

Learning Technology

A Handbook for FE Teachers and Assessors

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Learning Technology

A Handbook for FE Teachers and Assessors

DANIEL SCOTT

**FURTHER
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Contents

Meet the author	vi
Acknowledgements	vii
Foreword	viii
Introduction	1
Chapter 1 Identify needs	4
Chapter 2 Plan and design	4
Chapter 3 Deliver and facilitate	52
Chapter 4 Assess	77
Chapter 5 Evaluate	89
Chapter 6 Keep up to date	96
Glossary	107
Appendices	109
Index	128

Meet the author

Daniel Scott

Daniel Scott is a digital learning specialist / learning technologist from Barnsley, South Yorkshire, UK.

He began his career as a learning technologist at a further education (FE) college where he proactively developed the effective use of information learning technology (ILT) and eLearning design in learning, teaching and assessment. In addition, he line-managed, trained and assessed a small team of level 3 and 4 digital learning design apprentices. Daniel specialises in evaluating and developing learning technology tools and designing engaging and interactive eLearning resources.

Daniel has been a certified member of the Association for Learning Technology (ALT) since 2013 and went on to win the ALT Learning Technologist of the Year Award 2016. He holds a Technology Enhanced Learning MSc and is a qualified teacher, assessor and lead internal verifier.

He frequently posts on his professional and personal blog, which includes learning technology and eLearning practices, ideas and challenges with learning: <http://danielscott86.blogspot.com/>

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Daniel Scott

Foreword

Teaching and learning through digital technology is a fascinating subject. The interaction of people with wider life activities administered through digital technology has made the ability to be confident in its use an important life skill, and it is arguably a problem for those that never have the chance. Consequently, it isn't just about the advantages to learning that teachers use digital technology but it is part of the wider training for life that makes using ILT for teachers an essential skill. It ranks in importance with literacy and numeracy.

We have one further challenge as teachers in that we have to deal with digital technology as it presents itself to us rather than something to be managed in an orderly and progressive manner. What makes this so fascinating is that the speed at which digital technology offers options is always faster than our ability to assimilate it, meaning that ILT is always seen as a cutting-edge 'helter skelter' area of developing teacher practice. It provides us with a smorgasbord of opportunities to try different things. This is not a self-managed development but a constant confrontation of the 'new', meaning for teachers it is as much about confidence to explore as it is acquiring the skills to know how to bend, manipulate, adapt and revise software in order to fit it for the best teaching and learning. Teachers then need to know how to redesign learning in order to improve the learner and learning experience. These are important and critical skills for all teachers, and those unable to do this may be overtaken by those teachers that can.

In this book, Dan provides a grounding in the basics of how to use digital technology in effective teaching and learning. Reminding us that firstly the digital technology will do nothing freely for us as teachers without our directed and knowledgeable intervention with it, and a reminder that it is still all about, and always will be, great teaching and learning achieved through digital technology and not just for its own sake.

Good ILT design requires three things: know your subject, know how to teach and draw these two together through digital technology. The good news is that every teacher is two-thirds of the way there. Our glasses on this topic are already two-thirds full.

