Education and Training Inspectorate

A Report on the findings
from a Technical and Staff Survey
on The Use of Information and
Learning Technology in the
Six Area-Based Colleges of
Further Education

March 2010



Providing Inspection Services for

Department of Education
Department for Employment and Learning
Department of Culture, Arts and Leisure





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In this report, proportions may be described as percentages, common fractions and in more general quantitative terms. Where more general terms are used, they should be interpreted as follows:

Almost/nearly all - more than 90%

Most - 75% - 90%

A majority - 50% - 74%

A significant minority - 30% - 49%

A minority - 10% - 29%

Very few/a small number - less than 10%

1. THE EVALUATION

- 1.1 During September 2009 the Education and Training Inspectorate (the Inspectorate) carried out a third phase evaluation of the strategic and operational planning for the use of Information and Learning Technology (ILT) across the six area-based further education colleges, as outlined in Circular FE 09/09 from the Department for Employment and Learning (the Department). Teams consisting of two district inspectors visited each college and held discussions with senior managers, staff, and students. The inspectors also observed lessons and reviewed appropriate supporting documentation, including the colleges' ILT strategic and operational plans. A short report detailing the main outcomes of the evaluation was published for each college.
- 1.2 As part of the evaluation the colleges were asked to complete an on-line survey providing technical details on their ILT resources. Academic staff, in the colleges, were also asked to complete an on-line survey on their use of ILT. This report presents the composite findings from both the technical and staff surveys across the six colleges and includes comparisons with findings from the 2004 report on ILT¹.

2. SUMMARY OF KEY ISSUES

- 2.1 Most of the colleges have continued to invest significantly in ILT and this has resulted in a considerable improvement in the availability of computers for student use over the last five years. However, the current student computer access ratios vary significantly across the sector, from 3.6:1 to 2.3:1.
- 2.2 Two of the colleges have below average annual ILT budgets, the poorest student to computer access ratios in the sector, and a large percentage of computers which need to be replaced. One of these colleges also has relatively poor network connections between smaller campus sites and has a significant under investment in digital projection equipment including interactive whiteboards.
- 2.3 The majority of staff have a level 2 qualification in the use of ILT. Further staff development is needed to increase the number of staff qualified at level 3 or above.
- 2.4 The reliability of computer systems, printers, network and internet access is generally good across all the colleges, however, other systems such as virtual learning environments (VLEs), remote college access, e-registers and other on-line management systems, are less reliable in terms of speed and downtime, with considerable variation in the quality of service across teaching locations.
- 2.5 Almost all staff across the colleges have good access to computer systems and printers, however, a significant minority of the staff do not have regular access to other resources or technologies, such as VLEs, electronic whiteboards, or specialist resources to support students with disabilities. In addition, a minority of staff across the colleges have not used a VLE.
- 2.6 Most of the staff, regardless of teaching location or employment status, use the internet and traditional office applications as their main ILT resource. Those with regular access also use the VLE mainly as a repository to store documents, presentations or to link to other resources. There is little use of the other main features of the VLE, or new or emerging technologies by staff to support innovative teaching and learning.

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Report on Information and Learning Technologies (ILT) in Further Education Colleges in Northern Ireland, Education and Training Inspectorate, 2004

- 2.7 The majority of the staff indicate that the availability and access to physical resources, and time to develop on-line resources, are the main factors which impact on their use of the VLE. Other factors include the need for further staff development, and the availability of subject specific resources.
- 2.8 Most of the students can normally access a computer when they need one although they sometimes have to share. There is, however, variation in a minority of subject areas across the colleges, with students finding it difficult to get access to a computer during their time in college.
- 2.9 A majority of staff either have no knowledge of the colleges' strategic and operational plans or believe that they do not impact on their work. They stated that targets for the use of ILT are set by the college senior management team. A minority of staff indicated that their line manager reviews the use of ILT against the set targets. A majority of the staff identify opportunities to enable students to use ILT from lesson plans and schemes of work. The self-evaluation process is used effectively to review the use of ILT to support teaching and learning.
- 2.10 Most of the staff indicate that the best support they receive is from internal technical support staff, followed by peer and self-directed support. A significant minority of staff indicate that they have received no external support or training, and staff outside of a main college campus site, are more likely to be unsatisfied with the support that they receive.

