



Critical Curation and Collaboration in Learning (Cur8)

The Evolving Role of the CVET Educator

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Project Information

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The Evolving Role of CVET Educators in the Online Context



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	ACTIVITY		TASK		IDEAS		LEARNING EXPERIENCE PLATFORM
	SELF ASSESSMENT		WORKSHOP		PODCAST/WEBINAR		COLLABORATE
	SELF STUDY		EXPLORE		e-LEARNING		TOOLBOX



Module Introduction

Continuing Vocational Education and Training (CVET) is crucial in supporting participation of adults in lifelong learning so they can develop, update and upgrade their skills. Its role is to equip adults with the skills to manage their labour market transitions; to enable them to shape their own futures and, in so doing, ensure Europe's successful transition to an equitable green and digital economy and society. HE and initial VET are important but need to be complemented by CVET to deliver their full effects.

There is strong evidence to show that whilst Learning and Development (L&D) Professionals working in CVET recognise that digital content creation and facilitating online collaboration for learning are required skills, the majority are aware of their urgent need to upskill in this area; a need foreceably exacerbated by the COVID-19 pandemic!

This module explores the digital skills and competences that L&D Professionals need in order to effectively support the Upskilling and Reskilling of adult learners through Continuing Vocational Education and Training (CVET). Whilst it provides an overview of a number of digital learning approaches, the main focus is on the development of the specific digital competences of needed to support the transition from traditional approaches of content creator and presenter' to those of 'learning facilitator, meaning-maker and enabler'. The focus, therefore, is on the digital competences are considered essential within the context of developing and delivering Blended Learning, Collaborative, Personalised and Self-Directed Learning programmes for adult learners.

Module Aims and Objectives

The purpose of this module is to meet the challenge of the evolving role of Learning & Development Professionals in CVET by supporting the development of specific digital competences that enable the adoption of new approaches to teaching and learning. The objectives include:

- ◆ Raising awareness about how the role of the CVET Educator/Learning and Development Professional is changing and evolving
- ◆ Providing an overview of a range of topics relevant to the digitisation of teaching and learning activities
- ◆ Supporting the development of skills and competences in:
 - Digitally curating, creating and sharing learning resources
 - Critical Digital Literacy in learning content curation and creation
 - Managing and orchestrating collaborative and self-directed learning
- ◆ Facilitating personalised Digital Upskilling / Continuous Professional Development (CPD) Pathways for L&D Professionals

Learning Outcomes

After studying this module you will be able to:

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- ◆ Explain how and why the role of the L&D Professional is changing and the implications of this for CVET and Adult Learning
- ◆ Identify and new approaches to supporting the upskilling and reskilling of adults
- ◆ Use Critical Digital Literacy skills in curating learning content, including for collaborative curation and use of Open Educational Resources (OER)
- ◆ Recount the benefits and value of Learning Content Curation for your own development and that of the learners you support
- ◆ Facilitate collaborative online learning with adult learners
- ◆ Self-assess levels of competence in Learning Content Curation, Promoting Critical Digital Literacy amongst Adult Learners and Facilitating Collaborative Online Learning before and after completing a personalised Learning Pathway
- ◆ Using the Cur8 Competence Framework, create a Competence Development Learning Pathway for self-directed Upskilling/CPD
- ◆ Utilize the range of 'How to' topics in the Cur8 Learning Experience Platform (LXP) and Tools and Apps in the Cur8 Toolbox

Competence Development (see the Cur8 Competence Framework):

- ◆ Critical Digital Curation of Learning Content
- ◆ Promoting Critical Digital Literacy (CDL) amongst Adult Learners and Managing Required Changes
- ◆ Facilitating Collaborative Online Learning

Indicative Content

- ◆ The Evolving Role of the CVET Educator/Learning and Development Professional
- ◆ Learning Content Curation
- ◆ Critical Digital Literacy
- ◆ AI in Learning and Development
- ◆ Facilitation techniques for online collaboration
- ◆ Digital Learning Design
- ◆ Assessment in the Online Environment
- ◆ Communication Strategies for Online Learning
- ◆ The Cur8 Competence Framework
- ◆ Using the Cur8 'How To' tools, Apps and learning materials to support competence development

Duration: Approximately 20 hours

Further Reading and Learning Materials

You will also find a range of supporting tools and resource materials available in the [Cur8 Learning Experience Platform \(LXP\) and Toolbox](#)



Topic: The Evolving Role of the CVET Educator/Learning and Development Professional in the Online Context

The world of work is changing fast and having an immense impact on Continuous Vocational Education and Training (CVET), Upskilling, Reskilling and Lifelong Learning. New working practices, emerging technologies, flexible working patterns, dispersed locations and multi-generational teams are directly influencing the design and delivery of continuing vocational learning and skills updating. And then, of course, there has been the profound impact that the COVID-19 pandemic has had of the way we work and learn.

In this changing (and changed) world of work, skills learning and development has had to evolve; it has had to become accessible, agile and flexible.

The pandemic crisis brought a radical transformation to the whole educational sector, including the CVET sector. On the whole, many, if not all CVET Educators and Trainers, made the transition to a digital teaching environment. They managed to conduct at least some of their classes online and acquired new competences, speeding up the digital transformation. However, many educators and trainers had very little time to prepare to the transition to online education, meaning that they lacked the necessary skillset to adapt to the new environment and kept using outdated methodologies (e.g. 'death' by Powerpoint!), unsuited for the new circumstances. As a result, for many trainers and learners alike, their first experience of digital learning was often negative.

The difficulties experienced were compounded by the lack of opportunity to deliver practical skills development. CVET training almost invariably has a significant practical, hands-on component, delivered in a face-to-face environment. The most frequently used model for this type of education is group practice. These preconditions mean that CVET does not necessarily lend itself to an easy transition to a digital format of teaching and learning.

According to the World Economic Forum, the COVID-19 pandemic has busted the myth that work-from-home and online training is impractical or ineffective. Digital learning and learning via telepresence will become an accepted, "must-have" part of a blended working and learning environment⁽¹⁾.

The pandemic has also highlighted the importance of upskilling and reskilling employees. With many businesses struggling to stay afloat during the pandemic, L&D professionals have had to focus on developing new skills in their employees to help them adapt to new roles and responsibilities⁽²⁾.

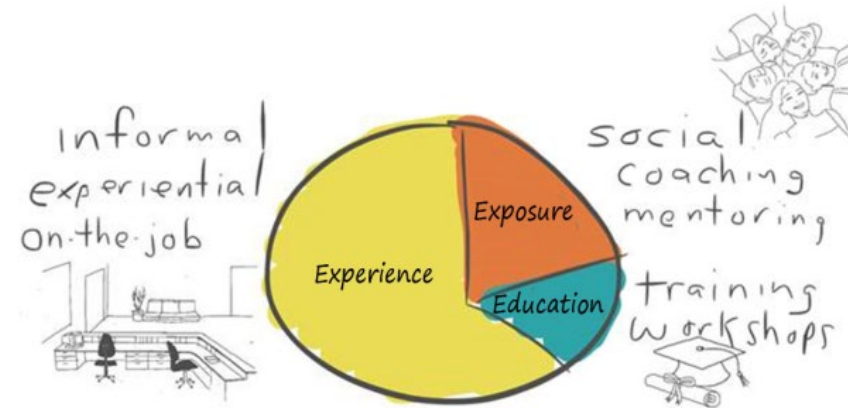
However even before the pandemic, the role of CVET Educators and Learning and Development (L&D) Professionals was in transition, but not always at the pace needed. A key shift was the recognition of the need for a move away from learning delivery to enhancing performance, underpinned by the need for L&D in the workplace to be aligned to the business and to deliver tangible organisational and individual impact. Recognising that most learning



takes place informally (outside the 70-20-10 model), this shift also recognised increasingly a need for L&D to support social, experiential and on-the-job learning.

