



THE UNIVERSITY OF  
MELBOURNE

# **EMBEDDING SCHOLARLY & DIGITAL LITERACY IN MELBOURNE'S CURRICULUM:**

PREPARING STUDENTS FOR LEARNING,  
RESEARCH AND WORK IN A DIGITAL WORLD

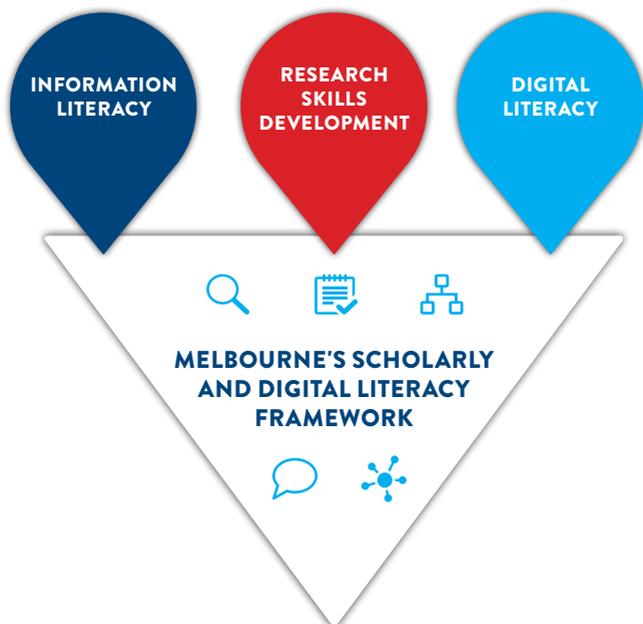
# REDEFINING INFORMATION & RESEARCH SKILLS FOR THE DIGITAL AGE

Melbourne's Scholarly and Digital Literacy Framework encapsulates the skills, behaviours and knowledge that students and researchers need to thrive in both the scholarly and professional communities of a digital society.

Scholarly literacy integrates the concepts 'information literacy' and 'research skills development', positioning them within a research-intensive and technologically innovative academic environment. Scholarly and digital literacy in combination provide students and academics with powerful capability to study, research and work in the digital world.

The Scholarly and Digital Literacy Framework is helping the Library, along with key academic and professional partners, to drive a culture of digital innovation and scholarship at Melbourne.

An explicit focus on scholarly and digital literacy is integral to the University's aim of producing world class scholars and graduates ready for the digital world.



## CONTEXT

Melbourne's approach to developing scholarly and digital literacy across the curriculum is underpinned by *Scholarly Literacy @ Melbourne* and *Melbourne's Scholarly and Digital Literacy Framework*.

*Melbourne's Scholarly and Digital Literacy Framework* draws from several established frameworks including:

- Australia & New Zealand Information Literacy Standards
- Research Skills Development Framework
- JISC's 7 Elements of Digital Literacy

In the local context, Melbourne's scholarly and digital literacy agenda is informed by *Growing Esteem's* priorities and principles and aligns with three key University of Melbourne strategy documents:

- *Melbourne's Scholarly Information Future: a ten-year strategy*
- *The University's Digital Learning Strategy*, and
- *The Research at Melbourne strategy: ensuring excellence and impact to 2025*



# DRIVERS

## STUDENT SUCCESS

Scholarly and digital literacy play a key role in students' realising their full academic potential. Scholarly and digitally literate students:

- use sophisticated, discipline-specific research practices
- evaluate and analyse information through multiple lenses
- manage information and reference sources efficiently
- undertake ethical and honest scholarship
- use technologies to connect and collaborate with other students for the co-production of scholarship

## EMPLOYABILITY

Scholarly and digital literacy skills underpin professional success in a digital world, as outlined in the *Australian Government's Core Skills for Work Development Framework*. Scholarly and digitally literate students:

- expertly seek industry knowledge to plan and expand their careers opportunities
- participate in ongoing academic and practitioner research
- work innovatively in a digital context
- build strong and effective professional networks using both traditional and social media

## RESEARCH PATHWAYS

The development of increasingly sophisticated scholarly and digital literacy throughout undergraduate and graduate degrees is key to nurturing the next generation of researchers.

