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The Education and Training Inspectorate -
Promoting Improvement

Providing inspection services for

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

Education and Training Inspectorate

Information and Learning Technology Supplement

Revised 2009

1. INTRODUCTION

The Information and Learning Technology (ILT) supplement to Improving Quality : Raising Standards (IQ:RS) has been updated to reflect changes in technology and practice, since the original document was published in 2004. The Education and Training Inspectorate (Inspectorate) has worked with the Regional Support Centre of Northern Ireland (RSC-ni) to revise the Demonstrating Transformation framework. This version is based on an original scheme developed by the Massachusetts Institute of Technology and adapted for e-Learning contexts by the British Educational Communications and Technology Agency (BECTA).
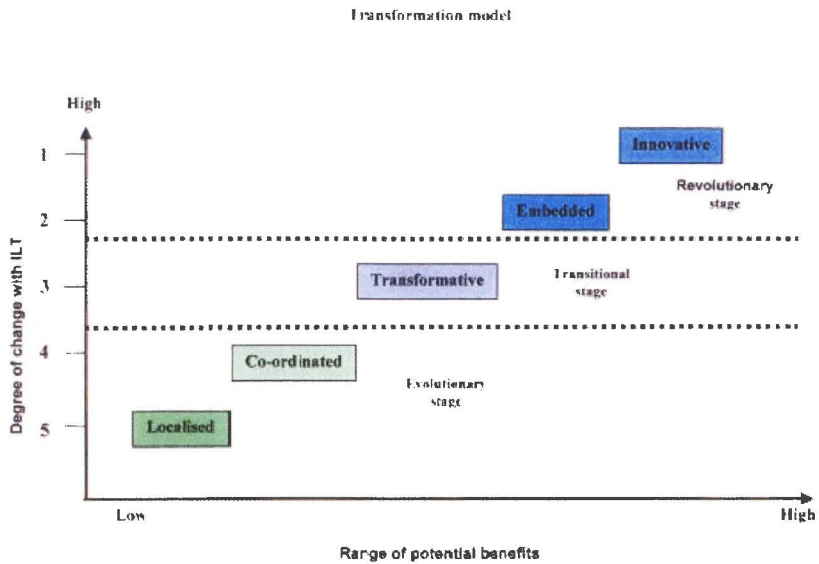
The revised demonstrating transformation matrix retains the original number of themes and descriptors, however the indicators have been updated to align more closely with the 2008 edition of IQ:RS. The descriptors have also been updated to improve clarity and consistency of language without making the levels noticeably more challenging.

The focus of the ILT supplement is on the role of technology in ensuring quality in provision and it should be read in conjunction with IQ:RS.

2. DEMONSTRATING TRANSFORMATION LEVELS

Organisations will be at various stages in the adoption of ILT, and the descriptors used here are designed to reflect this. The five levels show the extent to which ILT has impacted, ranging from small amounts of change in limited areas of activity (Localised/Low) to mould-breaking change across the organisation (Innovative/High). Remember when you are completing a self evaluation to answer the questions from the same perspective (individual, cross college, departmental, etc).

Levels of Demonstrating Transformation	Descriptor
5 (Lowest)	LOCALISED
4	CO-ORDINATED
3	TRANSFORMATIVE
2	EMBEDDED
1 (Highest)	INNOVATIVE

Transformation model

Range of potential benefits

3. DEMONSTRATING TRANSFORMATION ACTIVITY/THEME AND DESCRIPTORS

	Activity/Theme	5 Localised	4 Coordinated	3 Transformative	2 Embedded	1 Innovative
Leadership and Management	Strategic Management of ILT	A corporate ILT strategy is not developed but some staff, or departments, are integrating ILT into their work.	An ILT strategy is in place which refers to the overarching college mission. Some use of ILT is specified.	The ILT strategy is used as the source of all ILT action-planning and for evaluation of its implementation in the curriculum and business processes. The ILT strategy is regularly reviewed and updated.	Management ensures that ILT is used effectively across the curriculum and for management and business processes.	Significant strategic commitment to the integration of ILT in learning and other business processes.

Monitoring and development processes fully integrated into organisational management.

