EDUC362

Digital Creativity and Learning

S1 Day 2015

Dept of Education

Contents

General Information

Unit convenor and teaching staff
Unit Convenor
Matt Bower
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Tutor
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Credit points
3

Prerequisites
39cp or admission to BEd(Sec)

Corequisites

Co-badged status

Unit description
This unit addresses advanced themes in technology enabled learning. The social and pedagogical implications of emerging technologies are examined, such as Virtual Worlds, Games Based Learning, and Augmented Reality. Emphasis is placed on how to effectively develop students' creativity, including in the areas of computational and design thinking. The unit also covers current trends in the field of learning design, as well as the use of technology for educational research. Students are provided with a more in-depth grounding on technical aspects of Information and Communication Technologies as well as issues surrounding effective implementation in classrooms to enable them to become technology leaders in schools. Students also have the scope to explore an emerging educational technology or issue in detail as part of the major research project.

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:

Identify a range of emerging educational technologies and critically discuss their pedagogical and social implications

Critically review literature and discourse relating to the use of technology in the classroom

Create innovative and effective learning designs using emerging technologies

Utilise educational technologies to support reflective practice and research

Constructively engage in a community of practice focused on the effective use of technology for learning and teaching

General Assessment Information

It is important to check the EDUC362 unit website and student email regularly as assignment clarifications may be announced and it will be assumed all students have read them. Note that all assignments should be submitted online unless other instructions have been provided.

Assignment Requirements

The following requirements apply to assignments:

1. Please submit your assignments using the instructions in the Assessment section of this unit outline, and by the due date and time specified for each assignment.

2. The name of any assignment files should include your full name and the task number – for instance MattBowerTask2.doc .

3. Extensions of time for the submission of the assignment will be granted only in special circumstances. Applications for such extensions must be made via http://ask.mq.edu.au prior to the submission date, and must include appropriate evidence (usually a Professional Authority Form). The main grounds for seeking an extension are (a) illness and (b) misadventure (i.e., circumstances beyond the student's control, not pressure of accumulated assignments).

4. Late assignments will be penalised at a rate of 5% of the maximum mark for an assignment for each day it is late. The late penalty does not apply when an extension of time has been granted.

5. It should be noted that late assignments cannot be accepted for grading after marked assignments have been returned.

6. Students are responsible for periodic back up of any digital work during the creation of an assignment. In case of system failure students will be provided with reasonable time compensation commensurate with the amount of time that the system was down. All students must keep a digital copy of their assignments so that in case of system failure the assignment can be resubmitted.

7. Students should keep within the stated length or word limit, and students may be

penalised for exceeding this limit. References lists are not included in any word counts.

8. The School of Education referencing procedures must be adopted. These requirements are based on the APA style.

9. Written assignment work should be submitted online in Word format with the first two pages consisting of the relevant cover sheet and marking rubric attached to the end of this unit outline. It is particularly important that students include the disclaimer section as a way of acknowledging the originality of their work.

10. Assignment feedback will be provided via the corresponding dropbox in the unit website. Feedback will include the assessment of performance in relation to the assignment criteria as well as qualitative feedback in the form of comments. Overall student performance on assignments will be reported using a grade.

11. If you wish to appeal against your grade you must first contact the original marker within one week of a marked assignment being returned. If you remain concerned you should arrange to meet with the unit convenor.

12. For information relating to assessment see the University Assessment Policy at http://www.mq.edu.au/policy/docs/assessment/policy.html .

13. Remember assignments must be your own work. Plagiarism is a serious offence.

Assessment Tasks

Name	Weighting	Due
Wiki Task	10%	11:55pm Tue 10 March 2015
Independent Research Review	20%	11:55pm Tue 7 April 2015
Emerging Technology Module	30%	11:55pm Fri 22 May 2015
E-portfolio	40%	11:55pm Tue 9 June 2015

Wiki Task

Due: **11:55pm Tue 10 March 2015**
Weighting: **10%**

By the middle of Week 2 (by Wednesday 4/3/15) students are to have selected an emerging technology (either software, hardware or website) and explain on the course wiki how it can be used to foster creativity. By the middle of Week 3 (by Tuesday 10/3/15) students should ensure that their page is appropriately situated and linked to other pages on the wiki.

 Student performance will be assessed based on the following criteria:

1. the page provides a clear and concise summary of the emerging technology

2. the page describes innovative ways in which the technology could be used to foster creativity

3. the page includes a reflection on pedagogical issues that warrant consideration when attempting to foster student creativity using the technology

4. the page is clearly formatted and professionally edited

5. the page is appropriately situated within the wiki

6. the page is linked to other appropriate pages on the wiki

7. the page appropriately references external sources of information.