Scholarly and digitally literate students and researchers:

- achieve maximum impact and discoverability through the creation of cutting edge scholarship
- connect and collaborate with extensive networks of researchers
- actively contribute to the reputation of Melbourne as a world-leading research institution

## COURSE ACCREDITATION

Development of scholarly and digital literacy in the curriculum contributes to the alignment of the University's courses with the *Higher Education Standards Framework (Threshold Standards) 2011*.

Embedding scholarly and digital literacy explicitly within the curriculum programs:

- supports accreditation reviews
- assists faculties and schools to demonstrate that their courses and graduates meet the requirements of external bodies

**Embedded (and explicit) scholarly literacy teaching adds enormous benefit to learning outcomes for students, and our programs are strengthened by the contributions of librarians who work with MSGE.**

- Dr Amelia Church, Melbourne Graduate School of Education



# SCHOLARLY LITERACY @ MELBOURNE

*Scholarly Literacy @ Melbourne* maps out an approach that seeks to maximise the opportunities for collaboration between the University's academic community, the Library, Academic Success and other key groups. These collaborations will be key to driving the curriculum change required to build a culture of digital scholarship across the university and deliver future-ready scholarly and digitally literate graduates.

## PRINCIPLES

### 1. Equity

All students have the opportunity to develop scholarly and digital literacy throughout their studies. The 'whole of course' approach is critical to achieving this principle.

### 2. Sustainability

Course-level programming combined with the utilisation of digital learning resources maximises the reach and effectiveness of scholarly and digital literacy programs.

### 3. Collaboration

Academics, librarians, Academic Success advisers and other learning and teaching specialists bring diverse expertise and work collaboratively to design and deliver curriculum-based scholarly and digital literacy development.

### 4. Curriculum Innovation

A focus on embedding scholarly and digital literacy within the curriculum via digital and blended delivery modes provides opportunities for driving curriculum innovation and showcasing best practice learning design.

## PRIORITIES

### 1. 'Whole of Course'

Adopting a strategic, 'whole of course' approach, by embedding in core and capstone subjects, ensures that the University delivers the best learning outcomes for the maximum number of students.

### 2. Structured

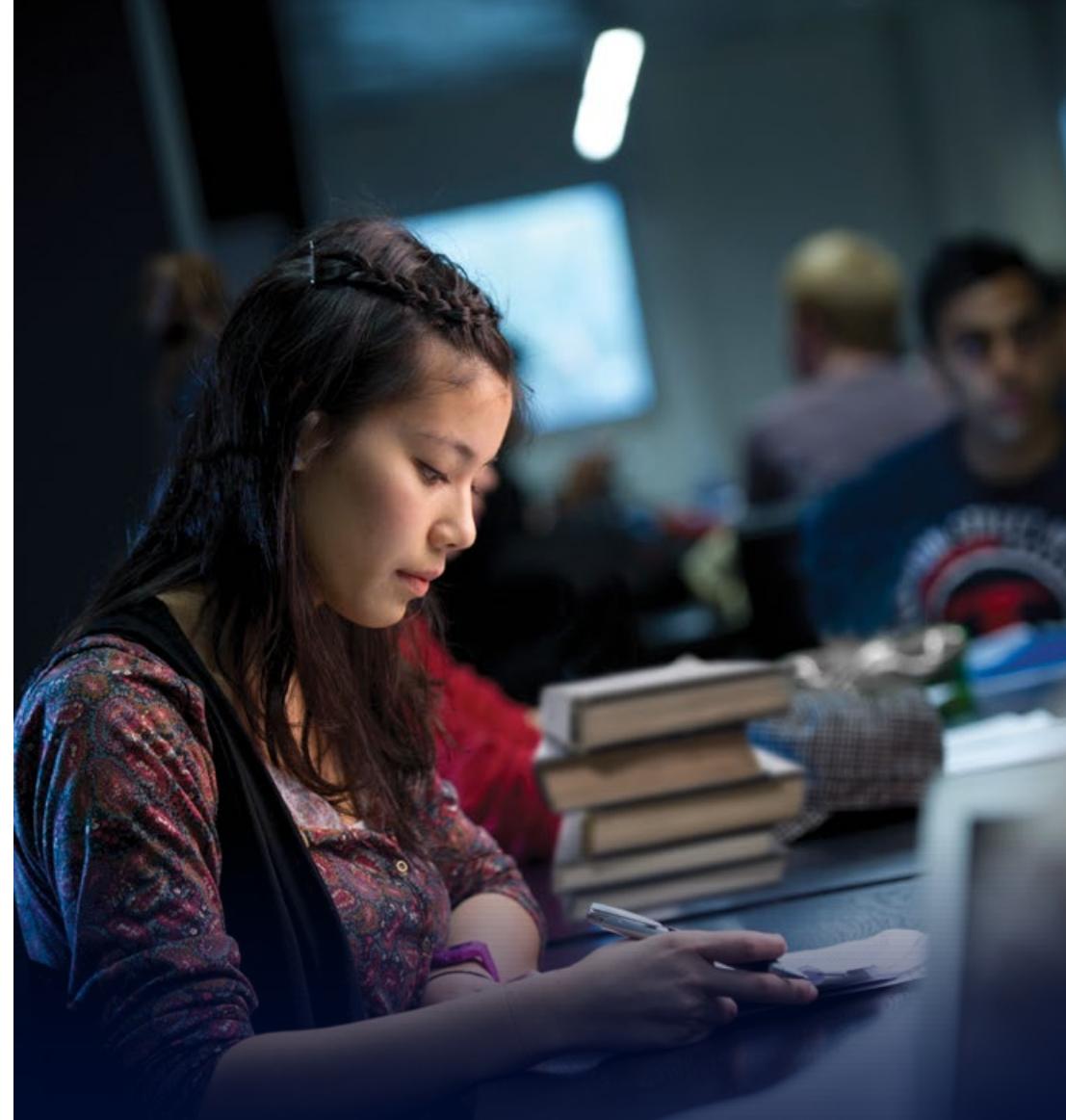
Structuring scholarly and digital literacy development across a course allows for incremental, scaffolded learning and the development of increasingly sophisticated skills.

