EDST8304

Learning Technologies in School

Session 2, Online-scheduled-weekday 2023

Macquarie School of Education

Contents

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General Information

Unit convenor and teaching staff
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by appointment

Tutor
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Credit points
10

Prerequisites
Admission to MTeach(Sec) or GradCertEd

Corequisites

Co-badged status

Unit description
This unit examines design, implementation, evaluation and research issues relating to the use of technology in education. It investigates how current and emerging technologies can be used to effectively develop high school students' capabilities across a range of discipline areas. It provokes consideration of how research and theory can inform the effective design of technology-enhanced learning, and critical reflection of the role, place and influence of technology in secondary school contexts.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Demonstrate a specialised understanding of how to integrate technology effectively into classroom practice.

ULO2: Describe a range of contemporary technologies and critically evaluate their potentials for educational purposes.

ULO3: Develop technology-enhanced learning designs based on insightful selection and use of contemporary technologies.

ULO4: Critically evaluate and justify technology selection and design decisions with reference to current scholarly commentary, research and theory in pedagogy regarding technology in educational contexts.

ULO5: Utilise educational technologies to support integrated, reflective, and critical practice and research.

ULO6: Model positive attitudes and social behaviours relating to the integration of technology within teaching and learning, including effective participation in collaborative processes.

General Assessment Information

- Students should be aware of and apply the University policy on academic honesty (see: https://policies.mq.edu.au/document/view.php?id=3)

- Unless a Special Consideration (see: https://students.mq.edu.au/study/assessment-exams/special-consideration) request has been submitted and approved, a 5% penalty (of the total possible mark) will be applied each day a written assessment is not submitted, up until the 7th day (including weekends). After the 7th day, a mark of, 0 (zero) will be awarded even if the assessment is submitted. Submission time for all written assessments is set at 11:55pm. A 1-hour grace period is provided to students who experience a technical issue.This late penalty will apply to non-timed sensitive assessment (incl essays, reports, posters, portfolios, journals, recordings etc).

- Late submission of time sensitive tasks (such as tests/exams, performance assessments/presentations, scheduled practical assessments/labs etc) will only be addressed by the unit convenor in a Special consideration application. Special Consideration outcome may result in a new question or topic.

- Please format assessments using 12-point font and 1.5 spacing.

- All assessments are submitted electronically. Turnitin plagiarism detection software is used to check all written assessments.

- Students can use Turnitin's Originality Report as a learning tool to improve their

academic writing if this option is made available in the unit.

- Students should carefully check that they submit the correct file for an assessment as no re-submissions will be accepted after the due date and time, including instances where students upload an incorrect file in error.

- Word limits are strictly applied. Work above the word limit will not be marked.

- All assessments are marked using a clear marking scheme or a rubric.

- Marking of all assessments is moderated by the Unit Convenor.

- Applications for extensions must be made via AskMQ (https://ask.mq.edu.au/).

- It is not the responsibility of unit staff to contact students who have failed to submit assessments. If you have any missing items of assessment, it is your responsibility to make contact with the unit convenor.

University policy on grading

Criteria for awarding grades for assessment tasks

Assignments will be awarded grades ranging from HD to F according to guidelines set out in the University's Grading Policy. The following descriptive criteria are included for your information.

Descriptive Criteria for awarding grades in the unit

In order to meet the unit outcomes and successfully pass this unit, students must make a genuine attempt at all assessment tasks. Where any submitted assessment task is considered to be unsatisfactory in this regard, the highest possible final grade that can be awarded for the unit will be 45.

Students will be awarded grades ranging from HD to F according to guidelines set out in the policy: https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/assessment-in-effect-from-session-2-2016

The following generic grade descriptors provide university-wide standards for awarding final grades.

