EDUC706

Learning and Technology

S2 Evening 2017

Department of Educational Studies

Contents

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General Information

Unit convenor and teaching staff
Convenor
Matt Bower
matt.bower@mq.edu.au
Contact via matt.bower@mq.edu.au
X5B238
TBA

Credit points
4

Prerequisites
Admission to MRes

Corequisites

Co-badged status

Unit description
This unit examines learning technology selection, implementation issues, and evaluation in a variety of educational contexts. It provides opportunities to consider theory in relation to practice and encourages experimentation as well as the evaluation of pedagogical practices. It will include investigation of the research methods and research applications possible with digital technologies.

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:

Demonstrate an understanding of how to integrate technology effectively into classroom practice.

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

Critically review research literature and discourse relating to the use of technology for learning.

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.

Explain in a broad sense how digital technologies impact on our social, cultural and educational lives.

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

The way in which your assessment tasks are submitted will depend on the form of the assignment.

- Posts to the ePortfolio will be submitted through the blog within iLearn. If students wish to use a blog external to iLearn, permission must be sought from the convenors.
- Participation in class discussions will be assessed directly via your contributions to the forums on the iLearn site.
- The Independent Research Review should be submitted as a document via the corresponding task submission box on iLearn.

Other points

1. Extensions of time for the submission of the assignment will be granted only in special circumstances. Applications for such extensions must be made in accordance with the Macquarie University Disruptions to Study Policy (see http://www.mq.edu.au/policy/docs/disruption_studies/policy.html). In particular, all applications for special consideration need to be made online via Ask (http://ask.mq.edu.au). The Professional Authority Form (PAF) is the officially required documentation, which must be completed by a registered health professional or professional within Macquarie University Campus Wellbeing and Support Services. A copy of the PAF is available online: http://www.mq.edu.au/policy/docs/disruption_studies/Form_Disruption to Studies_PAF.pdf.

2. 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.

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

4. 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.

5. Students should keep strictly within the stated length or word limit, and students may be penalised for exceeding this limit. Reference lists are not included in the word count. Appendices are not included in the word count, though it is at the marker's discretion as to whether information in appendices is taken into account for determining grades so please ensure all essential information is included in the main body of the submission.

6. The Department of Educational Studies Referencing Procedures must be adopted. These requirements are based on the APA style. Online guides are provided via the unit website to support students with their referencing.

7. Assignment feedback will be provided on a marked up version of the assignment file. 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.

8. 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 a unit convenor.

9. It is particularly important that students note that by submitting their assignment they are acknowledging that their work is original. Remember assignments must be your own work. Plagiarism is a serious offense.

10. Feedback on task performance will be provided via the Gradebook in iLearn. Additionally, feedback for the Task 3 Independent Research Review will be provided through Turnitin in the form 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.

Assessment Tasks

Name	Weighting	Hurdle	Due
Discussion	30%	No	End of each fortnight
e-Portfolio	30%	No	End of each fortnight
Independent Research Review	40%	No	11:55pm 12th November

Discussion

Due: **End of each fortnight**
Weighting: **30%**

Students will critically engage in discussion topics relevant to the unit, making a post each fortnight across ten weeks. See the unit website for further details including the assessment rubric.

On successful completion you will be able to:
- Demonstrate an understanding of how to integrate technology effectively into classroom practice.
- Describe a range of contemporary technologies and critically evaluate their potentials for educational purposes.
- 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.
- Explain in a broad sense how digital technologies impact on our social, cultural and educational lives.
- Model positive attitudes and social behaviours relating to the integration of technology within teaching and learning, including effective participation in collaborative processes.

e-Portfolio

Due: **End of each fortnight**
Weighting: **30%**

You will keep an e-portfolio of your learning in the form of posts in a blog to reflect on and practise the technologies and pedagogies discussed in the unit. The fortnightly posts should each be approximately 350 words (five in total). See the unit website for further details including the assessment rubric.

On successful completion you will be able to:
- Demonstrate an understanding of how to integrate technology effectively into classroom practice.
- Describe a range of contemporary technologies and critically evaluate their potentials for educational purposes.
- Critically review research literature and discourse relating to the use of technology for learning.
- 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.
- Explain in a broad sense how digital technologies impact on our social, cultural and educational lives.