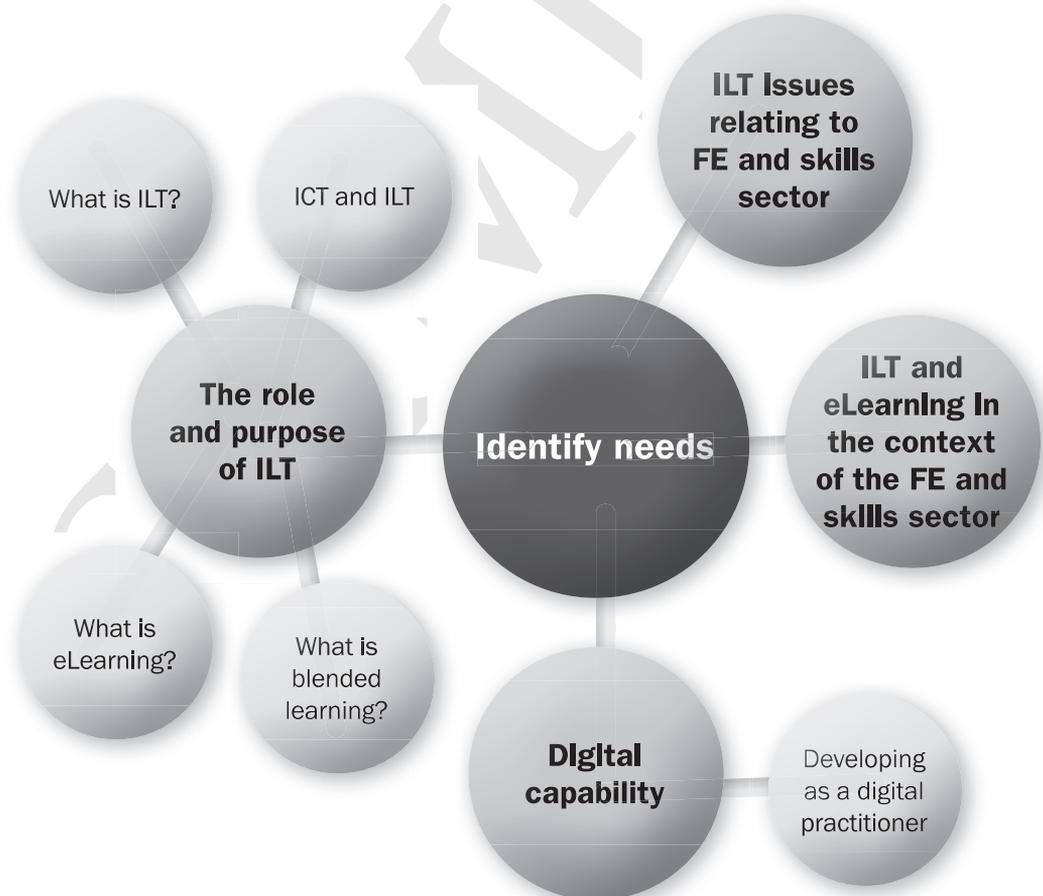
Geoff Rebbeck

Chapter 1 Identify needs

Chapter content

This chapter covers the following topics:

- » the role and purpose of Information Learning Technology (ILT), including what is ILT, eLearning and blended learning;
 - » ILT and eLearning in the context of the further education (FE) and skills sector;
 - » digital capability; including developing as a digital practitioner;
 - » ILT issues relating to the FE and skills sector, including barriers and FELTAG.
-



Introduction

Digital technology is an integral part of our everyday lifestyle. In this digital age, many people use digital technology without thinking of it in these terms, from accessing information at your fingertips via desktop and portable devices, to creating digital content through applications and social media. Using digital technology in education is about harnessing this and converting it into learning opportunities. For example, the most meaningful learning can occur in the most informal places, such as on social media services and mobile devices, and moments of inspiration can even be found while travelling. Educators must embrace how learners of today are interacting with digital technologies and help them apply those abilities in a learning situation. Due to the digital age and easy access to a variety of free digital technologies, learners' expectations for instant and flexible online content are higher than ever. They expect and require learning materials and activities to be accessible at their fingertips. You need to use your imagination and creativity to create accessible, flexible online learning activities to reach the learners of today. This is what effective use of ILT is about, adapting learning and teaching in different ways, having instant and long-term impact for all learners, and preparing them to live and work in the current world.

ILT is simply a current expectation of teaching and learning, just like how businesses today are embracing the wealth of what digital technology brings to their organisation and teams. Education needs to welcome the positivity that ILT brings to learning experiences and teaching practices. However, including ILT in your role should not be a forced task, but something to be positively encouraged and nurtured to engage and enhance the learning, teaching and assessment journey.

Learning, teaching and assessment doesn't have to be rigid or linear. The effective use of ILT should be approached with an open mind which allows the freedom of creativity to flow. Creativity will be further developed when you have the willingness to take risks and expose what went right and wrong in the use of ILT. This allows for critical reflection and evaluation of your own practices to enable further development. You can also learn from your learners as much as they do from you. If learner feedback is taken on board, this allows for a richer experience.