Today's learners have more means of obtaining information than generations past. Advancements in technology have created limitless options for delivering training, creating a challenge for many learning leaders to select the right training tool.

The 70-20-10 model continues to challenge the profession to think about what's going to be most effective approach for the audience. How can we provide the training that is most effectively designed to meet the needs of the learner?

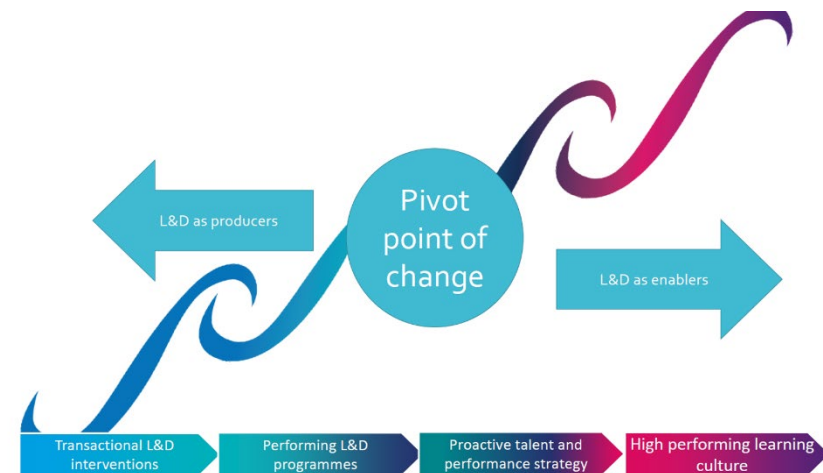


Many learning interventions are now best delivered in the flow of work activity, not in a classroom. Digital technologies enable learning to be available anytime and anywhere with many also choosing to learn in their own time and often from their own sources of learning and knowledge. With the proliferation of rich, readily available online content, learning design is shifting from not just creation but to Learning Content Curation.

This new learning landscape creates many new opportunities but also raises a number of challenges. Learners must be at the heart of learning design and delivery. Development is shifting from activities that are 'done to' learners, to resources that are 'available to' for learners to access in their own ways. Digital collaborative platforms, online social platforms and communities of practice can also now provide an environment where performance-related discussions take place in 'real time' and learning needs identified accordingly.

The skills of CVET Educators and Learning & Development Professionals are having to change from those of being the 'sage on the stage' (creating and presenting learning), to a 'curator-concierge' model – directing learners to excellent existing learning content; a 'guide on the side' and 'enabler of learning'.

This is a shift in mind set as well as skill set.



Source: Transformational Change, L. Overton

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Becoming a Content Curation Concierge

[Jane Hart](#) of Modern Workplace Learning coined the term ‘**curator-concierge**’. She writes of the shift from content provider to learning concierge, where L&D Professionals work as individual performance consultants to source learning resources both within and outside the workplace, and help workers connect with others in the organisation or the industry. In particular, she promotes this approach for building on a continuous self-learning and self-development culture.

If you’re responsible for helping people continuously learn and stay up to date, you already know that formal training courses are not enough. They’re great for getting going, but even the best courses and resources go out of date.

Continuous learning means just that: Finding relevant content from different sources, continuously. However that is not easy and potentially it is very timeconsuming. There’s too much content for any human to consume, even in niche areas. We need ‘trusted guides’ to source and share the most relevant and best quality content out there. That’s where Content Curation becomes a Critical Digital Literacy skill for learning professionals.

Content Curation is the act of continuously finding, filtering, making sense of and sharing relevant content. So how do you do it in learning? Not by just Googling it! Educators are increasingly confronted with the challenge of sourcing, filtering, creating and managing digital content to enhance learning effectiveness.

However, today there are many Artificial Intelligence (AI) Apps and Tools available that can automate this process.



See examples in the Cur8 Toolbox:
<https://lxp.cur8learning.online/product-category/curation>



Task: Study the following steps to becoming a ‘**curator-concierge**’.

[10 Steps to Become a Learning Content Curation Concierge | Anders Pink](#)





Shaping the Future of Learning

Advances in technology, changes in the workforce make up, definitions of work itself, demands from learners and the need to demonstrate impact on performance, all play a part in L&D professionals asking questions about the focus and approach learning and development needs to take. In terms of changing Mindset we have identified six ingredients for success in shaping the future of learning:



The infographic is a central graphic with a dark blue and green space-themed background. It features six ingredients for success arranged in two rows of three. Each ingredient has a corresponding icon, a title in bold blue letters, and a brief description below it.

Ingredient	Icon	Description
CURIOSITY	Magnifying glass	Exploring, questioning, adapting
CREATIVITY	Lightbulb with gears	Solving important problems with practical tools
CREATIVE THINKING	Head with gears	Listening, questioning, viewing different perspectives
COMMUNITY	Atom symbol	Connecting, sharing, collaborating
CLARITY	Diamond	Prioritising simplifying
COURAGE	Group of people	Stepping up, stepping out disrupting and challenging the status quo

Centered text in the infographic: Shaping the future of learning: **6 ingredients for success:**

Skills development remains a strong focus post-pandemic with a sustained level of upskilling and reskilling activity across the whole of Europe. It is estimated that a third of upskilling has been in response to an immediate business need, demonstrating how people teams are adapting to deal with changing priorities. Skills priorities are supporting line managers, facilitating flexible working, and developing organisational development and change management capabilities.

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However, despite the seismic shift to digital learning, take-up of technologies that have the potential to make CVET learning more engaging and effective, remains low. The proportion of CVET Providers and business organisations using mobile apps, chatbots, VR and AR animations or games is largely unchanged since 2019.

In 2022, the CIPD identified 10 areas that demonstrate where and how L&D professionals have an opportunity to drive organisational performance, build learner engagement and evolve their practice ⁽³⁾. These shifts may well challenge a traditional training approach. However, whilst challenging it, we believe there's still a place for formal facilitated learning when addressing relevant performance gaps, as well as taking advantage of relevant technological development.

Within the Cur8 project our aim is to raise awareness of these shifts in role- the evolving role of the ECVET Educator/L&D Professional - whilst focusing in particular on promoting and facilitating the following changes amongst CVET Educators and Learning and Development Professionals:

1. Shifting to a curator-concierge approach, not just creator
2. Enabling user-choice and co-creation, not prescription learning (facilitating and supporting self-directed learning): Empowering the learner.
3. Creating opportunities from social and informal learning to support formal provision
4. Facilitating just-in-time and in-the-flow learning where learners can access content in a way and at a time that is most convenient for them
5. Creating engaging bite-sized learning using podcasts, video clips, curated links, collaborative online discussions, forums, Learning Experience Platform – a Netflix-like presentation of learning topics (e.g. the Cur8 LXP)
6. Digital-mobile learning to support face-to-face (Blended Learning)

References

- (1) How COVID-19 will reshape learning and work - The World Economic Forum. <https://www.weforum.org/agenda/2021/04/future-remote-working-digital-learning-covid-19>
- (2) Learning during the pandemic - GOV.UK. <https://www.gov.uk/government/publications/learning-during-the-pandemic>.
- (3) Learning and development evolving practice: CIPD 2021. <https://www.cipd.org/uk/knowledge/factsheets/evolving-practice-factsheet/#what-are-the>
- (4) State of Digital Learning Report 2023: Elucidat [Download .pdf of report by clicking here](#)



Topic: Learning Content Curation

What's the purpose of content curation?

