

EDUC 1104 ● A World of Mobile Learning

Co-ordinators: Grace Oakley & Mark Pegrum
February – May 2018
Perth



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Quick links ▼



Blackboard LMS

<http://www.lms.uwa.edu.au/>



Mobile Learning Overview

<https://goo.gl/BV8ysK>

Unit details

EDUC 1104: A World of Mobile Learning

Authorship

Course/unit developed by M. Pegrum & G. Oakley, 2013-2018.

Unit Guide written by M. Pegrum, 2013-2018.

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Unit Overview

Welcome to *A World of Mobile Learning* (EDUC 1104).

Introduction

The field of mobile learning, or m-learning, which is the focus of this unit, covers all teaching and learning involving mobile devices such as tablets, mobile phones (cellphones), wearable devices such as fitness trackers and augmented reality glasses, and numerous other emerging technologies.

M-learning opens up exciting educational possibilities for a number of reasons:

- ◆ there has been an explosion in mobile device ownership, including ownership of user-friendly smart devices like smartphones and tablets;
- ◆ there has been an explosion in the number and quality of apps available for smart devices in particular;
- ◆ mobile devices allow learning to be integrated into the spaces and times of everyday life;
- ◆ mobile learning fits well with current educational approaches, which are student-centred, active, immersive, and independent but collaborative.

A World of Mobile Learning (EDUC 1104) will give you the chance to explore this exciting new area of mobile learning. You will be asked to think about the impact of mobile learning in your own life, to consider how mobile learning works around the world, to explore educational uses of mobile technologies, and to create and share recommendations on mobile learning for other students. Learning about current and future technological developments in this unit will stand you in good stead if you decide to pursue a career in education or in many other areas.

We hope you'll enjoy this journey through mobile hardware, mobile software and mobile learning over the coming semester.

General Learning Outcomes

On completion of this unit, you should have made progress towards developing the generic skills which constitute the [UWA Educational Principles](#), as follows:

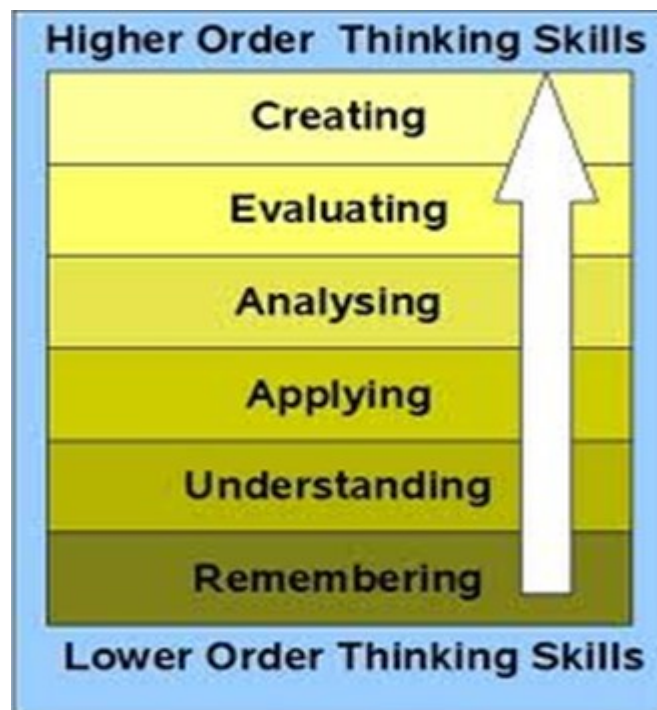
- (1) to develop disciplinary and interdisciplinary knowledge and skills through study and research-based enquiry, at internationally recognised levels of excellence
 - to think, reason and analyse logically and creatively
 - to question accepted wisdom and be open to innovation
 - to acquire the skills needed to embrace rapidly changing technologies.
- (2) to further develop the skills required to learn, and to continue through life to learn, from a variety of sources and experiences
 - to develop attitudes which value learning
 - to acquire skills in information literacy.

- (3) to develop personal, social, and ethical awareness in an international context
- to acquire cultural literacy
 - to respect Indigenous knowledge, values and culture
 - to develop ethical approaches and mature judgement in practical and academic matters
 - to develop the capacity for effective citizenship, leadership and teamwork.
- (4) to communicate clearly, effectively and appropriately in a range of contexts
- to develop spoken and written English communication skills at high levels
 - to acquire skills in critical literacy and interpersonal communication.

As well as this Unit Guide, please also see the official Unit Outline in LMS.

Specific Learning Outcomes

The specific learning outcomes in this course reflect a progression from lower order thinking skills to higher order thinking skills in the revised version of Bloom's Taxonomy. That is, there is a progression from **knowing** (remembering) **and understanding**, to **applying**, to **analysing and evaluating**, and finally to **creating**.



| Bloom's Taxonomy by Kristina Ia (2012) under CC BY-SA 3.0 licence from http://commons.wikimedia.org/wiki/File:Bloom's_Taxonomy.png |

On completion of this unit, you should be able to:

- (1) **know** and **understand** that new technologies function within complex cultural, social, political, economic and educational ecologies, resulting in different possibilities in diverse cultural contexts;
- (2) **know** and **understand** the specific affordances of mobile devices for formal, informal and networked learning in diverse cultural contexts;
- (3) **know** and **understand** the use of mobile devices for formal and informal learning in both the developing and developed world;
- (4) **apply** your knowledge and understanding of mobile devices to support your own learning in your current and future contexts, and **analyse** and **evaluate** this usage; and
- (5) **analyse** and **evaluate** the use of mobile devices for formal and informal learning in the developing and developed world;
- (6) **analyse** and **evaluate** the notion of mobile devices delivering digital education and information for all;
- (7) **create** a series of recommendations on using mobile technologies to support learning, for other learners in your major study area.

