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DIGITAL LITERACY



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# Digital literacy

**We are living in a digital world, but it can be hard to keep up. Don't get left behind – find help here.**

## **Digital literacy**

Here you can develop your awareness of different kinds of digital literacies and consider how you can develop your ability to succeed in the digital world, now and in the future.

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STUDY SMART WEBSITE

Find this section on the Study Smart website here:

[http://westernsydney.edu.au/studysmart/home/digital\\_literacy](http://westernsydney.edu.au/studysmart/home/digital_literacy)



## What is digital literacy

Digital literacy means having the skills you need to live, learn, and work in a society where communication and access to information is increasingly through digital technologies like internet platforms, social media, and mobile devices.

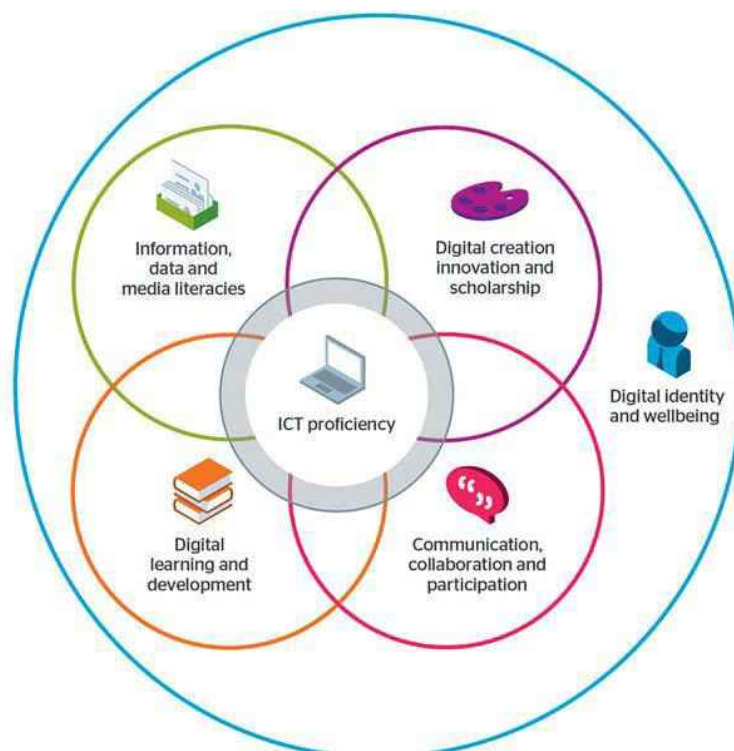
Developing your **critical thinking skills** (PDF, 128 kB) is essential when you're confronted with so much information in different formats – searching, sifting, evaluating, applying and producing information all require you to think critically.

**Communication** is also a key aspect of digital literacy. When communicating in virtual environments, the ability to clearly express your ideas, ask relevant questions, maintain respect, and build trust is just as important as when communicating in person.

You'll also need **practical skills** in using technology to access, manage, manipulate and create information in an ethical and sustainable way. It's a continual learning process because of constant new apps and updates, but your future self will thank you if you keep your digital life in order!

Digital literacy is really important now, while you're a university student. It'll also be really important in the future when you enter the **professional** world. In your workplace you'll be required to interact with people in digital environments, use information in appropriate ways, and create new ideas and products collaboratively. Above all, you'll need to maintain your digital identity and wellbeing as the digital landscape continues to change at a fast pace.

Here you can learn more about the six elements of digital capability as modelled by Jisc. The Jisc model below illustrates the idea that proficiency in ICT (Information and Communication Technology) is a core element, whilst other skills overlap and build on this capability, and overarching it all is our digital identity and wellbeing.



Retrieved from Jisc (2016)

## References

Jisc. (2016). Digital capabilities: The six elements. Retrieved from <https://www.jisc.ac.uk/rd/projects/building-digital-capability>



## Information and Communication Technology (ICT) proficiency

Information and communication technology (ICT) refers to technologies like computers, mobile phones, and tablet devices, as well as the many software programs that these machines can run, which allow us to access information and communicate with each other. The Internet (often referred to as 'the web', although these have **slightly different meanings**) is a major piece of ICT in that it connects many millions of machines to each other via a global network.

Whether you are required to attend on campus or not, it's likely that you will spend a significant portion of time studying online. You'll need to know how to access learning materials, how to communicate effectively with other students and staff using email and discussion boards, and which software to use for producing your assignments.