When you look at how much brilliant content is available nowadays to support adults learning, the challenge isn't creating it, it's that there is simply so much of it! Where do you start? How long will it take to find what you need?

Think about how much thought goes into choosing the best artifacts for an exhibition, the same thought and care needs to go into curating content for learning and performance support.

Its purpose: to aid learning and performance strategies by gathering the best and most relevant content for a particular need or audience, making it easily available to learners.

Content can come from many places – the internet, podcasts, videos, interviews, or perhaps organisational blog posts. The work of the curator is to 'gather' the content, provide context for it and make it available.

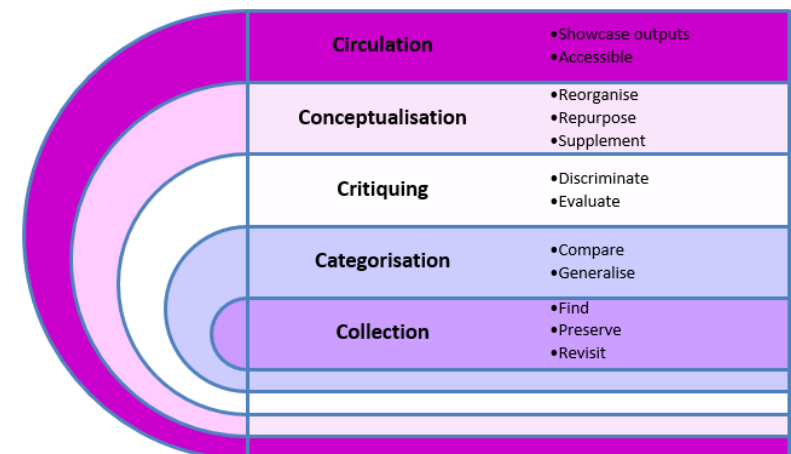
Curating content is an essential activity that sources the best information to enable staff and organisations to be effective, innovative, and competitive in a rapidly changing world. To do this effectively the Learning and Development Professional must develop Critical Digital Literacy Skills.

Clearly there is huge scope for CVET Educators and L&D Professionals in organisations to utilise curation as a learning support strategy.

Learning Content Curation is far more than just gathering lots of information, it's about:

- ◆ Defining the key purposes or themes to support learning and performance
- ◆ Finding and filtering the best information, and
- ◆ Explaining the relevance or providing context for the curated content

The competence of Learning Content Curation can be defined as the ability: **“To transform teaching and learning through effective collection, categorisation, critiquing, conceptualisation, and circulation of resources deemed to have (curricular and) content value.”**



Source: adapted from <https://files.eric.ed.gov/fulltext/EJ1074044.pdf>



Watch this video for an example of how content curation is used to support updating construction skills.



<https://youtu.be/CbSPi5bMu44>

Not all learning needs require a formal course, many can be supported by content that's easy to access, whenever the need arises. Typically, the majority of our learning is non-formal, experiential and often experienced on-the-job as part of working lives. That is why creating a strategy for curating content is so important to organisations and individual learners alike.

In summary:

- ◆ Content curation aids learning strategies by gathering the best and most relevant content for a particular need or audience, making it easily available to learners.
- ◆ Content curation is an efficient and flexible way of producing learning content for workforces and in CVET organisations.
- ◆ In a fast-moving world, keeping up to date is more important than ever – content curation makes learning assets available in the flow of work.
- ◆ It ensures learners have the best carefully selected and filtered content, that's targeted to a specific group.

The content curation process searches, filters, embeds and contextualises learning assets.

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What does it take to be a great content curator for learning?

According to an article on Scoop.it [2](#), an excellent content curator is someone who can apply Critical Digital Literacy skills to:

1. Find the most relevant material for the topic
2. See patterns and trends
3. Identify groupings and contexts for the topic
4. Navigate the complexity of available information

In addition to these skills, a good curator must be skilled at:

- ◆ Locating and evaluating valuable content
- ◆ Sorting, organizing, and structuring content so that it is as accessible as possible
- ◆ Contextualizing content to help make it as meaningful as possible to a specific audience
- ◆ Creating and re-purposing content when it adds to the underlying value.

However, effective curation benefits from genuine subject specialists who are competent, knowledgeable in their area and have ‘intellectual curiosity’. The role of Learning Content Curator is important and requires specific skills and expertise.



To be effective at Learning Curation you need the following qualities and attributes.

Is this, or could it be, you? What are your development needs?

Consider the following questions:

- ◆ Are you passionate about your area of expertise?
- ◆ Are you recognised as a credible role model in your field?
- ◆ Do you have Critical Digital Literacy Skills (the ability to analyse and evaluate digital content critically: see below)?
- ◆ Do you understand the sector/organisational context you work with?
- ◆ Are you experienced at undertaking research to source content, including OER?
- ◆ How do you manage enquiries from learners for information?



- ◆ How do you assign, catalogue, and archive learning content in themes for convenient access.
- ◆ Are you confident at presenting content in a creative, engaging and interesting way?
- ◆ Can you write simple copy to explain content relevance?
- ◆ Do you embrace new thinking and change?
- ◆ Do you collaborate with colleagues and external organisations in developing learning content?

Whilst all these characteristics are important, the first four are vital.

CVET Educators/L&D Professionals need to be passionate experts that are role models in their specialism, who can source content that supports performance improvement with a clear understanding of the context.

The role of automation in filtering content

In the 'find and filter' or 'seek' stage of the process, content curators can and should use automated processes. This is where curation as a skillset has changed in recent years. You simply can't find and read everything manually, whereas crawlers and algorithms can.

However, according to the CIPD Learning and Skills at Work Survey 2021 showed that only 4% of organisations were using technology to support curation!

There are Apps available that can do this kind of curation e.g. the Anders Pink App⁸ and algorithm which purports to review over 8 million posts published daily.

The key skill is being able to use automated processes to aggregate and filter relevant content. In simple terms it is the difference between someone who can enter a search term into Google and someone that understands the importance of advanced search and filtering, and can use this to bring back much more relevant content.

Advanced use of automated tools

You can use an automated tool such as Google to find authoritative content on elearning or you can use RSS feeds, for example from a site such as Elearning Industry to see all new content they publish. Both of these are very crude and simple ways to find content. Search engine results are strongly influenced by brands and commercial considerations, including placing ad content above search results – and even geography. By using automated and advanced search features you can refine your filters to find the content you need.



In the case of the Anders Pink App, for example, you can specify a topic such as elearning and the crawlers and algorithm will find and filter for you all the latest articles published each day on elearning. However, the skill of a curator is to go further. For example, you can use keyword combinations to only filter content about elearning trends or say game based elearning design. The curator can further refine their automated curation to filter content just from specific domains they trust or RSS feeds or even just what experts in the field are sharing. In this way the curator can use automation effectively in the find and filter stage. For curation, less is more. Anyone can use Google and get 2 million results. That's not curation. You want to find and filter quality articles that are highly relevant for your audience.