ILT will not replace teachers, who will remain fundamental in encouraging, supporting and enthusing learners, as well as designing the learning process and experience. However, others in similar roles who embrace digital technology and use it effectively could potentially leave behind those that opt out, so it is important to learn and use ILT in your practices.

The role and purpose of Information Learning Technology (ILT)

It is an accepted fact that FE organisations are embracing the benefits that digital technology brings to improve and enhance the learning experience, such as flexibility and personalisation of online learning materials. Digital technology in education is referred to by a number of names such as Information Learning Technology (ILT), educational technology, technology enhanced learning (TEL) and eLearning. Collectively they all relate to the same thing, although some would see them as different parts of a process of application. The Association for Learning Technology (ALT) defines ILT as:

...the broad range of communication, information and related technologies that can be used to support learning, teaching and assessment.

(ALT, 2017)

ALT is based in the UK and has an international presence. It is a community of individual and corporate members that proactively research, support or enable learning through the use of learning technology. Chapter 6 provides more information about how to become a member.

New digital technologies are emerging every day which offer new and exciting ways of teaching and learning. As a result, learners expect instant and flexible access, choice and control of their learning content and materials, and are keen to personalise them to support their learning. To keep up with this growing demand, teachers face challenges such as ensuring they have the skills and appetite to use ILT effectively in their practices. Learners don't all have to face the same wall to learn any more. When applying ILT in a traditional classroom-based lesson, a common failing of inexperienced practitioners is that there is little or no underpinning pedagogical purpose. This reduces the effectiveness of what ILT could offer to enhance teaching/learning delivery, the learner experience and your own digital capabilities. ILT requires underpinning pedagogies, frameworks, plans and sometimes boundaries in order for it to have purposeful use. The main benefits that ILT brings are:

- » connecting others across multiple locations;
- » accessing, creating, collaborating and sharing digital information;
- » increasing digital capability and skills for living and working in a digital age;
- » 24/7 access to learning activities and resources in programmes, that develop with the needs of learners;

- » greater choice and flexibility over place and pace of study;
- » supporting a range of study types: blended, distance, work-based learning;
- » providing instant opportunities for reflection and personal learning recognition;
- » enabling rapid feedback on formative and summative pieces of work;
- » increasing active learning with peers, through interactive and multimedia tools and resources;
- » widening access to join and participate in online communities;
- » enabling learning through discovery and networking.

ICT and ILT

Information communication technologies (ICT) are concerned with the use and function of electronic hardware and software. Hardware includes mobile phones and tablets, laptops, desktop computers, peripheral devices such as headsets, handsets, microphones, cameras and so on. Software consists of products and services that could be in the form of applications (apps) installed on a hardware device or accessed via websites. Multimedia is text, audio (spoken and music) and/or video (still and moving images) combined together.

Both ICT and ILT work together – one cannot work without the other, but sometimes ILT can be confused with ICT. An example is using video clips or PowerPoint presentations as a means of embedding ILT into lessons. While these enrich learning delivery, it is not an effective use of ILT as learners are not actively involved in the process of their learning. They are just being entertained through a passive experience. ICT concerns the toolkit used, ILT is the design and application, and eLearning is the result. However, this could also be a matter of understanding and having confidence in your own ICT skills, network reliability or fear of ILT.

What is ILT?

ILT is the overall term used in FE to relate to anything 'Information Learning Technology'. It is about the overall tools and systems that can manage learning, such as publishing software, social media and Virtual Learning Environments (VLE), a learning platform that attempts to mimic in digital alternatives everything teachers and students traditionally experience in a learning programme. ILT can be viewed as a toolkit which can help you to design learning with digital technology in mind. It should support and enhance face-to-face, blended and self-directed learning methods. In essence, it doesn't matter what technology you use, as long as the material is accessible, flexible and helps to achieve the required learning outcomes.