Innovative methods of funding to encourage ILT developments are explored and exploited. |
	Operational Management of ILT	ILT use takes place mainly in isolation, with little coordination across the organisation. Funding of IT is left to individual management units on an ad hoc basis.	A coordinated approach to ILT development is encouraged and supported by managers. Management coordinates developments in ILT practice in the curriculum. Procurement of ICT is centrally coordinated.	Management takes account of current applications of ILT in education. They promote the development of differentiated learning programmes through ILT and create plans for all ILT staff development needs. A significant proportion of the budget is dedicated to ILT staff development.	Management monitors and evaluates ILT integration across the curriculum. Appropriate support is provided to promote good practice and innovation.	
	Curriculum development	ILT use within the curriculum is limited to early adopters operating mainly in isolation.	Use of ILT in curriculum development and programme design is planned. Some targets set for the use of ILT in key areas of the curriculum.	Curriculum design clearly linked to the ILT strategy and external priorities. Opportunities created for students to develop a wide range of e-learning skills	ILT curriculum development integrated with other areas of college development. and opportunities taken to make full use of new and emerging learning technologies	
	Staff development	Training for individuals' personal and professional development in relation to ILT is provided on an ad hoc basis.	A coordinated approach is taken to generic ILT training. There is provision of some additional training to support the integration of ILT in the curriculum and in wider business processes.	Curriculum and MIS-focused ILT training is provided for most staff in line with an organisation-wide plan. Training needs analysis is used to inform planning in response to changing teaching and learning styles.	ILT is integrated routinely into all areas of the work of the college. Staff take responsibility for reviewing and responding to their own ILT staff development needs.	Staff routinely manage and seek improvements in their own ILT skills – using responsive organisational support systems.
	Learning Resources Management	Learning resources are managed without reference to ILT. Budgets are ad hoc.	A senior member of staff has overall responsibility for development and deployment of learning resources across the whole organisation.	Learning and ILT resource provision is regularly reviewed and their use is integrated into the curriculum. Access management is used to make them available to all users.	Learning resources are clearly signposted and available in a range of formats on and off campus to provide support for a variety of needs and learning styles.	Learning resources are always integrated into course materials for direct use by learners.

Activity/Theme	5 Localised	4 Coordinated	3 Transformative	2 Embedded	1 Innovative

Leadership and Management

Theme	5	4	3	2	1
ILT Support Systems	Technical support is sporadic and unreliable. No systematic communication procedures are in place. Support for the curriculum use of ILT is ad hoc.	Centrally managed and coordinated technical support. Acceptable use policies and other support procedures are clearly defined. Teaching staff have access to specialist support to assist them in using ILT effectively in the curriculum.	Non-academic support staff are available at a suitable level to support student learning and staff development activities. A team is in place to support teaching staff in the pedagogical use and development of e-learning.	Technical and learning support roles encompass developmental and advisory activities – as well as routine activities. Teaching staff have regular access to all of the support systems necessary for the effective execution of their roles.	Efficient, client-driven resources deployment
Physical resources	Individual departments procure and control their own ILT resources. Wide variations in provision of equipment exist.	Provision of ILT facilities is centrally funded and coordinated and relates to curriculum and other business processes. Full inventory of hardware and software resources is maintained.	Provision of physical resources for ILT is on a planned basis and takes account of internal structures and relative demands of the organisation.	ILT resources are appropriately deployed to enable flexible and independent learning. Development and maintenance of resources including new technologies to support curriculum and business processes is planned. Software licences and permissions are actively managed.	
Record-keeping	Individuals or departments use ILT for short-term record-keeping on an ad hoc basis. MIS is used for some administrative purposes.	A coordinated and centralised approach to record-keeping is implemented across the organisation. Data is largely entered by administrative staff. Teaching staff make some use of ILT or MIS in handling course administration and curriculum data.	Academic and managerial staff have direct access to a centralised MIS. Data from MIS is used by some staff to support planning and decision-making in the curriculum and in business processes.	Academic and managerial staff routinely access a centralised MIS to generate learner, curriculum and financial data to support course management and other business decisions.	Diagnostic assessment and guidance on demand. MIS data on curriculum and student data informs and drives business planning
ILT quality improvement	Evaluation of the effectiveness of ILT in supporting the curriculum and business planning are ad hoc and mainly in response to external pressure.	A coordinated approach is taken to evaluating the use of ILT to support curriculum and business planning. (e.g. curriculum targets in schemes of work, SERs, key performance indicators)	Well-defined ILT quality assurance process in place to support curriculum and business processes and feeds into corporate management of quality issues. Internal and external evaluations of the use of ILT across the organisation are used to inform planning.	Real-time MIS data is accessed regularly by all staff and is used routinely to improve quality and to inform curriculum and business planning across the organisation.	
External links	Informal links by individuals or departments are used to gain access to the expertise of commercial, industrial, academic and other organisations.	Support and advice from the community and other external agencies. (eg in curriculum review and business development) is sought on a formal basis.	The organisation's links with external agencies are centrally coordinated. Links are regularly reviewed for mutual benefit.	Contact with relevant agencies influences the development of the organisation's actions on the educational use of ILT.	Organisation makes use of external alliances to co-develop use of ILT in learning.