This exercise should be treated as an opportunity to help each other define the knowledge space rather than as an onerous assessment task. The length of the summary and description should not exceed 400 words.

Note that every person should select a unique technology to review. You are advised to check the wiki in advance to ensure that nobody else has selected your technology. Students may create a placeholder page on the wiki in order to reserve your preferred technology.

On successful completion you will be able to:
• Identify a range of emerging educational technologies and critically discuss their pedagogical and social implications
• Constructively engage in a community of practice focused on the effective use of technology for learning and teaching

Independent Research Review

Due: **11:55pm Tue 7 April 2015**
Weighting: **20%**

Students are to complete independent research review that investigates an area of educational technology usage in-depth. Examples of possible topics include social networking, mobile learning, virtual worlds, digital games, Web 2.0, augmented reality, 3D printing and robotics. The investigation should synthesise research literature as well as other appropriate information sources to present a critical review of pedagogical practices in the domain. Students may also chose to collect real-world examples to demonstrate the ideas being discussed. The review is to be 800 words in length (not including references) and should be submitted to the assignment dropbox on the unit website.

The assessment rubric for this task will be made available via the unit website.

On successful completion you will be able to:
• Identify a range of emerging educational technologies and critically discuss their pedagogical and social implications
• Critically review literature and discourse relating to the use of technology in the

classroom

- Utilise educational technologies to support reflective practice and research

Emerging Technology Module

Due: **11:55pm Fri 22 May 2015**
Weighting: **30%**

Students are to produce a module featuring theoretically grounded learning activities based around emerging technologies. Possible topics could include robotics to develop computational thinking capabilities, augmented reality to develop physics understanding, a virtual worlds language simulation, an educational game using the Scratch visual programming environment, or 3D printing in industrial design. Chosen technologies must be strongly integrated within the module. The module should relate to a topic or sub-topic from a state or national syllabus document (either existing or proposed).

As a guide students should aim to produce the equivalent of four 45 minute lessons that could be run as a Macquarie ICT Innovations Centre 'Bootcamp' (this term will be explained in tutorials). Students may use any technologies or platforms to create their module of work but it should be available online via a URL. The module should include an assessment component (formative or summative).

Students are also required to submit a 600 word justification that provides a pedagogical justification of their design. The justification should clearly explain how the module fosters creative thinking in the content area being addressed. It should also and explain how student learning and the effectiveness of the module of work can be evaluated. Arguments should be supported by reference to educational theory. The justification may also be included on the website for the module. The targeted learning outcomes should be included in an Appendix. Appendices and references are not included in the word count. The justification should be submitted via the assignment dropbox on the unit website, and must include the URL to the module. The URL must be provided and accessible by the marker in order for the assignment to be considered submitted.

Students are also required to provide a 10 minute presentation or 'pitch' of their module to the their peers and teacher. The presentation should include at least one 'vignette' that models the teaching approaches embedded within the module. This provides students with the opportunity to showcase the module and explain key components of their design. The presentations will occur in the last two weeks of tutorial classes.

The assessment rubric for this task will be made available via the unit website.

On successful completion you will be able to:

- Identify a range of emerging educational technologies and critically discuss their pedagogical and social implications
- Critically review literature and discourse relating to the use of technology in the classroom

- Create innovative and effective learning designs using emerging technologies
- Utilise educational technologies to support reflective practice and research

E-portfolio

Due: **11:55pm Tue 9 June 2015**
Weighting: **40%**

Students are to complete a personal e-Portfolio that showcases the skills and understandings they have developed throughout the unit. This e-Portfolio is not to be merely a collection of digital artefacts - it must evidence a familiarity with how a wide range of technologies can be used to foster digital creativity and learning.

The e-Portfolio should include such items as personal work samples, critical discussion of key pedagogical issues, links to other resources, and references to educational literature. As a guide, students should complete an approximately 350 word post for each week of classes. Note that students may choose to integrate interesting and relevant findings from sources outside the unit in order to enhance their portfolio. The e-Portfolio will be completed using a blog, and students will be provided with details about how to create their e-Portfolio in the first two weeks of tutorial classes.

As well as critically reflecting upon their own work students should also spend time reflecting on the work of their peers and providing constructive feedback to them. The e-Portfolio should be composed for a professional teaching audience (employers, other teachers). It should be designed to support usability through categorisation of posts, clear formatting and appealing aesthetics.

Students will make their e-Portfolio URL known to the class in the first weeks of semester so there is no need to submit anything via iLearn. Students may not edit their e-Portfolio after the submission date (checking server logs will confirm students adhere to this). Feedback will be made available via the iLearn Gradebook. The marking rubric for this task will be made available on the unit website.