What is eLearning?

eLearning means electronic learning or enhanced learning. eLearning with a lower-case 'e' and uppercase 'L' signifies that 'electronic' is not the predominant process but the emphasis is on learning and pedagogy. eLearning can be viewed as pedagogy that can be used through ILT, like a VLE for example. eLearning is a process that enables learning to be facilitated and supported appropriately within the VLE. It provides the essential pedagogical foundations that may be missing within the digital technology. eLearning can appear in many forms such as online participation activities and self-directed learning objects, often presented as an online instruction/lesson. These can be produced by the tutor or an external company. Learning objects are covered in Chapter 2. eLearning can be participated in both online and offline; the latter may offer fewer opportunities for reporting. So to summarise, ILT is the tools and systems that support and carry the pedagogy (eLearning). If designed and used well, eLearning is independent learning in disguise that promotes self-management of learning and the ability to collaborate with other learners outside of the classroom. When learners are participating in any form of eLearning, there is a significant amount of independent learning, from using and engaging with the digital technology to applying existing and new learning through it.



What is blended learning?

Blended learning is a method of delivering teaching and learning that involves a mash-up of techniques involving face-to-face learning and ILT. This means that you will still be delivering teaching and facilitating learning face to face, but using ILT alongside to increase learners' attention and enhance their learning uptake. There's no set formula for this; it is up to you, with the help of your learners, to decide on the right 'blend' for your programme and context.



Example

Geoff is teaching reflective theories to his learners. After he taught this he tasked his learners to use laptops or their personal electronic devices to access a shared online document, a Google Doc – that he had prepared earlier. Geoff had pre-written some questions on the Google Doc and asked his learners to work in small groups to answer them. Learners can see each other's responses and refer to this Google Doc throughout the lesson.

Another form of blended learning is the 'flipped learning/classroom'. This is an approach where the theory or introductory activity is delivered online and accessed for homework in the learners' own time. Valuable classroom time is then used to develop the knowledge further through the use of collaborative activities, allowing learners to put their knowledge into practice.

ILT and eLearning in the context of the FE and skills sector

In FE, you may be given creative freedom to use ILT in any aspects of your curriculum, programme and lessons. Awarding Organisations tend to support and encourage this

where possible. However, time to plan and try ILT can be very limited due to teaching, administrative and organisational pressures. Perhaps researching and practising as the programme progresses may help. While time can be restricted, to get the best out of ILT try to incorporate it into your practice as often as you can, as this will develop your knowledge as well as increase your confidence in using it. Alongside this, it's helpful to have a good understanding of your own digital capabilities, assessing what you need to learn or improve on in the use of ICT tools and systems. As a result, this will enable you to develop ideas and identify challenges which are needed to innovate – these combined can make for outstanding use of ILT.

As well as aiming for you to make effective use of ILT, Ofsted are also monitoring its impact on learning and assessment. Ofsted is the Office for Standards in Education. They aim to raise standards in education and skills in the United Kingdom, for all ages, through inspections and regulatory visits, publishing the outcomes online. It is good practice to follow Ofsted guidelines even if you are not likely to be involved in an inspection. The 2016 Ofsted inspection handbook outlines that inspectors will gather evidence from the following:

- » learning activities in lessons or workshops that demonstrate the use of ILT to deliver and assess learning;
- » assistive technology to support learners to overcome barriers to learning caused by impairment or particular educational needs;
- » whether learners are developing the knowledge and skills to stay safe online: know potential risks, dangers and misuse – often referred to as eSafety.

Digital capability

Digital technology can be challenging for individuals in terms of their technological and cognitive competence. These challenges include:

- » practical and functional skills;
- » critical thinking and evaluation;
- » staying safe online;
- » cultural and social understandings;
- » collaborating with information;
- » curating information;
- » being an effective communicator;
- » being creative.

Glossary

There are countless digital technologies and names associated with ILT and eLearning. The following is a glossary that covers some of the ones you are most likely to come across in your role.