Structure

The unit will run over 10 weeks, with 3 hours of input time each week, divided into an online lecture, a face-to-face tutorial, and a follow-up online activity.

Each online lecture includes 5 automatically graded quiz questions that you should complete to ensure your comprehension of key points in the lecture and to help you prepare for the face-to-face tutorial. Note that correct completion of the lecture quiz questions is worth up to 2% per week, and up to 4% in the final week, constituting 20% of your grade over the semester (there are 9 lectures since there is no lecture in Week 1).

Each face-to-face tutorial will set you one task to be completed as a follow-up online activity, which will involve an original posting to a discussion board, followed by 2 responses to other students. This activity must be completed within the set week, after which the discussion board will be closed to new postings. Note that completion of the online activities is also worth up to 2% per week, and 4% in the final week, constituting 20% of your grade over the semester (there are 9 tasks since there is no activity in Week 10).

The main assessment, a digital study guide to mobile learning in your subject area, will be due in Week 11; that is, the week after the end of the unit, and will be worth 60% of your grade over the semester.

Key references are also provided for each week, and you are advised to consult at least some of these to deepen your understanding of the topics covered and provide additional background for your assessed work.

Timing

Online lectures	<p>Online lectures will be available in the LMS by the Friday preceding the relevant tutorials at the latest. For example, the Week 5 lecture will be available by the Friday of Week 4. Please ensure you have viewed the lecture BEFORE attending your tutorial, since the material covered in the lecture, and especially the last of the quiz questions, will form the basis for each tutorial. Please remember that correct completion of the lecture quiz questions is worth up to 2% per week, and up to 4% in the final week, constituting 20% of your grade over the semester.</p>
F2F Tutorials	<p>You will be able to sign up for a face-to-face tutorial at one of the available times. Note that not all times may be available initially, and since numbers are capped according to room size, some tutorials may become unavailable as the classes fill up. If your preferred tutorial is not available, you should make another selection. Further tutorial times may be added according to demand.</p>
Online Activities	<p>Each week you will be required to complete an online activity based on material covered in the face-to-face tutorial. In the latter part of the semester, this will often involve pair or group work; you may select partners yourself.</p> <p>It is expected that contributions to online discussions will be written in language appropriate for an educational setting. This need not always be formal academic language, but it should be the same kind of language you would use in your face-to-face tutorial.</p> <p>It is also expected that all interactions with others, particularly comments on their views and opinions, will be made in a courteous and respectful manner.</p> <p>Breaches of these guidelines will be referred to the unit coordinators, who will take appropriate action.</p> <p>Please remember that completion of online activities is worth up to 2% per week, and up to 4% in the final week, constituting 20% of your grade over the semester, and that this involves making an initial discussion board posting followed by a minimum of 2 replies to classmates, i.e., 3 postings in total. Even in the weeks which involve pair or group activities, each individual must still post at least 3 times.</p>

Online Activities (cont'd)

All online activities will remain open to all students until the end of Week 3, after which the discussion boards will be locked to new posts on the day of the following week's face-to-face tutorial (e.g., the ability to contribute to the Week 4 online activity will cease at on the day of the Week 5 tutorial. Your tutor will advise you of the time). You will, however, still be able read past weeks' online postings.

Provisional Content

The content in this unit outline was current at the time of publication. However, please note that the content covered in the unit may vary slightly, as follows:

- Tutors may opt to cover some, rather than all, of the 'During Class' content for a given session, in order to allow more time for discussion and exploration of key points.
- Due to rapid changes in the availability of technology, it may sometimes be necessary to alter the set task or recommended software for a given online activity. Your tutor will inform you of any such changes as they occur.
- Make sure you regularly check LMS and UWA emails and announcements for any important updates.

Audience

This unit is relevant to students from all disciplines who are interested in the use of mobile devices to support learning in varying contexts around the world. Please check with your faculty if you are unsure whether it is appropriate within your course structure.

Preliminary Requirements

You are not required to have any prior knowledge or experience of m-learning.

If you own or have regular access to a mobile device, you are requested to bring it along to the face-to-face tutorials. If you do not have regular access to such a device, you may borrow an iPad from the Library, or you may work together in groups with other students. As all tutorial work will be group-based, it is not necessary for each student to have their own device.

Most of the online work can be completed either on a mobile device or on a standard desktop or laptop computer. Computers are available for student use in the Graduate School of Education computer lab, and in numerous other labs across campus. Where mobile devices are required for online activities, you will be asked to work in groups where at least one person has access to such a device.

Delivery Mode

The course is offered in blended (flipped) mode, consisting of a mixture of digital lectures; face-to-face tutorials; and digital activities.

Online Resource 1: Blackboard LMS

If you have a smartphone (e.g., iPhone or Android phone) or tablet (e.g., iPad) with a scanning app, you can scan the QR codes throughout this document, including in the Quick Links list on the cover page, to jump straight to the relevant webpages. Otherwise, click on the web addresses (in the electronic version of this document) or type them into your browser address bar (if you are using a hard copy of the document).



Blackboard LMS

<http://www.lms.uwa.edu.au/>

The first online resource, Blackboard, is the platform you will use to access online lectures and some other course materials, submit online activities, and engage in online interactions.

The Blackboard unit includes a FAQ (Frequently Asked Questions) Forum where you are welcome to pose any questions related to the unit. When making a posting in this forum, please include your question, or a shortened version of it, as the title of your post, so that others who have similar questions can find the answers more easily.

For example, do not write titles such as:

- ✗ Question on WOML
- ✗ Week 5 Problem

Instead, write titles such as:

- ✓ Need to include apps with different educational approaches?
- ✓ Number of members for QR treasure hunt groups?