Grade	Descriptor

HD (High Distinction)	Provides consistent evidence of deep and critical understanding in relation to the learning outcomes. There is substantial originality and insight in identifying, generating and communicating competing arguments, perspectives or problem solving approaches; critical evaluation of problems, their solutions and their implications; creativity in application as appropriate to the discipline.
D (Distinction)	Provides evidence of integration and evaluation of critical ideas, principles and theories, distinctive insight and ability in applying relevant skills and concepts in relation to learning outcomes. There is demonstration of frequent originality in defining and analysing issues or problems and providing solutions; and the use of means of communication appropriate to the discipline and the audience.
Cr (Credit)	Provides evidence of learning that goes beyond replication of content knowledge or skills relevant to the learning outcomes. There is demonstration of substantial understanding of fundamental concepts in the field of study and the ability to apply these concepts in a variety of contexts; convincing argumentation with appropriate coherent justification; communication of ideas fluently and clearly in terms of the conventions of the discipline.
P (Pass).	Provides sufficient evidence of the achievement of learning outcomes. There is demonstration of understanding and application of fundamental concepts of the field of study; routine argumentation with acceptable justification; communication of information and ideas adequately in terms of the conventions of the discipline. The learning attainment is considered satisfactory or adequate or competent or capable in relation to the specified outcomes
F (Fail)	Does not provide evidence of attainment of learning outcomes. There is missing or partial or superficial or faulty understanding and application of the fundamental concepts in the field of study; missing, undeveloped, inappropriate or confusing argumentation; incomplete, confusing or lacking communication of ideas in ways that give little attention to the conventions of the discipline.

Note: *If you fail a unit with a professional experience component, the fail grade will be on your transcript irrespective of the timing of the placement.*

Withdrawing from this unit

If you are considering withdrawing from this unit, please seek academic advice via https://ask.mq.edu.au before doing so as this unit may be a co-requisite or prerequisite for units in the following sessions and may impact on your progression through the degree.

Results

Results shown in iLearn, or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit https://ask.mq.edu.au.

Use of Resources and Assistive Technologies

Ancillary resources and assistive technologies (such as generative Artificial Intilligence) may be used as a starting point for ideas. However, all content that is submitted must be the student's own work. Any use of ancillary resources such as generative Artificial Intilligence must be

appropriately credited, for instance, by providing an aknowledgement statement at the end of an assignment or by formally referencing contributions. Use of ancillary resources and assistive technologies that are not appropriately credited may be considered as academic misconduct.

Assessment Tasks

Name	Weighting	Hurdle	Due
ePortfolio (Set Up)	10%	Yes	11:55PM Thursday 3rd August
ePortfolio (Main)	40%	No	11:55PM Thursday 14th September
Learning Technology Module	50%	No	11:55PM Monday 6th November

ePortfolio (Set Up)

Assessment Type [1]: Portfolio
Indicative Time on Task [2]: 10 hours
Due: **11:55PM Thursday 3rd August**
Weighting: **10%**
This is a hurdle assessment task (see assessment policy for more information on hurdle assessment tasks)

Students setup their ePortfolio and complete a post that critically reflects on the use of technology to enhance learning with reference to research literature, in accordance with the topic designated in the first week of session (approx 300 words per post).

On successful completion you will be able to:
- Demonstrate a specialised understanding of how to integrate technology effectively into classroom practice.
- Describe a range of contemporary technologies and critically evaluate their potentials for educational purposes.
- Develop technology-enhanced learning designs based on insightful selection and use of contemporary technologies.
- Critically evaluate and justify technology selection and design decisions with reference to current scholarly commentary, research and theory in pedagogy regarding technology in educational contexts.
- Utilise educational technologies to support integrated, reflective, and critical practice and research.
- Model positive attitudes and social behaviours relating to the integration of technology

within teaching and learning, including effective participation in collaborative processes.

ePortfolio (Main)

Assessment Type [1]: Portfolio
Indicative Time on Task [2]: 30 hours
Due: **11:55PM Thursday 14th September**
Weighting: **40%**

Students complete an ePortfolio post each week that critically reflects on the use of technology to enhance learning with reference to research literature, in accordance with the topic covered in tutorials and lectures (approx 300 words per post).

