# EDCN865

## Learning Technologies in Practice

S1 Online 2016

*Dept of Education*

# Contents

# General Information

Unit convenor and teaching staff
Co-convenor
Matt Bower
matt.bower@mq.edu.au
Contact via matt.bower@mq.edu.au

Co-convenor
Pam Furney
pam.furney@mq.edu.au
Contact via pam.furney@mq.edu.au

Credit points
4

Prerequisites
Admission to MA in Education Studies or MEChild or PGDipEChild or PGCertEChild or MEd
or MEdLead or PGDipEdLead or PGCertEdLead or PGDipEdS or PGCertEdS or MHEd or
PGDipHEd or PGCertHEd or MSpecEd or PGDipSpecEd or PGCertSpEd or MTeach(Birth to
Five Years) or GradCertEdS or GradCertHEd or GradDipIndigenousEd or MIndigenousEd

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.

## 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:

Students demonstrate an understanding of how to integrate technology effectively into
their classroom practice.

Students describe a range of contemporary ICTs and critically evaluate their potentials
for educational purposes.

Students develop ICT-based learning designs based on appropriate selection and use of contemporary educational technologies.

Students critically evaluate and justify technology selection and design decisions with reference to current scholarly commentary, research and theory in pedagogy regarding ICTs in educational contexts

Participants can explain in a broad sense how ICTs impact on our social, cultural and educational lives

In their working context, students model positive attitudes and social behaviours relating to the integration of ICTs within teaching and learning, including effective participation in groupwork 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 Learning Activity Design should be submitted as a document or documents via the corresponding task submission box on iLearn.

 Extensions of time for the submission of the assignments may be granted provided application is made to the Convenor via http://ask.mq.edu.au. The application must be made before the due date and include a reasonable explanation with documentary support where necessary (for instance, a Professional Authority Form). For more information about the Disruption to Studies policy and procedure see: http://mq.edu.au/policy/docs/disruption_studies/policy.html

The following requirements apply to assessment tasks:

1. All students must keep a copy of their assignments in case a submitted copy is mislaid.

2. Where appropriate, the School of Education Referencing Procedures must be adopted. A copy may be obtained from the School Office, C3A827. These requirements are based on the APA referencing style.

3. The APA Style Help website at http://www.apastyle.org/apa-style-help.aspx contains useful material on APA style conventions.

4. Student performance on assessment tasks will be reported using a grade. 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.

5.  Remember assignments must be your own work.  Plagiarism – using the work of another person and presenting it as one's own - is a serious offence.Please refer to the University's Academic Honesty Policy http://www.mq.edu.au/policy/docs/academic_honesty/policy.html.

# Assessment Tasks

| Name | Weighting | Due |
|------|-----------|-----|
| e-Portfolio | 30% | See tasks below |
| Discussion | 30% | see discussion topics below |
| Learning Module Design | 40% | 11th June |

## e-Portfolio

Due: **See tasks below**
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 ICTs discussed in the course.  The set task for each two-weekly module is outlined below and resources and the assessment rubric are available on iLearn.  Each post is to be approximately 400 words.

**E-Portfolio Task 1 (Weeks 1-2):**  Authentic and meaningful learning using technology

- You will present an original example of how technology can be used to promote authentic and/or meaningful learning, aligning your example with contemporary literature.

Due: 12th March

**E-Portfolio Task 2 (Weeks 3-4):** Research and review a learning technology for creativity and innovation

- You will choose one online learning technology, effective for promoting creativity and innovation and freely accessible. Argue how and why the learning technology can be used to promote creativity and innovation for teaching and learning in your working context, in alignment with learning theory and scholarship.

Due:  26th March

**E-Portfolio Task 3 (Weeks 5-6):**  Research and review an online interactive activity which promotes critical thinking and problem-solving

- You will **r**esearch, and critique an online interactive activity accessible through a digital

repository such as Merlot, Scootle or WISC and useful for your working context. Justify the activity's effective use in teaching and learning, underpinning your review with recent literature.

Due: 9 April

**E-Portfolio Task 4 (Weeks 7-8):** Research and Compare Two Learning Technologies useful for Communication and Collaboration.