On successful completion you will be able to:

- Identify a range of emerging educational technologies and critically discuss their pedagogical and social implications
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Delivery and Resources

Unit Organisation

This unit is organised into ten modules. Each module starts with a lecture to provide a conceptual grounding for the module, followed by the corresponding tutorial. Students are expected to read the readings and review the videos and other resources for the module *before* coming to the tutorial. Note that there are no lectures or tutorials following the two-week mid semester break so that pre-service teachers can complete their block practicum.

Lecture

Monday 9am - 10am, in W5AT2

Weekly Tutorial Schedule

Tutorial Class A: Monday, 11am - 1pm, in C5A204

Tutorial Class B: Monday, 2pm - 4pm, in C5A204

Tutorial Class C: Tuesday, 10am-12pm, in C5A204

Tutorial Class D: Tuesday, 2pm - 4pm, in C5A204

Students must attend the tutorials for which they have enrolled. This is because students work at a computer during these sessions and there are a limited number of computers available. Students are expected to attend all the tutorials.

Participation in the tutorials is required so as to achieve the relevant ICT competencies, acquire experience using and evaluating a range of learning technologies, receive guided practice in the design and development of theoretically grounded online learning activities, and to contribute to the discussions that form the basis of the data for the discussion analysis assessment task. This is in line with the learning outcomes for this unit. When assessing participation four major aspects will be taken into account:

- attendance
- preparation including evidence of pre-reading and reviewing online lectures
- general contribution to the workshop via discussion
- completion of the workshop activities.

It is the responsibility of the student to contact their tutor by phone or email to inform tutors if they are going to be absent, and to provide them with supporting documentation to explain why they missed the tutorial (eg medical certificate).

Textbook

There is no textbook for this unit; current readings and links will be provided throughout the semester. Readings and resources will be made available online through the unit website.

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 presentation without needing to obtain copyright permission. Links to sites that supply copyright free images will be suggested in your tutorials, or you can do a search for them yourselves (Creative Commons). It is essential that you obtain copyright permission for any images you obtain from other web sites or scan from books. The source of the image and an acknowledgement of permission granted must be indicated/provided in your presentation. You, and the University, are open to prosecution if you post images taken from other sources without permission. If you particularly need to use material from a website/book, most book publishers and sources of web pages will provide copyright permission if you contact them to ask for permission indicating the use is for educational purposes and not for profit - just clearly indicate that it is only being used for local educational purposes.

Technology Use and Requirements
Accessing and using the Unit Website

The EDUC362 unit website is available from the Macquarie University iLearn system available at: http://ilearn.mq.edu.au.

To access the site students will need to use their student OneID username and password to log in and then choose EDUC362 from My Online Units menu. Please do NOT contact the Unit Convenor regarding iLearn technical support. CONTACT the Macquarie University Library Student IT Help Desk. Phone 9850 4357. Email support@library.mq.edu.au .

iLecture

Recordings of all lectures will be made available online using the ilecture system. These lectures can be downloaded or streamed from within iLearn.

Discussion Forums

These are for you to hold discussions on either general topics or specific issues. Students are required to regularly check the discussion forums and are encouraged to engage in discussion. Unit staff read and reply to the messages when requested.

Wiki

A wiki is a website that users can edit through a browser. The website wiki allows EDUC362 students and teachers to co-create a knowledge-space. This will form the basis of the first assessment task. For those that are unfamiliar with how to use the wiki, guidance will be provided in the workshops.

Teacher Education Learning Lab (TEL Lab)

All your tutorials will be held in the TEL Lab. This is a facility for Education students at Macquarie University and is located in C5A201, C5A204 and C5A210. The TEL Lab supports the use of technology as appropriate to our schools. The labs provide a student work area and venue for tutorials. The computers have a variety of educational software and full Internet access.

Students are welcome to use the computers and software provided that the room is not being used by lecturers for a tutorial or workshop. Notices are placed near the Centre door to indicate opening hours and computer room availability.

Training Support

In order to successfully complete the EDUC362 workshops students need to ensure they have a reasonable level of competence in ICTs and Information Literacy skills. 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 workshops. Options include:

Units of study

The following two units offered in the Faculty of Science develop technological skills:

- ISYS100 – IT and Society (Planet Unit)
- INFO104 – International Computer Driving Licence (Semester 2 only).

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 and other general technology matters, please contact the Macquarie University Library Student IT Help Desk (Phone: 9850 4357; Email: support@mq.edu.au).