Online Resource 2: M-learning Overview



Mobile Learning Overview

<https://goo.gl/BV8ysK>

Because of the impossibility of keeping printed documents completely up to date with the rapid changes in technology, and because of the ease of linking to useful websites and exemplars, this course is supported by the **Mobile Learning** section of the *Digital Learning* website. Your lecturers and tutors will ask you to take a look at it from time to time, but you can begin exploring it whenever you wish.

Assessment

Overview of assessment components:

1	Automated lecture quizzes	20%	Assessed weekly
2	Online discussion board activities	20%	Assessed weekly
3	Digital mobile learning guide	60%	Due: Friday 18 May

The major assessment within the unit is:

Digital Mobile Learning Guide (worth 60%): A digital guide to the use of mobile devices in your major study area, including integration of feedback from your peers.

You should create your multimodal guide with either PowerPoint or Prezi with a voiceover and automate it so that viewing time is 5 minutes or less. Your guide should include a minimum of 10 references to written texts. It should also include 2 peer reviews, to which you should respond.

The digital guides will be submitted by uploading them in the Task Submission area in the Blackboard LMS or providing a link to your guide before 5pm on Friday 18 May.

For further details of this assessment, see the **Preparing for the Major Assessment** section under **Week 10**.

The remainder of your assessment is composed as follows:

Automated Lecture Quizzes (worth 20%): You will receive up to 2% for each set of 5 weekly questions which you complete (and 4% in the final week).

Online Discussion Board Activities (worth 20%): You will receive up to 2% for each online activity you complete (and 4% in the final week) where you make an initial posting with at least 2 additional responses to peers (i.e., 3 posts in total).

Contact Details for Unit Co-ordinators

Name:	Assoc. Prof. Grace Oakley
E-mail:	grace.oakley@uwa.edu.au
Name:	Assoc. Prof. Mark Pegrum
E-mail:	<i>Absent in Semester 1, 2018</i>

Contact Details for Unit Co-ordination LMS Support

For general queries, please use the FAQ Forum in the Blackboard LMS. For individual queries, please contact the unit coordinator. For Blackboard LMS related enquiries, please contact Dr Fiona Mayne:

Name	Fiona Mayne
Email	fiona.mayne@uwa.edu.au

Contact Details for Unit Tutors

Grace Oakley	grace.oakley@uwa.edu.au
Fiona Mayne	fiona.mayne@uwa.edu.au
Gemma Scarparolo	gemma.scarparolo@uwa.edu.au
Jelena Rakovic	jelena.rakovic@uwa.edu.au
Renn Sabatino	renn.sabatino@uwa.edu.au
Jan Dook	jan.dook@uwa.edu.au
Thida Kheang	thida.kheang@uwa.edu.au

Course Queries

If you have queries about any aspect of the course, please use one of the following options:

- If you have a general query about the course, please post it in the *World of Mobile Learning* FAQ Forum in the Blackboard LMS. This allows common queries to be addressed by course staff. However, before posting your query, you should check whether a similar query has been posted by another student, in which case the answer may already be available. Please also see the instructions for posting to this forum under **Online Resource 1** above.
- If you have an individual query about the course, please address it to the *World of Mobile Learning* Co-ordination Assistant.
- If you have an individual query about your work, please direct it to the tutor of your face-to-face class.



Course Content

Week 1 ● Mobile Trends

Overview

This topic will help you work towards the following general learning outcomes:

- (1) to develop disciplinary and interdisciplinary knowledge and skills through study and research-based enquiry;
- (3) to develop personal, social, and ethical awareness in an international context;
- (4) to communicate clearly, effectively and appropriately in a range of contexts.

This topic will help you work towards the following specific learning outcomes:

- (1) **know** and **understand** that new technologies function within complex cultural, social, political, economic and educational ecologies, resulting in different possibilities in diverse cultural contexts;
- (4) **apply** your knowledge and understanding of mobile devices to support your own learning in your current and future contexts, and **analyse** and **evaluate** this usage.

Key topics: mobile devices, smart devices, social media, mind maps

Before class

1 View the online lecture

There is no online lecture in Week 1. Normally, the *minimum expectation* will be that you view the online lecture and complete the automated lecture quizzes before attending your tutorial. The online lecture for a given week will be available in Blackboard from the previous Friday at the latest.

2 Consult key references

You are required to consult at least some of these references to deepen your understanding of the topics covered and provide additional background for your assessed work. (Note that when URLs are divided over two lines, you may need to type them into a browser instead of just clicking on the link.)

report	Adams Becker, S., Cummins, M., Davis, A., Freeman, A., Hall Giesinger, C., & Ananthanarayanan, V. (2017). <i>NMC Horizon Report: 2017 Higher Education Edition</i> . Austin, Texas: The New Media Consortium. https://goo.gl/P7Smyq
blog post	Evans, B. (2015, Dec. 18). 16 mobile theses. <i>Benedict Evans</i> . http://goo.gl/nfQCw8
web article	McAlone, N. (2015, Nov. 5). 11 everyday things the iPhone has made obsolete. <i>Business Insider</i> . http://goo.gl/5tsnwI
infographic	OpenColleges. (2014). <i>The evolution of learning technologies</i> . http://goo.gl/r9tJo7

During class

Overview: This class will consist of a discussion of key trends in mobile hardware, software, and social media. We will follow the structure below.

1 First thoughts

Look at the slides shown by your tutor. Discuss the following questions together with a partner or group. Be prepared to share your answers with the class.

► Waiting for the announcement of the pope

- ◆ How have mobile devices changed the way we interact with the world?
- ◆ What advantages have these changes brought?
- ◆ What disadvantages have they brought?