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

Independent Research Review

Due: **11:55pm 12th November**
Weighting: **40%**

Students are to complete an 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, cloud based applications, augmented reality, virtual reality, 3D printing and robotics, or any other emerging technology usage. Check with the convenor if you are unsure whether your selected topic would be valid. 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 1500 words in length (not including references) and students should include the word count at the bottom of their review. The assignment should be submitted to the assignment dropbox on the unit website. See the unit website for further details including the assessment rubric.

On successful completion you will be able to:
- Demonstrate an understanding of how to integrate technology effectively into classroom practice.
- Describe a range of contemporary technologies and critically evaluate their potentials for educational purposes.
- Critically review research literature and discourse relating to the use of technology for learning.
- 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.

Delivery and Resources

Introduction to Unit

EDUC706 Learning and Technology explores issues surrounding the integration of technologies into learning and teaching. It provides opportunities to consider theory in relation to practice, allows for the development of relevant skills (not necessarily technological), and encourages experiment and evaluation of classroom practices. It is also concerned with educational issues related to the use of technology in the classroom - the language involved, the pedagogies that are appropriate, and the new literacies associated with 21st Century learning.

We plan to use the many opportunities of collaborating with each other throughout the thirteen weeks of the session. We will also be drawing upon the expertise of the group in order to learn

from each other and stay up-to-date. It is our aim to tailor the unit to your needs as far as is practicable and to this end we offer a flexible curriculum design and a wide range of choices for assessment tasks. We hope the unit proves to be a worthwhile experience for you and that it makes a significant contribution to your own, and indirectly, to your students' learning.

Note that in order to pass this unit you must have demonstrated that you meet the learning outcomes for the unit, by virtue of your performance in the assessment tasks.

Delivery

EDUC706 is primarily an online course and all materials are delivered through Macquarie University's online learning management system iLearn http://ilearn.mq.edu.au.

Unit Readings

The required reading for this unit is:

Bower, M. (2017). *Design of technology-enhanced learning - Integrating research and practice.* London, UK: Emerald Publishing.

Other readings will be made available via the iLearn unit website.

Technology Used and Required

The course requires access to a device with internet and word processing capabilities. Although this is a unit about technology in education, the aim is not to teach skills, but rather pedagogical approaches to technology in the classroom. However, participants are expected to have some prior knowledge of the technologies commonly used day-to-day.

Tutorial Times

There are six online tutorials and all participants are encouraged to attend. The collegiality and sharing of ideas creates valuable learning. The URL for the online web-conference will be http s://connect.mgsm.edu.au/mattbower . If some students wish to attend face-to-face then this can be negotiated with the convenor, though *please advise the convenor if you would prefer to attend face-to-face*. The dates and times of the workshops are as follows:

- Week 2:   5-7pm Monday 7th August
- Week 4:   5-7pm Monday 21st August
- Week 6:   5-7pm Monday 4th September
- Week 8:   5-7pm **Tuesday** 3rd October (please note this session is on Tuesday as Monday is a public holiday)
- Week 10: 5-7pm Monday 16th October
- Week 12: 5-7pm Monday 30th October

Students should have completed the readings for each fortnight *before* the respective online tutorial.

Students may choose to present their Independent Research Review to peers in a final seventh

tutorial on 5-7pm Monday 13th of November.

Teaching and Learning Strategy

The assessment tasks for EDUC706 focus on participants discussing, designing and creating technology-rich and real activities that could be used in working contexts, and on reflecting on the activities' pedagogical effectiveness, aligning this with contemporary literature. In this sense, the course aims to be practical but underpinned by learning theories. Further information about the curriculum for each topic is posted on iLearn, http://ilearn.mq.edu.au

Information about iLearn and Resources

Information for students about access to the online component of this unit is available at ilearn.mq.edu.au/login/MQ/. You will need to enter your student username and password. Please do NOT contact the Unit Convenor regarding iLearn technical help. No extensions will be given for any technical issues that are within your control. Allow enough time for your submissions. Assistance is available from IT Helpdesk ph: 1800 67 4357, or log a request at help.mq.edu.au. OneHelp is the online IT support service for both students and staff.