Term	Description
Augmented reality (AR)	Adding a digital layer over real-world environments and situations.
Blended learning	Using both face to face and ICT for delivering learning.
Blog	Web log, a kind of online diary to publish multimedia content.
Clickbait	Content on the internet purposely designed to attract attention that encourages you to click on a link that takes you to a webpage.
Cloud-based platforms/storage	A network of remote servers hosted on the internet to provide services rather than a local server on your personal computer.
Digital technology	In the context of education: electronic devices, websites and online media that can enhance assistive and social learning and teaching tasks.
Distance learning	Delivering learning and teaching remotely – often online.
eBook	A digital book that can be read on desktop and mobile devices.
eLearning	Pedagogy that can be used within learning technology.
eLearning object	Referred to as an interactive online activity containing multimedia content.
ePortfolio	An electronic portfolio containing a body of digital evidence in the form of multimedia content.
Face-to-face teaching	A traditional method of delivering teaching and learning that is distinguishable from an online environment.
Firewall	Protection against unauthorised access to a personal computer or network.
Learning technology	Tools and systems that can support and manage learning.

Mobile learning	Use of mobile devices to facilitate learning and teaching.
Multimedia	Text, images, audio, video and animation combined.
Open badges	A digital badge that demonstrates an accomplishment, knowledge or skill; typically in a VLE.
Pedagogy	Methods, strategies and styles of facilitating learning and teaching.
Personal Learning Network (PLN)	Utilising and combining personal and organisational digital technologies and content.
Podcast	A downloadable audio file.
QR code	Quick Response barcode that stores URLs and other information readable by a camera, typically on a mobile device.
Really Simple Syndication (RSS)	A method to pull and push content online.
Screencast	Software that can capture movements on your screen.
Self-paced learning	Typically in an asynchronous environment, where the individual controls the pace of their learning.
Troll	Someone that deliberately posts provocative content online to cause arguments.
Virtual Learning Environment (VLE)	An online space that allows you to create and manage digital learning and teaching activities and resources.
Webinar	A seminar that is delivered online. Also used for online tutorials and workshops.
Wi-Fi	A facility that allows devices to be connected to the internet.
Wiki	A series of webpages that can be openly edited.

Index

- 5 stage model
 - access and motivation, 66
 - development, 68
 - information exchange, 67
 - knowledge construction, 67
 - online socialisation, 66
- ability, in ILT, 11
- access and motivation, 5 stage model, 66
- accessibility, 70–74
- acquisition/assimilative ILT, 28
- ALT. see Association for Learning Technology
- assignments, 80
- assistive technologies, 70–74
- Association for Learning Technology (ALT), 6
- asynchronous ILT, 29
- audio feedback, 80
- authoring software, 43
- blended learning
 - benefits to, 20
 - curriculum planning, 20–21
 - definition of, 9
 - learning design, 22–27
 - using, 21
- blogs, 80
- capacity, in ILT, 12
- Certified Membership of the Association for Learning Technology (CMALT), 101
- CMALT. see Certified Membership of the Association for Learning Technology
- collaborative/interactive ILT, 29
- conditional activity release, 80
- constructivism, 21
- continuing professional development (CPD)
 - conferences and events, 100
 - definition of, 97
 - free programmes, 99–100
 - list of organisations and bodies, 97–98
 - membership of professional bodies, 101
 - opportunities, 99
- CPD. see continuing professional development
- curiosity, in ILT, 12
- curriculum design
 - DADDIE model, 22
 - in ILT, 21–22
 - traditional method of, 21
- curriculum planning, 20–21
- DADDIE model, 22
- Data Protection Act, 93
- delivery with ILT
 - Display, Engage, Participation (DEP) model, 58–59
 - employability skills, 61–64
 - learning spaces, 60–61
 - learning, teaching, assessment and quality assurance, 56
 - LearningWheel, 59–60
 - technical solutions, 57–58
- desire, in ILT, 12
- development, 5 stage model, 68
- differentiation, 27
- digital capability
 - as digital practitioner, 11–12
 - challenges, 10
 - definition of, 11
 - ideas of, 11
 - increasing ways for, 13
- digital capability curriculum mapping, 115–17
- digital divide, 53
- digital footprint, 64
- digital practitioner, 11–12
- digital skills, 28
- digital storytelling, 42–43
- digital teaching, 109
- discussion/communicative ILT, 28
- Display, Engage, Participation (DEP) model, 58–59
- drive, in ILT, 11
- eAssessment
 - assessment activity, 79