► Social media explained

- ◆ How good are the descriptions of the various social media services?
- ◆ Which of these do you use? Why?
- ◆ Which other social media services do you use?
- ◆ Which do you access on mobile devices?
- ◆ Are there any you use, or could use, for learning?

2 Overview of the unit

We'll briefly run through the structure of the unit and how to access and use the course platform, Blackboard. We'll also discuss this unit outline, which may be accessed online through Blackboard at:

<http://www.lms.uwa.edu.au/>

EDUC 1104 • A World of Mobile Learning

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3 Preparing for the online activity

Look at the slides shown by your tutor, which show a variety of approaches to mind mapping. Discuss the following questions together with the class.

► Mind mapping

◆ Imagine creating a mind map of your own use of mobile technologies. What uses might you include under the following categories:

- personal uses?
- social uses?
- educational uses?
- professional uses?

◆ Are there any other categories of uses you would include?

► Student mind maps

◆ Have a look at the mind maps created by past WOML students using a range of mind mapping software and apps. Which software or app appeals to you most? What other software or apps might you use?

◆ Have a look at the example of follow-up comments on a typical mind map. This will give you an idea of how the discussion might look.

After class

Required online task:

You should create a mind map of uses of mobile devices, following these guidelines:

- You may use whichever mind mapping software or app you prefer. Common freeware includes Canva Mind Maps, Coggle and Mind42, while common paid software includes MindMeister and SimpleMind (though these services usually offer a free trial).
- You should indicate personal, social, educational and professional uses, plus any other categories you wish to include.
- You may indicate past, present, and (desired) future uses, though you will need to differentiate them with colours or symbols.
- When you have completed your mind map, log into Blackboard and find the Week 1 discussion forum for your tutorial group. Upload your mind map in a discussion post, mentioning which web service or app you used to create it.
- Look at the mind maps of two of your classmates. Using the reply feature, comment on how they are similar to and different from yours. *You should write at least 50 words per mind map (i.e., 100 words in total) and no more than 150 words in total. You must write your word count on each post in the following format: Word count 95. (This will not be counted in your word count).*
- Later in the week, log in again and respond to any comments from your classmates or tutor.
- If you wish to modify your mind map in light of these discussions, you may attach a new version to the discussion thread containing your original mind map.



Week 2 ● Mobile Culture

Overview

This topic will help you work towards the following general learning outcomes:

- (1) to develop disciplinary and interdisciplinary knowledge and skills through study and research-based enquiry;
- (2) to further develop the skills required to learn, and to continue through life to learn, from a variety of sources and experiences
- (3) to develop personal, social, and ethical awareness in an international context;
- (4) to communicate clearly, effectively and appropriately in a range of contexts.

This topic will help you work towards the following specific learning outcomes:

- (1) **know** and **understand** that new technologies function within complex cultural, social, political, economic and educational ecologies, resulting in different possibilities in diverse cultural contexts.

Key topics: mobile culture, e-books

Before class

1 View the online lecture

The *minimum expectation* is that you have viewed the online lecture and completed the automated lecture quiz tasks before attending your tutorial. The online lecture will be available in Blackboard from the previous Friday. The final quiz task will form the starting point for the face-to-face tutorial.

2 Consult key references

You are required to consult at least some of these references to deepen your understanding of the topics covered and provide additional background for your assessed work.

References on mobile culture:

newspaper Clark, A. (2013, Aug. 11). How multiscreening is empowering a digital

article	generation. <i>Sydney Morning Herald</i> . http://goo.gl/EWcfsU
newspaper article	Fredrickson, B.L. (2013, Mar. 23). Your phone vs. your heart. <i>The New York Times Sunday Review</i> . http://goo.gl/UjvZa
magazine article	Grossman, L., & Vella, M. (2014, Sep. 22). iNeed? <i>Time</i> , pp.24-29. [Access a digital version in the UWA Library by searching for it using OneSearch .]
magazine article	Twenge, J.M. (2017, Sep.). Have smartphones destroyed a generation? <i>The Atlantic</i> . https://goo.gl/8Vp8Ds
journal article	Wellman, B., & Rainie, L. (2013). If Romeo and Juliet had mobile phones. <i>Mobile Media & Communication</i> , 1(1), 166-171. [Access a digital version in the UWA Library by searching for it using OneSearch .]

References on e-books:

newspaper article	Han, E. (2015, Jan. 18). Hard-copy books back on the rise as e-book and e-reader sales stagnate. <i>The Age</i> . http://goo.gl/4XEs2N
video	IDEO. (2010). <i>The future of the book</i> . http://vimeo.com/15142335
magazine article	Jabr, F. (2013, Apr. 11). The reading brain in the digital age: The science of paper versus screens. <i>Scientific American</i> . http://goo.gl/mVOcH
news article	Nuwer, R. (2016, Jan. 25). Are paper books really disappearing? <i>BBC</i> . https://goo.gl/7iUyd6
website	Pegrum, M. (ongoing). E-books. <i>Digital learning</i> . https://goo.gl/CMY452
conference paper	Smith, M., & Kukulska-Hulme, A. (2012). Building mobile learning capacity in higher education: E-books and iPads. In <i>11th World Conference on Mobile and Contextual Learning, 15-18 October 2012, Helsinki, Finland: mLearn 2012 Conference Proceedings</i> . http://goo.gl/Yc8N69

During class

Overview: This class will consist of a discussion of how mobile devices and social media are portrayed through the lens of contemporary culture. We will conclude by looking at e-books. We'll follow the structure below.

1 Reflecting on last week's online activity

- ◆ What did you learn from last week's online activity?