3. TECHNICAL SURVEY

3.1 INTRODUCTION

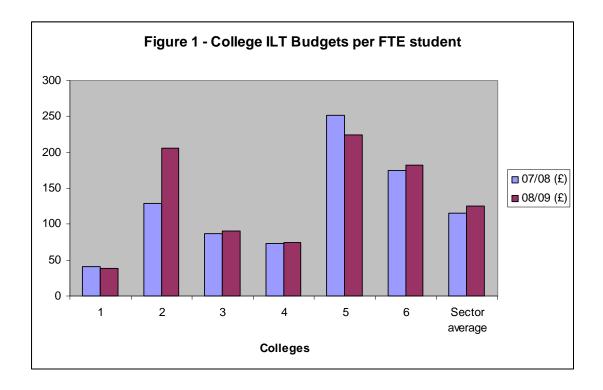
- 3.1.1 Each of the colleges completed an on-line survey which provided technical information on hardware and networks, access to computer systems, and usage of computer systems within the college.
- 3.1.2 Student enrolment and full-time equivalent (FTE) data supplied by the Department was collated for each of the colleges (Table 1) and used in calculations to make weighted comparisons across the sector. Historical data from the 16 pre-merger colleges was combined, based on the current six area-based college groupings, to produce the 2003/04 data and is used to identify trends during the period 2004-2009.

Table 1 – College enrolment data

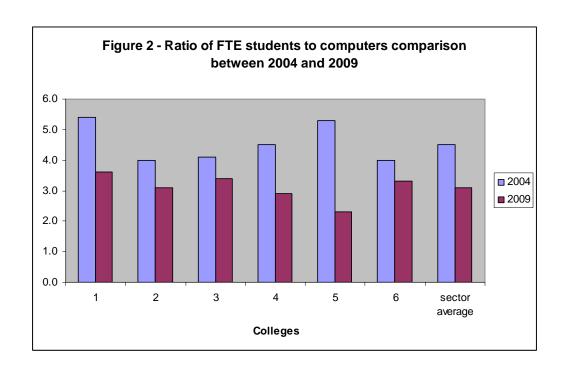
	College One	College Two	College Three	College Four	College Five	College Six	Sector Totals
Full-time students enrolled 08/09	6,025	4,279	4,554	4,215	3,418	4,783	27274
Part-time students enrolled 08/09	31,569	12,869	15,268	19,250	13,730	22,526	115212
Total students enrolled 08/09	37,594	17,148	19,822	23,465	17,148	27,309	142486
FTE Students 08/ 09	11,725	6,496	7,199	6,812	5,788	8,802	46822
FTE Students 03/04 (merged data from legacy colleges)	12,146	7,486	7,194	7,952	6,193	8,322	49292

3.2 MAIN FINDINGS

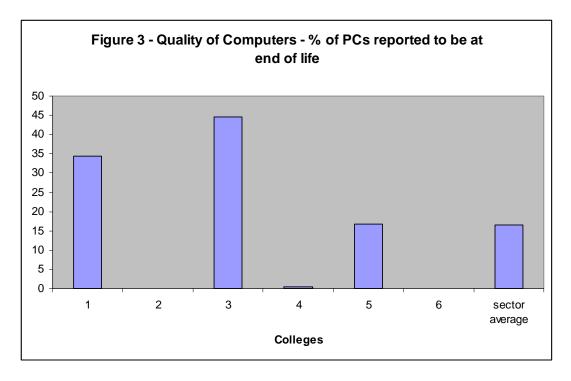
3.2.1 The total annual budget allocated by the six colleges for ILT, was £5,630,616 in 2008 and £5,856,827 in 2009. This is significantly greater than the average annual ILT funding of £2,909,153 provided by the Department (during the period 1999-2004) to the further education sector as a whole. There is, however, a significant variation in the ILT budgets across the colleges, which range from £39 to £225 per FTE student.



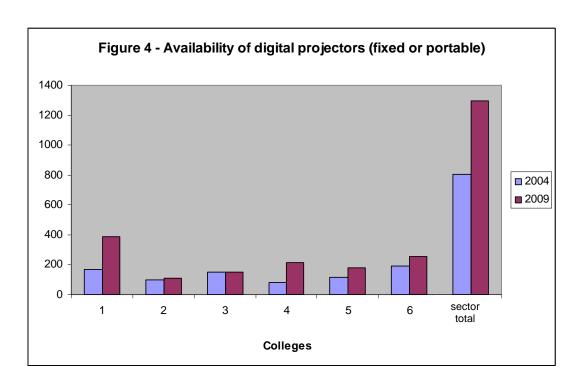
- 3.2.2 The external network connection speeds vary greatly from 1000 Mbit/s in the main college campus sites to two Mbit/s in smaller campus sites. One of the colleges, which is spread across a large geographic area and has a large rural base, has significant variations in its bandwidth.
- 3.2.3 The total number of networked computers available for student use across the colleges has increased from 10,885 in 2004 to 14,986 in 2009. The availability of computers for student use across the sector has also improved considerably from 4.5:1 (2004) to 3.1:1 (2009) based on student FTE enrolments. However, the current ratios vary significantly across the sector, from 3.6:1 to 2.3:1. In addition, the two colleges with the highest student to computer ratios also have a below average spend on ILT.