### 3. Embedded

Scholarly and digital literacy skills are learnt most effectively when embedded within the curriculum through specific assessment tasks. Partnerships between academics and other learning and teaching specialists, such as the Library, are critical.

### 4. Digital Learning

Developing contextualised digital learning resources assists with issues of sustainability and flexibility. The utilisation of blended and flipped delivery modes will maximise the value of face to face learning activities.



*We are enormously grateful to Library staff for their willingness to contribute directly in this way to our students' learning. This undoubtedly enhances students' scholarly literacy and contributes we hope to development of lifelong learning skills, that are key attributes of the UoM graduate.*

- Associate Professor Elizabeth Tudor, Faculty of Veterinary and Agricultural Sciences

# MELBOURNE'S SCHOLARLY & DIGITAL LITERACY FRAMEWORK

CAPABILITIES	DIRECTED RESEARCH Students engage with technologies and undertake learning and research within specified parameters	GUIDED RESEARCH Students explore technologies and undertake some self-determined learning and research within broad guidelines	INDEPENDENT RESEARCH Students/ researchers undertake research with a high degree of independence, utilising a range of technologies to create new scholarship
 <p><b>1. SEARCH</b> Finds the right type of information using the right tools</p>	<p>Clarifies understanding of the task, identifies key concepts, and establishes the type and scope of information required</p> <p>Uses essential search tools and strategies to seek information and reviews results for relevance</p> <p>Revises search tools and strategies as required</p>	<p>Develops manageable research questions within set guidelines and uses basic disciplinary knowledge to determine the type and scope of information required</p> <p>Uses some discipline-specific and multidisciplinary tools and advanced search strategies to seek information and reviews results for relevance</p> <p>Refines tools and strategies as required</p>	<p>Formulates a complex line of scholarly inquiry and employs strong disciplinary knowledge to determine the type and scope of information required</p> <p>Uses a wide variety of discipline-specific and multi-disciplinary tools to seek a diverse range of information</p> <p>Regularly refines and updates strategies as new information is discovered to ensure ongoing currency</p>
 <p><b>2. EVALUATE</b> Analyses information and the strategies used to find it</p>	<p>Examines information for relevant facts, concepts, insights and evidence to develop understanding and respond to the task</p> <p>Evaluates the suitability of information using task-specific criteria and reflects on how the tools, strategies and results suit the task</p>	<p>Analyses a diverse range of information for relevant concepts, themes, methodologies and evidence to extend and challenge understandings</p> <p>Evaluates the suitability of information using discipline-specific criteria and reflects on how the tools, strategies and results suit the task</p>	<p>Explores a comprehensive range of information for relevant themes, trends, relationships, methodologies and evidence to extend knowledge and identify gaps in existing research</p> <p>Evaluates the suitability of information using both discipline-specific and self-defined criteria and reflects on the efficacy of the research process</p>
 <p><b>3. ORGANISE</b> Manages information collected and generated</p>	<p>Uses basic principles, systems and digital tools to manage information</p>	<p>Uses appropriate digital tools and applies systematic, standardised principles to manage information</p> <p>Considers preservation issues when evaluating formats and technologies</p>	<p>Critically evaluates the affordances and limitations of various technologies and makes informed decisions about information and data management and preservation</p> <p>Establishes standards-based information and data management practices across all aspects of the research process</p>