How automated tools are developing

Currently automated tools are best at aggregating and filtering. However, developments in machine learning and AI means they are beginning to add value beyond aggregation and filtering. For example, they can look at factors such as how many shares the articles received, and more specifically the algorithms can look at how many of your network or your team shared the articles. They can also review how many upvoted the article or commented on the article. Algorithms can also look at the author of an article and the authority of the domain the article was published on. In this way algorithms can help determine if an article is more likely to be relevant and of interest to you. A good curator can use these factors to further refine the automation of content.

However, automation, whilst essential to good curation, still only takes you so far at the current time but can be helpful in the initial grading and synthesising of content. Machines find, aggregate and filter. Curation needs a human touch.

Manual curation of content

Pinterest is a great example of manually curated content. Users of Pinterest find and share pictures, blogs and other content and collate these on their own 'pinboards', which acts as a personalised curation of content. Users can browse the content of users and save individual pins to their own boards. Typically a user's board is organised around a central topic or theme. Each board is very personalised, it is what the curator wants to share with their audience.

Specific learning courses or programmes

While curation has gained a lot of currency in L&D, learning still mainly trades in terms of courses and programmes. These might be classroom based, elearning, or a blend involving these and other methods. These are of course still vital in helping people reach a certain level of competency. However, research shows that only 10% of our learning comes from formal courses like these. As soon as you complete them, they're out of date. New content like the industry news, trends and best practice mentioned above need to be available to learners. Here's where curation plays a role in learning design. The curator can manually curate a list of relevant articles to complement formal learning. For example:



- Embed the latest external articles on leadership as part of your leadership course to read and discuss ahead of a focused discussion
- Curate a reading list on trends in cloud computing and start a discussion on the impact of these trends after completing an introductory elearning module
- Set an assignment to analyse and share views on emerging trends in AI based on latest articles

The key here is where you place the curated content. Ideally it should be as close to your formal content as possible. One way is to embed curated content directly into your Learning Management System or Learning Platform.

For example, there are plugins for Moodle that let you do this.

Keeping this content alongside your formal courses and blends increases the likelihood that learners will discover it, rather than sending them to another platform.

Learning Content Curation as a core Digital Literacy Competence for CVET Educators

The digital curation of learning content is embedded in participatory and connected learning where the CVET Educator/L&D Professional becomes the enabler of learning, the 'guide on the side', rather than the traditional detachment and formality of content presentation from 'the sage on the stage'.

Curation embraces the multimodal competencies that are now central to effectively navigating abundant and complex information and media landscapes. Fundamentally is an act of problem solving. It is about finding, storing and organising relevant information in accessible ways.

Curation can be viewed as a core competency for critical inquiry, aggregation and storytelling in digital culture. It includes the ability of both CVET/Learning and Development (L&D) Professionals to effectively combine sources, ideas, content, and platforms to create clear, contextualised and balanced learning opportunities and, importantly, how to develop these competences in learners in order that they can become effective selfdirected and autonomous learners.

L&D Professionals and learners alike need to be proficient in the aggregation, repurposing, and appropriation of content while maintaining accuracy, cohesion, narrative flow, and point of view. The competence can be defined as the ability: "To transform teaching and learning through effective collection, categorisation, critiquing, conceptualisation, and circulation of resources deemed to have (curricular and) content value."

Content is 'out there' - curation enables us to focus on designing the Learning Process



The Cur8 Competence Framework: Self Assessment



Using the **Cur8 Competence Framework** available as a download from the **Cur8 Learning Experience (LXP) Platform** [CLICK HERE](#), review the competences of 'Digital Learning Content Curation' and self-assess your current level of competence in **"Critical Digital Curation of Learning Content"**. Start by completing the Cur8 Competence Check available on the LXP: <https://lxp.cur8learning.online/the-cur8-competence-check>



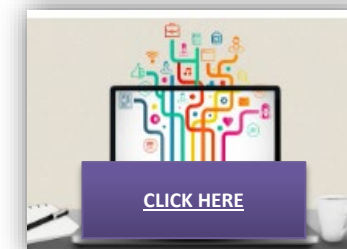
To learn how to curate learning content and generate learning experiences from curated content, go to the Cur8 LXP see the Learning Topic: [Learning Content Curation](#). This OER Topic is available for learning on-line or for download.



Task: Complete the 'How To' Guide to the Critical Digital Curation of Learning Content



[The Module: Content in the Online Context](#) offers a wide range of practical guides/topics on how to design the learning process using curated learning content. They include how to create mashups, podcasts, videos, quizzes, digital story-telling and many more.



Visit **the Cur8 LXP** to get inspiration, tips and techniques for making online learning more engaging.

Achieving transformational change in the workplace

"The learning professional who can control the attention of the learner by **curating** the vast amount of distribution (i.e. learning content) truly has the power to achieve transformational change within modern organisations. Here are my 3 lessons for curators...and a warning!⁷

Lesson 1: Mimic the way people learn at home and do the same in the workplace. Ever looked on YouTube for a "how to" video on putting something together? Or repairing something? Think about how natural it felt and how easy it was. Why is learning in the workplace so different? And does it have



to be? The opportunity to "snackify" learning into bite-sized pieces mimics the way we learn when away from the workplace so replicate it as much as possible.

Lesson 2: Teach them to fish. The command and control approach of "classic" L&D teams to centralise and own the processes and tools of learning.... Why not decentralise and create a learning network that enables the user to select the learning they want, when they want it? There's a plethora of platforms available today that can overlay a traditional LMS, enable single-sign-on access to content libraries beneath them AND give learners the ability to "share", "like" and create their own channels for distribution (learner created playlists).

Lesson 3: Enable a "participatory" culture to accelerate capability. Curation fits well as part of "participatory culture" as technology-enabled individuals archive, annotate, appropriate, and recirculate learning content. Being able to critically evaluate content and share information in participatory environments is a key aspect of "metaliteracy" (Mackey and Jacobson 2011); a unified construct that supports the acquisition, production, and sharing of knowledge in collaborative online communities.

The warning: homophily...or "love of the same". The presence of homophily has been discovered in a vast array of research. More than 100 studies that have observed homophily confirm that similarity breeds connection. Individuals in homophilic relationships share common characteristics that make connection and communication easier. The warning for the modern curator is that in the same way that homophily in the biological world can result in inbreeding, homophily, or a lack of diversity and challenging of the status quo, can stifle creativity and progress within a networked distribution system (think of the "echo-chambers" of some social media channels where everyone is in agreement and difference of opinion is shouted down and censored). The answer, of course, is to constantly be curating content for those groups that poses a question, a challenge or a radical new idea."

Source: Paul Boivitis, LinkedIn

Copyright tips

As with most things content-related, copyright is an important issue. But it doesn't need to be a complicated one. Here are 10 tips to help you curate within copyright laws.

1. Use a hyperlink to a freely accessible e online resource such as a TedTalk, YouTube video or online article. This can be added to an intranet, website or learning system page, email or newsletter.
2. Make sure hyperlinks are clearly identified with the source and add some context as to why it is relevant.
3. Avoid linking or framing in a way that reproduces material from the linked site; instead provide a pathway to the relevant page on the linked site.



4. Carry out all necessary checks to ensure that the work being linked to has not been published on that site without the copyright owner's consent.
5. Consider including disclaimers on the linking site regarding the reliability of any information on the linked site; this could reduce exposure to liability regarding unlawful content.
6. Check the terms and conditions of the linked site to see whether they contain any restrictions on linking or framing.
7. Partner with a recognised curation provider to integrate content in your learning system.
8. Consider systems that enable you to create e-magazines by simply adding the links. They automatically draw key, permissible content in.
9. Be aware that imagery used in the original resource may also be copyright, so use royalty free artwork on your hosting site, or images that you are licensed to use.
10. Signpost existing reading lists, communities of practice or individuals to follow via social media.

