

EDCN862

Designing Technology-based Curriculum

S3 Online 2015

Dept of Education

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General Information

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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 MTransInterPed or GradDipIndigenousEd or MIndigenousEd

Corequisites

Co-badged status

Unit description

This unit examines key elements and models for the design of technology based curriculum. Through an exploration of theory, research and practice, participants will explore the effective utilisation of information and communication technologies in the design of courses and learning tasks.

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:

analyse and use theories, frameworks and tools for designing technology-based curriculum

use evidence to explain how design principles and technology may enhance students' learning in specific curriculum contexts

analyse contextual, institutional, governmental, and societal factors that influence design

challenges, considerations and decisions

understand approaches to assessment and evaluation in technology enhanced learning contexts

explain and justify the design, implementation and evaluation of an ICT-based curriculum that addresses an educational challenge for a specific educational context

Assessment Tasks

Name	Weighting	Due
Learning activities	15%	Throughout + report 17 Jan
Critique	25%	20 December 2015 (5pm AEDST)
Design Context Analysis	20%	7 January 2016 (5pm AEDST)
ICT-based Curriculum Proposal	40%	27 January 2016 (5pm AEDST)

Learning activities

Due: Throughout + report 17 Jan Weighting: 15%

AT1 - Task description

Associated with each module are learning activities based within a discussion forum or other forms of online collaborative activity. It is expected that you will make regular contributions to the activities as these help to form a community of practice and enable you to learn from each other. Assessment of your contribution to the online learning activities will be based on the frequency of interactions and a short 500 words reflective report that addresses two key criteria:

1. Quality: How do your chosen contributions show evidence of in depth understanding of the topic under scrutiny;

2. Peer Interaction: How do your chosen contributions help other people enhance their understanding of the topic under scrutiny (e.g. types of questions you asked to other participants, types of comments you added and any response you received)

The Frequency of interactions will be measured against the total numbers of messages which you contributed throughout the duration of the online activities. It is expected that each student will make at least three contributions per discussion topic.

The quality of interactions and the peer interaction will be evidenced by the short 500 words reflective report where you address the two criteria by quoting directly messages you proactively (initiated) or reactively (responded) wrote.

Assessment Rubric: see iLearn site for full rubric

On successful completion you will be able to:

- analyse and use theories, frameworks and tools for designing technology-based curriculum
- use evidence to explain how design principles and technology may enhance students' learning in specific curriculum contexts
- analyse contextual, institutional, governmental, and societal factors that influence design challenges, considerations and decisions
- understand approaches to assessment and evaluation in technology enhanced learning contexts

Critique

Due: 20 December 2015 (5pm AEDST) Weighting: 25%

AT2 - Task description

Word length: 1,500 words

Select three articles that you identify yourself or from the unit reading list related to a learning design framework **or** theory that can be considered within higher education or school education or your own educational context.

Write three concise mini critiques (max 500 each, total of up to 1500 words) addressing the below questions:

- 1. What is the article about? Consider what framework or theory is being used and what is the context.
- 2. What was the most interesting thing about the article and why is it interesting? Consider what approach is novel or innovative in the learning situation.
- 3. What is the main limitation you have identified in the article and why? Consider what might be unexplained or impractical.
- 4. What are the lessons for you, which you can put in action for your future practice?

Assessment Rubric: see iLearn site for full rubric

On successful completion you will be able to:

- analyse and use theories, frameworks and tools for designing technology-based curriculum
- analyse contextual, institutional, governmental, and societal factors that influence design challenges, considerations and decisions

Design Context Analysis

Due: 7 January 2016 (5pm AEDST) Weighting: 20%

AT3 - Task description

Word length: 500 words

This task involves

- identification and analysis of a curriculum program challenge within an educational context.
- analysis of the current educational context in which the challenge exists.

The scope of the program can be determined by you. For example it may be a module of study (such as a unit of work in a school context, a unit/subject in a tertiary context, etc.), may be an overall approach to learning in an educational organisation (such as establishing a BYOD program, a project-based learning philosophy, etc.).

Your analysis should include, but not necessarily be limited to:

- 1. A description and explanation of the educational context (including the learners and their learning and assessment needs).
- 2. A description and explanation of the curriculum challenge.
- 3. An explanation of how others have addressed similar challenges using technology (from the literature).
- 4. A brief description of your plan to address the challenge.

Assessment Rubric: see iLearn site for full rubric

On successful completion you will be able to:

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- explain and justify the design, implementation and evaluation of an ICT-based curriculum that addresses an educational challenge for a specific educational context

ICT-based Curriculum Proposal

Due: 27 January 2016 (5pm AEDST) Weighting: 40%

AT4 - Task description

Word length: 3,000 words

This task involves the development of an ICT-based program solution to address a curriculum challenge within an educational context. The scope of the program can be determined by you. For example it may be a module of study (such as a unit of work in a school context, a unit/ subject in a tertiary context, etc.), may be an overall approach to learning in an educational organisation (such as establishing a BYOD program, a project-based learning philosophy, etc.).