Workload

Before commencing EDUC706, please read this outline very carefully and ensure that you can meet all requirements. Credit points indicate the approximate hours per week that a student is expected to spend studying in order to pass a unit. One credit point equals 3 hours; thus, students in this unit are expected to spend approximately 12 hours per week studying EDUC706. 'Study' may include attending face-to-face sessions, completing recommended and online readings, working via the unit's iLearn site and undertaking assessment tasks. Please ensure that you have sufficient time to dedicate to your studies before attempting this unit. We are sympathetic that students often have significant domestic and work-related responsibilities. To be fair to our staff and to other students, however, these cannot be used to justify incomplete work or extension requests.

Contact

The best way to contact the unit convenor is by email at matt.bower@mq.edu.au . Communication must be via your Macquarie University student email account.

Unit Schedule

Week	Topics
Weeks 1 and 2 Tutorial 1: Mon 7 August	**Week 1:** Introduction to Technology and Education **Week 2:** Pedagogy and Technology-Enhanced Learning *[Fortnightly discussion and e-portfolio posts due on Sunday 13th August]*

Weeks 3 and 4 Tutorial 2: Mon 21 August	**Week 3:** Technology Affordances and Multimedia Learning Effects **Week 4:** The Representation and Sharing of Content Using Technology *[Fortnightly discussion and e-portfolio posts due on Sunday 27th August]*
Weeks 5 and 6 Tutorial 3: Mon 4 September	**Week 5:** Design Thinking and Learning Design **Week 6**: Design of Web 2.0 Enhanced Learning *[Fortnightly discussion and e-portfolio posts due on Sunday 10th September]*
MID SEMESTER BREAK	
Weeks 7 and 8 Tutorial 4: <u>Tue</u> 3 October [Note: <u>Tutorial is on a Tuesday</u>]	**Week 7:** Designing for Learning Using Social Networking **Week 8:** Design of Mobile Learning *[Fortnightly discussion and e-portfolio posts due on Sunday 8th October]*
Weeks 9 and 10 Tutorial 5: Mon 16 October	**Week 9:** Designing for Learning Using Virtual Worlds **Week 10:** Technology-Enhanced Learning Implications and Future Directions *[Fortnightly discussion and e-portfolio posts due on Sunday 22nd October]*
Weeks 11 and 12 Tutorial 6: Mon 30 October	**Week 11:** Evaluating technology-enhanced learning **Week 12:** Researching technology-enhanced learning
Week 13 and 14 Tutorial 7: Mon 13 November (optional)	*[Submission of Assessment 3 - Independent Research Review due on Sunday 12th November 11:55pm. Presentation of review to peers 5-7pm Monday 13th of November.]*

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_2016.html

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

Complaint Management Procedure for Students and Members of the Public http://www.mq.edu.au/policy/docs/complaint_management/procedure.html

Disruption to Studies Policy (in effect until Dec 4th, 2017): http://www.mq.edu.au/policy/docs/disruption_studies/policy.html

Special Consideration Policy (in effect from Dec 4th, 2017): https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/special-consideration

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.

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 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.

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://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.

Graduate Capabilities

PG - Capable of Professional and Personal Judgment and Initiative

Our postgraduates will demonstrate a high standard of discernment and common sense in their

professional and personal judgment. They will have the ability to make informed choices and decisions that reflect both the nature of their professional work and their personal perspectives.

This graduate capability is supported by:

Learning outcomes

- Demonstrate an understanding of how to integrate technology effectively into classroom practice.
- Describe a range of contemporary technologies and critically evaluate their potentials for educational purposes.
- Critically review research literature and discourse relating to the use of technology for learning.
- 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.
- Model positive attitudes and social behaviours relating to the integration of technology within teaching and learning, including effective participation in collaborative processes.

Assessment tasks

- Discussion
- e-Portfolio
- Independent Research Review

PG - Discipline Knowledge and Skills

Our postgraduates will be able to demonstrate a significantly enhanced depth and breadth of knowledge, scholarly understanding, and specific subject content knowledge in their chosen fields.

This graduate capability is supported by:

Learning outcomes

- Demonstrate an understanding of how to integrate technology effectively into classroom practice.
- Describe a range of contemporary technologies and critically evaluate their potentials for educational purposes.
- Critically review research literature and discourse relating to the use of technology for learning.
- 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.

