The Education and Training Inspectorate -
Promoting Improvement

Providing Inspection Services for
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Department of Culture, Arts and Leisure

CUSTOMER SERVICE EXCELLENCE

INVESTOR IN PEOPLE

Education and Training Inspectorate

Survey on the use of

Information and Learning Technology in the Six Area Based Colleges in Northern Ireland

2007

CONTENTS

A number of quantitative terms are used in the report. In percentages, the terms correspond as follows:

More than 90%	-	almost/nearly all
75%-90%	-	most
50%-74%	-	a majority
30%-49%	-	a significant minority
10%-29%	-	a minority
Less than 10%	-	very few/a small minority

PART ONE

1. INTRODUCTION

1.1 This report summarises the main findings of an inspection which focused on the development and use of information and learning technologies (ILT) across the six area-based colleges (ABCs) of further education (FE) in Northern Ireland. The inspection was undertaken by the Education and Training Inspectorate (Inspectorate) during the first term of the 2007/08 academic year. The objectives of the inspection were to evaluate:

- the effectiveness and coherence of the colleges' strategic and operational planning to embed the use of ILT;
- the use of on-line learning environments across the colleges;
- the impact of ILT on the standards of students' work;
- the effectiveness of staff development arrangements for ILT;
- the use of ILT in supporting teaching and learning; and
- the quality and range of ILT resources.

The inspection also reports on the progress made by the colleges since the last inspection survey of ILT undertaken by the Inspectorate during the 2002/03 academic year.

1.2 Since 1999/2000 the colleges have been required to submit annual plans for scrutiny by the Department for Employment and Learning (the Department) in order to secure funding for ILT capital equipment. The Department provided the colleges with an annual circular for ILT along with guidance on the procurement and installation of infrastructure to support their ILT resources and computer networks.

1.3 As part of the arrangements for the new six ABCs, the Department outlined changes in the ILT planning and funding processes in Circular FE 15/06. This required each college to submit a three year ILT strategic plan along with a one year ILT operational plan in order to secure funding for the 2007/08 academic year. Each college was provided with detailed guidance on the content and structure of the ILT strategic plans. This guidance was produced in conjunction with the Department's FE ILT Working Group and was informed by advice from the Learning and Skills Development Agency Northern Ireland (LSDA (NI)), the Regional Support Centre for Northern Ireland (RSCni) and the Qualification and Curriculum Authority (QCA). The Department's aim is that all of the ABCs by 2010, will attain the embedded stage of 'Demonstrating Transformation', (DT) as outlined in the Inspectorate publication, 'Improving Quality: Raising Standards' (IQ:RS). They were also informed that their ILT strategy should demonstrate how their plans to use ILT will enhance learning and the management of the curriculum and business processes, in order to support the Department's key priorities outlined in 'FE Means Business and the Northern Ireland Skills Strategy'.

1.4 The Department's guidance states that the operational ILT plan should detail specific goals or objectives over the academic year to support the strategic aims and objectives articulated in the ILT strategy, and that the plan must be supported with evidence of self-evaluation on the use of ILT in the work of the college.

1.5 At the time of the survey, the ABCs were in the process of appointing the senior management teams for the new colleges. One of the ABCs had not a permanent director in place, and none of the colleges had appointed the third management tier below deputy director level. These gaps in the senior and middle management structures, and the ongoing industrial action by lecturers, have presented key challenges for the ABCs in drafting, and implementing, their ILT strategic and operational plans. In addition, significant work was needed prior to the mergers to develop harmonised and reliable computer networks across the different campus locations.

1.6 METHODOLOGY

1.6.1 The strategic and operational plans for ILT were evaluated by the district inspectors for each ABC. This desk-based exercise provided an important element in the process of determining the effectiveness of management and leadership for ILT across the ABCs.

1.6.2 During December 2007, the district inspectors visited the ABCs to evaluate the management of ILT across the colleges and the use of ILT in teaching and learning. For each ABC, the inspectors observed lessons in the vocational area of health and social care. In addition, the inspectors observed lessons in vocational areas that were identified by each ABC, as an area of good practice in the use of ILT in teaching and learning. The inspectors observed a total 97 lessons across ten vocational areas. In each college, the inspectors held discussions with the senior management teams, curricular and staff development managers, the ILT Champions and Promoters, lecturers and groups of students. They examined relevant documentation including the ILT strategic and operational plans, the college development plans (CDPs), minutes of meetings and other materials, including, induction and pre-entry guidance material and on-line resources.

PART TWO

2. MAIN FINDINGS

2.1 THE ILT STRATEGIC AND OPERATIONAL PLANS

2.1.1 In three of the ABCs, the strategic plans have identified a well-defined vision of how ILT can support and enhance the learning experiences of students and the management of the work of colleges. The vision statements of two of the ABCs are weak and do not address sufficiently how the effective use of ILT will meet the needs of their students and the wider community.

2.1.2 The strategic and operational plans in four of the ABCs are learner-centred, with a commitment to blended learning and, in the best practice, give an appropriate emphasis to the social aspects of learning.

2.1.3 For most of the ABCs, the analysis of the external and internal environments to identify key priorities for development in the strategic plans is ineffective. A key omission, for example, is a baseline assessment of their current position in the use of ILT in classroom delivery.

2.1.4 The transitional arrangements to manage ILT in advance of the appointment of the second and third management tiers are variable; they are effective in three of the ABCs but are mostly ineffective in the other colleges.

2.1.5 The use of qualitative and quantitative targets for the integration of ILT in teaching and learning is underdeveloped in five of the ABCs' strategic and operational plans.

2.1.6 Most of the strategic plans set clear targets for student and staff access to networked personal computers (PCs) but few of the ABCs identify whether they will provide additional funding out of their recurrent budgets to improve access ratios.

2.1.7 There is evidence that planned levels of investment in the infrastructure is unbalanced with insufficient investment in interactive whiteboards, fixed mounted data projection equipment and mobile digital devices.

2.1.8 The majority of the ABCs in their staff development plans make appropriate reference to the national Lifelong Learning United Kingdom (LLUK) standards; the staff development plan in one ABC is a model of good practice. In three of the ABCs, the plans do not assess the baseline competences of staff and management, and the targets for staff development are not sufficiently challenging. In addition, they do not make explicit reference to the required levels of staff development to ensure that ILT resources are used to their full potential.