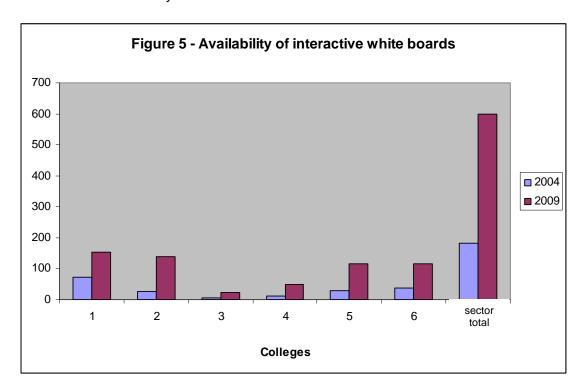
3.2.4 A further concern, for the same two colleges with below average ILT budgets, is the high percentage of computers for student use which are reported by the colleges as being at the end of life, and therefore need to be replaced soon.



3.2.5 The availability of digital projectors has increased across the sector from 802 (2004) to 1,298 (2009), with one college making a particularly large investment over this period.



3.2.6 The availability of interactive whiteboards has also increased significantly across the sector from 183 (2004) to 598 (2009) with almost all of the increase in four colleges. One of the colleges has not appreciably increased the overall number of projection devices available over the last five years.



3.2.7 All of the colleges report that they have an acceptable use policy in place and that it forms part of the college induction programme. None of the colleges currently require staff to undertake e-Safety training, however, there is a range of different methods employed by colleges to monitor acceptable use, including automated systems and staff monitoring of students while on-line.

3.2.8 All colleges have security policies and procedures in place and these are reviewed regularly. Security measures fully in place across all colleges include; protection of personal data, resilience, firewalls, off-site backups, malware and antivirus controls. Other security systems which have not been fully implemented across the sector include; identification (ID) systems for students and staff, physical security of computers, intrusion protection, encryption of data, business continuity and disaster recovery.

4. STAFF SURVEY

4.1 INTRODUCTION

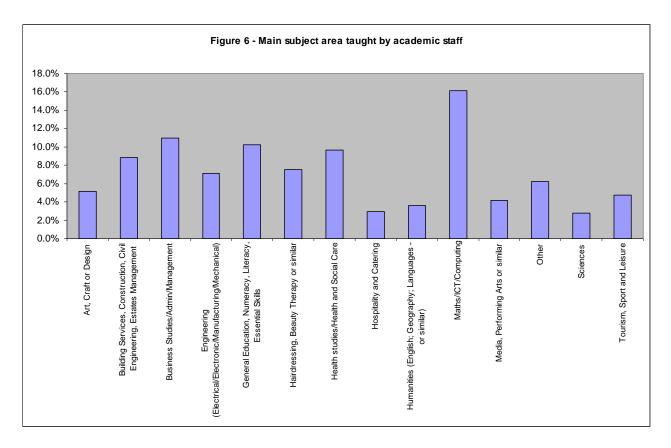
- 4.1.1 All the academic staff across the six area-based colleges were given the opportunity to complete an on-line survey as part of the evaluation. In addition to providing general information such as primary teaching location, employment status, gender, main subject area taught, and highest level of certification in the use of ILT the staff were asked to give their views on a range of issues grouped within three main areas: physical resources; teaching and learning; and management and support.
- 4.1.2 A total of 841 valid responses were received, giving an overall response rate of 19.4% from academic staff across the colleges. The breakdown of response rates by college is given below in table 2.