On successful completion you will be able to:
- Demonstrate a specialised understanding of how to integrate technology effectively into classroom practice.
- Describe a range of contemporary technologies and critically evaluate their potentials for educational purposes.
- Develop technology-enhanced learning designs based on insightful selection and use of contemporary technologies.
- Critically evaluate and justify technology selection and design decisions with reference to current scholarly commentary, research and theory in pedagogy regarding technology in educational contexts.
- Utilise educational technologies to support integrated, reflective, and critical practice and research.
- Model positive attitudes and social behaviours relating to the integration of technology within teaching and learning, including effective participation in collaborative processes.

Learning Technology Module

Assessment Type [1]: Design Task
Indicative Time on Task [2]: 40 hours
Due: **11:55PM Monday 6th November**
Weighting: **50%**

Students design a module of work in teams that demonstrates how technology can effectively enhance student learning outcomes, and include an individually written justification of the elements they designed (1000 words). This is the summative and integrative assessment task.

On successful completion you will be able to:
- Demonstrate a specialised understanding of how to integrate technology effectively into classroom practice.
- Describe a range of contemporary technologies and critically evaluate their potentials for educational purposes.
- Develop technology-enhanced learning designs based on insightful selection and use of contemporary technologies.
- Critically evaluate and justify technology selection and design decisions with reference to current scholarly commentary, research and theory in pedagogy regarding technology in educational contexts.
- Utilise educational technologies to support integrated, reflective, and critical practice and research.
- Model positive attitudes and social behaviours relating to the integration of technology within teaching and learning, including effective participation in collaborative processes.

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[1] If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

[2] Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

Unit Organisation

This is a ten credit point unit containing 10 topics / weeks of classes. See the Unit Schedule below for the timing of topics. The following classes will occur in each week that a topic is running.

Webinar lecture and discussion

- Monday 4pm-5pm for all students for each topic week. Offered in hybrid mode either Building 01CC Room 215 or online (see unit website for Zoom webinar link)

Tutorial

- *Class A (Online):* 5pm-7pm Mondays (see unit website for Zoom webinar link)

- *Class B (Face-2-Face):* 10am-12pm Wednesdays in 12SW317

Students need to attend the lecture and one of the two tutorial class streams in order to complete the assessment tasks. Content and activities covered in the lectures and tutorials are essential for building the core knowledge and skills required to demonstrate the learning outcomes of this unit. As well, students complete the Learning Technology Module groupwork assessment task with peers from their tutorial, so unexplained absences may impact on other students.

Required Reading

The required text for this unit is "Design of Technology-Enhanced Learning - Integrating Research and Practice" by Matt Bower.

e-Book version

A digital copy of the book should be available from http://ebooks.com for around $AU 50, which is about a 65% discount. Simply go to https://www.ebooks.com/95840983/design-of-technology-enhanced-learning/bower-matt/ and use the discount code provided at the top section of the unit website on checkout to receive the discount. This offer has been setup especially for EDST8304 this session so please don't pass it onto anyone because the number of people who can use this discount is capped. The digital version of the book has several advantages including being searchable, colour images, and live hyperlinks to web references.

Hardcopy/paperback version

Those who prefer a hardcopy version of the book can purchase it online at https://www.booktopia.com.au/design-of-technology-enhanced-learning-matt-bower/book/9781838679200.html . Hardcover and paperback versions are available from other vendors, so it can be worthwhile to shop around online.

Library version

The text is available for periodical borrowing from the Library. The number of digital and hardcopy versions available may be capped, the library versions cannot be annotated, and there is a limit on the duration for which you borrow the digital and hardcopy versions from the library. In previous sessions students have been caught without access during peak periods, so it is recommended that you purchase either an e-Book or hardcopy version.

Copyright Issues

Copyright rules apply to the use of materials taken from other sources. There are images you can use in the development of your assignments without needing to obtain copyright permission. Links to sites that supply copyright free images will be suggested in your tutorials, or you can search for Creative Commons resources yourselves. It is essential that you adhere to copyright requirements. For guidance on what you can use and how you can use it, see https://smartcopying.edu.au.