2.1.9 Links between staff development and curriculum planning are underdeveloped in most of the strategic plans.

2.1.10 In four of the ABCs' plans, there is insufficient detail given in relation to how learning resources will be developed to support the use of ILT in teaching and learning.

2.1.11 Few of the plans specify in detail the standards and targets for the reliability of the network and the threshold levels of technical support; the use of service level agreements for technical support is underdeveloped across the ABCs.

2.1.12 Although most of the plans make a commitment to integrate learning platforms with their management systems, few of them identify sufficiently robust targets for the implementation of an effective Managed Learning Environment (MLE). For most of the ILT plans, there is little evidence of the use of service level agreements on service standards from college management information systems (MIS).

2.2 THE USE OF ILT IN TEACHING AND LEARNING AND IN THE MANAGEMENT OF THE COLLEGES

2.2.1 Leadership and management for ILT are variable across the ABCs; they are satisfactory in two colleges, good or better in four; they are excellent in one college.

2.2.2 Four of the ABCs are taking appropriate action over the three years of their strategies to ensure the cohesive development of the new college MIS, infrastructure and learning platforms to exploit the full potential of ILT. The strategy in one ABC is unbalanced and more action is needed to enhance the use of the Virtual Learning Environment (VLE) in teaching and learning, and in the other ABC, planning is confined to the different pre-merger college locations.

2.2.3 Three ABCs have well developed arrangements to monitor the progress of the key action points in their ILT operational plans. These arrangements are ineffective in two ABCs and at the time of the survey, little progress had been made in meeting their action points.

2.2.4 Self-evaluation and quality improvement arrangements for the use of ILT are underdeveloped in four ABCs.

2.2.5 Three ABCs have effective staff development programmes to support the use of ILT in teaching and learning which are based on the identification and adoption of good practice in the pre-merger colleges. Too much of the staff development activities in the other ABCs are ad hoc, and are fragmented across the different campus locations.

2.2.6 A key omission in staff development programmes across the ABCs is whole college provision to support lecturers' pedagogic skills in the use of ILT.

2.2.7 Although ILT Champions provide good support to lecturers, the levels of remission time for ILT Champions in four of the ABCs is inadequate. The provision of professional development for ILT Champions in most ABCs is insufficient to support their work effectively.

2.2.8 There is evidence of significantly more use of college VLEs since the last survey report. Across the ABCs, however, a significant minority of the lecturers make insufficient use of the VLE to collaborate and to share resources within and across their specialist vocational areas.

2.2.9 The main use of VLEs is still mostly as a repository for course materials and assignments and for students to access relevant information. The use of the advanced features of VLEs is still mostly underdeveloped.

2.2.10 Induction arrangements for students in the use of ILT are well- organised in the majority of the ABCs, and they are poor in one ABC.

2.2.11 The use of ILT to guide and support students in their learning is effective in four ABCs and satisfactory in two. One has excellent arrangements in place to support students; their provision of electronic (e)-mentors is a feature of good practice.

2.2.12 The use of ILT in initial assessment is variable; it is effective in three of the ABCs and is satisfactory in the other three. Few of the ABCs have started to implement consistent arrangements across their different campus locations.

2.2.13 The standards of work in most of the programmes inspected are good, and there is evidence that, where ILT is used effectively, it enhances the quality of the students' work. The expectations of lecturers are a key enabler in raising the standards of the students' work.

2.2.14 Across the ABCs, there is evidence of good use of ILT facilitating independent learning, particularly when the students access a wide range of resources on the VLE in college or at home. There is evidence that students on level one and level two courses need more support in developing independent learning skills and in the interpretation of information.

2.2.15 In most of the ABCs, the students are developing good ICT skills in their work; they are inconsistent in one college.

2.2.16 Across most of the areas inspected, the students are confident in their use of industry standard software, particularly in construction and engineering.

2.2.17 Information and learning technology is well-embedded in about half of the vocational areas that were inspected, and nearly all of the other vocational areas have some features of good practice. In health and social care, ILT is well-embedded in two ABCs, with some features of good practice in the remaining colleges.

2.2.18 Nearly all (97%) of the lessons had more strengths than weaknesses, and nearly 60% of lessons had significant strengths.

2.2.19 There is evidence of more effective use of ILT to support teaching and learning since the last ILT survey, with most of the lecturers in the areas inspected skilfully blending the use of ILT with other active teaching approaches to interest and motivate the students.

2.2.20 Key areas for improvement in teaching and learning include undue variation in how ILT is used in vocational areas across different campus locations, and for a minority of lessons, the unimaginative use of multi-media presentations, with students transcribing notes directly from the screen.

2.2.21 The use of ILT for formative assessment is underdeveloped across most of the ABCs.

2.2.22 Few of the ABCs have effective curriculum projects in place to support the development of ILT in teaching and learning.

2.2.23 For most vocational areas, the use of Web 2.0 Technologies in teaching and learning is underdeveloped and is inconsistent.

2.2.24 The quality and range of ILT resources for most students are good and they have improved significantly since the last survey report. More action is needed however, to provide clusters of PCs in classrooms to facilitate more consistent use of ILT in teaching and learning. The range of ILT resources in health and social care is variable; they are good in half the ABCs but are mostly inadequate in the other three colleges.

2.2.25 The quality and range of ILT resources in some campus locations that are coming toward the end of their lifespan, or are about to be refurbished, are inadequate to support the students in their work.

2.2.26 Access to interactive whiteboards and ceiling mounted data projectors across and within the ABCs is variable. They are inadequate in a minority of ABCs.

2.2.27 There is evidence of good progress since the last ILT survey report on enhancing the layout and design of classrooms and workshops to enhance the use of ILT in teaching and learning.

PART THREE

3. THE ILT STRATEGIC AND OPERATIONAL PLANS

3.1 VISION FOR INFORMATION AND LEARNING TECHNOLOGIES

3.1.1 Three of the ABCs have articulated a well-defined vision on how ILT can enrich the learning experiences of students, as well as making a real contribution to the management of learning and to the management of their core business. There is a positive correlation between the quality of the vision statement and the standard of the overall ILT strategy for each ABC. The vision statements in two ABCs do not address sufficiently how ILT will meet the needs of the students and of the wider community they serve.