Table 2 – Staff responses per college

College	Responses received	Total Staff (08/09)	Response rate
College One	163	1,069	15%
College Two	74	387	19%
College Three	104	689	15%
College Four	205	896	23%
College Five	125	477	26%
College Six	170	828	21%
Total	841	4,346	19.4%

Table includes both full-time and part-time staff

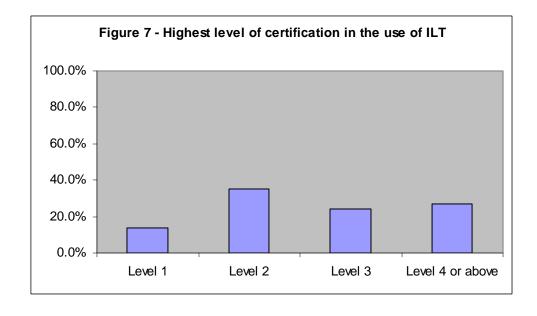
- 4.1.3 Almost all (90%) of the staff who responded were employed in either a large main campus site or in a small college campus, with only a small number employed in other locations such as a college out-reach centre or skills centre. Most of the staff (88%) were employed on a permanent capacity, either full-time or part-time and a majority (60%) of the staff who responded were female.
- 4.1.4 There is a good distribution of responses received across subject areas, however, responses are low in a number of areas, particularly hospitality and catering, humanities, and sciences.



4.2 MAIN FINDINGS

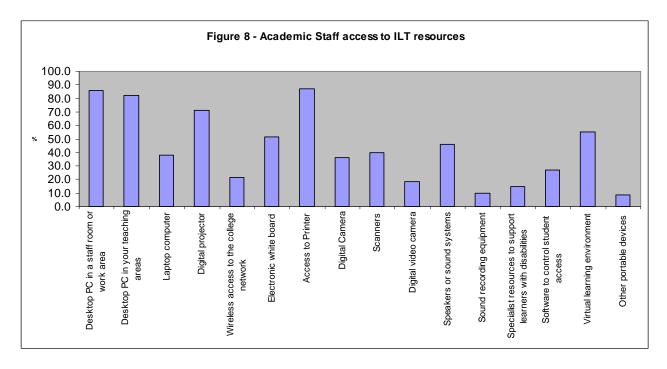
4.2.1 THE LEVEL OF ILT QUALIFICATIONS HELD BY THE STAFF

4.2.1.1 The levels of ILT qualifications held by staff range from level 1 to at least level 4; the largest percentage of staff hold a level 2 ILT qualification as their highest level of certification in the use of ILT. There is no significant variation in the levels of qualification between full-time and part-time staff.

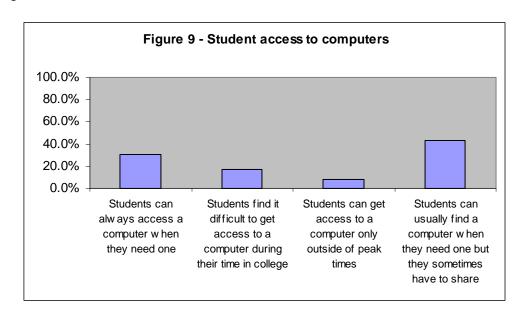


4.2.2 PHYSICAL RESOURCES

4.2.2.1 The staff have good access to computer systems and printers within the colleges, however, access to other resources or technologies to support teaching and learning, including VLEs, electronic whiteboards, or specialist resources to support students with disabilities, is poor for a significant minority of staff across most subject areas. There is also considerable variation in access to resources, which can be more limited, depending on the teaching location or employment status of staff.

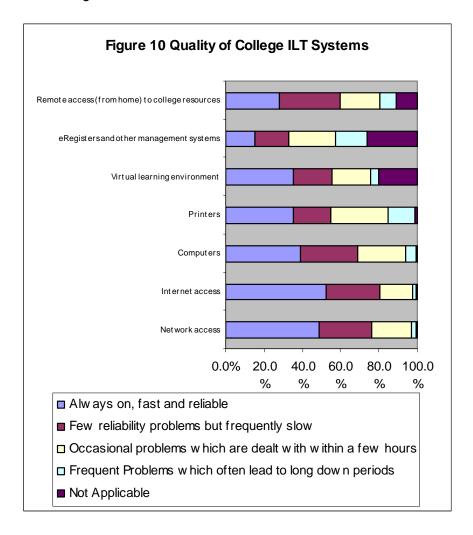


4.2.2.2 Most of the staff (75%) agree that students can access a computer when they need one, although they sometimes have to share. There is, however, variation across subject areas, with students in a minority (29%) of subject areas, such as hairdressing and beauty therapy, health studies, health and social care, humanities such as English or languages, and tourism, sport and leisure, finding it difficult to get access to a computer during their time in college.