Remember: If you have any doubts concerning the possible breach of copyright and intellectual property in curating content, then it is important to take legal advice. You may need to gain permission from the content owner if you want to reproduce any of the resource.

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Topic: The impact of Artificial Intelligence (AI) on Learning, Training and Development

In the ever-evolving landscape of learning and development, artificial intelligence (AI) is emerging as a transformative force. There is growing recognition of its potential to revolutionise workplace learning, improve knowledge retention and support employees' professional growth. However, as with any technological advancement, there are exciting opportunities and cautionary notes to consider.

Artificial Intelligence has been defined as the development of computers to engage in human like thought processes, such as learning, reasoning, and self-correction. It includes machine learning and cognitive computing.

In 2022, artificial intelligence (AI) exploded in popularity, particularly as a tool for improving workplace learning. Advances in technology present new opportunities for L&D professionals. Digital learning platforms make collaboration and knowledge sharing across a dispersed work force easier than ever.

L&D practitioners need to consider how best to use AI as it continues to develop. This includes ethical considerations, but also using technology to align with business and individual learning needs, and not just implemented for technology's sake. We need to apply what we know about offline learning to a digital strategy.

Content Curation for Education and Training using AI

As discussed previously, Content Curation is as important a skill to L&D as learning design. (Indeed, in many ways, it is a form of learning design.) We argue that content curation for learning should be a core digital literacy skill for CVET Educators and Learning and Development Professionals.

The ten key factors, already at work, which, among others, pave the way for a much greater and rapid adoption of curation practices in CVET are:

- An overwhelming abundance of information that needs to be organized
- A Growing Number of "Open" Teaching / Learning Content Hubs
- Constantly changing information
- Real-World Info is not held inside silos
- The Job Market is changing - new skills are needed and old skills need updating
- Alternative Certification systems are emerging – including for non-formal learning e.g. LEVEL5
- *Educators can curate their own textbooks*
- Educational marketplace is open to thousands of competitors
- There is a demand for *trusted guidance* – nb the influence of “Fake News” = distrust (eg. the current debates about Wikipedia)



The process of finding, aggregating and selecting relevant content has always been a key skill in learning design and as the web has developed and the volume of content has grown these content curation skills have become more important. We need the ability to filter the huge volumes of new content prior to evaluating, selecting and adding value to content.

The growth in content volumes and constantly changing information is one of the reasons why the digital curation of learning content is considered poised to transform learning.

The pace of change these days means that L&D staff simply can't create all the content that learners require. However there is a huge amount of content readily available on the web that can be accessed and made available to support learners.

With Artificial Intelligence, L&D professionals can get a better understanding of modern learner behaviour and help develop learning pathways to improve the learning experience. Using such predictive analytics, organisations can further develop smarter learning content, one that is intuitive as well as responsive to the learners' learning journey.

AI is undoubtedly beginning to transform how content gets delivered while fostering knowledge retention.

The Application of AI Chatbots

The developments in AI chatbots are likely to continue at pace, and it is important for CVET Providers and employers to stay up to date with the advances, at least as an observer if not a user. It has the potential to reshape jobs, generate new roles, change the skills we need, or plug skills gaps many organisations currently have. It can also take on tasks to enable L&D Professionals to be more productive, innovative and strategic in their focus. But with these and other opportunities, there are also risks. These will become clearer as we learn how to use these technologies and how they will shape the future of work.

Implications for skills and learning

"AI could help personalise and speed up learning. Its ability to gather and summarise information and engage in conversation means it could become a personal tutor on some subjects.

Conversational AI (through chatbots etc) could reduce the skills required to become competent at some tasks (deskill), increasing the number of people who could do the task competently. With conversational AI tools producing draft summaries quickly, the demand for summarising skills might shift to fact checking and editing, and learning how to use a chatbot for this task. This is the case with calculators for example. While they can calculate quickly and accurately, arithmetic is still considered a core skill. We still need to know enough about how to do sums and other arithmetic to know when to use calculators in our daily lives.



Important skills at work will increasingly veer towards ‘human’ skills and the ability to collaborate with AI. For example:

- ◆ **Adaptability.** Technology is rapidly changing our world, so the ability to keep pace or get ahead will be crucial.
- ◆ **Critical thinking and judgement.** Being able to recognise inaccuracy or potential for error, to know when and how to check facts will be important, especially where accuracy has consequences.
- ◆ **Creativity and problem solving.** This includes identifying problems and applying solutions, looking for fresh applications to existing solutions, perhaps in collaboration with AI.
- ◆ **Interpersonal.** A focus on human, relational skills that connect people. AI tools like ChatGPT don’t have feelings.” (Source: CIPD ⁽⁷⁾)

AI in Reskilling and Upskilling

AI can help people to reskill or acquire new skills – for example, through Microsoft’s partnership with [Ashoka](#), a global organization that supports social entrepreneurs who are committed to finding innovative solutions to society’s most pressing social, cultural, and environmental challenges. As part of Microsoft’s worldwide Tech for Good Initiative, at the heart of this new partnership is the [Microsoft-Ashoka Accelerator](#), a program designed to foster an ecosystem of start-ups that take advantage of the power of cloud computing and artificial intelligence to tackle social and environmental issues.. Microsoft is providing access to technology, AI and cloud expertise, and mentors who can help entrepreneurs create intelligent, data-driven solutions, connect to markets, and more.

AI is transforming the way we learn and develop skills including:

- ◆ Automation of the processes of Learning Content Curation.
- ◆ Personalizing the learning processes, empowering the learner, boosting engagement and thereby improving completion and retention rates
- ◆ Enhancing ‘microlearning’ (bite-sized learning)
- ◆ Supporting collaborative online learning
- ◆ Facilitating formal and informal learning assessment, retention and transfer
- ◆ Automation of analytics that measures learning effectiveness and others.
- ◆ Improving ‘Adaptive Learning’(adapting the learning experience in real time based on the learner's performance and feedback).



The Benefits of AI to Learners

Learner Engagement

Through the use of artificial intelligence tools, individualised schedules, custom learning tasks, interaction with learning tools, and personal recommendations are part of the enhanced engagement that a learner can benefit from. The tools can also be used to read learners' engagement with the goal to increase their engagement and raising interest in learning content.

Access To Learning Materials

Artificial intelligence tools can help make global learning content available to all, including those who speak different languages or those who might have visual or hearing impairments. The emergence of software that detects language and auto-translates to the preferred language, while creating subtitles to the instructions being given to learners. This also opens up possibilities for learners to access learning content and materials that are not available in their location or in their language.

Tailor-Made Projects

Just as search engines use human web search activity to deliver custom search results, artificial intelligence can be used in a similar way to track learners' internet activity, preferences, and learning capabilities to design, develop and deliver custom projects to them. As Wei LI explains in the project "Accelerating artificial intelligence from the Cloud to the Edge [2]." This is a very great addition to project-based learning as it assesses a learner based on their learning capabilities and speed as opposed to the collective capabilities of a learning group. A project can be designed in a method that learners will grasp in the best way possible.

Ensuring Access for Learners with Special Needs

The adoption of innovative AI technologies opens up new ways of interacting of learners with learning disabilities. Artificial Intelligence tools can be successfully trained to provide more effective access to learning for learners with special needs e.g people who are deaf and hard of hearing, visually impaired, with ASD.