 <p><b>4. CREATE</b> Uses and communicates information using appropriate conventions and technologies</p>	<p>Creates and communicates scholarly outputs for specified audiences, adhering to academic and professional conventions and using appropriate information and technologies</p> <p>Demonstrates a basic understanding of ethical and legal issues (eg. academic integrity and copyright) associated with using and creating scholarly outputs</p>	<p>Explores a range of technologies to create, communication and curate scholarly outputs for a range of audiences and purposes, following appropriate conventions</p> <p>Demonstrates a deep understanding of ethical and legal issues associated with using and creating scholarly outputs</p>	<p>Creates and communicates scholarly outputs that follow established and emerging disciplinary conventions and uses a range of technologies to communicate and curate content in innovative ways</p> <p>Integrates an extensive understanding of cultural, ethical and legal issues associated with the research process and makes outputs available for use and reuse via open access platforms</p>
 <p><b>5. CONNECT</b> Builds networks to collaborate and connect</p>	<p>Demonstrates a basic understanding of the role of social media and online collaboration tools in fostering collaboration and scholarship</p> <p>Engages with the concept of a digital identity and demonstrates an understanding of key issues such as online safety, privacy and security</p>	<p>Co-produces scholarly outputs through a range of social media and online collaboration tools</p> <p>Establishes and manages own digital identity, making decisions underpinned by a sophisticated understanding of context, privacy and security</p>	<p>Uses social media and online collaboration tools to connect and collaborate with an extensive network of researchers to create and share new disciplinary knowledge</p> <p>Establishes an active online profile and manages own research identifiers, track record and impact</p>

# USING THE FRAMEWORK

The Scholarly and Digital Literacy Framework outlines five core activities central to the research process:



## SEARCH

Finds the right type of information using the right tools



## EVALUATE

Analyses information and the strategies used to find it



## ORGANISE

Manages information collected and generated



## CREATE

Uses and communicates information using conventions and technologies



## CONNECT

Builds networks to collaborate and connect

As students progress through their study from undergraduate courses to graduate research, they require increasingly sophisticated discipline, scholarly and digital literacy skills and knowledge. The Framework makes this progression explicit, and identifies the critical capabilities needed for learning and research at key points in the curriculum.

The Framework can be used to:

- map learning outcomes across undergraduate and graduate degrees
- inform the development of learning activities and assessment tasks in subjects
- identify opportunities for incorporating new technologies and approaches to learning within the curriculum
- identify specific criteria to integrate within marking rubrics
- enable students to reflect on their own scholarly and digital literacy skill development

## GET STARTED

1. Visit [Teaching@Library](https://library.unimelb.edu.au/teaching/scholarly-literacy/showcase) to see examples of where scholarly and digital literacy have been embedded within subjects and courses:  
[library.unimelb.edu.au/teaching/scholarly-literacy/showcase](https://library.unimelb.edu.au/teaching/scholarly-literacy/showcase)
2. Contact a Subject Liaison Librarian to discuss how scholarly and digital literacy can be embedded within your subject or course:  
[library.unimelb.edu.au/liaison](https://library.unimelb.edu.au/liaison)

## CONTACT DETAILS

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The University of Melbourne  
Victoria 3010 Australia

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