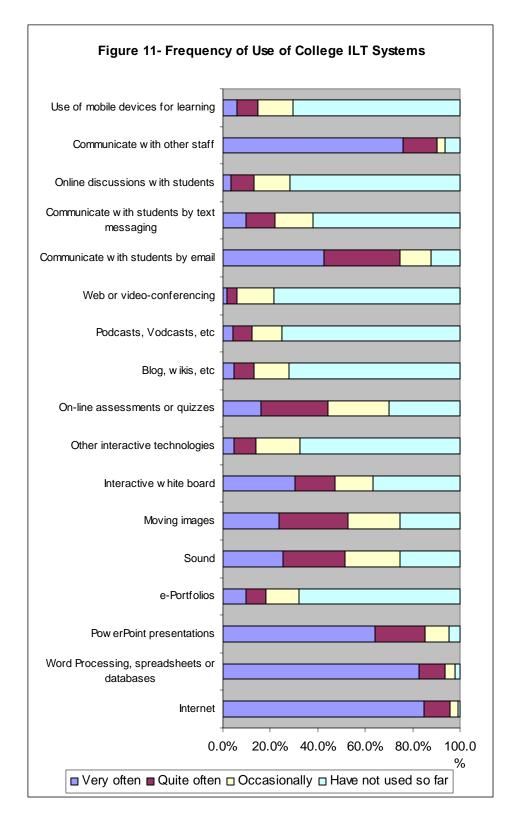


4.2.3 TEACHING AND LEARNING

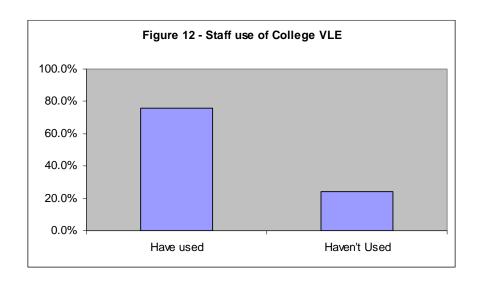
4.2.3.1 The reliability of the computer systems, printers, network and internet access across all six area-based colleges is generally good. Other systems such as VLEs, e-registers and other management systems, and remote college access are less reliable, however, in terms of speed and downtime, with considerable variation in the quality of service across teaching locations.



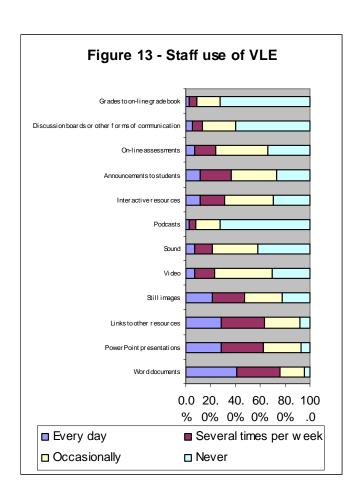
4.2.3.2 Most staff (90%), regardless of teaching location or employment status, use the internet and traditional office applications such as word processors, spreadsheets, databases, and PowerPoint presentations as their main ILT resource. There is also little variation, in terms of the qualification levels of staff or across the range of subject areas, in the use of other new or emerging technologies by staff to support innovative teaching and learning.



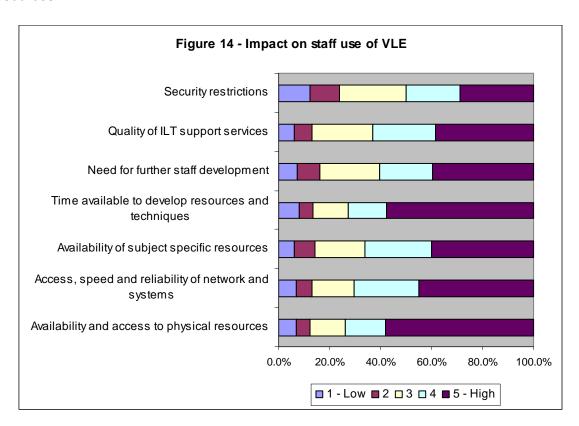
4.2.3.3 A minority (24%) of staff across the colleges have not used a VLE. Variations in the numbers of staff who have not used a VLE also exist and can increase depending on teaching location, employment status, level of qualification in the use of ILT, or delivering across particular subject areas such as engineering, essential skills, health studies or health and social care.



4.2.3.4 Staff mainly use the VLE to store word documents, PowerPoint presentations or to use still images or develop links to other resources. The other main features or uses of the VLE remain largely under-developed.