3.1.2 The plans in four ABCs, are learner centred and, for one college, identify how the vision of promoting excellence can be supported with the implementation of an effective ILT strategy. In these ABCs, the vision is supported with a set of strategic aims; the aims in one college are both demanding and comprehensive. None of the colleges, however link these aims explicitly to the strategic aims in their CDPs. In addition, the use of clear milestones of success over the planning period for the strategy, including the use of strategic targets is underdeveloped in most of the colleges.

3.1.3 The main features of good practice from the vision statements include the following:

- an appropriate emphasis is given to blended learning;
- one ABC gives due account to the social aspects of learning and the importance of face-to-face contact in learning;
- key links with other key college strategies are identified, including quality improvement, management information, marketing and estates;
- a well- informed and consistent definition of ILT, and the business systems that support effective learning and assessment to take place; and
- the benefits of harnessing ILT are stated, which are underpinned with evidence of well-informed debate within the ABC.

3.1.4 The vision statements for four of the ABCs, however, do not make appropriate reference to the following:

- information and learning technology as an enabler to meet the challenges facing the newly formed ABCs, including, serving different communities across a wide geographical area, meeting the specific needs of a wide range of learners including the 'hard to reach', and the potential of economies of scale resulting from the larger units of management and delivery;
- inadequate explicit reference to the move towards the embedded stage of DT as a three year goal;

- the role of ILT in supporting economic development or addressing business needs, particularly links to key the Department's policies, including, FE Means Business and the Northern Ireland Skills Strategy;

- links with other external stakeholders including schools, particularly for the 14-19 cohort of pupils;

- the added-value from good ILT experiences, notably increasing student motivation and enabling students to take more control in their learning, and in raising standards of students' work and retention rates; and

- the use of ILT to support flexible learning to widen access and to remove barriers to learning. Only one ABC outlines explicitly a vision for freeing learners from traditional and rigid modes of learning, to allow students to access learning at a time and in a place to suit them.

3.2 SITUATIONAL ANALYSIS FOR ILT

3.2.1 In five of the ABCs, the strategic analysis of their external and internal environments, is ineffective. Its potential as a management tool to help identify key priorities for development has not been exploited effectively.

3.2.2 Only one of the ABCs has undertaken a thorough analysis of the external environment to identify opportunities and challenges emerging over the planning period for the strategy. Key omissions the other ABCs include:

- the emerging trends in learning technologies, including the increased sophistication and availability of mobile digital devices, and wireless network connections;

- the increasing confidence, and use by young people in their personal lives of digital technologies;

- the changing needs of industry and the local/ regional economy, including workforce development; and

- trends in education and training for young people aged 14-19.

3.2.3 Although all of the ABCs make reference to the external bodies, including links with key bodies including, the RSC ni, Joint Information Systems Committee (JISC), United Kingdom Education and Research Network Association (UKERNA) and the Inspectorate, these have not been followed through with clear priorities for development. Similarly reference to statutory requirements, including issues related to the Special Educational Needs and Disability (Northern Ireland) Order 2005 (SENDO), Freedom of Information and Data Protection legislation are not accompanied by action plans for improvement.

3.2.4 The plans in five of ABCs do not analyse sufficiently their own strengths and weaknesses, regarding the use of ILT to enrich students' learning and in the management of the colleges. A key omission is a baseline assessment of their current position in the use of ILT in classroom delivery and in the management of the college. In addition, the baseline

assessment of the expertise of all staff in ILT, including their levels of competence in the use of digital technologies is mostly inadequate. For one ABC, the strategy has analysed in detail, the status of ILT in each of its three constituent colleges, with effective reference to the RSCni health checks that were undertaken prior to the formation of the ABC. The results have been well-analysed, taking cognisance of the strengths and weaknesses of each college, and identify effectively the opportunities to embed key strengths across the ABC, with a clear commitment to attain the embedded stage of DT during the three year lifespan of the strategy.

3.3 MANAGING THE STRATEGY

3.3.1 For three of the ABCs, this section is well-developed with a clear commitment to make use of appropriate management structures to implement the strategies and operational plans. These ABCs have also identified the appropriate transitional arrangements, in advance of the creation of the ABC wide committees and structures. They have clearly identified remits for these planning groups which include a broad range of stakeholders, senior management, and learning support staff. There is appropriate reference to the potential of ILT Champions in embedding the use of ILT in teaching and learning. One ABC, with a well-considered strategy, identifies the respective roles of the staff development committee, the Information Communication Technology (ICT) support unit, the e-learning development unit and a web development unit in the overall management of ILT across the college.

3.3.2 The plans in the other three ABCs are not well-developed. The roles and remits of committees and key promoters of good practice are not identified in their strategies.

3.3.3 The role of the Governing Bodies in overseeing and reviewing the ILT strategy and operational plans is a weakness for nearly all of the ABCs.

3.4 TECHNOLOGY SUPPORTING TEACHING AND LEARNING

3.4.1 Three of the ABCs articulate effectively the opportunities and challenges in harnessing the potential of ILT to enhance the quality of the learning experiences for students. These plans give appropriate coverage to the implementation of effective strategies to embed ILT in the curriculum that are linked to staff development. The features of the best plans include the following:

- an understanding that ILT is a key feature of the total learning experiences for all students and the need to develop a blended approach to learning that meets their needs;

- the potential of ILT to assist the development of personal learning approaches that meet the needs and capabilities of each individual student, and to help the students take a more active role in their learning;

- key groups of learners are identified for the development of blended learning approaches, including work -based learning and pupils from post-primary schools on the Vocational Enhancement Programme (VEP);

- comprehensive and robust procedures for self- evaluation and quality improvement in the development of ILT across different learning programmes; and

- an appropriate emphasis is given to developing the ICT skills of students.

3.4.2 The plans for the other three ABCs give superficial coverage to the key challenges in making the best use of technology to support learners.