Check out these ICT essentials for Western Sydney students:

- **vUWS** (pronounced 'views') is the University's e-Learning system
- Your **Student email** is the official communication channel between you and the University
- **Zoom** is available for videoconferencing
- **Western Wi-Fi** is the University's on campus wireless network
- **Computer lab locations and facilities** on each campus
- **IT Service Desk** includes phone, email, and chat support

And that's just the start! Once you get comfortable with using ICT for your studies, you'll realise there are so many possibilities for designing and programming computer systems and user interfaces. You might decide to learn some basic coding, or discover some of the free software tools for presenting and managing content on the web.

- Presentation apps (**MS PowerPoint Online, Prezi, Projeqt, eMaze, Slides**)
- **Microsoft Office Tutorials** (YouTube)
- University staff and students have free access to the **lynda.com** online training library covering software titles, scripting languages, design and web development platforms. You need to **register with your Western account**.
- Once you've registered (as above), try the **lynda.com** playlist: **Skills and tools for student success** or try out one of the **Learning Paths**.

Because software and hardware are always changing, you'll need to consider how the documents and projects you create whilst at uni will remain accessible in future. Try saving electronic documents in **open file formats** wherever possible, back up your files regularly, and have a **file naming system** so you know what's what!

- The **Personal Digital Archive Toolkit** provides steps to preserve your digital photographs, emails, recordings, and documents.





## Information, data, and media literacies

This section covers the essential skills you need for the huge array of information available in today's globally connected world. Sharpen your information, data, and media literacy skills and you'll be better at detecting bias, assessing accuracy, and making positive use of the information sources that are relevant to your university studies.

### Information literacy

As a learner, to be information literate means that you:

- are able to identify a need for certain information, and
- have the critical awareness and skills to find, evaluate, interpret, and apply information that is relevant to the situation, and
- are able to effectively manage and ethically share that information for appropriate purposes, now and in the future.
- (adapted from the [ANZ Information Literacy Framework](#) (PDF, 406 kB), p.3)

The [Western Sydney University Library](#) can assist you in locating appropriate sources of 'scholarly' information. There are many different [types of sources](#) (PDF, 87 kB) available through library databases and on the open web, so you should always carefully evaluate these for currency, relevance and possible bias.

- Complete the Western Sydney University Library [Successful Searching](#) Tutorial
- Watch these Western Sydney University Library videos:
  - [Finding information for Assignments](#) (video, 1:59)
  - [Evaluate resources using APPEAL](#) (video, 6:26)
  - [Evaluate websites using APPEAL](#) (video, 8:09)

Referring (with correct acknowledgement) to the research of others in your assignments, coursework, and own research helps to strengthen your understanding and demonstrate that you have read widely about a topic or issue.

- Learn more about [academic integrity, plagiarism, and Australian copyright law](#)
- Find the Library [Referencing and Citation guide](#) for the referencing style your course of study requires you to use.

### Data literacy

[Data literacy](#) is similar to information literacy, in that it encompasses the knowledge and skills to find or collect, manage, and interpret data. Data is sometimes called 'raw' information because it's just the facts, without any analysis or interpretation having taken place. It's important to be aware, though, that the act of [collecting data](#) could be influenced by economic, technological, or political factors so it is still important to evaluate all data carefully.

- To learn more about statistics, check out the Australian Bureau of Statistics (ABS) page: [Understanding Statistics](#)
- To learn more about research data and data skills, see the Library's [Research Data Management guide](#).
- For information about data visualisation, visit the [Digital creation, innovation and scholarship](#) section of this site

## Media literacy

Media literacy also covers skills in critical interpretation of information. There's a lot of information out there, in lots of media formats, and anybody can publish material to the Internet without anyone else checking to see if it's accurate. That's why it's important to recognise bias when you see it, and sort the fact from the fiction.

- [How can we learn to reject fake news in the digital world?](#) (The Conversation website)
- [Media literacy](#) (video, 3:09) - 5 key ideas & questions about media messages

Media literate students should also be able to choose an appropriate medium to communicate effectively to a particular target audience. Identifying the purpose of a piece of communication, and adjusting the tone to suit the intended recipients of the message, is integral to the success of any communication effort, whether you're sending an email or producing a short film. When it comes to academic work, you can learn more about the purpose, structure, and tone of different assignment genres in the [Writing](#) section of this site.