2 Reflecting on the lecture

Look at the slides shown by your tutor, which relate to the two tasks set during the online lecture. Using the notes you made, discuss the following questions together with a partner or group. Be prepared to share your answers with the class.

► **I forgot my phone**

- ◆ This YouTube video by Charlene deGuzman & Miles Crawford has been described as "smart, poignant, depressing" by Gawker (<http://goo.gl/4paADs>). What three adjectives would you use to describe it, and why?
- ◆ Is the video an accurate portrayal of our mobile society?
- ◆ Is the video an accurate portrayal of your mobile life?

► **Pop culture reactions to mobile social media**

- ◆ Do you recognise any of the movies or TV series on the two slides shown by your tutor? Do they represent positive or negative reactions to new technologies?
- ◆ Which film or video did you select?
- ◆ Does your chosen film or video portray mobile social media positively or negatively?
- ◆ Can you summarise the overall pop culture reaction to mobile social media? Are the views portrayed similar or different?
- ◆ As a pair or group, choose one of your films or videos, and be prepared to describe to the class the view it expresses of mobile social media.

3 Preparing for the online activity

Looking at the slide shown by your tutor, discuss the following questions together with a partner or group. Be prepared to share your answers with the class.

► **The future of books**

- ◆ Did you mention e-books in your mind map last week? Why or why not?
- ◆ Did you find out anything unexpected in the reading or viewing you did about e-books in preparation for this class? If so, what?

► **Student e-book review**

- ◆ Have a look at the example blog review of an e-book by a past WOML student. This will give you ideas on what you might include in your own book review.

After class

Required online task:

You should review an e-book of your choice, following these guidelines:

- Find and download an e-book which could be useful for your own learning. You may choose to download a book from a free service such as Creative Commons Books (<http://goo.gl/IWUlr>) or an app such as Worldreader, or from a paid service such as the Amazon, Google Play or iTunes stores (note that you are likely to have a greater range of functionality available with a paid book). Alternatively, you may choose to view an e-book which you find in the UWA Library catalogue (which can be accessed through [OneSearch](#)).

- Try to view your e-book on a mobile device if possible. Think about how similar or different it feels to read an e-book compared to a hard copy book.
- Log into Blackboard and find the Week 2 discussion forum for your tutorial group. Write a *blog post* of at least 200 words and no more than 300 words describing your reaction to the e-book. You may wish to cover some of the following questions:
 - Name, and include a screenshot of the cover of, your book.
 - What added functionality does it have compared to a hard copy book?
 - How useful is that added functionality for learning?
 - Are there any disadvantages compared to hard copy books?
 - If given the choice, would you prefer an e-book or hard copy book? Why?
- Look at the blog posts of two of your classmates. Using the reply feature, comment on how they are similar to and different from yours. Write at least 50 words per response.
- Later in the week, log in again and respond to any comments from your classmates or tutor.
- If you wish to modify your blog post in light of these discussions, you may attach a new version beneath your original post.
- You must write your word count on your post.



Week 3 ● Mobile Education

Overview

This topic will help you work towards the following general learning outcomes:

- (1) to develop disciplinary and interdisciplinary knowledge and skills through study and research-based enquiry;
- (2) to further develop the skills required to learn, and to continue through life to learn, from a variety of sources and experiences
- (3) to develop personal, social, and ethical awareness in an international context;
- (4) to communicate clearly, effectively and appropriately in a range of contexts.

This topic will help you work towards the following specific learning outcomes:

- (1) **know** and **understand** that new technologies function within complex cultural, social, political, economic and educational ecologies, resulting in different possibilities in diverse cultural contexts;
- (2) **know** and **understand** the specific affordances of mobile handheld devices for formal, informal and networked learning in diverse cultural contexts;
- (3) **know** and **understand** the use of mobile handheld devices for formal and informal learning in both the developing and developed world;
- (4) **apply** your knowledge and understanding of mobile devices to support your own learning in your current and future contexts, and **analyse** and **evaluate** this usage.

Key topics: educational approaches, social constructivism, mobile education, educational apps

Before class

1 View the online lecture

The *minimum expectation* is that you have viewed the online lecture and completed the automated lecture quiz tasks before attending your tutorial. The online lecture will be available in Blackboard from the previous Friday. The final quiz task will form the starting point for the face-to-face tutorial.

2 Consult key references

You are required to consult at least some of these references to deepen your understanding of the topics covered and provide additional background for your assessed work.

References on educational approaches:

guide	Hurst, M. (n.d.). Behavioral, cognitive, developmental, social cognitive and constructivist perspectives. <i>Education portal</i> . http://goo.gl/m6mFZB
guide	UNESCO. (n.d.). Most influential theories of learning. <i>Education</i> . http://goo.gl/s9p9vl
guide	University of California Berkeley. (n.d.). Overview of learning theories. <i>Teaching guide for graduate student instructors</i> . http://goo.gl/cjRmpJ

References on technology-enhanced education:

magazine article	Romeo, N. (2014, Sep.). Is Google making students stupid? <i>The Atlantic</i> . http://goo.gl/Smeqbc
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References on mobile education:

web article	Briggs, S. (2015, Mar. 1). Where edtech can help: 10 most powerful uses of technology for learning. <i>informED</i> . http://goo.gl/LLZCgu
infokit	JISC. (ongoing). <i>Mobile learning infokit</i> . http://goo.gl/YVQHh3
book chapter	Parsons, D. (2014). The future of mobile learning and implications for education and training. In M. Ally & Tsinakos, A. (Eds.), <i>Increasing access through mobile learning</i> (pp.217-229). Vancouver: Commonwealth of Learning & Athabasca University. http://goo.gl/SwU1VG
book	Pegrum, M. (2014). <i>Mobile learning: Languages, literacies and cultures</i> . Basingstoke: Palgrave Macmillan. [Access a digital version in the UWA Library by searching for it using OneSearch .]
book chapter	Pegrum, M. (2016). Future directions in mobile learning. In D. Churchill, J. Lu, T.K.F. Chiu, & B. Fox (Eds.), <i>Mobile learning design: Theories and application</i> (pp.413-431). Singapore: Springer. [Access a digital version in the UWA Library by searching for it using OneSearch .]
book chapter	Woodill, G. (2015). Unique affordances of mobile learning. In C. Udell & G. Woodill (Eds.), <i>Mastering mobile learning: Tips and techniques for success</i> . Hoboken, NJ: Wiley. [Access a digital version in the UWA Library by searching for it using OneSearch .]