- Choose two learning technologies useful for communication and/or collaboration within your working context. Examples of these might be OneNote versus Google Docs, or Skype versus Adobe Connect. The comparison will critically evaluate the technologies for use in your educational context, with reference to relevant literature.

Due: 30 April

**E-Portfolio Task 5 (Weeks 9-10):** How can technologies provide evidence of student learning and evaluate the task design?

- Provide an example of how technologies can be used to provide evidence of student learning and to evaluate the efficacy of learning design. The explanation will be underpinned by relevant literature.

Due: 21st May

**E-Portfolio Task 6 (Weeks 11-12):** How will technology will change the future of education?

- You will build a case for your ideas on how technology will change the future of education up to 2050. Provide compelling evidence for your predictions.

Due: 4th June

\* The e-portfolio is a work in progress throughout the course and cannot be done at the last minute.

**Assessment Criteria:**

- Originality **-** portfolio contains original content and exemplars
- Pedagogical reflection **-** portfolio includes critical reflection on issues around the use of learning technologies
- Contextualised **-** portfolio integrates and discusses links to other resources (including scholarly literature)
- Professionalism - posts are carefully composed for a professional teacher audience
- Community - constructive contributions have been made to colleagues' e-portfolios

On successful completion you will be able to:

- Students demonstrate an understanding of how to integrate technology effectively into their classroom practice.
- Students describe a range of contemporary ICTs and critically evaluate their potentials for educational purposes.
- Students critically evaluate and justify technology selection and design decisions with reference to current scholarly commentary, research and theory in pedagogy regarding ICTs in educational contexts
- Participants can explain in a broad sense how ICTs impact on our social, cultural and educational lives
- In their working context, students model positive attitudes and social behaviours relating to the integration of ICTs within teaching and learning, including effective participation in groupwork processes.

# Discussion

Due: **see discussion topics below**
Weighting: **30%**

Students will participate in discussion on specific topics relevant to the fortnightly modules as outlined below.

**Discussion Weeks 1 and 2:** Choose a contemporary research paper (NOT included in the Bower references), aligned to a particular pedagogy and discuss the implications for learning and teaching using technology in your working context

Due: 12th March

**Discussion Weeks 3 and 4:** Select and critique a contemporary research paper on a specific technology which promotes creativity and innovation in the classroom and explain the implications for your work context.

Due: 26th March

**Discussion Weeks 5 and 6:** : What are the attributes of a game or online resource which promotes critical thinking?  Find a paper that addresses the development of critical thinking or problem solving using technology and critically discuss.

Due: 9th April

**Discussion Weeks 7 and 8:** How can social networking and communities of practice be of assistance in your professional practice?  How is social networking useful and effective in your learning environments?   Search for a contemporary paper on either of the topics and discuss pertinent questions that the article raises for you.

Due: 30th April

**Discussion Weeks 9 and 10:** Critique a contemporary paper on **either** evaluating technology-enabled learning **or** design-based research, and confer with your colleagues on issues that could

challenge you.

Due: 21st May

**Discussion Weeks 11 and 12:** Read the Horizon report/s relevant to your teaching context. Discuss your views on the report's predictions of technologies which will become mainstream in five years.

Due: 4th June

**Assessment Criteria:**

- Brief summary of the key point or points of an appropriate article
- Critical reflection on the implications for learning and teaching in an educational context
- Identification of pertinent questions that the article raises
- Overall quality of the argumentation
- Responses to the key questions of others

On successful completion you will be able to:
- Students demonstrate an understanding of how to integrate technology effectively into their classroom practice.
- Students describe a range of contemporary ICTs and critically evaluate their potentials for educational purposes.
- Students critically evaluate and justify technology selection and design decisions with reference to current scholarly commentary, research and theory in pedagogy regarding ICTs in educational contexts

# Learning Module Design

Due: **11th June**
Weighting: **40%**

You will design and create a technology-rich learning module for those in their working context. This can be in the form of a website, a project-based learning activity or in other formats suitable for disseminating the task to students. While there is no strict constraint on the scope of the module, as a guide it should be able to be completed in approximately three 1 hour lessons. You are advised to have the activity completed by students or yourself to verify that it is good practice and effective pedagogically. To complement this activity, an 800 word scholarly justification for the pedagogical design of the project will be submitted.