Unit Schedule

Week Commencing	Lectures	Tutorial Content
Week 1 (23/02/15)	Introduction to Unit / Creativity in Education	Intro to unit & technologies (LMS, wiki, blog) Reflecting on how to encourage creativity in the classroom
Week 2 (02/03/15)	Introduction to Fostering Creativity using Technology	Exploration of technologies to foster creativity Reflecting on pedagogies to support creative technology use
Week 3 (09/03/15)	Design Based Thinking in Education	Designing a learning sequence using technology **(Task 1 Wiki due)**

Week 4 (16/03/15)	Technology-based Learning Evaluation and Research	Planning an evaluation of learning and teaching Instrument design Aligning tasks, outcomes and assessments
Week 5 (23/03/15)	Computational Thinking	Tools and strategies for developing computational thinking
Week 6 (30/03/15)	Enhancing Learning using Augmented Reality	Exploring augmented reality and reflecting on its potentials
Mid Semester Break – Friday 3rd April to Sunday 19th April **(Task 2 Independent Research Review due)**		
Week 7 (20/04/15)	*No lecture*	*No tutorial*
Week 8 (27/04/15)	*No lecture*	*No tutorial*
Week 9 (04/05/15)	Digital Games and Design	Tools for games design Students as designers of games
Week 10 (11/05/15)	Robotics and Computational Thinking	Solving problems using robots
Week 11 (18/05/15)	Constructionism and the Maker Movement	Embedded systems, electronic circuits, 3D design and printing **(Task 3 Emerging Technology Module due)**
Week 12 (25/05/15)	Technology Enabled Learning Futures	Emerging Technology Module Presentations I
Week 13 (01/06/15)	*No Lecture*	Emerging Technology Module Presentations II

 (Note that the Task 4 e-Portfolio is due in Week 14)

Learning and Teaching Activities

Lectures

10 Modules of 1 hour lectures

Tutorials

Weekly 2 hour tutorials

Online activities

10 weekly module preparation

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central. Students should be aware of the following policies in particular with regard to Learning and Teaching:

Academic Honesty Policy http://mq.edu.au/policy/docs/academic_honesty/policy.html

Assessment Policy http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy http://mq.edu.au/policy/docs/grading/policy.html

Grade Appeal Policy http://mq.edu.au/policy/docs/gradeappeal/policy.html

Grievance Management Policy http://mq.edu.au/policy/docs/grievance_management/policy.html

Disruption to Studies Policy http://www.mq.edu.au/policy/docs/disruption_studies/policy.html *The Disruption to Studies Policy is effective from March 3 2014 and replaces the Special Consideration Policy.*

In addition, a number of other policies can be found in the Learning and Teaching Category of Policy Central.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/support/student_conduct/

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 ask.mq.edu.au.

Academic Honesty

The nature of scholarly endeavour, dependent as it is on the work of others, binds all members of the University community to abide by the principles of academic honesty. Plagiarism is a matter of particular importance. Plagiarism is defined as using the work or ideas of another person and presenting this as your own without clear acknowledgement of the source of the work or ideas. This includes, but is not limited to, any of the following acts:

- copying out part(s) of any document or audio-visual material or computer code or

  website content without indicating their origins;

- using or extracting another person's concepts, experimental results, or conclusions;

- summarising another person's work;

- submitting substantially the same final version of any material as another student in an assignment where there was collaborative preparatory work;

- use of others (paid or otherwise) to conceive, research or write material submitted for assessment; and

- submitting the same or substantially the same piece of work for two different tasks (self-plagiarism).

Plagiarism is a serious breach of the University's rules and carries significant penalties. Penalties may include a deduction of marks, failure in the unit, and/or referral to the University Discipline Committee.

Academic Honesty is key to the core values and principles that underpin the University's Ethics Statement (see the policy at http://www.mq.edu.au/policy/docs/academic_honesty/policy.htm). The procedures for Academic Honesty as well as the Assessment – Code of Practice outlines the responsibility of students (and staff) in academic endeavours. Please consult these documents (available through Policy central: http://www.mq.edu.au/policy/all.html)

Grading

The University recognises the importance of producing grades and reports of student learning achievements that are valid, reliable and accurate representations of each student's capabilities in relation to clearly articulated learning outcomes.

Assignments will be awarded grades ranging from HD to F according to guidelines set out in the policy: http://www.mq.edu.au/policy/docs/grading/policy.htm. Each assignment uses a standards-based approach to assessment where performance is assessed against specified criteria. You will NOT be notified of a numerical mark for awarded for specific assessment tasks.

Your final unit grade (HD to F) will be accompanied by an SNG (Standardised Numerical Grade) The SNG reflects the extent to which you have met the overall grade descriptors eg an SNG of 73 (ie closer to D than CR) means your work shows evidence of meeting the Credit descriptors and has some characteristics of the Distinction descriptors.

Grade Descriptors

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

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.