In Task 3 you identified the challenge and undertook a context analysis. In Task 4 you will document the design, implementation and evaluation of your proposed ICT-based program solution that addresses the challenge you identified in Task 3.

Your proposal should include:

1. Briefly describe your solution including the curriculum approach and the technology that will support it. Use an evidence-base to support your solution.

2. Explain how the proposed solution aligns with the overall planning process in this educational context.

3. Describe and explain the advantages, practical considerations, and limitations of implementing this solution in this context.

4. Describe the evaluation plan. Describe and explain your evaluation indicators. Describe how you will collect information about those indicators and plans to act on the outcomes.

Assessment Rubric: see iLearn site for full rubric

On successful completion you will be able to:

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Delivery and Resources

Unit Organisation and Delivery

This Unit is organised around three key topics:

- 1. Foundations of ICT in Teaching and Learning
- 2. Developing the Digital Curriculum
- 3. Implementing the Digital Curriculum

All teaching and learning resources activities are accessed and managed through an online iLearn site. To satisfactorily complete unit requirements you must have regular and reliable access to the Internet.

To find out more about how to use the tools in your unit, the technical requirements for accessing your unit, the support and training available, and how your privacy and confidentiality is maintained visit http://ilearn.mq.edu.au

Workload Requirements

EDCN862 is a 4-credit point postgraduate unit. It is expected that you will devote a minimum of 25 hrs hours per week to meet the requirements of the unit.

Readings

There is **no set textbook** for this unit. Reading are available through one of the following ways:

- Electronic copies available through E-reserve which is linked from the iLearn site or can be accessed from http://www.lib.mq.edu.au/reserve/
- 2. Electronic copies available from **the electronic journals or books** in the Macquarie University Library. The electronic journals can be found by searching the Journal Finder or the Catalogue. To access and article just follow the screen prompts. Assistance is available from the reference librarians or through the Online Librarian service (linked from the Library Homepage)
- 3. Electronic resources freely available on the Web.

The core readings are intended to show a breadth of areas you could explore. Rather than reading all of them, you can choose a few and read more widely on topics of particular interest.

Unit Schedule

Week/ Dates	Торіс	Module Title and Purpose	Activities and Assessment	
Week 1 Beginning Monday 7 December		Introduction:get to know your fellow studentsdevelop a familiarity with the unit and the tools	Online Activity: Introduce yourself in the discussion forum Mon 7 th Dec – Tues 8 th Dec	
	1	 Foundations of ICT in Teaching and Learning Conceptualising e-learning The Learning Environment Students and the Learning Environment 	AT1 - Learning activity 1: your "favourite" ICT resources The discussion board is open Tues 8 th Dec to Sun 13 Dec.	
Week 2 Beginning Monday 14 December	2	 Developing the Digital Curriculum The importance of the curriculum Taxonomy for learning, teaching and assessing Curriculum Alignment 	 AT1 - Learning activity 2: Thought discussion Complete this before Thursday 17th Dec. AT2 - Critique Submit your critique by Sun 20 Dec, 5pm. 	
Session 3 Break - 21 December to 4 January				
Week 3 Beginning Monday 4 January	3	 Implementing the Digital Curriculum Factors that impact on course and resource design The development cycle and the teachers role in ensuring educational efficacy How do you know if IT works? 	 AT3 – Design Context Analysis Submit by Wednesday 6 Jan, 5pm. AT1 – Learning activity 3: Processoriented analysis The discussion board is open Thurs 7th Jan - Tues 12th Jan. 	

Week/ Dates	Торіс	Module Title and Purpose	Activities and Assessment
Week 4			
Beginning			
Monday 11 January			
Week 5		Use this week to finalise your AT1 - Learning activity report.	AT1 - Learning activity report
Beginning Monday 18 January			Submit by Sunday 17 Jan, 5pm.
Exam Week		Use this week to finalise your proposal.	AT4 – Proposal
Beginning Monday 25 January			Submit your proposal by Wednesday 27 Jan, 5pm.

Policies and Procedures

Macquarie University policies and procedures are accessible from <u>Policy Central</u>. 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 <u>http://www.mq.edu.au/policy/docs/disruption_studies/policy.html</u> 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 <u>eStudent</u>. For more information visit <u>ask.m</u> <u>q.edu.au</u>.

Assessment Criteria and Grading

An assessment rubric is provided in the detail of each assessment task.

NOTE: A fail grade will be applied for any assessment task that does not apply APA referencing conventions.

To meet the requirements for this unit you will be expected to satisfactorily complete all three (3) assessment tasks.

Your final unit result will consider perforance across each assessment task and in relation to the Macquarie University grade descriptors. This will consist of a grade plus a standardized numerical grade (SNG). The relationship between SNGs and Final Grades is shown in the table below.

SNG Range	Final Grade
85 - 100	High Distinction (HD)
75 - 84	Distinction (D)
65 - 74	Credit (C)
50 - 64	Pass (P)
45 - 49	Conceded Pass (PC)
0 - 44	Fail (F)

Assignment Preparation and Submission

Assessment Task 1 (AT1) consists of thee (3) learning activities that are completed on the unit iLearn site.