**Assessment criteria:**

**The Activity**

- Clearly outlined learning outcomes for the intended audience
- Appropriately utilises contemporary technology to support pedagogical approaches and

the representation of content

- Pedagogically sound concepts and practices
- Suitability for the intended audience

**The Justification:**

- Clearly outlined learning outcomes and understandings
- Explanation of how content has been developed for intended audience
- Identification of relevant issues and challenges for implementation of the module
- Evidence of a scholarly approach and alignment with educational research
- Clarity of expression and quality of the argument
- Use of APA referencing procedures

On successful completion you will be able to:
- Students demonstrate an understanding of how to integrate technology effectively into their classroom practice.
- Students develop ICT-based learning designs based on appropriate selection and use of contemporary educational technologies.
- Students critically evaluate and justify technology selection and design decisions with reference to current scholarly commentary, research and theory in pedagogy regarding ICTs in educational contexts

# Delivery and Resources

EDCN865 is primarily an online course and all materials are delivered through Macquarie University's online learning management system iLearn http://ilearn.mq.edu.au.

## Technology Used and Required

The course requires access to a device with internet and word processing.  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.

## Lecture and Tutorial Times

There are six on-site workshops and all participants are encouraged to attend.  The collegiality and sharing of ideas creates valuable learning.

Monday evening on-campus Workshops

- Week 2:   Monday 7th March
- Week 4:   Monday 21st March
- Week 6:   Monday 4th April

- Week 9:   Tuesday 26th April - please note this is a Tuesday as Monday is a public holiday
- Week 12:  Monday 16th May
- Week 14:  Monday 30th May

Time:   7:00 - 9:00p.m.

Venue: C5A 201

# Teaching and Learning Strategy

The assessment tasks for EDCN865 focus on participants discussing, designing and creating technology-rich and real activities to be used in their 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.

# Information about iLearn and Resources

Readings and resources for the current topic are posted each week in  iLearn, http://ilearn.mq.edu.au

# Unit Schedule

| Week | Topics |
|---|---|
| Weeks 1 and 2<br><br>**On-campus workshop - Week 2**: 7 March | **Week 1**: **Pedagogy and technology-enabled learning**<br><br>**Week 2:  21$^{st}$ Century and the new literacies** |
| | **Assessment**:<br><br>**Module 1 E-Portfolio Task**<br><br>**Module 1 Discussion** |
| Weeks 3 and 4<br><br>**On-campus workshop - Week 4**: 21 March | **21$^{st}$ Century Learning Technologies for Creativity and Innovation**<br><br>**Week 4:** Web 2.0 learning technologies<br><br>**Week 5:** Pedagogies and tools for creativity and innovation |
| | **Assessment:**<br><br>**Module 2   E-Portfolio Task**<br><br>**Module 2   Discussion** |

| | |
|---|---|
| Weeks 5 and 6<br><br>On-campus workshop - **Week 6**: 4 April | **21st Century Learning Technologies for Critical Thinking and Problem Solving**<br><br>**Week 5:** Learning objects and digital resources<br><br>**Week 6**: Games, virtual worlds; Minecraft |
| | **Assessment**:<br><br>**Module 3   E-Portfolio Task**<br><br>**Module 3   Discussion** |
| **MID SEMESTER BREAK** | |
| Weeks 7 and 8<br><br>On-campus workshop - **Week 7**: 26 April<br><br>**Note: this is a Tuesday** | **21st Century Skills: Communication and Collaboration**<br><br>**Week 7**:  Tools for communication and collaboration<br><br>    •  Mobile learning<br><br>**Week 8**: Social networking and communities of practice |
| | **Assessment**:<br><br>**Module 4   E-Portfolio Task**<br><br>**Module 4   Discussion** |
| Weeks 9 and 10<br><br>On-campus workshop - **Week 10:** 16 May | **Week 9**: Evaluating technology-enabled learning<br><br>**Week 10**: Design-based research |
| | **Assessment**:<br><br>**Module 5   E-Portfolio Task**<br><br>**Module 5   Discussion** |
| Weeks 11 and 12<br><br>On-campus workshop - **Week 12**: 30 May | **Week 11**:  Social implications<br><br>**Week 12**:  Futures/conclusion |
| | **Module 6   E-Portfolio Task**<br><br>**Module 6   Discussion** |
| **Week 13  and 14** | **Submission of Assessment 3 -  Major Project** - design and creation of a technology-rich learning activity for those in your working context. |
| | |
| | |