3.4.3 Although most ABCs articulate the potential of e-assessment, the main focus is on the assessment of learning (summative assessment) rather than on assessment for learning (formative assessment).

3.4.4 Overall the use of quantitative and qualitative targets for the integration of ILT in teaching and learning is underdeveloped for most of the ABCs.

3.5 TECHNICAL INFRASTRUCTURE

3.5.1 This is one of the strongest elements of the strategic plans across the six ABCs. Most set clear targets for student and staff access ratios to networked PCs by 2008. Few of the plans, however, make an explicit reference to target access ratios for part-time lecturers. With the exception of two ABCs, they do not state the baseline position of current access ratios for students and staff. Most of the targets are within the DEL guidelines, with a minority making a commitment to exceeding the target for 2008. Few of the colleges indicate whether they will provide additional funding out of their recurrent budget to increase access ratios, though the commitment of one ABC to provide additional funding out of its recurrent budget is significant. The strategic plans indicate that across the ABCs, computers will be refreshed over a three to five period. Few of the plans, however, provide specific details on their replacement strategies. In addition, most of the plans do not identify how the colleges will deploy mobile devices to support local businesses. For most of the ABCs, insufficient detail has been provided on service level standards for the operation of the network.

3.5.2 A common omission for nearly all of the ABCs is that the planned investment in infrastructure is unbalanced; it is mostly for computers and hardware investment to support the network. They do not specify sufficiently other important hardware to support learning, including interactive whiteboards, digital cameras, and fixed-mounted projection equipment, and mobile digital devices.

3.5.3 Few of the ABCs specify in detail the standards and targets for the reliability of the network, the protection against data loss, and threshold levels of technical support, through robust service level agreements, including maintenance of the infrastructure.

3.5.4 The features of the best plans include the following:

- a commitment for all students and staff, including good access to, high speed internet access, college e-mail accounts, storage space, printers and reprographics, remote access, and a personalised e-learning environment;

- a commitment to cluster computers in normal classrooms in response to Inspectorate reports; and

- planned improvements in the infrastructure to allow for growth in network usage, increased use of a wide range of messaging tools, and the use of pod casting to support learning.

3.6 BUSINESS PROCESS FOR SUPPORTING LEARNERS AND STAFF

3.6.1 This is one of the briefest sections in each of the strategic plans. Most of the ABCs make a commitment to integrate learning platforms with their management systems to provide a MLE. Appropriate weighting is given to the integration of the systems to inform management information at all levels, to track students, record achievements, and key performance indicators, including retention rates. The main shortfalls and omissions, however, are:

- no baseline of the current position in the integration of college systems;

- a lack of robust quantifiable targets for the implementation of an effective MLE. For one college, there is a commitment for an MLE being up and ready by 2010; and

- the plans for nearly all of the colleges do not articulate service levels standards from MIS.

3.7 STAFF DEVELOPMENT

3.7.1 The majority of the ABCs make reference to the national LLUK standards. One ABC has a comprehensive and detailed staff development plan for ILT. This includes an e-personal development framework of competences that are linked to the LLUK standards to support and inform innovative approaches in the use of ILT. The plan is linked effectively into the college's overall staff development programme. The plan gives due account of the need to develop competences for a wide range of staff, including lecturers, support staff, learning resource staff, leaders and managers and trainers. The programme has a set of challenging objectives, which if realised will equip staff well to meet the ABC's vision for ILT over the planning period of the strategy. Good reference is also made to the role of ILT Champions with a clear commitment to significantly up-skill all staff in ILT.

3.7.2 For three of the ABCs, there are weaknesses in this section. These include:

- insufficient coverage of the role of ILT Champions in curriculum and staff development;

- links between staff development and curriculum development in relation to the use of ILT are not identified clearly;

- no baseline assessment of existing competences of all staff, including leaders and managers, learning resource staff, technical support staff, trainers for ILT, and lecturers, including those employed on a part-time basis;

- a lack of demanding targets, to enable lecturers to develop the full repertoire of skills and approaches; for most colleges, they are either omitted or are of a low level; and

- no commitment on the required levels of investment in staff development to ensure that ILT resources are used to their full potential.

3.8 MATERIALS AND RESOURCE DEVELOPMENT

3.8.1 The coverage of this important aspect of an ILT strategy is underdeveloped in four ABCs. Two of the ABCs, however, have meaningful plans to encourage staff in the development and adaptation of ILT learning resources for use by students. One aims to audit all ILT materials to help inform future procurement and usage. Its planned e-learning development unit will play a key role in testing/piloting, and adapting new ILT materials, and will provide appropriate staff development when required. The other ABC makes a clear commitment to invest significant resources in ILT materials, including the development of in- house materials. There is a clear expectation that departmental heads will be subject to demanding targets for the production and publication of learning resources on the VLE.

3.8.2 Overall, none of the ABCs identify how much or what proportion, of their ILT budget will be allocated to the development of learning resources.

3.9 CONTRIBUTION TO SHARING AND DISSEMINATING GOOD PRACTICE

3.9.1 The opportunities for ABCs to share information and resources across the sector are not addressed effectively in the strategic plans; two concentrate on how to share good practice within their own college. Few have identified clearly the benefits of collaborative working, including avoiding undue duplication of work in the development of in-house learning resources, and inter-college curriculum development projects. Only one ABC, has identified the potential of ILT to share good practice for Centres of Excellence in supporting economic engagement.

PART 4

4. THE USE OF ILT IN TEACHING AND LEARNING AND IN THE MANAGEMENT OF THE COLLEGES

4.1 LEADERSHIP AND MANAGEMENT OF ILT

4.1.1 The leadership and management of ILT are satisfactory in two ABCs, and good or better in the remaining colleges; they are excellent in one. The role of the directors in the management of ILT is crucial. In one ABC, the director provides well-informed strong and supportive leadership, and has been instrumental in promoting innovative practice across the college.

4.1.2 Four of the ABCs are taking appropriate action, over the life span of the ILT strategy, to ensure the cohesive development of the new college MIS, infrastructure and learning platforms to exploit the full potential of ILT in the work of the colleges. The strategy in one of the ABC's is unbalanced; it has made significant progress in developing the infrastructure, and MIS reporting tools, but much more work is needed to enhance the quality of provision for ILT learning tools, particularly the VLE. In another ABC, planning for the use of ILT has been confined to the different pre-merger college locations, and does not address fully the needs of learners across the ABC.