## Social media literacy

A key aspect of media literacy is understanding of the nature of social media, and what constitutes appropriate behaviour on these massive, influential, and sometimes unpredictable information channels. It's worthwhile reviewing the following guide to ensure your social media interactions remain professional.

- [Social Media: Guidelines for Students](#) (Western Sydney University)





## Digital creation, innovation, and scholarship

Digital literacy involves more than simply being a well-informed, analytical consumer of digital information and technology. Ultimately, you'll want to become a confident creator of digital content as well.

This aspect of digital literacy is about bringing together the knowledge you gain in each unit of study with your analysis and ideas about a topic or issue, leading to the creation of innovative solutions and engaging communication. Technology can be with you every step of the way – as the well-known Apple slogan goes, "there's an app for that"!

### Digital scholarship

Digital research and scholarship is a growing area of interest in universities all around the world. Often referred to as **e-research**, digital scholarship is focused on using information and communications technologies to supercharge the research process and the dissemination of research findings. There's also a movement, facilitated by the Internet, towards **open access** to **research data** and publications, especially for publically funded research.

**Data visualisation** is also trending, especially for big data (this refers to massive datasets which may be added to incrementally and/or consist of very many pieces of information which would be impossible to analyse without the aid of computers).

- The **DiRT Directory** aggregates information about digital research tools for scholarly use.
- University Staff and Students have free access to the lynda.com online training library. You need to **register with your Western account**. Once you have registered, try this playlist: **Learn data visualization**
- **Drawing by numbers** brings together free data visualisation tools from all over the web.
- The University of Edinburgh's 23 Things for Digital Knowledge is a self-directed course which aims to expose you to a range of digital tools for your personal and professional development as a researcher, academic, student, or professional.
- Western Sydney University has a range of fantastic technology facilities:
  - **3-D printing**
  - **Music & video production**
  - **Construction testing**
  - **Magnetic resonance** technology for biological, chemical, and medical analyses.

### Open access to scholarship

There is a vast range of free and open scholarship available on the web which supplements the Library's large collection of e-resources.

- Check out the **Library Subject Guides** and browse the e-resources organised by subject.
- Check out Western's online research repository, **ResearchDirect**, which contains research and publications by Western researchers.
- **Directory of Open Access Journals** (DOAJ) is a service that indexes high quality, peer reviewed Open Access research journals and periodicals.
- **Directory of Open Access Books** (DOAB) indexes academic, peer reviewed books which are Open Access.

## Digital preservation

As a digital scholar, creator or collaborator you should plan for the long-term sustainability of the digital artefacts you produce. Your ICT proficiency will be important here as you consider appropriate file formats, storage media, and documentation or metadata, so that these artefacts remain accessible for future scholars.

→ The [Personal Digital Archive Toolkit](#) provides steps to preserve your digital photographs, emails, recordings and documents.



## Communication, collaboration, and participation

This aspect of digital literacy is about respectful, positive, and effective participation in digital networks. As a student at Western you'll join your learning community in online spaces such as [vUWS](#) and [OrgSync](#), and you may also have opportunities for communication and collaboration via platforms like [Facebook](#), [Twitter](#), [Snapchat](#) or [Instagram](#).

### Communication

The way you present yourself in online platforms is equally as important as your face-to-face interactions. These two things are connected: the things you post and do online are not separate from your real self, so you need to remain aware of how you will be perceived, and maintain a positive digital identity.

You could even say this is your personal brand, and just like a marketing brand it needs to be managed to ensure the right messages are put out to the world. This doesn't mean you need to tell lies or omit information - in fact, just the opposite! Presenting yourself in an authentic, courteous way and demonstrating respect for the feelings and opinions presented by others is a great way to approach online communication and collaboration.

- [Social Media: Guidelines for Students](#) (Western Sydney University)
- [Online Netiquette](#) (video, 3:30, Western Sydney University)

### Collaboration

You can harness technology for collaboration as well as communication. Web-based applications like [Google Docs](#) allow real-time editing by all group members, removing the need to endlessly email different versions to each other. Just search for 'collaboration tools' in your favourite search engine (or ask your [personal learning network](#)!) to get the latest technology at your fingertips. You'll also find useful links to some of the tools provided by the University in the [ICT Proficiency](#) section of this site.