AI in CVET Organisations

Artificial intelligence has produced, and continues to produce, new teaching and learning solutions for a wide range of contexts including workplace learning, practical skills development, CVET provision and other forms of education. AI is substantially altering labour markets, industrial and public



services, and the organisation of workplaces in particular. Whilst CVET organisations are increasingly integrating AI into education and training, (according to research undertaken by the Cur8 project) many are yet to form meaningful or robust responses to technological shifts.

The effectiveness of CVET depends on its links and relevance to the labour market. Regardless of context, all CVET organisations should develop an understanding of the current and future importance of AI and begin to incorporate its use into their planning. Forward thinking and, where possible, pre-emptive action, will put CVET organisations, their Educators and their learners in a position to thrive in the era of AI and contribute positively to economic, social, and individual development.

Impact AI on Skills



Self Study: The impact of digitalisation and AI on skills is one of the four main themes of Cedefop's '[Digitalisation, AI and the future of work](#)' project. The project "analyses the impact and drivers of digitalisation and automation, spurred by advanced robotics, artificial intelligence (AI) and other digital technologies, on employment and changing skill needs and skill mismatch. It also examines the implications of digitalisation for new forms of work and learning, such as platform or gig work, or remote ICT-based work. The insights of the project aim to inform policy regarding the future of vocational education and training."

In Summary

The use of artificial intelligence is increasing in all walks of life. It is rapidly affecting the way we live, work, and learn. The main benefit of AI in learning is the possibility of training machines and software to automate tasks and offer learners a personalised, engaging approach to Upskilling and Reskilling.

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Topic: Promoting Critical Digital Literacy and Managing Required changes

In our fast-paced society, where much of the world's information is at our fingertips, we tend to make quick decisions all the time. Research on memory and the brain shows that when we make fast decisions those judgments are based on intuition, emotion, and 'gut feelings'. Psychologists call this "System One" thinking. Wherever we engage System One, we don't exert much control.

To guard against being manipulated and influenced by misinformation, we need to adopt a more critical mind. Simply slowing down and taking a more deliberate approach can make us much less susceptible to misinformation. Using a more deliberate approach engages our critical mind, takes more time, and helps us better determine the credibility of the information being presented. The critical mind can be exercised and trained, and it can also act as a form of resistance to bias, prejudice, propaganda and other forms of misinformation.

Given the seismic shifts in the digital media landscape, corresponding shifts are also needed in our definition of critical literacy to enable it to be fit for purpose and to equip us with the skills we need to communicate and engage effectively.

The Cur8 Methodology is based on the proposal that critical digital literacy competences are essential for creating and facilitating skills-based learning.

We need to include an understanding of the added value of the digital: participation, contribution, transparency and accountability, of course, but also disinformation and the interplay of influence.

Many adults, both young (and not so young!), lack the critical skills to make judgements about the accuracy of online information. Whilst most internet users understand that not all information they find online is truthful, very few check on its trustworthiness. (Also, although most people are aware of at least one of the ways in which information is collected about online users, very few are aware of all the ways or how it is used).

There is consensus, therefore, that any model of critical literacy/thinking skills for the digital age should include an awareness of the various types of 'misinformation' and 'disinformation' and the methods and motivations behind the production of such eg. the relationship between advertising revenue and fake news. This is increasingly referred to as Critical Digital Literacy.





Critical Digital Literacy and Learning Content Creation

Critical digital literacy is an essential skill for learning content creation. It involves the ability to analyse and evaluate digital content critically. It is important in the creation of learning content because it allows both educators and learners to develop a range of skills that are crucial in helping them become lifelong learners. To become digitally literate, both you and your learners need to develop skills such as using technology to search for and create content, solve problems and innovate. You also need to be able to connect and communicate effectively online, learn, collaborate with peers, and discover and share new information.

The ability to critique digital and media content allows individuals, whether educators or learners, to identify biases and evaluate messages independently. This fosters the ephemeral and highly sought after 21st century skills, serves as a prerequisite to digital citizenship, and acts as a foundation to literacy as a whole.

Critical digital literacy is important for trainers because it helps them develop active and engaged thinkers and creators in digital environments. By building digital literacy, trainers lay the foundations for learners to fully embrace and understand digital tools and online resources – in both learning and everyday life. It follows that Learning and Development Professionals need to develop their own Critical Digital Literacy Skills in order to effectively support adult learners in developing these skills.

Critical Digital Literacy empowers educators and learners alike to consume content critically, as a prerequisite for online engagement, by identifying issues of bias, prejudice, misrepresentation and trustworthiness. It should be approached as a lifelong set of abilities and predispositions and pedagogically promoted in tandem with all digital learning. It is necessary for providing context and ensuring that the veracity of content is more easily ascertained.

Developing Critical Digital Literacy competence implies learning to appreciate the opportunities and risks presented by digital media, including focusing on their democratising potentials and political constraints.

Here are some knowledge and skills needed to promote critical digital literacy for learning content creation:

1. **Intellectual Curiosity:** curiosity that leads to the acquisition of knowledge and because it catalyses new ideas, drives quality and niche solutions, and inspires unique and valuable talents
2. **Curate:** Curating digital content is an important skill for promoting critical digital literacy. It involves selecting and organising digital content in a way that is meaningful and relevant.



3. **Prioritise:** Prioritising digital content is an important skill for promoting critical digital literacy. It involves identifying the most important information and focusing on that.
4. **Listen with curiosity:** Listening with curiosity is an important skill for promoting critical digital literacy. It involves being open-minded and willing to learn from others.
5. **Collaborate:** Collaboration is an important skill for promoting critical digital literacy. It involves working with others to create and share knowledge.
6. **Identify one's own knowledge gaps and limits:** Identifying one's own knowledge gaps and limits is an important skill for promoting critical digital literacy. It involves recognizing what you don't know and seeking out information to fill those gaps.
7. **Monitor trends:** Monitoring trends is an important skill for promoting critical digital literacy. It involves staying up-to-date with the latest developments in your field.
8. **Adapt:** Adapting to new technologies and trends is an important skill for promoting critical digital literacy. It involves being flexible and willing to change your approach as needed.
9. **Learning Design:** Designing effective learning content is an important skill for promoting critical digital literacy. It involves creating content that is engaging, informative, and easy to understand.
10. **Survey and leverage niches:** Surveying and leveraging niches is an important skill for promoting critical digital literacy. It involves identifying areas of expertise that are not well-covered by existing resources and creating content to fill those gaps.
11. **Grasp the significance:** Grasping the significance of new developments in your field is an important skill for promoting critical digital literacy. It involves understanding how new technologies or trends will impact your work.
12. **Establish context:** Establishing context is an important skill for promoting critical digital literacy. It involves providing background information that helps learners understand the significance of the content they are learning.
13. **Reimagine:** Reimagining existing content is an important skill for promoting critical digital literacy. It involves finding new ways to present information that are more engaging or effective.
14. **Network:** Networking with other professionals in your field is an important skill for promoting critical digital literacy. It involves building relationships with others who can help you stay up-to-date with the latest developments in your field.
15. **Communicate effectively:** Communicating effectively is an important skill for promoting critical digital literacy. It involves presenting information in a way that is clear, concise, and easy to understand.



These are just some of the knowledge and skills needed to promote critical digital literacy for learning content creation. There are many other skills that can be developed as well, depending on the specific needs of the learners and the course content.