- assessment planning, 79
- core principles of, 78
- definitions of, 78
- feedback, 83–84
- providing and accessing feedback, 78
- tools, 80
- eLearning
 - definition of, 8
 - objects, 40, 81
- eLearning and digital activities
 - authoring software, 43
 - digital storytelling, 42–43
 - game-based learning, 42–43
 - imagery, recording and audio, 43–44
 - instructional design, 40
 - open educational resources, 44–45
 - storyboarding, 41–42
- employability skills, in ILT, 61–64
- ePortfolio, 84, 85
- eSafety, 53
- eTutoring
 - definition of, 65
 - online activities, 69
 - strategies of, 68–69
- evaluating ILT, 90–92
- feedback
 - audio, 80
 - eAssessment, 83–84
 - ePortfolios, 84
 - screencast, 82
 - work-based evidence, 83
- FELTAG. *see* Further Education Learning Technology Action Group
- Further Education Learning Technology Action Group (FELTAG), 13–15
- game-based learning, 42–43
- games, 82
- GDPR. *see* General Data Protection Regulation
- General Data Protection Regulation (GDPR), 93
- ICT. *see* information communication technologies
- ILT. *see* Information Learning Technology
- imagination, in ILT, 12
- information communication technologies (ICT), 7
- information exchange, 5 stage model, 67
- Information Learning Technology (ILT)
 - attributes of, 11
 - benefits of, 6
 - blended learning, 9
 - curriculum design, 21–22
 - definition of, 6, 7
 - effective use of, 5
 - eLearning and, 8
 - evaluating, 90–92
 - example of, 9
 - FE and skills sector, 9–10
 - FELTAG, 13–15
 - Information Communication Technologies (ICT) and, 7
 - Ofsted guidelines, 10
 - planning thinking, 26
 - practical examples of, 119–21
 - promoting practices, 104–05
 - quality assurance, 85
- instructional design, 40
- Interactive Whiteboard (IWB), 20, 81
- investigative ILT, 29
- IWB. *see* Interactive Whiteboard
- Jisc Digital Discovery Tool, 109–14
- knowledge construction, 5 stage model, 67
- learning analytics
 - description of, 92–93
 - using data, 93
- learning design, 22–27
- learning log, 127
- learning spaces, 60–61
- Learning Technologists, 45–46
- LearningWheel, 59–60
- LinkedIn, 64
- Massive Open Online Courses (MOOCs), 99
- Microsoft Skype, 85
- mobile devices, 81
- MOOCs. *see* Massive Open Online Courses
- OERs. *see* open educational resources
- Office for Standards in Education (Ofsted), 10
- online activities, 69
- online activity readiness questionnaire, 122–25
- online collaborative document, 86

- online forums, 81
- online socialisation, 5 stage model, 66
- online wall/pinboard, 86
- open educational resources (OERs), 44–45

- pace of learning, 27
- peer assessment, 81
- peer collaboration, 104
- personability, 61
- personal and professional development
 - plan, 126
- polling devices, 81
- practice/experiential ILT, 29
- problem-based learning, 21
- productive ILT, 29

- quality assurance
 - digital technology, 85
 - in ILT, 85
- quick ILT planner, 118

- Rebbeck, G, 12
- recording devices/lecture capture, 82

- safe practice of ILT
 - eSafety, 53
 - false information, 55–56
 - guidelines, 53
 - social media, 54
- screencast feedback, 82

- self-assessment quizzes, 82
- simulations, 82
- Skills Funding Agency, 14
- social constructivism, 21
- social media
 - in ILT, 30–31
 - safe practice of ILT, 54
- social networking, 101–04
- soft-skills, 61
- sourcing ILT
 - benefits of, 27–28
 - description of, 27
 - social media, 30–31
 - types of ILT, 28–29
 - virtual learning environments, 32–34
- Special Educational Needs and Disability Act, 72
- storyboarding, 41–42
- storytelling, digital, 42–43
- synchronous ILT, 29

- time, in ILT, 15, 27

- video/audio tools, 86
- Virtual Learning Environments (VLEs), 32–34, 87
- vision, in ILT, 11
- VLEs. see virtual learning environments

- work-based learning, 83