# 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

**New Assessment Policy in effect from Session 2 2016** http://mq.edu.au/policy/docs/assessment/policy_2016.html. For more information visit http://students.mq.edu.au/events/2016/07/19/new_assessment_policy_in_place_from_session_2/

Assessment Policy prior to Session 2 2016 http://mq.edu.au/policy/docs/assessment/policy.html

Grading Policy prior to Session 2 2016 http://mq.edu.au/policy/docs/grading/policy.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 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.

# 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

- Students demonstrate an understanding of how to integrate technology effectively into their classroom practice.
- Students describe a range of contemporary ICTs and critically evaluate their potentials for educational purposes.
- Students develop ICT-based learning designs based on appropriate selection and use of contemporary educational technologies.
- Students critically evaluate and justify technology selection and design decisions with reference to current scholarly commentary, research and theory in pedagogy regarding ICTs in educational contexts
- In their working context, students model positive attitudes and social behaviours relating to the integration of ICTs within teaching and learning, including effective participation in groupwork processes.

### Assessment tasks

- e-Portfolio
- Discussion

- Learning Module Design

# 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

- Students demonstrate an understanding of how to integrate technology effectively into their classroom practice.
- Students describe a range of contemporary ICTs and critically evaluate their potentials for educational purposes.
- Students develop ICT-based learning designs based on appropriate selection and use of contemporary educational technologies.
- Students critically evaluate and justify technology selection and design decisions with reference to current scholarly commentary, research and theory in pedagogy regarding ICTs in educational contexts

## Assessment tasks

- e-Portfolio
- Discussion
- Learning Module Design

# 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

- Students demonstrate an understanding of how to integrate technology effectively into their classroom practice.
- Students describe a range of contemporary ICTs and critically evaluate their potentials for educational purposes.
- Students critically evaluate and justify technology selection and design decisions with reference to current scholarly commentary, research and theory in pedagogy regarding

ICTs in educational contexts

## Assessment tasks

- e-Portfolio
- Discussion
- Learning Module Design

# 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

- Students develop ICT-based learning designs based on appropriate selection and use of contemporary educational technologies.
- Students critically evaluate and justify technology selection and design decisions with reference to current scholarly commentary, research and theory in pedagogy regarding ICTs in educational contexts

## Assessment tasks

- e-Portfolio
- Discussion
- Learning Module Design

# 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

- Participants can explain in a broad sense how ICTs impact on our social, cultural and educational lives
- In their working context, students model positive attitudes and social behaviours relating to the integration of ICTs within teaching and learning, including effective participation in groupwork processes.

## Assessment tasks

- e-Portfolio
- Discussion

# 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

- Participants can explain in a broad sense how ICTs impact on our social, cultural and educational lives
- In their working context, students model positive attitudes and social behaviours relating to the integration of ICTs within teaching and learning, including effective participation in groupwork processes.

## Assessment task

- e-Portfolio

# Changes from Previous Offering

The focus this year is about aligning technologies in practice with learning theories and contemporary research literature on each topic.

**Assessment 1, the e-portfolio**, comprises fortnightly tasks on the practical aspects of learning technologies and resources and their use in participants' working contexts. **Assessment 2, discussion** is designed to evoke conversations on the pedagogies surrounding the use of technologies, aligning them to a current research paper.  Each of these assessments is weighted at 30%.

**Assessment 3 Project** asks participants to design and create a learning activity for students in their working context, over several weeks.    The weighting for this assessment is now 40%.

Previous assessments on lesson planning and participation have been removed.

# Educational Philosophy

## Introduction

This unit is designed for classroom teachers who wish to explore ways of integrating Information Communications Technologies (ICTs) into their teaching and learning. 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 semester.  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.

## 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 technologySelf-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