References on apps:

book chapter	Gardner, H., & Davis, K. (2013). Introduction. In <i>The app generation: How today's youth navigate identity, intimacy, and imagination in a digital world</i> . New Haven, CT: Yale University Press. [Access a digital version in the UWA Library by searching for it using OneSearch .]
magazine article	Murray, O.T., & Olcese, N.R. (2011). Teaching and learning with iPads, ready or not? <i>TechTrends</i> , 55(6), 42-48. [Access a digital version in the UWA Library by searching for it using OneSearch .]
website	Pegrum, M. (ongoing). Apps. <i>Digital learning</i> . https://goo.gl/numKuS

blog	Schrock, K. (2013). Bloomin' apps. <i>Kathy Schrock's guide to everything</i> . http://goo.gl/M4r82
journal article	Stevenson, M. E., & Hedberg, J. G. (2017). Mobilizing learning: A thematic review of apps in K-12 and higher education. <i>Interactive Technology and Smart Education</i> , 14(2), 126-137. [Access a digital version in the UWA Library by searching for it using OneSearch .]
magazine article	Van Buskirk, E. (2013, Feb. 25). The problem with apps is smartphones. <i>Gizmodo</i> . http://goo.gl/g6s2J

During class

Overview: This class will consist of a discussion of major educational approaches, with a particular emphasis on social constructivism and how it can be put into practice using mobile devices. We will conclude by looking at apps, and how they fit with contemporary educational approaches. We'll follow the structure below.

1 Reflecting on last week's online activity

- ◆ What did you learn from last week's online activity?

2 Reflecting on the lecture

Look at the slides shown by your tutor, which relate to the two tasks set during the online lecture. Using the notes you made, discuss the following questions together with a partner or group. Be prepared to share your answers with the class.

► 3 common approaches to teaching & learning

- ◆ Who is the man in the picture, and what did he say about learning?
- ◆ What would a teaching and learning approach based on **information transmission** look like?
- ◆ What would a teaching and learning approach based on **behaviourism** look like?
- ◆ What would a teaching and learning approach based on **(social) constructivism** look like?
- ◆ What are the advantages and disadvantages of each approach?

► Mobile approaches to teaching & learning

- ◆ Give an example of an **information transmission** learning activity using a mobile device.
- ◆ Give an example of a **behaviourist** learning activity using a mobile device.
- ◆ Give an example of a **social constructivist** learning activity using a mobile device.

3 Preparing for the online activity

► Language learning apps / Other educational apps

Look at the slides of educational apps shown by your tutor. Discuss the following questions together with the class.

- ◆ Does each app seem to fit better with an information transmission/behaviourist or (social) constructivist approach? Why?
- ◆ Can you identify any general characteristics of information transmission/behaviourist vs (social) constructivist apps? Which apps tend to be more *generic* and/or *productive*?

► Student app reviews

- ◆ Have a look at the example app reviews by past WOML students. These will give you ideas on what you might include in your own reviews.

After class

Required online task:

You should review *two* apps of your choice, following these guidelines:

- Find and download two educational apps from the iTunes Store (<http://goo.gl/rAOqfv>) for Apple devices, or the Google Play Store (<http://goo.gl/UOdFf>) for Android devices (or any other relevant online store). You may select paid or free apps. Alternatively, look at two of the educational apps on the EDFAA Library iPads, which are available on 3-hour loan.
- If possible, choose:
 - one information transmission or behaviourist app which is relevant to your intended future studies
 - one generic and/or productive app which could be used across multiple subjects
- Log into Blackboard and find the Week 3 discussion forum for your tutorial group. Write a discussion post of at least 200 words and no more than 300 words covering the following points:
 - Name and include a screen capture of each app.
 - Briefly describe each app.
 - What subject area(s) is each relevant for?
 - Which app is more generic/productive?
 - Do you plan to use either of these apps for your studies? Why/why not?
- Look at the discussion posts of several of your classmates. Try to find at least *two* more apps that might be useful to you. Leave two comments. Write at least 50 words per response.
- Later in the week, log in again and respond to any comments from your classmates or tutor.
- If you wish to modify your original review in light of these discussions, you may

attach a new version beneath your original post.



Week 4 ● Mobile in the Developing World

Overview

This topic will help you work towards the following general learning outcomes:

- (1) to develop disciplinary and interdisciplinary knowledge and skills through study and research-based enquiry;
- (2) to further develop the skills required to learn, and to continue through life to learn, from a variety of sources and experiences
- (3) to develop personal, social, and ethical awareness in an international context;
- (4) to communicate clearly, effectively and appropriately in a range of contexts.