Technology Use and Requirements

Accessing and using the Unit Website

The EDST8304 unit website is available from the Macquarie University iLearn system available at: http://ilearn.mq.edu.au.

Students will need regular access to a computer and the Internet to complete this unit. Weekly access to iLearn is compulsory for all students. Important assessment information will be posted on iLearn, as will other relevant unit notices and materials. Please check the iLearn unit website regularly.

Lecture recordings

Weekly lectures will be recorded via Zoom, and will typically be made available within 24 hours via the unit website.

Training Support

In order to successfully complete the EDST8304 tutorials students need to ensure they have a reasonable level of competence in ICTs and Information Literacy skills. For instance, students should be able to navigate around a desktop computer to open and edit Word documents and use a web-browser to search for information. If you feel uncertain about your competency levels it is your responsibility to undertake training to acquire or improve these skills as soon as possible as they will be assumed in the tutorials.

Library Training

The library offers a range of face-to-face and online workshops to support the development of technological skills. For more details refer to the Macquarie University library website (http://www.mq.edu.au/on_campus/library/) under 'Training'.

General IT Support and Troubleshooting

For support with access to wireless networks and other general technology matters, please contact the Macquarie University Library Student IT Help Desk (Phone: 9850 4357 or 1800 67 4357; Email: onehelp@mq.edu.au).

Unit Schedule

Week Commencing	Lectures	Tutorial Content
Week 1 (24/07/23)	Introduction to Technologies in Education Technology as an educational imperative The Technology Pedagogy and Content Model and its implications	Intro to unit and technology platforms Initial analysis of technologies & their educational implications Student safety, privacy, risk Introduction to Task 1 ePortfolio
Week 2 (31/07/23)	Pedagogies of Technology-Enhanced Learning	Analysing pedagogies of technology-enhanced learning Evaluating online modules of work

Week 3 (07/08/23)	Technology Affordances and Multimedia Learning Effects	Introduction to Learning Management System authoring (Google Classrooms)
Week 4 (14/08/23)	Representing and Sharing Content Using Technology	Learning objects Sharing and reuse of content (copyright & Creative Commons) Assessment using technology
Week 5 (21/08/23)	Design Thinking and Learning Design	Introduction to the design of technology enhanced learning (learning design and lesson planning) Overview of Task 2 Learning Technology Module
Week 6 (28/08/23)	Design of Web-Enhanced Learning	Designing activities using web technologies Learning Technology Module group work
Week 7 (04/09/23)	Designing for Learning using Artificial Intelligence	Using artificial intelligence tools and approaches for learning Learning Technology Module group work
Mid-Session Break (11/09/23)	*RECESS (no lecture)*	*RECESS (no tutorial)*
Mid-Session Break (18/09/23)	*RECESS (no lecture)*	*RECESS (no tutorial)*
Week 8 (25/09/23)	Design of Mobile Learning	Exploring mobile potentials Learning Technology Module group work
Week 9 (02/10/23)	Designing for Learning using Virtual Worlds and other emerging technologies	Virtual world activities Learning Technology Module group work
Week 10 (09/10/23)	*PRACTICUM (no lecture)*	*PRACTICUM (no tutorial)*
Week 11 (16/10/23)	*PRACTICUM (no lecture)*	*PRACTICUM (no tutorial)*
Week 12 (23/10/23)	*PRACTICUM (no lecture)*	*PRACTICUM (no tutorial)*
Week 13 (30/10/23)	Abstracting Technology-Enhanced Learning Design Principles Conclusions and Future Directions for Educational Technology	Peer feedback on Learning Technology Modules Reflections and evaluations Group debriefing General review

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit Student Policies (https://students.mq.edu.au/support/study/policies). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.edu.au) and use the search tool.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

Results

Results published on platform other than eStudent, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in eStudent. For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe academic integrity – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free online writing and maths support, academic skills development and wellbeing consultations.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- Access StudyWISE
- Upload an assignment to Studiosity
- Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- Accessibility and disability support with study
- Mental health support
- Safety support to respond to bullying, harassment, sexual harassment and sexual assault
- Social support including information about finances, tenancy and legal issues
- Student Advocacy provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via AskMQ, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the Acceptable Use of IT Resources Policy. The policy applies to all who connect to the MQ network including students.