Activity/Theme	5 Localised	4 Coordinated	3 Transformative	2 Embedded	1 Innovative
Achievements and standards — Learner achievement	Some teaching staff exploit learners' basic ICT skills but with little attempt to integrate ILT into the learning and assessment process.	Curriculum areas provide contexts for the development of ICT skills and their assessment. Generic skills are developed through ICT courses for some learners.	Staff diagnose and report on the levels of learner ICT skills and devise appropriate learning situations which reflect and allow further development of these skills.	Learners' competence in the use of ILT is appropriate in the context of their learning situations and is checked and regularly re-evaluated.	
Quality of provision for learning — Teaching and learning	Individual teachers and learners explore the potential of ILT in an ad hoc way.	ILT is used by many staff to support and enhance existing teaching and learning practices across the organisation.	ILT-based approaches to a variety of teaching and learning styles, are incorporated into curriculum, planning and practice.	Suitable uses of ILT are routinely incorporated into teaching and learning strategies. ILT is used to encourage and support higher order forms of learning. Good practice in the use of ILT for teaching and learning is routinely captured and shared.	Students work collaboratively with teachers to set and achieve their own learning targets. Learners take responsibility for seeking solutions to their own ILT development needs. ILT used to provide flexible individualised learning. ILT used to make a distinctive and measurable contribution to assessment and monitoring of students progress.
Assessment	Some use is made of ILT in the formative assessment of learner achievement and progress by a few teachers. Outcomes are stored and accessed locally.	Staff use shared electronic tools and records to track learner progress and achievement.	A range of ILT assessment strategies is used to enhance formative and summative assessment. Outcomes of assessment are used by staff to inform teaching strategies and improve learning.	Student achievement and progress is mapped to learning goals and recorded by electronic means that are regularly used by the students and teachers to plan and adjust learning.	
Learning experiences	Learners have some access to local ILT resources and the Internet to support learning.	ILT is used in a relevant and interesting way to find and present information and to enhance the learning experience. Learners have access to sets of shared learning resources.	Learners can access learning resources remotely. ILT is used effectively by all to meet individual learner needs. Interactive learning resources and communication tools are used to support different learning styles.	Learning programmes are supported and enhanced by a wide range of technologies and resources which challenge and inspire learners. Learners can assess their own progress on-line, electronically submit assessments and receive individual feedback.	

4. RELATING ILT TO IMPROVING QUALITY:RAISING STANDARDS (IQ:RS)

Relating ILT and e-learning to the five key questions in IQ:RS

Leadership and Management:
   1. how effective are leadership and management in raising achievement and supporting learners?
 Achievements and standards:
   2. how well do learners achieve?
 Quality of provision for learning:
   3. How effective are teaching, training and learning, and assessment?
   4. How well do the learning experiences, programmes, and activities meet the needs of the learners and the wider community?
   5. How well are learners cared for, guided and supported?

4.1 LEADERSHIP AND MANAGEMENT

Strategic leadership: How effective are the senior management and governing body/management committee in providing strategic leadership and clear direction in achieving high quality education and training?
Examples of raising standards through ILT and e-learning
- There is a clear understanding across the organisation on how the effective embedding of ILT enhances learning and the management of the organisation.   - Management at all levels make effective use of the management information systems (MIS) to monitor performance.   - The development work in ILT is underpinned by a clear and coherent strategic plan.   - The targets for the effective use of ILT in the organisation's development plan are suitably demanding and aligned well to current capabilities and resourcing.   - Up-to-date data obtained from the MIS is used to inform decision-making at all levels and to underpin the organisation's development plan.   - All staff are given on-line access to MIS and other organisational data to encourage awareness of their contribution to the organisation's overall performance.   - On-line technologies are used to inform staff regarding legal and health and safety obligations.   - The use of ILT in teaching and learning is reviewed regularly and systematically throughout the organisation.   - Good practice in the use of ILT is widely disseminated across the organisation.