This topic will help you work towards the following specific learning outcomes:

- (1) **know** and **understand** that new technologies function within complex cultural, social, political, economic and educational ecologies, resulting in different possibilities in diverse cultural contexts;
- (2) **know** and **understand** the specific affordances of mobile handheld devices for formal, informal and networked learning in diverse cultural contexts;
- (3) **know** and **understand** the use of mobile handheld devices for formal and informal learning in both the developing and developed world;
- (4) **apply** your knowledge and understanding of mobile devices to support your own learning in your current and future contexts, and **analyse** and **evaluate** this usage;
- (5) **analyse** and **evaluate** the use of mobile devices for formal and informal learning in the developing and developed world;
- (6) **analyse** and **evaluate** the notion of mobile devices delivering digital education and information for all.

Key topics: globalisation, developing world, affordability, feature phones, smartphones, polling

Before class

1 View the online lecture

The *minimum expectation* is that you have viewed the online lecture and completed the automated lecture quiz tasks before attending your tutorial. The online lecture will be available in Blackboard from the previous Friday. The final quiz task will form the starting point for the face-to-face tutorial.

2 Consult key references

You are advised to consult at least some of these references to deepen your understanding of the topics covered and provide additional background for your assessed work.

References on mobile learning in the developing world:

report	Belalcázar, C. (2015). <i>Mobile phones and literacy: Empowerment in women's hands. A cross-case analysis of nine experiences</i> . Paris: UNESCO. http://unesdoc.unesco.org/images/0023/002343/234325E.pdf
newsletter article	Blum, S. (2014, Feb. 20). Where mobiles outnumber people ... <i>eLearning Africa: News</i> . http://goo.gl/4L6nXw
slides	GSMA. (2013, Apr.). <i>Scaling mobile for development: A developing world opportunity</i> . http://goo.gl/7xvEKb
portal	GSMA. (ongoing). <i>Mobile for development impact</i> . http://www.m4dimpact.com/
book chapter	Oakley, G., & Imtinan, U. (2018, in press). Supporting children's literacy learning in low- and middle-income countries through m-learning. In G. Oakley (Ed.), <i>Mobile technologies in children's language and literacy: Innovative pedagogy in preschool and primary education</i> . London: Emerald. [Access a digital version in the UWA Library by searching for it using OneSearch .]
press release	UNESCO. (2015, Feb. 2). Mobile technology the key to bringing 'education to all', says UN Broadband Commission. UNESCO. http://goo.gl/W484Ge
report	West, M., & Chew, H.E. (2014). <i>Reading in the mobile era: A study of mobile reading in developing countries</i> . Paris: UNESCO. http://goo.gl/Y8CJk8
newspaper article	Zelezny-Green, R. (2013, Mar. 4). MDGs: How mobile phones can help achieve gender equality in education. <i>The Guardian</i> . http://goo.gl/kMLnT
journal article	Zelezny-Green, R. (2014). She called, she Googled, she knew: Girls' secondary education, interrupted school attendance, and educational use of mobile phones in Nairobi. <i>Gender & Development</i> , 22(1), 63-74. [Access a digital version in the UWA Library by searching for it using OneSearch .]

Case studies of mobile learning in the developing world:

case study	Case Study 3: Building literacy in Pakistan. Excerpt from: Pegrum, M. (2014). <i>Mobile learning: Languages, literacies and cultures</i> (pp.44-47). Basingstoke: Palgrave Macmillan. [Access a digital version in the UWA Library by searching for it using OneSearch .]
case study	Case Study 7: Playing mobile games in India. Excerpt from: Pegrum, M. (2014). <i>Mobile learning: Languages, literacies and cultures</i> (pp.105-108). Basingstoke: Palgrave Macmillan. [Access a digital version in the UWA Library by searching for it using OneSearch .]
case study	Case Study 9: Spreading vocabulary learning in China. Excerpt from: Pegrum, M. (2014). <i>Mobile learning: Languages, literacies and cultures</i> (pp.133-135). Basingstoke: Palgrave Macmillan. [Access a digital version in the UWA Library by searching for it using OneSearch .]
case study	Case Study 17: Making mobile inroads in Afghanistan. Excerpt from:

Pegrum, M. (2014). *Mobile learning: Languages, literacies and cultures* (pp.202-206). Basingstoke: Palgrave Macmillan. [Access a digital version in the UWA Library by searching for it using [OneSearch](#).]

References on polling:

website Pegrum, M. (ongoing). Polling. *Digital learning*. <https://goo.gl/4j8iBx>

During class

Overview: This class will consist of a discussion of both formal and informal learning in the developing world. We will examine the kinds of mobile learning projects common in the developing world, discussing their advantages and drawbacks, as well as examining informal learning around political and social events, as facilitated by mobile social media. We will conclude by looking at polling. We'll follow the structure below.

1 Reflecting on last week's online activity

- ◆ What did you learn from last week's online activity?

2 Reflecting on the lecture

Look at the slides shown by your tutor, which relate to the two tasks set during the online lecture. Using the notes you made, discuss the following questions together with a partner or group. Be prepared to share your answers with the class.

► 4 case studies of mobile learning

In light of the quote below by Ronda Zelezny-Green, who was a guest speaker in this week's online lecture, discuss your selected case study (about Afghanistan, China, India or Pakistan) with a partner or partners who chose a different case study. Be prepared to share your answers with the class.

I believe one of the greatest missed opportunities in education in the next decade could be ignoring the potential of mobile devices to address the scarcity of literacy-building opportunities, particularly for women and girls, in developing areas of the world.

Ronda Zelezny-Green (2014)

- ◆ Explain to your partner(s) what you learned from your case study, focusing on the 3 advantages and 3 disadvantages of mobile learning you listed for the context you studied.
- ◆ After everyone in your group has described their case study, try to list at least 3 common themes (positive, negative or neutral) which you notice in

these developing world case studies. Consider what kinds of educational approaches are typically adopted in these case studies.