Appeals against Grades

University regulations allow for students to appeal a final grade if they feel they have been disadvantaged. Grading appeals can be lodged on the following grounds:

- a clerical error occurred in the determination of a final grade
- the Unit Guide was not in accordance with the Unit Guide Policy
- due regard was not paid to an illness or misadventure that had been found to be eligible for special consideration
- the student had been disadvantaged in some way due to the conduct of an assessment task
- the student had been disadvantaged by variation of the assessment requirements or feedback provisions laid out in the Unit Guide
- the assessor's judgement was not objectively applied.

Information relating to grading appeals can be found at: http://mq.edu.au/policy/docs/gradeappeal/policy.html .

Student Support

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

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to improve your marks and take control of your study.

- Workshops
- StudyWise
- Academic Integrity Module for Students
- Ask a Learning Adviser

Student Wellbeing

Macquarie University provides a range of Academic Student Support Services. Details of these services can be accessed at students.mq.edu.au/campus_life/campus_wellbeing_support_services/.

Advice for International Students

Macquarie International is the first point of contact for international students. Refer to http://www.international.mq.edu.au/

International students can make individual or small group appointments to see the Study Skills Adviser, or drop-in for quick questions to E3A, Level 1. Don't forget to bring your unit outlines with you to your appointment.

Study Skills Support Unit

Many students find it difficult to apply the independent study approaches required for success in tertiary studies. Assistance with study skills is provided through a range of programs for students. See: http://www.students.mq.edu.au/support/learning_skills/

Writing Skills

Unit staff are not expected to help you with basic writing advice. Further, in fairness to other students, unit staff will not provide you with information and advice concerning assessments, which is not readily available to all students in the unit.

Macquarie University offers a number of courses and services to help students with writing problems, whether they be first or second language speakers of English. If you find writing difficult, you are advised to:

- Contact Sue Spinks, Writing Skills Coordinator, Department of Linguistics, W6A531. Telephone: 9850 8770
- Visit the Department of Linguistics Writing Skills website at http://www.ling.mq.edu.au/support/writing_skills/index.htm
- Contact the Writing Skills Adviser, Centre for Open Education, X5B. Tel: 9850 7470.
- See also: Peters, P. (1985). Strategies for student writers. Brisbane: John Wiley.

Student Services and Support

Students with a disability are encouraged to contact the Disability Service who can provide appropriate help with any issues that arise during their studies.

The **Disability Service** is one of the services provided by Campus Wellbeing. Staff from the Disability Service work with students who have a permanent or temporary disability and/or health condition to get the services they need so as to have an equal opportunity to flourish at Macquarie University.

Students can contact or register with the Disability Service at any time before or during their studies at Macquarie.

Please contact the Disability Service to learn more about the services that may be available to you to enable you to flourish in your studies.

General contact details:

- Phone: 02 9850 7497
- email: equity@mq.edu.au
- In person: Level 2, Lincoln Building (C8A), Macquarie University

School of Education contact person:

- Karen Gregory, Academic Disability Liaison Officer, School of Education, phone: 9850 8608

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

IT Help

For help with University computer systems and technology, visit http://informatics.mq.edu.au/help/.

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

Please do NOT contact the Unit Convener or Tutors regarding technical support for your computer or iLearn.

It support can also be contact by calling 9850 4357 or emailing support@mq.edu.au.

Technological literacy requirements

In order to successfully complete various Education and TEP units students need to ensure they have a reasonable level of competence in ICTs and Information Literacy skills. If you feel uncertain about your competency it is your responsibility to undertake training to acquire or improve these skills as soon as possible as they will be assumed in the workshops. You can request help with your IT literacy from the Library.

Any other technological inquiries can be addressed to any of the following support channels:

- PLodge a OneHelp ticket at http://onehelp.mq.edu.au
- hone (02) 9850 HELP (4357) or Freecall 1800 674357
- Email help@mq.edu.au
- Face to Face IT Help Desk (locations available at http://www.mq.edu.au/about_us/ offices_and_units/informatics/find_us/)
- , Level 1, University Library Email: Just Ask form http://www.library.mq.edu.au/justask/ 24x7 Follow the Sun Helpdesk email: ithelp@mq.edu.au

Graduate Capabilities

Creative and Innovative

Our graduates will also be capable of creative thinking and of creating knowledge. They will be imaginative and open to experience and capable of innovation at work and in the community. We want them to be engaged in applying their critical, creative thinking.

This graduate capability is supported by:

Learning outcomes

- Identify a range of emerging educational technologies and critically discuss their pedagogical and social implications
- Create innovative and effective learning designs using emerging technologies
- Utilise educational technologies to support reflective practice and research
- Constructively engage in a community of practice focused on the effective use of technology for learning and teaching

Assessment tasks

- Emerging Technology Module
- E-portfolio

Learning and teaching activities

- Weekly 2 hour tutorials
- 10 weekly module preparation

Capable of Professional and Personal Judgement and Initiative

We want our graduates to have emotional intelligence and sound interpersonal skills and to demonstrate discernment and common sense in their professional and personal judgement. They will exercise initiative as needed. They will be capable of risk assessment, and be able to handle ambiguity and complexity, enabling them to be adaptable in diverse and changing environments.