Other popular web-based technologies for communication and collaboration are [blogs and wikis](#). It's possible some of your assignments may involve use of these tools, either within [vUWS](#) or using external sites. One famous wiki is [Wikipedia](#) but there are many others, usually based around particular topics, which can be a useful source of information and links to material.

Please note, though, that wikis and blogs are not considered to be scholarly sources. Depending on the context of your assignment, they will not usually be suitable sources for you to cite in your reference list. For more detail please visit the [Information, data and media literacies](#) section of this site.

### Participation

Your participation in the digital world is ideally a two-way interaction. To be fully digitally literate, you will not only be a capable, confident consumer of information and technology, but you will also become an active participant as a producer of content.

Understanding the technical, legal, social, and ethical aspects of digital content creation will ensure you can contribute in a positive way to our networked society.

- [Find an answer](#) about Australian copyright law
- [The 3 Rs of Digital Citizenship – Being Responsible, Respectful and Reputable](#) (Be social.Be smart blog)

Digital inclusion refers to the idea that people of all backgrounds and abilities deserve equal access to technology and its benefits. As a creator of content, it's worth considering your material's **accessibility** and providing alternative access methods wherever possible.

→ [Visit Media Access Australia](#) for more about digital inclusion and web accessibility



## Digital learning and self-development

This aspect of digital literacy is connected with your effective use of technology for formal and informal lifelong learning. It's highly likely that most or all of your learning materials will be provided in the University's e-learning system, known as **vUWS** (pronounced 'views').

Getting to know the systems the University uses will help you feel more comfortable. There is more information about University systems in the **ICT Proficiency** section of this site.

### Online learning

In order to really make the most of the online learning experience, you will need to understand your own preferred learning style. The way you like to learn encompasses things like:

- how you prefer to have information presented  
*(do you like to read and absorb first, do an activity, or just jump into a discussion?)*
- the technique you use to understand and remember information  
*(do you make mind maps, or highlight and make notes for yourself?)*
- the way in which you interact with other learners  
*(are you happy to share ideas with others before you fully understand the topic, or do you feel you have to have mastered something before you make a comment?)*

Technology can be a major support to your learning and academic work, but if you haven't developed habits that suit your learning style you may find yourself struggling or feeling that technology is a hindrance.

Try these resources to find out what type of digital learning suits you best:

- Visit the **Study Smart vUWS site** and complete the module and self-quiz in the Digital Literacy section, called Online Learning: A guide for students.
- Online quiz: **What type of digital learner are you?** (University of Exeter)

### Online reading

A common feature of online study is that your textbook or reading material is presented in ebook format. Check out our page about **Using digital textbooks** and the **Library ebooks guide** for access to a range of ebook platforms. The Library guide contains details about download and access in the major platforms we subscribe to (click the MyLibrary tab).

Most people find it a very different experience when reading on screen, compared to reading a printed text. It might take practice and persistence to find what works for you. The **Reading on Screen website** offers some great advice on how to make reading on screen easier, including a handy **Quick Guide** (PDF, 470 kB).

### E-portfolios

One digital tool which encourages learning through self-reflection is an **e-portfolio** (PDF, 782 kB). You may be required to start one for your course, or you might like to produce one anyway - perhaps to record your personal learning journey or to capture achievements that potential employers will be interested in.

## Lifelong learning

At Western Sydney University, we hope students will become lifelong learners. Lifelong learning is about learning as a continual process. Along the journey, lifelong learners discover new interests, build their knowledge, and strive to approach new tasks with an active, enquiring mind.

- There are many free courses online, which you can access to supplement your formal learning. Check out providers such as [Coursera](#), [edX](#), [FutureLearn](#), and make use of the University's free access to Lynda.com ([register with your Western account](#)).
- The University of Edinburgh's [23 Things for Digital Knowledge](#) is a self-directed course which aims to expose you to a range of digital tools for your personal and professional development as a researcher, academic, student, or professional.

## Personal learning networks

The amazing connectivity of the World Wide Web provides an opportunity for you to build a personal learning network (PLN). Tapping into the information and ideas that people with similar interests share through social networking platforms is an effective way to increase your understanding and find some really current research material too!

First, create an account on the social network platform. You could try [LinkedIn](#) or [Twitter](#), as these are very active. [Hashtags](#) are useful because they bring together all the posts that include that hashtag, so you can see a wide range of posts from people you might otherwise miss. We found a great infographic ([Use Twitter for your Personal Learning Network \(PLN\)](#)) by searching Twitter with #PLN.