Assessment tasks

- Discussion
- e-Portfolio
- Independent Research Review

PG - Critical, Analytical and Integrative Thinking

Our postgraduates will be capable of utilising and reflecting on prior knowledge and experience, of applying higher level critical thinking skills, and of integrating and synthesising learning and knowledge from a range of sources and environments. A characteristic of this form of thinking is the generation of new, professionally oriented knowledge through personal or group-based critique of practice and theory.

This graduate capability is supported by:

Learning outcomes

- Demonstrate an understanding of how to integrate technology effectively into classroom practice.
- Describe a range of contemporary technologies and critically evaluate their potentials for educational purposes.
- 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.

Assessment tasks

- Discussion
- e-Portfolio
- Independent Research Review

PG - Research and Problem Solving Capability

Our postgraduates will be capable of systematic enquiry; able to use research skills to create new knowledge that can be applied to real world issues, or contribute to a field of study or practice to enhance society. They will be capable of creative questioning, problem finding and problem solving.

This graduate capability is supported by:

Learning outcomes

- Critically review research literature and discourse relating to the use of technology for learning.
- 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.

Assessment tasks

- Discussion
- e-Portfolio
- Independent Research Review

PG - Effective Communication

Our postgraduates will be able to communicate effectively and convey their views to different social, cultural, and professional audiences. They will be able to use a variety of technologically supported media to communicate with empathy using a range of written, spoken or visual formats.

This graduate capability is supported by:

Learning outcomes

- Explain in a broad sense how digital technologies impact on our social, cultural and educational lives.
- Model positive attitudes and social behaviours relating to the integration of technology within teaching and learning, including effective participation in collaborative processes.

Assessment tasks

- Discussion
- e-Portfolio
- Independent Research Review

PG - Engaged and Responsible, Active and Ethical Citizens

Our postgraduates will be ethically aware and capable of confident transformative action in relation to their professional responsibilities and the wider community. They will have a sense of connectedness with others and country and have a sense of mutual obligation. They will be able to appreciate the impact of their professional roles for social justice and inclusion related to national and global issues

This graduate capability is supported by:

Learning outcomes

- Explain in a broad sense how digital technologies impact on our social, cultural and educational lives.
- Model positive attitudes and social behaviours relating to the integration of technology within teaching and learning, including effective participation in collaborative processes.

Assessment task

- e-Portfolio

Changes from Previous Offering

The content for this year has been adjusted to focus more in-depth upon a set of technologies in order to abstract principles for learning design that educators can apply in their contexts. The assessment tasks and topics have changed as compared to the previous iteration.

Educational Philosophy

The general educational philosophy of the unit is outlined below. It is offered here to give you an understanding of the basis on which decisions about the unit have been made.

1. Each of you comes to the unit with a different background and different expectations. We hope to draw on your experiences as a resource for learning that can be shared with others so that we can contribute to and gain from each other's knowledge, experience and research activities. All of us, as participants, are teachers and learners.

2. We try to give you room for choice so that you can individualise your learning experiences as much as possible, particularly in relation to assessment.

3. As staff, we see our role as providing you with a framework for a unit of study in which we act as facilitators who make known the range of available resources and strategies to enable the exploration of options in your chosen areas of study. Our role includes:

   ◦ providing guidelines for independent study by participants

   ◦ acting as a sounding board to assist participants to clarify their thinking and make decisions about their personalised programs

   ◦ being a resource person for the group and sharing skills, knowledge and experience where appropriate with the participants

   ◦ suggesting criteria by which work is to be evaluated and applying these criteria in evaluating your work

   ◦ encouraging you to engage in critical thinking and reflection, appropriate to postgraduate study.

4. We want you to experience a diversity of approaches in the organisation of your learning experiences. To achieve this goal, the unit will include the opportunity to work individually as well as collaboratively.

5. We have found the effectiveness of learning is increased when participants reflect on

their own learning. You will, therefore, have opportunities to evaluate your own learning during the unit.

6. Students are encouraged to recognise the opportunities provided by this unit for developing their generic skills in:

- Foundation skills of literacy, numeracy and information technology
- Self-awareness and interpersonal skills, including the capacity for self-management
- Collaboration and leadership
- Communication skills for effective presentation and cultural understanding
- Problem-solving skills to supply and adapt knowledge to the real world
- Critical analysis skills to evaluate, synthesise and judge
- Creative thinking skills to imagine, invent and discover