This graduate capability is supported by:

Learning outcomes

- Identify a range of emerging educational technologies and critically discuss their pedagogical and social implications
- Critically review literature and discourse relating to the use of technology in the classroom
- Create innovative and effective learning designs using emerging technologies
- Utilise educational technologies to support reflective practice and research
- Constructively engage in a community of practice focused on the effective use of technology for learning and teaching

Assessment tasks

- Wiki Task
- Independent Research Review
- Emerging Technology Module
- E-portfolio

Learning and teaching activities

- 10 Modules of 1 hour lectures
- Weekly 2 hour tutorials
- 10 weekly module preparation

Commitment to Continuous Learning

Our graduates will have enquiring minds and a literate curiosity which will lead them to pursue knowledge for its own sake. They will continue to pursue learning in their careers and as they participate in the world. They will be capable of reflecting on their experiences and relationships with others and the environment, learning from them, and growing - personally, professionally and socially.

This graduate capability is supported by:

Learning outcome

- Constructively engage in a community of practice focused on the effective use of technology for learning and teaching

Assessment task

- E-portfolio

Learning and teaching activity

- 10 Modules of 1 hour lectures

- Weekly 2 hour tutorials
- 10 weekly module preparation

Discipline Specific Knowledge and Skills

Our graduates will take with them the intellectual development, depth and breadth of knowledge, scholarly understanding, and specific subject content in their chosen fields to make them competent and confident in their subject or profession. They will be able to demonstrate, where relevant, professional technical competence and meet professional standards. They will be able to articulate the structure of knowledge of their discipline, be able to adapt discipline-specific knowledge to novel situations, and be able to contribute from their discipline to inter-disciplinary solutions to problems.

This graduate capability is supported by:

Learning outcomes

- Identify a range of emerging educational technologies and critically discuss their pedagogical and social implications
- Critically review literature and discourse relating to the use of technology in the classroom
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- 10 Modules of 1 hour lectures
- Weekly 2 hour tutorials
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Critical, Analytical and Integrative Thinking

We want our graduates to be capable of reasoning, questioning and analysing, and to integrate and synthesise learning and knowledge from a range of sources and environments; to be able to critique constraints, assumptions and limitations; to be able to think independently and systemically in relation to scholarly activity, in the workplace, and in the world. We want them to have a level of scientific and information technology literacy.

This graduate capability is supported by:

Learning outcomes

- Identify a range of emerging educational technologies and critically discuss their pedagogical and social implications
- Critically review literature and discourse relating to the use of technology in the classroom
- Create innovative and effective learning designs using emerging technologies
- Utilise educational technologies to support reflective practice and research
- Constructively engage in a community of practice focused on the effective use of technology for learning and teaching

Assessment tasks

- Independent Research Review
- Emerging Technology Module
- E-portfolio

Learning and teaching activities

- 10 Modules of 1 hour lectures
- Weekly 2 hour tutorials
- 10 weekly module preparation

Problem Solving and Research Capability

Our graduates should be capable of researching; of analysing, and interpreting and assessing data and information in various forms; of drawing connections across fields of knowledge; and they should be able to relate their knowledge to complex situations at work or in the world, in order to diagnose and solve problems. We want them to have the confidence to take the initiative in doing so, within an awareness of their own limitations.

This graduate capability is supported by:

Learning outcomes

- Identify a range of emerging educational technologies and critically discuss their pedagogical and social implications
- Critically review literature and discourse relating to the use of technology in the classroom
- Create innovative and effective learning designs using emerging technologies
- Utilise educational technologies to support reflective practice and research
- Constructively engage in a community of practice focused on the effective use of technology for learning and teaching

Assessment tasks

- Independent Research Review
- Emerging Technology Module
- E-portfolio

Learning and teaching activities

- Weekly 2 hour tutorials
- 10 weekly module preparation

Effective Communication

We want to develop in our students the ability to communicate and convey their views in forms effective with different audiences. We want our graduates to take with them the capability to read, listen, question, gather and evaluate information resources in a variety of formats, assess, write clearly, speak effectively, and to use visual communication and communication technologies as appropriate.