- [LinkedIn for students](#) (LinkedIn Corporation, 2016)
- [Twitter basics](#) (UNSW, video, 3:54)
- [10 tips for students using Twitter](#) (Be social. Be smart blog)
- [Personal Learning Networks](#) (Scoop.It)

Of course, the point is for you to participate, so don't just lurk on the sidelines! You can use these platforms to (politely) ask questions, find new research, or share material that you have found useful (always include where you found it).

It's wise to pay attention to [account security](#) and [privacy settings](#) on all social networking sites, and please, don't post when you are upset or under the influence because this may impact your [perceived employability](#).

## The value of feedback

As a digital learner, you may receive feedback from tutors in a variety of formats. To maximise the value of feedback, ensure you reflect and act on it (see the Study Smart resources [Track, progress, success](#) (PDF, 107 kB) and [Feedback hide and seek](#) (PDF, 141 kB)).

- [Accessing assignment feedback via Turnitin](#) (Western Sydney University Library video, 2:06)
- [How to use feedback effectively: A guide for students](#) (PDF, 771 kB, part of [DEFT Toolkit](#) - Higher Education Academy UK)



## Digital identity and wellbeing

Actively managing your digital identity and reputation, and caring for your digital wellbeing, is a crucial and encompassing element for you to fulfil your potential in today's digital society.

### Your digital footprint

You may have heard of the idea of a **digital footprint**. This refers to the traces of your personal and professional information that are left in online networks - both intentionally and unintentionally.

Sometimes, you might hear advice about not posting anything that you don't want your Mum and Dad to see. That makes sense, but also, think about what you would like future generations to see.

Posting material online effectively means you are letting go of control over it (have you heard of the term: **going viral?**), so you want to be sure it will not damage your reputation or credibility. Even if you later choose to delete, there is no guarantee that someone hasn't already copied or shared it without your knowledge. Unfortunately, there are people who enjoy bullying others in digital spaces, or who will take advantage of you if given the opportunity. Report cyberbullying immediately, whether you are the victim or a bystander.

- [The 3 Rs of Digital Citizenship – Being Responsible, Respectful and Reputable](#) (Be social. Be smart blog)
- [Cyberbullying fact sheet](#) (Australian Human Rights Commission)

### Digital security

In order to protect your wellbeing, it's also important to protect your privacy. This is not only about what you choose to share, but also relates to the information that is collected about you in relation to your online interactions, whether these are financial, social, professional, medical or legal. This series of [tutorials by the Internet Society](#) provides more information about minimising your digital footprint.

Keeping your devices, access passwords, and personal details secure is paramount, as is learning to spot probable identity theft and financial scams:

- [Student guide to cyber security](#) (Western Sydney University, PDF, 728 kB)
- [Scamwatch](#) (Australian Competition and Consumer Commission)

### Coping with information overload

The digital, connected, always 'on' society is fascinating and full of opportunities for collaboration and learning. However, it can also be overwhelming. Do you ever feel as though you're drowning in information? One way to combat this is to sharpen your critical thinking skills so that you can quickly evaluate what's in front of you. The [Information, data and media literacies](#) section of this site has more detail about this.

Another skill for coping with the huge amount of information that lands in front of us each day is to actively manage it.

- Think carefully before subscribing to email lists (often you need to uncheck the box on online forms so that you are not automatically subscribed to updates).
- Create a digital filing system (in your email and for your documents) that works for you, so that you can save and retrieve information you need or want, and delete the rest.
- Take advantage of software that helps you manage information for assignments (like [RefWorks](#), [EndNote](#), or [Zotero](#)), and find out which **note-taking**, time management, or file storage technologies suit your study habits.



→ The [Personal Digital Archive Toolkit](#) provides steps to preserve your digital photographs, emails, recordings and documents.

### **Finding a balance**

Maintaining a balance between real world and digital interactions is also crucial for mental and physical wellbeing. Keep it real, and [unplug](#) every so often!

→ This blog post about [National Day of Unplugging](#) (Be social.Be smart blog) has some great tips about 'unplugged' activities.

This article on the ABC Health & Wellbeing website highlights the importance of controlling the amount of time you spend checking your phone: [Digital detoxing in the real world: How to get started.](#)

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