School of Education Procedures

In addition, the following policies and procedures of the School of Education are applicable in this unit.

Fitness to Practice

Academic Senate has approved the development of a Fitness to Practice (FTP) procedure to provide further clarity to students enrolled in practical, clinical and professional programs who have not met the requirements of the General Coursework Rules. It establishes how the University will manage the progression of students enrolled in practical, clinical or professional (PCP) programs or units listed on Schedule 3 of the Academic Progression Policy, with embedded placements and/or registration, accreditation or other mandated requirements.

The Procedure is governed by General Coursework Rules, and the Academic Progression Policy and is supported by the Inherent Requirements Framework. It provides the process to identify, notify, intervene, support, monitor and exclude when required, those students who are not meeting the FTP requirements of their program.

FTP is the demonstration of professional competence, acceptable professional behaviour, freedom from impairment and compliance with program specific requirements needed for a student to practice properly and safely throughout their practical, clinical or professional program.

Students must ensure they meet Inherent Requirements before enrolling in their program; that they have the physical, cognitive, communication and behavioural capacity to complete the program. Students with a disability or chronic health condition may have reasonable adjustments made. Students must also demonstrate that they are fit to practice and demonstrate the capabilities and professional behaviours required of that profession.

Attendance for Master of Teaching (Primary and Secondary) units

*Attendance at all synchronous activities, completion of non-synchronous formative/diagnostic class tasks and involvement in professional forums is **compulsory** as the Master of Teaching is a professional qualification. All students must meet the 80% attendance requirement.*

Activities completed during weekly tutorials or on campus days are essential for building the core knowledge and/or skills required to demonstrate the learning outcomes of this unit and to meet the AITSL Graduate Teacher Standards. Attendance at all tutorials or on campus days is expected and the roll will be taken.

Students are required to attend the tutorial in which they are enrolled. Any changes to tutorial enrolments must be completed officially through e-student. Please do not contact the unit convenor requesting a change.

Unit Expectations

- Students are expected to read weekly readings before completing tasks and attending tutorials
- Students are expected to listen/attend weekly lectures before completing tasks and attending tutorials

Note: It is not the responsibility of unit staff to contact students who have failed to submit assignments. If you have any missing items of assessment, it is your responsibility to make contact with the unit convenor.

<u>**Electronic Communication**</u>

It is the student's responsibility to check all electronic communication on a regular weekly basis. Communication may occur via:

- Official *MQ Student Email* Address
- Other iLearn communication functions

Changes from Previous Offering

The content from the previous offering has been updated to reflect advances in educational technology research and practice.

The Artificial Intelligence topic replaces the Social Media topic.

Students are expected to make personal, reflective and original contributions on assessment tasks - submission of generic content that could be generated by Artificial Intelligence will not be sufficient to pass this unit.

5Rs Framework

The 5Rs Framework, developed by the School of Education at Macquarie University, is embedded throughout your teacher education course. Your use of the 5Rs Framework will help you develop the capabilities that will make your teaching career sustainable and fulfilling.

In this unit, you will learn using the 5Rs framework in the following important ways:

- **Resilience:** Apply strategies to rise above study, work and life pressures to maintain holistic health and sense of coherence.
- **Reflexive:** Consider how your thoughts and actions within your study and teaching environments can lead to maximum positive impact.
- **Responsive:** Design learning environments that cater to the individual needs and interests of your students.
- **Ready to learn**: Identify areas where self-development is required and pursue learning in those areas of need.
- **Research engaged:** Source relevant learning design research and critically apply it to create evidence-based technology-enhanced learning modules.

Unit information based on version 2023.01R of the Handbook