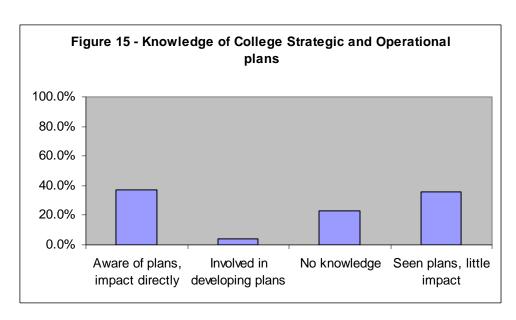


4.2.3.5 Staff indicate that the availability and access to physical resources and time to develop resources are the main factors which impact on their use of the VLE. Other factors include the need for further staff development, and the availability of subject specific resources.

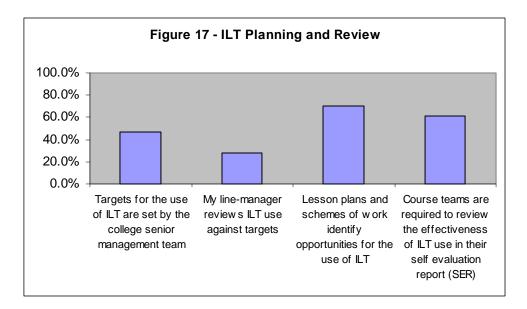


4.2.4 MANAGEMENT AND SUPPORT

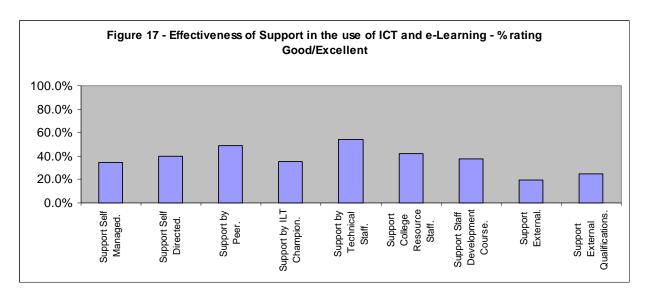
4.2.4.1 A majority (59%) of staff either have no knowledge of the colleges' strategic and operational plans or believe that they do not impact on their work. Only a small number of staff (4%) indicated that they were involved in developing the ILT strategic and operational plans.



4.2.4.2 Almost half (47%) of the staff stated that targets for the use of ILT are set by the college senior management team, with lesson plans and schemes of work providing the main way for staff to identify opportunities to use ILT. A majority (61%) of staff indicated that course teams are required to review the effectiveness of the use of ILT to support teaching and learning during the self-evaluation process, however, only a minority (28%) of staff indicated that their line manager reviews ILT use against targets.



4.2.4.3 Most staff (81%) indicate that the best support they receive is from internal technical support staff, followed by peer and self-directed support. A significant minority of staff (39%) indicate that they have received no external support or training, and staff outside of a main college campus site are more likely to be unsatisfied with the support that they receive.



5. KEY AREAS FOR DEVELOPMENT

To further develop the more effective use of ILT to support teaching and learning management across the colleges, need to consider the:

- provision of improved access to the full range of ILT facilities, including VLEs, electronic whiteboards, remote access facilities, and specialist resources, for all staff and students;
- provision of more appropriate professional development opportunities and support for staff, to enable them to engage more fully with ILT and share good practice, in order to enhance the quality of teaching and learning;
- development of improved strategies to allow more effective communication of ILT strategic and operational plans, and to monitor more effectively the development of ILT against targets set at all levels; and
- development of more effective strategies for the renewal and updating of computer hardware in a significant minority of the colleges.

COLLEGES VISITED DURING THIS EVALUATION

The following colleges were visited during this evaluation:

Belfast Metropolitan College (BMC)

Northern Regional College (NRC)

North West Regional College (NWRC)

Southern Regional College (SRC)

South Eastern Regional College (SERC)

South West College (SWC)

APPENDIX 2

ACKNOWLEDGEMENTS

- The Business Support Team and Statistics and Research Branch (Department of Education).
- The Tertiary Education Analytical Services (Department for Employment and Learning).
- The Regional Support Centre for Northern Ireland (RSC-NI).

SOURCES OF DATA USED IN THIS EVALUATION REPORT

The following sources of data were used to inform this evaluation report:

- 2009 ETI on-line staff and student survey data completed by the six area-based colleges;
- 2004 ETI on-line survey completed by the 16 pre-merger further and higher education colleges;
- College enrolment data supplied by the Department for Employment and Learning; and
- Northern Ireland Regional Area Network II (NIRAN II) data supplied by RSC-NI.

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