This graduate capability is supported by:

Learning outcomes

- Identify a range of emerging educational technologies and critically discuss their pedagogical and social implications
- Critically review literature and discourse relating to the use of technology in the classroom
- Create innovative and effective learning designs using emerging technologies
- Constructively engage in a community of practice focused on the effective use of technology for learning and teaching

Assessment tasks

- Wiki Task
- Independent Research Review
- Emerging Technology Module
- E-portfolio

Learning and teaching activities

- Weekly 2 hour tutorials
- 10 weekly module preparation

Engaged and Ethical Local and Global citizens

As local citizens our graduates will be aware of indigenous perspectives and of the nation's historical context. They will be engaged with the challenges of contemporary society and with

knowledge and ideas. We want our graduates to have respect for diversity, to be open-minded, sensitive to others and inclusive, and to be open to other cultures and perspectives: they should have a level of cultural literacy. Our graduates should be aware of disadvantage and social justice, and be willing to participate to help create a wiser and better society.

This graduate capability is supported by:

Learning outcome

- Constructively engage in a community of practice focused on the effective use of technology for learning and teaching

Assessment task

- E-portfolio

Learning and teaching activity

- Weekly 2 hour tutorials
- 10 weekly module preparation

Socially and Environmentally Active and Responsible

We want our graduates to be aware of and have respect for self and others; to be able to work with others as a leader and a team player; to have a sense of connectedness with others and country; and to have a sense of mutual obligation. Our graduates should be informed and active participants in moving society towards sustainability.

This graduate capability is supported by:

Assessment task

- E-portfolio

Learning and teaching activity

- Weekly 2 hour tutorials
- 10 weekly module preparation

Changes from Previous Offering

- The assessment structure of the unit has been changed.
- Some of the topics have been updated to reflect recent developments in emerging technologies.

AITSL Professional Teaching Standards

The Australian Institute for Teaching and School Leadership (AITSL) specifies Australian Professional Standards for Teachers (APST). The Australian Professional Standards for Teachers provide a common framework to describe, recognise and support the complex and varied nature of teachers' work. The standards describe what teachers need to know,

understand and be able to do as well as providing direction and structure to support the preparation and development of teachers.

EDUC362 forms part of a program of study that enables students to achieve or exceed the **Graduate Teaching Standards**. The Graduate Teaching Standards are the competencies expected of a beginning teacher. The assessment tasks in EDUC362 address Graduate Teaching Standards as outlined in the following table.

Assessment Task	Graduate Teaching Standards Addressed
Task 1 - Wiki Contribution	3.4 Demonstrate knowledge of a range of resources, including ICT, that engage students in their learning. 4.5 Demonstrate an understanding of the relevant issues and the strategies available to support the safe, responsible and ethical use of ICT in learning and teaching.
Task 2 - Independent Research Review	1.2 Demonstrate knowledge and understanding of research into how students learn and the implications for teaching. 3.4 Demonstrate knowledge of a range of resources, including ICT, that engage students in their learning. 4.5 Demonstrate an understanding of the relevant issues and the strategies available to support the safe, responsible and ethical use of ICT in learning and teaching.
Task 3 - Emerging Technology Module	1.2 Demonstrate knowledge and understanding of research into how students learn and the implications for teaching. 2.3 Organise content into an effective learning and teaching sequence. 3.2 Plan lesson sequences using knowledge of student learning, content and effective teaching strategies. 2.6 Implement teaching strategies for using ICT to expand curriculum learning opportunities for students. 4.5 Demonstrate an understanding of the relevant issues and the strategies available to support the safe, responsible and ethical use of ICT in learning and teaching.
Task 4 - ePortfolio	1.2 Demonstrate knowledge and understanding of research into how students learn and the implications for teaching. 2.6 Implement teaching strategies for using ICT to expand curriculum learning opportunities for students. 3.4 Demonstrate knowledge of a range of resources, including ICT, that engage students in their learning. 4.5 Demonstrate an understanding of the relevant issues and the strategies available to support the safe, responsible and ethical use of ICT in learning and teaching. 6.3 Seek and apply constructive feedback from supervisors and teachers to improve teaching practices.

The complete list of Graduate Teaching Standards are outlined below. Further information regarding the Australian Professional Standards for Teachers can be found on the Institute's website: http://www.teacherstandards.aitsl.edu.au/ .

AITSL's Australian Professional Standards for Teachers (Graduate)

Professional Knowledge

Standard 1: **Know students and how they learn**

1.1	Physical, social and intellectual development and characteristics of students	Demonstrate knowledge and understanding of physical, social and intellectual development and characteristics of students and how these may affect learning.
1.2	Understand how students learn	Demonstrate knowledge and understanding of research into how students learn and the implications for teaching.
1.3	Students with diverse linguistic, cultural and socioeconomic backgrounds	Demonstrate knowledge of teaching strategies that are responsive to the learning strengths and needs of students from diverse linguistic, cultural, religious and socioeconomic backgrounds.
1.4	Strategies for teaching Aboriginal and Torres Strait Islander students	Demonstrate broad knowledge and understanding of the impact of culture, cultural identity and linguistic background on the education of students from Aboriginal and Torres Strait Islander backgrounds.
1.5	Differentiate teaching to meet specific learning needs of students across the full range of abilities	Demonstrate knowledge and understanding of strategies for differentiating teaching to meet the specific learning needs of students across the full range of abilities.
1.6	Strategies to support full participation of students with disability	Demonstrate broad knowledge and understanding of legislative requirements and teaching strategies that support participation and learning of students with disability.