4.1.3 The senior and middle management teams in four of the ABCs have a clear and consistent understanding on how effective use of ILT can enhance the quality of teaching and learning and the management of the colleges. This clarity of purpose was not evident in the other two colleges. Features of good practice include the following:

- two ABCs have identified appropriately the potential of ILT as an enabler in developing a cohesive culture in teaching and learning across the different campus locations; and

- another two ABCs have implemented effective transitional arrangements to oversee the development of ILT in teaching and learning. In one, the ILT strategic and operational plans were drafted by the college ILT committee in absence of the appointment of the new SMT for the college. The group was a continuation of a pre-merger ILT working group. The ILT committee is composed of the key internal stakeholders and has worked effectively in developing a college-wide culture for the use of ILT in enhancing the infrastructure, systems and procedures across all campuses. Members of the group have been sensitive to the different cultures of the former colleges and have worked effectively to ensure full synergies of good practice have been recognised and adopted.

4.1.4 Three of the ABCs have well-developed arrangements in place to monitor the progress of the key action points identified in the ILT operational plans. In one ABC, the targets in the operational plan are well-embedded in curriculum targets that have been set through departmental and cross college planning. In two ABCs, the systems are inadequate, and at the time of the survey, little progress had been made in meeting the targets set in the operational plans.

4.1.5 Self-evaluation and quality improvement arrangements for the use of ILT in teaching and learning are underdeveloped in the majority of the ABCs. Good progress has been made in two ABCs; they have effective arrangements in place to review the use of ILT in teaching and learning, through well-developed quality improvement systems. In one ABC, its quality improvement unit has drafted a robust self-evaluation framework for the use of ILT. The team monitors systematically, the quality of learning resources on the college VLE, as well as making effective use of on-line student evaluations.

4.2 STAFF DEVELOPMENT AND ILT

4.2.1 The effectiveness of staff development programmes to support the use of ILT in teaching and learning is variable across the ABCs. Three ABCs have well-organised staff development programmes, which are based on the identification and adoption of existing good practice in the pre-merger colleges. In these ABCs, the staff development programme for ILT sets demanding targets for staff competences that are subject to robust whole-college monitoring. In addition, their priorities for further development are informed from a range of sources including, the outcomes from training needs analyses, feedback from ILT Champions, evaluations of staff development activities, and on-going monitoring on the use of the college VLE. In the best practice in one ABC, staff development for ILT is well managed by a dedicated cross-college department. The staffing complement of this department includes senior managers with a well-developed understanding of curricular and pedagogic issues, specialists in ILT systems and applications, a cohort of e-learning mentors, and non-lecturing staff who provide support and guidance for both learners and lecturers. There are close links with the staff from the learning resource centres (LRCs) and considerable emphasis is placed on innovation with new approaches to learning environments, for example, the use of music and alternative seating arrangements in the LRCs, in the interests of further promoting and supporting learning. The college centrally planned staff development programme is well-matched to college priorities in the ILT strategic plan, and the provision is suitably flexible to meet the specific needs of different vocational areas. There is evidence that the skills levels of lecturers are being enhanced effectively in developing their technical skills, as well as their confidence and competence in the use of ILT to enhance and support learning. The programme has been supported effectively with customised specialist training for ILT Promoters in the college.

4.2.2 In the other three ABCs, there are weaknesses in the management of staff development programmes for ILT. Much of the staff development activities in these ABCs are ad hoc, with undue variations in practice across the different campus locations. In one ABC, staff development activities are fragmented and are mostly led by ILT Champions working independently on a demand led basis to meet the specific needs of individual lecturers and course teams. In another ABC, there is insufficient shared knowledge and understanding of ILT across the different campus locations. In these ABCs, the monitoring and evaluation of staff development to support ILT is inadequate.

4.2.3 In four of the ABCs, most of the whole-college staff development activities focus on the use of the college VLE and on improving the lecturers' ICT skills. There is evidence of effective informal staff development at course team level, in improving lecturers' skills in the use of ILT in teaching and learning, however, for most of the ABCs, whole-college formal staff development activities to enhance the lecturers' pedagogic skills are underdeveloped.

4.2.4 Only two of the ABCs, have ILT development teams in place to support lecturers in the production of interactive on-line learning materials, and to populate the VLEs. One-third college reports that it plans to have an ILT development team in place during the current academic year. Much more work is required from the other three ABCs to ensure that lecturers have good access to high quality learning resources to support teaching and learning.

4.3 ILT CHAMPIONS

4.3.1 Five of the ABCs had designated ILT Champions or Promoters deployed at the time of the survey; they had been in place in the pre-merger colleges. The other ABC has identified the need to deploy ILT Promoters during the current academic year. There is evidence that ILT Champions provide effective support to lecturers in developing staff competences in the use of ILT and in the development of learning resources. The deployment of ILT Champions across the ABCs varies significantly. In one, there are two Champions in each vocational department, while in a number of colleges, there is only one deployed in each main campus. The levels of staff remission to support the work of the Champions vary significantly within and across the ABCs; the levels of remission in four colleges is inadequate to support their work effectively. In addition, there is evidence that the roles and responsibilities of the ILT Champions are not sufficiently clear in the majority of the ABCs. In the best practice, they have a clear remit to provide one-to-one and small group support to lecturers, for example, sourcing, publishing and accessing on-line materials, VLE training, and supporting staff in identifying opportunities for blended learning approaches.