Action to promote improvement: How effective are the leaders and managers, at all levels, in supporting learners, improving the quality of provision, and raising the standards of the learners' work?
Examples of raising standards through ILT and e-learning
- The use of ILT in teaching and learning is reviewed regularly and systematically throughout the organisation.   - The SERs provide reliable evaluations on the use of ILT and are an integral part of the organisation's development planning process.   - Course management is informed by current and accurate electronic data showing retention and achievement on all learning programmes.   - All staff are given on-line access to MIS data and other organisational data to encourage awareness of their contribution to the organisation's overall performance.

Use of on-line tools that analyses retention, achievement and trends by individual programme of learning
On-line learner evaluation surveys are combined with use of MIS software, and record learner perception data to underpin SERs.
On-line technologies collate enrolment data to inform policies on widening participation and inclusion.

Staffing: How effective are the leaders and managers in recruiting, deploying, supporting and developing staff, at all levels, to provide high quality education and training?
Examples of raising standards through ILT and e-learning
- Practitioners have the relevant pedagogic skills to make effective use of ILT in teaching and learning.   - Practitioners have good access to appropriate ILT resources and contribute to an in-house library of resources, and provide references to resources that have proved effective and useful.   - Good use is made of ILT for the induction and support of new staff.   - A reliable and secure infrastructure is maintained by well qualified and trained technical support staff.   - All staff have access to flexible opportunities to acquire additional qualifications in both ICT and ILT.   - ILT Champions/facilitators have a clearly defined remit in the promotion of ILT in teaching and learning.   - Appropriate time and resources are invested in staff and curriculum development to support the embedding of ILT.

Physical resources: How effective are leaders and managers in the deployment of all resources to provide high quality education and training?
Examples of raising standards through ILT and e-learning
- The learners and staff have good access to ILT resources.   - Access to electronic resources outside of classroom sessions and from home enables all learners to progress and extend their learning.   - Appropriate investment in innovative new technologies.   - Provision is made for technical support for remote and blended learning.   - Access to specialist and assistive technology and software is provided from all learning centres to maximise the support offered to learners with disabilities.   - Data from electronic tracking and booking systems ensures efficient deployment of learning resources, equipment and computer areas.   - The security, development and sustainability of the organisation's infrastructure are well planned and managed.   - Effective use is made of automated timetabling systems   - Use of specialist and assistive technology and software provides additional support for SLDD.   - Use of a learning platform provides extension to learning activities and offers blended and remote learning opportunities.

Links and partnerships: How effective are leaders and managers in the deployment of all resources to provide high quality education and training?

Examples of raising standards through ILT and e-learning

- Use of shared resources on a learning platform enables collaborative partnerships with other providers including industry and work-based learning.
- Automated tracking tools, linked to tutorial programme and other support mechanisms, enable the effective tracking of learners following a flexible curriculum.
- Active participation in, and leadership of curriculum development projects.
- Clear vision and understanding of the potential of ILT to create and support strategic alliances with schools.
- ILT is used to support strategies to widen access and increase participation for groups under represented in further education.

Equality of opportunity: How effectively do leaders and managers plan strategically to remove barriers to learning, and provide opportunities for all learners to achieve their full potential?

Examples of raising standards through ILT and e-learning

- Access to electronic resources outside of classroom sessions and from home to enable all learners to progress and extend their learning.
- Provision of on-line surveys, combined with use of MIS software, to record data on learner perceptions to inform departmental SERs.
- Provision of resources in alternative formats to make course content accessible to all learners, including those with disabilities.
- Website and intranet to provide a 'virtual front door' for learners and encourage and support late enrollers.
- Using ILT to provide a variety of routes to information on enrolment and induction to suit different categories of learners.

Sources of evidence to evaluate leadership and management

- Comparative infrastructure data showing where the organisation is in relation to national and regional benchmarks.
- Programme SERs.
- Data IT support and helpdesk systems.
- Data on continuing professional development (CPD).
- Equipment lists and maintenance records.
- Learner entitlement records.
- Links between CPD, lesson observations and retention and achievement data to measure the impact of CPD on learners.
- Policies for upgrading and sustaining resources.
- Staff induction procedures.
- Statistics on relevant qualifications and skills held by staff.
- Strategic and operational planning documents including; the organisation's vision, teaching, ILT/e-learning, staff development, estates and accommodation strategies as well as health and safety, marketing, equal opportunities, data protection, risk assessment and acceptable use policies.
- College strategic, operational and development plans.
- Data on enrolment, retention, achievement and progression.
- Data showing responsiveness of the organisation to policies on widening participation and inclusion.
- Minutes of meetings from middle management through to the governing body available electronically.
- Self-evaluation reports (SERs) linked to strategies and objectives.
- Room and equipment utilisation rates.
- College contracts with business and industry.
- Learner software tracking data, for example, VLEs.
- Partnership arrangements with schools and community/voluntary organisations and business.
- Shared communication tools and resources on a virtual learning environment (VLE) or other learning platform.