For Assessment Task 2 and 3 (i.e., AT2, AT3a, AT3b) you must prepare and present this in

written form and this must be in accordance with the requirements of the Publication Manual of the American Psychological Association http://www.apastyle.org/.

When submitting AT2, AT3a, AT3b you must include an academic honesty declaration. At the beginning of your document include the following words and insert your name:

I, [Insert your name], declare that:

This assignment is entirely my own work based on my personal study and/or research.

- I have acknowledged all material and sources used in the preparation of this assignment, including any material generated in the course of my employment.
- I have not copied in part, or in whole, or otherwise plagiarised, the work of others.
- The assignment, or substantial parts of it, has not previously been submitted for assessment in any formal course of study in this or any other institution, unless acknowledged in the assignment and previously agreed to by the Unit's Convenor
- · The assignment is within the word and page limits specified for the assignment
- The use of any material in this assignment does not infringe the intellectual property / copyright of a third party
- I understand that this assignment may undergo electronic detection for plagiarism and a copy of the assignment may be retained on the University's database and used to make comparisons with other assignments in the future

All written work must be submitted as Microsoft Word files or as rich text format (RTF) files. Your **name** and **the number of the assessment task** should appear in the header and/or footer of *every page* of your submission. When naming files please adopt the following convention:

(Your Surname)(Initial of Your First Name) - AT (number of Assessment Task)

eg: LockyerL-AT2, or SmithJ-AT1

Assessment Tasks 2, 3a and 3b should be submitted using the ILearn Turnitin tool.

You are expected to submit written assessment tasks by the published due date UNLESS you have received written permission to submit your work at a later date from the Unit convenor. **Requests for extensions must be submitted through the ask.mq site.** Extensions will only be granted in exceptional, unforeseen circumstances (workload is not a legitimate or sufficient reason for the granting of an extension).

Student Support

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

Learning Skills

Learning Skills (<u>mq.edu.au/learningskills</u>) 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 <u>http://informatics.mq.edu.au/hel</u>p/.

When using the University's IT, you must adhere to the <u>Acceptable Use Policy</u>. 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

- analyse and use theories, frameworks and tools for designing technology-based curriculum
- use evidence to explain how design principles and technology may enhance students' learning in specific curriculum contexts
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- understand approaches to assessment and evaluation in technology enhanced learning contexts
- explain and justify the design, implementation and evaluation of an ICT-based curriculum that addresses an educational challenge for a specific educational context

Assessment tasks

- Learning activities
- Critique
- Design Context Analysis
- ICT-based Curriculum Proposal

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

- analyse and use theories, frameworks and tools for designing technology-based curriculum
- use evidence to explain how design principles and technology may enhance students' learning in specific curriculum contexts
- analyse contextual, institutional, governmental, and societal factors that influence design challenges, considerations and decisions
- understand approaches to assessment and evaluation in technology enhanced learning contexts
- explain and justify the design, implementation and evaluation of an ICT-based curriculum that addresses an educational challenge for a specific educational context

Assessment tasks

- Learning activities
- Critique
- Design Context Analysis
- ICT-based Curriculum Proposal

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

- analyse and use theories, frameworks and tools for designing technology-based curriculum
- use evidence to explain how design principles and technology may enhance students' learning in specific curriculum contexts
- analyse contextual, institutional, governmental, and societal factors that influence design challenges, considerations and decisions
- understand approaches to assessment and evaluation in technology enhanced learning contexts
- explain and justify the design, implementation and evaluation of an ICT-based curriculum that addresses an educational challenge for a specific educational context

Assessment tasks

- Learning activities
- Critique
- Design Context Analysis
- ICT-based Curriculum Proposal

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

- use evidence to explain how design principles and technology may enhance students' learning in specific curriculum contexts
- analyse contextual, institutional, governmental, and societal factors that influence design challenges, considerations and decisions
- understand approaches to assessment and evaluation in technology enhanced learning contexts
- explain and justify the design, implementation and evaluation of an ICT-based curriculum that addresses an educational challenge for a specific educational context

Assessment tasks

• Design Context Analysis

• ICT-based Curriculum Proposal

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

- use evidence to explain how design principles and technology may enhance students' learning in specific curriculum contexts
- analyse contextual, institutional, governmental, and societal factors that influence design challenges, considerations and decisions
- understand approaches to assessment and evaluation in technology enhanced learning contexts
- explain and justify the design, implementation and evaluation of an ICT-based curriculum that addresses an educational challenge for a specific educational context

Assessment tasks

- · Learning activities
- Design Context Analysis
- ICT-based Curriculum Proposal

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

- analyse contextual, institutional, governmental, and societal factors that influence design challenges, considerations and decisions
- understand approaches to assessment and evaluation in technology enhanced learning contexts
- explain and justify the design, implementation and evaluation of an ICT-based curriculum that addresses an educational challenge for a specific educational context

Unit guide EDCN862 Designing Technology-based Curriculum

Assessment task

ICT-based Curriculum Proposal