4.3.2 Two of the ABCs have well-managed programmes to support the work of ILT Champions. In one ABC, the ILT Promoters are given appropriate time, support and resources to manage and evaluate the impact of ILT on learning. There are clear lines of responsibility and accountability; the ILT Promoters provide a customised response to the needs of the vocational area and their work is monitored effectively by the departmental managers. There is sound evidence that the skills levels of individual lecturers are developed appropriately, and specialised training is provided for the ILT Promoters to inform them of new technologies and applications. In the other ABC, 15 ILT Champions were appointed to provide ILT staff development across the ABC. They have started working as a coherent team to identify, prioritise, monitor, and evaluate the effectiveness of their work. Their role is well-defined and clear lines of accountability have been established. The ILT Champions regularly report to the ILT co-ordinator who monitors their effectiveness through regular meetings and through the collation and analysis of standardised records of provision and uptake. Through the ILT co-ordinator, the Champions provide valuable feedback to the ILT Committee regarding, for example, recommendations on the future design and development of the college on-line learning environment. In addition to providing good support to lecturers in the publication and use of on-line materials, they have supported staff in identifying opportunities for blended learning approaches within their curriculum area. The level of support provided to lecturers is of high quality and is sufficiently flexible to meet the specific needs of lecturers including part-time tutors.

4.3.3 The provision of continuous professional development for ILT Champions in four of the ABCs is inadequate. In two ABCs, most of the ILT Champions have not been provided with specific staff development for the role, and in one ABC, the ILT Champions reported that they were just ‘one step ahead’ of the lecturers’ skills and competences in the use of ILT in teaching and learning.

4.4 INTRANETS AND LEARNING PLATFORMS

4.4.1 All of the six ABCs have on-line learning environments in place to support the work of students. Three of the ABCs have developed, or are in the process of developing, an MLE which integrates the VLE, intranet, MIS, and other systems. The other three have VLEs which they aim to integrate with other systems to create a MLE in the future. Four of the ABCs have adopted well-tested commercial 'off the shelf' VLEs, and one of these is planning to migrate to a free open-source VLE from September 2008. In the remaining ABCs, one has developed its own in-house VLE based on open-source components and the other is in the process of developing a custom built VLE, based on a commercial web-based collaboration and documentation platform. All of the ABCs have also developed intranets which provide continual access to a range of on-line learning materials for students.

4.4.2 The on-line systems have been implemented effectively across most of the ABCs, although some problems do exist across individual campuses. In one ABC, the custom built system does not have the range of functionality that is available on commercial VLEs. It lacks standard key learning tools, including integrated assessment, a digital drop box, collaboration tools, grade books and tracking tools, to support the use of ILT in teaching and learning. Some of the lecturers, who had previously used a fully functioning VLE prior to the merger, have adopted alternative technologies hosted off-site, to provide some of the standard features of a VLE to address these shortfalls.

4.4.3 All of the ABCs, are committed to integrating their learning platforms to the Northern Ireland College Information Systems (NICIS) management information system, with the aim of providing access to accurate and timely information on key performance indicators. The progress made by the ABCs is variable and for most, more work is needed to further integrate these systems. In one, good progress has been made in linking a number of core business functions, for example, the integration of the student registration process and the timetabling system so that course information and registration on individual courses are automatically available to the students when they log on for the first time. Through the web portal, they have access to a wide range of facilities, 30 minutes after they have registered including, the college VLE, a personalised site, and information on student support and library loans. The portal also provides students with web access to an extensive catalogue of digital resources and e-books.

4.4.4 The use of on-line learning environments by staff and students, across the ABCs, has increased significantly since the last survey. The students report benefits of using VLEs in their work, including access to relevant information about their ABC and their particular courses, good lines of communication with tutors, extensive access to learning resources where illness or other commitments prevented attendance in their lessons. In the best practice there were opportunities for extended reading, formative assessment through on-line practice tests, customised materials to support careers education, information advice and guidance, and a facility to receive additional help and support. There is also evidence of the use of the VLEs by some pupils from local post- primary schools, who are following applied courses in the colleges under the VEP.

4.4.5 Across the ABCs, the VLEs are used mostly as a repository for course materials and assignments, and as a means for students to access information about their course, careers advice, and progression pathways. There is some evidence of course teams making effective use of advanced features of the VLE to enhance the use of assessment in teaching and learning, for example, the use of the digital drop box and on-line grading books, but this is mostly underdeveloped. More work is needed to make more effective use of the advanced features of VLEs in nearly all of the ABCs.

4.4.6 The monitoring of student use of the VLE is variable across the colleges and across the individual campuses in each ABC. For most ABCs, monitoring is not sufficiently systematic and is typically carried out by individual lecturers. The arrangements in one ABC are inadequate. In the best practice, in one ABC, the web portal is monitored regularly, and the outcomes of the evaluation are being used effectively to inform future planning. For example, recent monitoring of the portal demonstrated that students make extensive use of it on Sunday evenings, so additional e-learning support is being put in place to cover this period of high demand.

4.4.7 The quality of the materials on the on-line learning environments across the ABCs is variable. They range from high quality lecturer prepared materials, including interactive features with some animation and sound, commercially produced resources, to basic text documents. One ABC rigorously quality assures all documentation available on the VLE to ensure fitness for purpose and consistency of approach across the college. This is a time consuming process but results in well- developed, and stimulating learning resources.

4.4.8 Across most ABCs, a significant number of the lecturers, make insufficient use of the VLE to work collaboratively and to share resources within and across their specialist areas. Typically, the level of access by staff to teaching resources developed by other lecturers is very limited. There is evidence, however, of good practice of effective collaboration by lecturers in a minority of ABCs. In one ABC, a course team of business studies lecturers, work effectively to develop resources and populate the VLE. This collaboration highlights links and overlaps within and between units. It has now been extended to rationalise teaching inputs into the programme to ensure consistency and avoid duplication. In another ABC, there are examples of the college making good use of the VLE, and this been recognised through one campus receiving the British Telecom ILT award for innovation in curriculum development.

4.5 INDUCTION ARRANGEMENTS AND STUDENT SUPPORT FOR ILT

4.5.1 Student induction arrangements for ILT are well-organised in four of the ABCs. In these colleges, the students follow an effective induction programme, including the use of the college VLEs. The students received promptly user logins, and passwords to make use of on line learning resources. In one ABC, these facilities were offered to all the pupils enrolled on courses under the VEP. The arrangements are ineffective in one ABC; induction is confined to organising student visits to the college LRCs and the students are not provided with sufficient hands on practical activities to allow them to make effective use of the full range of ILT resources. At the time of the survey, a minority of the students had not been allocated

logins, passwords or e-mail accounts to support their work. In another, induction was variable across the three different pre-merger colleges. Two campuses had thorough induction arrangements, while in another campus the arrangements are poor. In this campus, the students are making slow progress in developing their ICT skills. A group of students on a higher education course, for example, were not aware of the college VLE.