The Cur8 Competence Framework: Self Assessment

Using the [Cur8 Competence Framework](#) available as a download from the [Cur8 Learning Experience \(LXP\) Platform](#) [CLICK HERE](#), review the competences of “Promoting Critical Digital Literacy (CDL) amongst Adult Learners and Managing Required Changes’ and self-assess your current level of competence.



Start by completing the Cur8 Competence Check available on the LXP: <https://lxp.cur8learning.online/the-cur8-competence-check>.

Then create your own personalised Learning Pathway for developing your competence in “Promoting Critical Digital Literacy (CDL) amongst Adult Learners and Managing Required Changes” using Pages **9-13** of the [Cur8 Competence Framework](#)

Critical Digital Literacy underpins all the Learning Topics available to you in the Cur8 Learning Experience Platform (LXP)

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Topic: Facilitating Collaborative Online Learning

Facilitating collaborative online learning is an increasingly important aspect of CVET. The COVID-19 pandemic led to a significant increase in the use of online learning platforms and tools. Of necessity, it massively accelerated the implementation of strategies to facilitate all types of online learning, including ways for educators and learners to collaborate in the online context. Some implemented virtual group projects and discussions, while others used breakout rooms for small group discussions (e.g. using Zoom or Teams). Many new digital tools were developed to make online learning more engaging and to better facilitate collaborative learning in the online context.

Facilitating collaborative online learning involves working together towards a common goal and creating an environment that fosters collaboration. Collaboration in learning means we learn something together, by working in groups on tasks, projects, or concepts. When we collaborate, our ideas complement each other, so it helps to break down information silos and enhance the experience of every single learner.

Here are some strategies that can help facilitate collaborative online learning:

1. **Develop measurable learning objectives:** Developing measurable learning objectives is one of the cornerstones that influences online collaboration.
2. **Establish Netiquette Guidelines:** Many of us have had experiences with peers that have been less than kind or respectful. Establishing netiquette guidelines can help ensure that everyone is on the same page and knows what is expected of them.
3. **Give Learners Enough Time to Collaborate:** Collaborative learning takes time, so it's important to give learners enough time to work together.
4. **Provide Technical Support:** Technical issues can be a major barrier to collaboration. Providing technical support can help ensure that learners are able to collaborate effectively.
5. **Give Frequent Feedback:** Feedback is an important part of the learning process. Giving frequent feedback can help learners stay on track and make progress towards their goals.
6. **Create Real-World Collaborative Experiences:** Creating real-world collaborative experiences can help learners see the relevance of what they are learning and apply it in real-world situations.
7. **Promote a Sense of Group Community:** Creating a sense of community in an online learning activity can help learners feel more connected and engaged with the material. Collaborative group interactions facilitate active learning, shared knowledge, and promote social interaction and a supportive eLearning community.



Collaborative Tools for Supporting Online Learning

Online collaboration is the process in which digital technologies help us work together when we are apart. For the delivery of Blended Learning programmes, remote learning and for supported self-directed learning, it is important to bring learners together and engage them in group activities. There is a wide variety of online learning collaboration tools to choose from to facilitate this.

A wide range of online learning collaboration tools are available to support you in establishing a truly collaborative eLearning environment. Visit the **Cur8 LXP** Learning Topic on [Collaborative Tools for Supporting Online Learning](#) to see examples and their potential areas of application. The Tools are divided into categories to match the purpose and tasks you wish to achieve.



The Cur8 Competence Framework: Self Assessment

Using the **Cur8 Competence Framework** available as a download from the **Cur8 Learning Experience (LXP) Platform** [CLICK HERE](#), review the competences of ‘**Facilitating Collaborative Online Learning in CVET**’ and self-assess your current level of competence. Start by completing the **Cur8 Competence Check** available on the LXP: <https://lxp.cur8learning.online/the-cur8-competence-check>.

Create a personalised Learning Pathway for developing your competence in “**Facilitating Collaborative Online Learning in CVET**” using Pages 14 - 18 of the **Cur8 Competence Framework**

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Topic: Digital Learning and Digital Learning Design



Introduction

Digital learning has progressed since the term 'e-learning' was first used. It includes anything that embraces learning through technology, such as websites, ebooks, social media and online communities, online lectures, webinars and podcasts. It's become a viable way of developing people in organisations.

This topic defines digital learning and examines three broad categories: formal, informal, and blended learning. It investigates the role of technology in learning, its benefits and drawbacks. The topic concludes by exploring recent trends such as the wider use of collaborative technologies and approaches to learning.

Digital learning is playing an increasingly important role in Upskilling, reskilling and Continuous Vocational Education and Training (CVET). The COVID-19 pandemic in particular gave a boost to the development and implementation of digital learning.

Goals of this topic:



This topic explores the different types of digital learning, its benefits, challenges and effectiveness. It aims to demonstrate the basics of planning/preparing a digital learning offer. Learning design aspects that need to be taken into account during planning are outlined. Afterwards you will have the opportunity to test your knowledge and to view and, if you like, download supporting material.

What is digital learning?

There's no universally accepted definition of digital learning. It is generally considered to be “**learning that's facilitated, enabled or mediated using technology**” (CIPD, 2022). Examples include websites, ebooks, videos, multimedia, online communities or a distinct piece of online learning.

Digital learning has progressed from CD-ROMs and video cassettes to cover a wide range of formal course based e-learning packages and products. The approaches include sharing knowledge or links to resources via social/interactive media sites, viewing/participating in online lectures, webinars, podcasts or blogs.

In addition, gaming technology, artificial intelligence (AI), virtual reality (VR) and the use of cloud computing, can all deliver learning according to user needs.

The growth and development of different types of digital learning is rapid and constantly changing.

What's the difference between digital learning and e-learning?

You will be familiar with the term e-learning which refers to studying that is completed online. The terms are very similar as e-learning is an important part of digital learning which has expanded to include other topics.

As explained above, digital learning refers to the use of digital devices and the internet to study. Digital learning can give the learner the opportunity to work at their own pace as well as to decide where the learning takes place (such as with distance learners). It can also offer the learner the flexibility to select which parts of a course or training scheme they wish to address or seek out specific topics to support on-the-job and self-directed learning.

Types of digital learning

There are three broad categories of practice, although definitions vary and overlaps exist between categories:

- ◆ **Formal digital learning** - formal courses delivered through technology, often fee based and accredited.
- ◆ **Informal digital** – provides opportunities to support informal workplace learning, using forums and communities of learning. Informal digital learning is often linked with knowledge management and the curation of learning content. The collaborative media approach (see below) can play



an important role in knowledge-sharing, experiential learning and team development activities. The rise of informal networking via online tools also enables knowledge-sharing within organisations and across communities of practice.

- ◆ **Blended or supported learning** - where formal and/or informal learning is combined ('blended') with other types of learning. For example, the majority of learning content might be delivered through face-to-face lectures or coaching, but the dialogue with other learners, collaborative activities and searching for/access to supporting material are conducted online. A popular blend is the 'flipped' classroom model where the knowledge transfer is done online asynchronously with the discussion on that learning done synchronously, face-to-face or in a virtual classroom.

Various forms of digital learning

A range of technologies are used to facilitate digital learning including:

- ◆ Learning Experience Platforms (LXPs), Virtual Learning Environments (VLEs), Learning Management Systems (LMS), Virtual Classrooms, webinars
- ◆ Social media apps including Twitter, LinkedIn, YouTube and Facebook
- ◆ Massive Open Online Courses (MOOCs)
- ◆ Integration of smartphone technology into the learning environment apps, such as kahoot and sli.do, Padlet.
- ◆ AI, VR and machine-based learning in the learning environment to 'push' relevant content and resources to employees.