4.2 ACHIEVEMENTS AND STANDARDS

Social Cohesion and Economic Development: How effective is the provision in promoting learners' ability to be contributors to social cohesion and economic development?

Examples of raising standards through ILT and e-learning
- They apply their learning in a range of contexts to enhance their work in their vocational areas.
- They display initiative, creativity and problem-solving in their use of ILT.
- They work competently in teams (collaborative learning) and independently (working autonomously with less reliance on practitioners).

Standards of work: How effective is the provision in helping learners achieve the highest possible standard of work?

Examples of raising standards through ILT and e-learning
- Learners make effective use of ILT to enhance the quality of their vocational work.
- They have appropriate skills to make use of ILT in their work.
- They have appropriate information-handling skills, for example, in accessing, analysing, critiquing and representing other information and research to support their own learning.
- They present their work for a variety of audiences, using good quality and appropriate ILT outcomes (including images or sounds in multimedia presentations).

Progression in learning: How well do learners progress in their learning?

Examples of raising standards through ILT and e-learning
- Learners achieve levels of competence in ILT that are appropriate to their vocational programme and their prior achievements and potential.
- They make good use of ILT to develop a clear knowledge and understanding of appropriate paths and employability skills.

Achievement: How effective is the organisation, at all levels, in ensuring high levels of achievement?

Examples of raising standards through ILT and e-learning
- ILT has contributed to learner outcomes, for example, retention, success and progression rates and the monitoring of these.
- ILT has increased the levels of learner motivation, perseverance and satisfaction.
- Management Information Systems (MIS) software is used to provide robust, timely and accurate data on recruitment, attendance, punctuality, retention and achievement which can be accessed by all; Learner Management Records; learner profiles that disaggregate data by age, gender, disability and ethnicity.
- Use of on-line initial diagnostic assessment tools to inform individual planning.
- Use of on-line tools and e-portfolios to track and inform learner's of their progress and to build individual learning plans
- Analysis of retention, achievement and trends by individual programme of learning

Sources of evidence to evaluate Achievements and Outcomes
- Data from initial diagnostic assessment.
- Data from learner progress tracking software for example, virtual learning environments (VLEs), e-portfolios or electronic progress files.
- Data on attendance and punctuality.
- Data on enrolment, retention, achievement and progression.
- Data on progression statistics from internal and external careers and guidance services.
- Data provided by external examination and qualification agencies.
- Discussions with practitioners and learners.
- Employer feedback.
- Individual course MIS data on retention, achievement and progression.
- Internal/external verifier/moderator reports.
- Observations of teaching, training and learning sessions.
- Records from tutorial work and Individualised Student Learner Agreements (ISLAs).
- Self-evaluation reports.
- The quality of the learners' work, e-portfolios.
- Work-based projects.

4.3 QUALITY OF PROVISION FOR LEARNING

Teaching, Training and Learning: How effective are teaching and training in promoting learning?

Examples of raising standards through ILT and e-learning
- Practitioners have the relevant pedagogic skills to make effective use of ILT in teaching and learning.
- Practitioners make good use of ILT in the classroom to improve the effectiveness of learning, enhance the application of learning and ensure learners progress at a pace appropriate to their ability.
- Electronic course materials are an integral part of learning programmes.
- Use of communication tools provides links between tutor and learners, including those learners in work-based learning environments.
- Schemes of work, lesson plans and lesson observation proformas signal opportunities for the use of e-learning and encourage its evaluation.
- On-line surveys, combined with the use of MIS software, record learner evaluation data to inform SERs.

Assessment: How effective is assessment in promoting learning?

Examples of raising standards through ILT and e-learning
- Use of initial diagnostic assessment, and learning styles assessment software, provides learners with access to support early in their course.
- On-line self-assessment tools are used in formative assessment
- Learners can assess their own progress via on-line records, and submit assignments electronically, and receive individual feedback electronically.
- Tutors use email, text, on-line collaboration and networking tools to enhance communication with learners and to provide feedback to learners.
- Learners can assemble and manage electronic records of evidence of their work using an e-portfolio

Curriculum provision: How well does an organisation's curriculum provision support social cohesion and economic development, and meet the needs of the learners and the wider community?