4.5.2 The use of ILT to guide and support students in their learning is variable across the six ABCs; it is effective in four, with one having consistently good practice. It is barely satisfactory in two ABCs, where, little progress has been made in developing coherent approaches to support students effectively during induction and throughout their programmes. In the best practice, good systems are in place across the ABC for students to undertake an initial assessment of their ICT skills and learning styles, with appropriate support provided for those students with identified weaknesses. This college also has an effective system in place to support students in their learning. It has a group of e-mentors who provide support and guidance to individual and groups of students who either need electronic or face-to-face support to develop their time management or study skills. Another ABC makes effective use of the VLE to provide students information on careers, cultural diversity and on pastoral care. In this ABC, a number of vocational courses provide students excellent signposting to appropriate careers web sites, including banks of interview questions, and labour market information. Although a number of the colleges have participated in pilot programmes to develop e-individualised student learner agreements (ISLAs), there is little evidence, however, that the participating colleges have addressed the need to ensure that they support students in personal career planning.

4.6 USE OF ILT IN INITIAL ASSESSMENT

4.6.1 The use of ILT to support initial assessment is effective in three ABCs but is barely satisfactory in the other colleges. Few of the ABCs have implemented consistent arrangements across their campus locations, with evidence of variation in practice from the pre-merger colleges. Although the majority of the ABCs make use of on-line diagnostic tools to screen students' essential skills of literacy and numeracy, there are few examples of good practice in the screening of their ICT skills. Only one ABC, has effective arrangements in place to help identify students' preferred learning styles. In one college, lecturers make use of on-line and paper based systems in initial assessment, and tutors have to transfer this information manually to their e-ISLA.

4.7 STANDARDS AND OUTCOMES IN THE VOCATIONAL AREAS INSPECTED

4.7.1 The standards of work for most of the ten programmes are good and there is evidence that where ILT is well-used, it enhances the quality of the students' work. The students are motivated and respond positively to their learning experiences, with enjoyment in their learning, particularly when the lecturers' expectations are appropriately high. In one ABC, a class of business students for example, downloaded video clips from a social network site on disciplinary hearings. They responded effectively to a range of tasks that were posted on the college VLE through well-managed group discussions and the sharing of ideas.

4.7.2 Across the ABCs, there is evidence of good use of ILT facilitating independent learning, particularly when the students access a wide range of resources on the VLE at home, or in college. In a number of ABCs, the students on level one and level two courses need more support in developing their independent learning skills and in the interpretation of information.

4.7.3 The students in most of the ABCs are developing appropriate information and handling skills. In most lessons, they competently and confidently carry out independent research, record their responses, share and synthesise ideas and make good oral contributions. In the best practice, there is evidence of students developing their creative, and problem solving skills.

4.7.4 The students in most of the ABCs are developing good ICT skills and this has enhanced the quality of their vocational work, particularly when lecturers encourage collaborative and group work. In one ABC, the standards are variable; they are good in two campuses, but in another, the students' ICT skills are not being developed sufficiently.

4.7.5 In a minority of the lessons, the students are not being challenged sufficiently in their work; typically lecturer expectations were too low. They spent excessive periods of time undertaking mundane tasks, for example in the direct transcription of information from digital projectors. In one college, good progress has been made in organising electronic resources effectively to reduce levels of note taking by the students.

4.7.6 Across most of the areas inspected, the students make confident use of industry standard software in their work, particularly in construction and engineering where students can master appropriate design and testing software applications.

4.7.7 There is little direct evidence of good use of ILT in enhancing student outcomes, particularly in improving retention and success rates. The survey however has identified features of good practice where use of the college VLE has helped students benefit from accessing a wide range of electronic resources and in meeting their assessment deadlines.

4.8 QUALITY OF TEACHING AND LEARNING

4.8.1 Across the sample of the ten vocational areas that were inspected, ILT is well-embedded in half of the programmes. With the exception of one programme that was inappropriately identified by one ABC as being of good practice, there are features of good practice across all of the other vocational areas.

4.8.2 Across the 97 lessons observed, nearly all (97%) of the lessons had at least more strengths than weaknesses and none of the lessons were poor. A relatively high proportion (57%) of the lessons had significant strengths, and a minority (7%) were excellent.

4.8.3 In health and social care, ILT is well-embedded in two of the ABCs and there are features of good practice in the remaining ABCs. All of the lessons had at least more strengths than weaknesses. Just over half (53%) of the lessons had significant strengths and 10% were excellent. The deployment of ILT resources in health and social care is variable; they are good in half of the colleges and are mostly inadequate in the other three ABCs. In these, the main shortfalls in ILT resources, include access to networked PCs, interactive whiteboards and ceiling mounted data projectors. In one of these colleges, the lecturers

through effective collaboration make good use of their limited ILT resources. More effort is needed to ensure that this vocational area is supported effectively with an appropriate range of ILT resources across different campus locations. There is evidence that those course teams that have well-established strong working practices have facilitated effective development of ILT in teaching and learning. In one ABC, ILT is well-embedded through strong planning and systematic approaches based on robust monitoring and evaluation of its effectiveness in teaching and learning. Students on higher education courses, for example, have good access to an extensive range of ILT resources, and they receive excellent on-line support from tutors in well-designed group project work and from their peers through on-line discussion boards. They are developing well their skills and competences in researching, presenting and evaluating information.

4.8.4 Most of the lecturers make good use of ILT across the vocational areas that were inspected. They work effectively to blend the use of ILT with other active teaching approaches to provide interesting and challenging experiences for the students. Across the ABCs, however, there are significant variations in the use of ILT in vocational learning programmes across the different college campuses. In one, there is evidence of undue variation in practice across the pre-merger college campuses. In two of the campuses, ILT is an integral part of the learning experiences for most of the students. The majority of the lecturers make effective use of a wide range of tools to stimulate and challenge students; the VLE is well-embedded in course delivery for most courses. In the other pre-merger college, the use of ILT is inconsistent and for most courses, it is significantly underdeveloped.