The benefits of digital learning include:

- ◆ Personalise and self-directed learning
- ◆ Peer-to-peer learning
- ◆ Available 'just in time'
- ◆ Access anywhere at anytime.
- ◆ The ability to reach simultaneously an unlimited number of employees/adult learners, especially in dispersed locations or complex organisational structures
- ◆ Uniformity/consistency of learning delivery
- ◆ Potential to achieve cost reductions/cost-effectiveness
- ◆ Reduction in the time delivering learning content
- ◆ The ability to track learning activities

N.B. Making digital learning available to unprepared and unsupported learners is unlikely to be effective. Any online learning must be appropriately presented, and adequately resourced including learner support.



Challenges to the effective use of digital learning include:

- ◆ technological barriers such as disparities of access to reliable devices or Wi-Fi; a lack of tech support; cybersecurity risks
- ◆ Lack of access to IT facilities and/or basic IT skills.
- ◆ Allocating time – ensuring learners make the time to participate - it is easier to overlook digital learning opportunities
- ◆ Providing appropriate learner support
- ◆ Finding relevant content
- ◆ Learner hostility towards e-learning, particularly if there is a history of ‘click next, quiz at the end’ compliance e-learning, or a fear of sharing knowledge via social tools
- ◆ Learner barriers e.g. feelings of isolation, lack of time, lack of motivation to complete courses
- ◆ Lack of digital competence amongst the Educators/Learning and Development Professionals

The first consideration must be the needs of the learner and then how the technology could best meet that need.

The Social aspects of Digital Learning

Social and interactive media brings opportunities for collaboration, co-creation, content sharing, and enhanced communication. It's important to remember that social media is not itself a type of digital learning, but a tool which can be used for learning.

Terms such as 'social media', 'social networking' or 'interactive media' are often used interchangeably, all loosely referring to the 'second-generation' (Web 2.0) of Internet based communities that encourage interaction and collaboration between users. In contrast, Web 3.0 learning, where the web is connective and intelligent brings us opportunities with AI.

Digital Learning Design Framework and Toolkit (Curated materials)

Teesside University and Jisc UK have developed a *Digital Learning Design Framework and Toolkit*. The framework and toolkit were created to help nurture and cultivate the digital confidence and fluencies of teaching staff who design and deliver courses, challenging them to think about learning design and the intersection of pedagogy and digital solutions to map the learner's journey. The toolkit contains seven sections and is intended to be used by educators, trainers and facilitators to inform their course designs.

The Framework and Toolkit are free to use (OER) and can be downloaded in PowerPoint here: <https://library.educause.edu/resources/2022/7/digital-learning-design-framework-and-toolkit>



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Additional Material:

- ◆ Considerations for digital teaching: didactics and scenarios (Technical University Darmstadt) https://www.e-learning.tu-darmstadt.de/online_lehre/index.en.jsp



Topic: Assessment in the Online Environment

Online learning presents both challenges and opportunities for assessment.

Challenges

New national guidelines require methods for authenticating learning in an online environment. This will most likely be done by proctoring test takers, with either on-site proctors or camera equipment that monitors students as they take exams. Online instructors must get used to providing digital feedback on assignments rather than handwritten notes and learn about technologies that save time and increase the amount of feedback given to students.

Opportunities

In an Online context, discussion takes a new form as an assessment tool. Online learning allows for a much more detailed assessment of discussion. For one, students can, and should, be required to post a certain number of discussion comments each week, which are graded according to rubrics similar to those used for formal assignments. This allows for an online formative assessment of student learning that tracks how well the class and individual students grasp the subject matter. Another reason is that online discussion has fewer limits than face-to-face instruction; students can be given performance tasks in an online discussion to better measure comprehension. For instance, if one class aims to cultivate students' ability to evaluate and make recommendations on issues they may encounter in the workplace, discussion questions can provide hypothetical situations and require students to analyse those situations and provide solutions.

Online assessment approaches

The following approaches help assess students' knowledge about a given topic as well as their writing skills:

- ◆ **Quick Write:** As a pre- or post-assessment tool, 1- to 3-minute quick writes on a topic or big idea can be revealing. Student responses often show what they do or do not understand about a topic and provide the teacher with insights into the reasoning processes that students are using.
- ◆ **Graphic Organisers:** These include Venn diagrams, word/idea webs or concept maps, cause/effect charts, flowcharts, and sequence charts. Graphic organisers can assess prior knowledge, record learning during lectures or class readings, or organise knowledge after learning.
- ◆ **Cloze Writing:** The cloze procedure consists of fill-in-the-blank activities for sentences and paragraphs that can be used to assess knowledge. Facilitative supports, such as a vocabulary bank, can be used for sentences. For a more extended response, students can be given a short story



(for example) for which they must write a one-paragraph ending. The brainstorming for this activity can be done in pairs or small groups, and each student can write their one-paragraph conclusion.

- ◆ **Think-Pair-Share or Write-Pair-Share:** These activities ensure that everyone has a chance to talk and process their thinking. Ask for two minutes of silence while each student considers their response to a prompt, text, lecture, etc. Then, have students take turns sharing their reflections with a partner. Some reflections can then be shared with the whole group.
- ◆ **Entry/Exit Cards:** As students enter class, they respond to a prompt displayed on the board or a flipchart (e.g., a sentence or short paragraph) related to the topic of that day's lesson. Alternatively, students can be asked for an "exit card" that provides insight into what they learned from the day's activities or what they predict might follow.
- ◆ **Student Reflection:** The teacher can encourage students to reflect on their accomplishments as well as their challenges by asking students to answer questions that spark critical thinking:
 - What was your task, the ultimate goal, or the outcome of this activity?
 - What are some essential concepts and ideas that you discovered/learned? Why are they important?
 - How did you solve the problem or task? Did you reach your goal? Explain.
 - Would you make changes if you had to do it again? Explain.

How might we use technology for work-based assessments, and what are the benefits?

Technology can enable the work environment to be a location for assessing specialist and professional skills in ways that are authentic and convenient. It can also facilitate collaboration and give adult learners who might otherwise feel isolated the sense of being part of a learning community.

Further benefits include:

- ◆ Capture of workplace skills in situ (digital video, audio, still photography, webcams)
- ◆ Immediate learning reflection (internet-connected mobile devices, e-portfolios)
- ◆ Efficient collaboration between tutors and workplace assessors (web conferencing)
- ◆ Contextualised assessment management (mobile access to competency maps and assessment records)
- ◆ Delivery, assessment and accreditation of short courses in any location (e-portfolios, VLEs)
- ◆ Convenient, secure submission, return and storage of assignments (online assessment management tools)



- ◆ Online access to feedback/feed forward (podcasts, voice boards)
- ◆ Asynchronous and synchronous communication with tutors, peers and workplace mentors (voice boards, VLEs, e-portfolios, social networking tools, blogs).

Online Evaluation tools

There are several approaches for evaluating as indicated above. Click on examples to find out more (curated content from <https://www.ispringsolutions.com>):

- [Online quizzes](#)
- [Essay questions](#)
- [Drag-and-drop activities](#)
- [Online interviews](#)
- [Dialogue simulations](#)
- [Online polls](#)
- [Game-type activities](#)
- [Peer evaluation and review](#)