Examples of raising standards through ILT and e-learning
- Management Information Systems (MIS) data is used effectively to make informed decisions about the viability of courses.
- Internet, intranet and other technologies are used to widen participation and inclusion through blended and remote learning opportunities.
- Use of e-learning enables learners to undertake minority subjects and wider academic or vocational options in collaborative partnership with other organisations.
- Practitioners participate in well-planned internal/external ILT curriculum development projects.
- Provision of good pedagogic support in the use of ILT provided for course teams.
- Use of digital resources on a learning platform provides differentiation of pace and meets the needs of individual learning styles.
- Access to electronic resources outside of classroom sessions enables learners to progress and extend their learning.

Learning experiences: How well do the learning experiences meet the full range of learners' needs?

Examples of raising standards through ILT and e-learning
- Sharing digital resources via a learning platform, for example, intranet, computer network, website or VLE minimises duplication of time and effort, addresses individual learning styles, and provides differentiation of pace and programme for learners.
- Use of a learning platform provides extension activities and offers blended and remote learning opportunities.
- Use of MIS data links the provision and use of resources to learners' progression and achievement.
- Use of electronic communication tools, for example, email and discussion boards, provides tutor and peer support.

Pastoral care: How effectively does the care, advice and guidance, and other support processes provided for learners safeguard their welfare, promote personal development and ensure achievement of high standards?

Examples of raising standards through ILT and e-learning
- Use of on-line induction and diagnostic tools.
- Use of the organisation's learning resource centres (LRCs).
- Automated learner tracking tools linked to tutorial programme and other support mechanisms.
- Website and intranet provide a 'virtual front door' for learners and encourage and support late enrollers.
- On-line enrolment and induction information meets the needs of remote and distance learners.

Careers Education, Information, Advice and Guidance (CEIAG): How effective is the programme of CEIAG in meeting the needs, potential and interests of the learners?

Examples of raising standards through ILT and e-learning
- Use of blended careers education and guidance.
- Use of on-line booking of careers interviews.
- Use of on-line career diagnostic and planning tools

Additional learning support: How effective is the organisation in providing additional learning support?

Examples of raising standards through ILT and e-learning
- Use of specialist and assistive technology and software provides additional support for learners with learning difficulties and disabilities (SLDD).
- Provision of resources and learning activities in alternative formats makes course content accessible to all learners, including those with disabilities.
- Good communication between learning support and curriculum staff.

Diversity: How effective is the organisation in promoting social and educational inclusion, in increasing access to education and training, which meets the diverse needs of all learners?

Examples of raising standards through ILT and e-learning
- Access to electronic resources outside of classroom sessions and from home to enable all learners to progress and extend their learning.
- Provision of resources in alternative formats to make course content accessible to all learners, including those with disabilities.
- Use of shared resources on a learning platform enables collaborative partnerships with other providers including industry and work-based learning.
- ILT is used to support strategies to widen access and increase participation for groups under represented in further education.

Child Protection and Vulnerable Adults: How effective is the organisation in making arrangements to safeguard and promote the welfare and protection of children and vulnerable adults receiving education and training?

Examples of raising standards through ILT and e-learning
- Acceptable use policies in place and include in induction for all users
- e-Safety awareness raising and training for all staff
- Staff and software monitor the use of electronic communications systems
- Use of electronic ID systems to access buildings and resources
- Security of personal data
- Use of electronic detection systems to monitor and filter access to Internet resources

Sources of evidence to evaluate quality of provision for learning

- Links to regularly updated electronic resources for personal and social development from website or intranet.
- Data from learner progress tracking software, for example, VLEs
- Data from learning resources tracking software.
- Individualised Student Learning Agreements (ISLAs).
- Data from on-line learner evaluation surveys.
- College curriculum and development plans.
- College ILT strategic plans.
- Comparative course retention, achievement data and infrastructure data showing where the college is in relation to national and regional benchmarks.
- Course action plans addressing areas of weakness with subsequent reviews of progress.
- Course documentation.
- Course self-evaluation reports (SERs)
- Data on use of available resources, including library and learning resource centres.
- Formative and summative assessment data for individual courses and departments.
- Individual learning plans, where appropriate.
- Learning support programme records.
- Schemes of work and lesson plans.
- Acceptable use, security and e-Safety policies and procedures