4.8.5 There is evidence of more effective use of ILT since the last survey, in the use of ILT in teaching and learning. The main developments in the best practice include, good use of commercial and specialised software packages, on-line courses, video clips, on-line quizzes, use of the college VLE, e-mail facilities, on-line tests, and games, and remote teaching packages. In, a minority of the lessons, however, in spite of these developments, the lecturers make unimaginative use of multi-media presentations in lessons, with students typically transcribing notes directly from the screen.

4.8.6 The use of ILT for formative assessment is underdeveloped in most of the ABCs. It is being developed effectively across a wide range of programmes in only one college. The lecturers make effective use of web-based assessment tools, including, multiple choice tests, short answer tests, and on-line surveys to assess student progress and to inform teaching strategies. Although the majority of the ABCs are involved in a small number of pilot programmes to develop the use of e-portfolios, its use in teaching and learning, is at an early stage of development across all of the ABCs.

4.8.7 There are good examples of ILT being used effectively to meet the different needs and abilities of learners, but for most programmes, planning for differentiation is underdeveloped. In the best practice, a minority of the lecturers plan effectively to provide more able students with more challenging learning resources on the college VLE. In another ABC, the lecturers make effective use of ILT to engage a group of students with learning difficulties, who were hesitant in class, through the discussion forum on the college VLE. The students as a consequence were more confident in making oral contributions in their lessons.

4.8.8 With the exception of pilot work on e-portfolios, and e-ISLAs, few of the ABCs make use of systematic internal or external curriculum development projects to embed the use of ILT across the college.

4.8.9 For most programmes, the use of Web 2.0 Technology software is underdeveloped, and is inconsistent. A key constraint is the shortfalls in staff competences and understanding of the potential of these platforms to stimulate students.

4.9 QUALITY OF ILT RESOURCES

4.9.1 In nearly all of the ABCs, the quality and range of ILT resources for most students are good, and they have improved significantly since the last survey report. Most students and staff have good access to high specification networked PCs to support their work in computer suites, classrooms, workshops and in learning resource centres. For most ABCs, the main deployment of PCs is in computer suites. Although some progress has been made in deploying small clusters of PCs in classrooms, more deployment is needed to ensure more consistent use of ILT in teaching and learning.

4.9.2 The network infrastructure is well-developed, with effective technical support for most of the ABCs. There is evidence of different working practices in the management of the networks across campus locations in a minority of the ABCs. A small number with campuses spread over a wide geographical area have additional costs in developing effective links with the smaller campuses.

4.9.3 There is evidence that the quality and range of ILT resources in some campus locations that are coming toward the end of their lifespan, or are about to be refurbished, are inadequate to support the needs of students, and lecturers in their use of ILT in teaching and learning. In addition, in a minority of the ABCs, there are significant variations in the quality and range of ILT resources across the main campus locations. In one ABC, two of the pre-merger colleges have well-equipped computer suites, classrooms with clusters of PCs and learning resource centres. In the other pre-merger college, the quality and range of ILT resources is inadequate.

4.9.4 Access to inter-active whiteboards and ceiling mounted data projectors across and within the ABCs is variable. They are inadequate in a minority of ABCs.

4.9.5 Across the ABCs, good progress has been made since the last survey in enhancing the layout and design of classrooms and workshops to enhance the use of ILT in teaching and learning. In one ABC, most of the classrooms, for example, are consistently well-designed. The teaching spaces are spacious, equipped with inter-active whiteboards and well-furnished, with PCs installed on the perimeter of the room with ample space in the middle of the room for students to work away from their PCs.

PART FIVE

5.1 CONCLUSION

5.1.1 The unfilled vacancies in senior and middle management structures, the ongoing industrial action by lecturers, and the considerable work involved in harmonising the different Information Technology (IT) systems across the different campuses following the college mergers, presented a major challenge for the ABCs in developing and implementing their strategic and operational plans for ILT. The ABCs, with few exceptions, have made a sound or better start to implementing appropriate strategies and policies to embed the use of ILT in teaching and learning, and in the management of the colleges.

5.1.2 The report highlights features of good practice across the ABCs in their strategic and operational plans for ILT. In the best practice, the plans are learner centred, and are supported with a clear vision on how effective use of ILT can enhance the quality of the learning experiences of students and in the management of the colleges. There is evidence of some good progress in a minority of colleges, in evaluating the baseline position of the use of ILT in teaching and learning, and in the staff and management competences in their use of ILT. However, more work is needed here across the ABCs; the use of situational analysis to identify priorities for improvement in most of the plans is underdeveloped. The use of quantitative and qualitative targets, in the plans, for the integration of ILT in teaching and learning is at an early stage for nearly all the ABCs.

5.1.3 Monitoring arrangements to evaluate the progress of the key action points in the operational plans are variable across the ABCs: they are well developed in three ABCs but are weak in two, with little progress being made on their action points. Leadership and management of ILT is effective in four ABCs; the contribution of the Directors is crucial. There is a need to improve quality improvement arrangements in the majority of the ABCs. In addition, more work is needed to enhance staff development for ILT and ILT Champions, which are linked to plans to embed ILT across the curriculum.

5.1.4 There is evidence of more effective use of ILT in teaching and learning since the last ILT survey report. Although there is more widespread use of on- line learning platforms, more work is required by lecturers to share learning resources across and within their vocational areas. The use of the advanced features of VLEs is still mostly underdeveloped. Although the ABCs are committed to link learner management to curriculum delivery, more work is needed in connecting on-line learning platforms to their college MIS.

5.1.5 Information and learning technology is well-embedded in about half of the vocational areas that were inspected, and when it is used effectively, the standards of students' work are enhanced, especially when lecturers' expectations are high. Although the range and quality of ILT resources have increased significantly since the last survey report, there is evidence of shortfalls in some of the ABCs, particularly in the stock of interactive whiteboards and ceiling mounted data projection equipment.

Copies of this report are available on the DE website: www.deni.gov.uk or may be obtained from the Inspection Services Branch, Department of Education, Rathgael House, 43 Balloo Road, Bangor, Co Down BT19 7PR.