Standard 2: Know the content and how to teach it

2.1	Content and teaching strategies of the teaching area	Demonstrate understanding of the concepts, substance and structure of the content and teaching strategies of the teaching area.
2.2	Content selection and organization	Organise content into an effective learning and teaching sequence.
2.3	Curriculum, assessment and reporting	Use curriculum, assessment and reporting knowledge to design learning sequences and lesson plans.
2.4	Understand and respect Aboriginal and Torres Strait Islander people to promote reconciliation between Indigenous	Demonstrate broad knowledge of, understanding of and respect for Aboriginal and Torres Strait Islander histories, cultures and languages.
2.5	Literacy and numeracy strategies	Know and understand literacy and numeracy teaching strategies and their application in teaching areas.
2.6	Information and communication technology (ICT)	Implement teaching strategies for using ICT to expand curriculum learning opportunities for students.

Professional Practice

Standard 3: Plan and Implement effective teaching and learning

3.1	Establish challenging learning goals	Set learning goals that provide achievable challenges for students of varying abilities and characteristics.

3.2	Plan, structure and sequence learning programs	Plan lesson sequences using knowledge of student learning, content and effective teaching strategies.
3.3	Use teaching strategies	Include a range of teaching strategies in teaching.
3.4	Select and use resources	Demonstrate knowledge of a range of resources, including ICT, that engage students in their learning.
3.5	Use effective classroom communication	Demonstrate a range of verbal and non-verbal communication strategies to support student engagement.
3.6	Evaluate and improve teaching programs	Demonstrate broad knowledge of strategies that can be used to evaluate teaching programs to improve student learning.
3.7	Engage parents/carers in the educative process	Describe a broad range of strategies for involving parents/carers in the educative process.

Standard 4: **Create and maintain supportive and safe learning environments**

4.1	Support student participation	Identify strategies to support inclusive student participation and engagement in classroom activities.
4.2	Manage classroom activities	Demonstrate the capacity to organise classroom activities and provide clear directions.
4.3	Manage challenging behaviour	Demonstrate knowledge of practical approaches to manage challenging behaviour.
4.4	Maintain student safety	Describe strategies that support students' well-being and safety working within school and/or system, curriculum and legislative requirements.
4.5	Use ICT safely, responsibly and ethically	Demonstrate an understanding of the relevant issues and the strategies available to support the safe, responsible and ethical use of ICT in learning and teaching.

Standard 5: **Assess, provide feedback and report on student learning**

5.1	Assess student learning	Demonstrate understanding of assessment strategies including, informal and formal, diagnostic, formative and summative approaches to assess student learning.
5.2	Provide feedback to students on their learning	Demonstrate an understanding of the purpose of providing timely and appropriate feedback to students about their learning.
5.3	Make consistent and comparable judgements	Demonstrate understanding of assessment moderation and its application to support consistent and comparable judgements of student learning.
5.4	Interpret student data	Demonstrate the capacity to interpret student assessment data to evaluate student learning and modify teaching practice.

5.5	Report on student achievement	Demonstrate understanding of a range of strategies for reporting to students and parents/carers and the purpose of keeping accurate and reliable records of student achievement.

Professional Engagement

Standard 6: Engage in professional learning

6.1	Identify and plan professional learning needs	Demonstrate an understanding of the role of the National Professional Standards for Teachers in identifying professional learning needs.
6.2	Engage in professional learning and improve practice	Understand the relevant and appropriate sources of professional learning for teachers.
6.3	Engage with colleagues and improve practice	Seek and apply constructive feedback from supervisors and teachers to improve teaching practices.
6.4	Apply professional learning and improve student learning	Demonstrate an understanding of the rationale for continued professional learning and the implications for improved student learning.

Standard 7: Engage professionally with colleagues, parents/carers and the community

7.1	Meet professional ethics and responsibilities	Understand and apply the key principles described in codes of ethics and conduct for the teaching profession.
7.2	Comply with legislative, administrative and organisational requirements	Understand the relevant legislative, administrative and organisational polices and processes required for teachers according to school stage.
7.3	Engage with the parents/carers	Understand strategies for working effectively, sensitively and confidentially with parents/carers.
7.4	Engage with professional teaching networks and broader communities	Understand the role of external professionals and community representatives in broadening teachers' professional knowledge and practice.