► **Mobile viral learning**

During the online lecture, you saw the quote below, which emphasises a very different kind of learning from what you came across in the case studies. After rereading the quote, use the notes you made during the online lecture to discuss the questions below with a partner or group. Be prepared to share your answers with the class.

Arguably, the Arab Spring ranks among the most significant informal mobile learning phenomena in 2011. Thousands of youth used social media – accessed via their mobile phones – as a space for self-identification, self-assertion, contestation and mobilization around democracy, human rights and civil liberties. This review also uncovered evidence of the ways in which young people in the region are defining their identities through the integration of mobile phones in their daily lives (Shah and Jansen, 2011; UNICEF, 2011).

Shafika Isaacs (2012)

- ◆ Tell your partner(s) about the developed world example of mobile viral learning that you came up with during the online lecture (such as the England riots; the Kony case; or the Ice Bucket Challenge). Be prepared to share at least one of these examples with the class.
- ◆ What are the similarities to and differences from the kinds of mobile learning you read about in the case studies?
- ◆ To what extent does this kind of informal, networked information sharing and communication count as learning?
- ◆ Is there potentially a negative side to this kind of viral learning?

3 Preparing for the online activity

Look at the slides shown by your tutor, which will introduce the principles and practices of polling, together with the class.

► **Live poll**

Follow the instructions given by your tutor to complete the online poll.

► **Why poll students?**

Consider the ideas presented on why polling might be useful in education.

- ◆ Can you think of any other uses of polling?
- ◆ What are the main advantages of polling? Are there any disadvantages?
- ◆ What educational approaches would fit with polling?

► Student polls

- ◆ Have a look at the example polls by past WOML students. These will give you ideas on what you might include in your own poll.
- ◆ Which service appeals to you most? Why?
- ◆ Would you like to use one of these services, or explore other options, for this week's online task?

After class

Required online task:

You should create an online poll, and take two online polls, following these guidelines:

- Choose one or more polling website(s) or app(s) to use. Common options include:
 - AnswerGarden (<http://answergarden.ch/>)
 - Mentimeter (<https://www.mentimeter.com/>)
 - Poll Everywhere (<http://www.polleverywhere.com/>) [limit of 1 free poll]
 - Straw Poll (<https://strawpoll.me/>)
 - SurveyMonkey (<https://www.surveymonkey.com/>)
 - SurveyNuts (<http://surveynuts.com/>)
- Design a poll containing 5 questions covering any topics from the *World of Mobile Learning* unit.
- Try to include a mixture of opinion-based questions and factual questions.
- Try to include a mixture of multiple choice and open-ended questions.
- Log into Blackboard and find the Week 4 discussion forum for your tutorial group. Post the link or links to your poll questions.
- Look at the polls posted by your classmates. Complete *two* of their polls.
- After completing each poll, return to the discussion thread where it was posted and leave a comment on it. Consider the following guiding questions:
 - What did you learn from this poll?
 - What did you like most about this poll?
 - What is one point that could be improved in this poll?

Write at least 50 words and no more than 75 words per response.

- Later in the week, log in again and respond to any comments from your classmates or tutor. Make sure you clarify the answers to your poll questions in any situation where there is disagreement in the responses, and please post the results of any opinion-based questions!
- If you wish to modify your original poll questions in light of these discussions, you may create a new version or versions and attach a link or links to it/them beneath your original post.



Week 5 ● Mobile in the Developed World

Overview

This topic will help you work towards the following general learning outcomes:

- (1) to develop disciplinary and interdisciplinary knowledge and skills through study and research-based enquiry;
- (2) to further develop the skills required to learn, and to continue through life to learn, from a variety of sources and experiences
- (3) to develop personal, social, and ethical awareness in an international context;
- (4) to communicate clearly, effectively and appropriately in a range of contexts.

This topic will help you work towards the following specific learning outcomes:

- (1) **know** and **understand** that new technologies function within complex cultural, social, political, economic and educational ecologies, resulting in different possibilities in diverse cultural contexts;
- (2) **know** and **understand** the specific affordances of mobile handheld devices for formal, informal and networked learning in diverse cultural contexts;
- (3) **know** and **understand** the use of mobile handheld devices for formal and informal learning in both the developing and developed world;
- (4) **apply** your knowledge and understanding of mobile devices to support your own learning in your current and future contexts, and **analyse** and **evaluate** this usage;
- (5) **analyse** and **evaluate** the use of mobile devices for formal and informal learning in the developing and developed world;
- (6) **analyse** and **evaluate** the notion of mobile devices delivering digital education and information for all.

Key topics: globalisation, developed world, affordability & affordances, smart devices

Before class

1 View the online lecture

The *minimum expectation* is that you have viewed the online lecture and completed the automated lecture quiz tasks before attending your tutorial. The online lecture will be available in Blackboard from the previous Friday. The final quiz task will form the starting point for the face-to-face tutorial.

2 Consult key references

You are advised to consult at least some of these references to deepen your understanding of the topics covered and provide additional background for your assessed work.

References on mobile learning in the developed world:

report	Kukulska-Hulme, A. (2010). <i>Mobile learning for quality education and social inclusion</i> . UNESCO Institute for Information Technologies in Education Policy Brief. http://goo.gl/kSSzZd
report	Oakley, G., Pegrum, M., Faulkner, R., & Striepe, M. (2012). <i>Exploring the pedagogical applications of mobile technologies for teaching literacy</i> . Report for the Association of Independent Schools of Western Australia. http://goo.gl/DdPDK
guidelines	UNESCO. (2013). <i>UNESCO policy guidelines for mobile learning</i> . Paris: UNESCO. http://goo.gl/UctZy

References on affordability & affordances:

book chapter	Pegrum, M. (2014). The mobile landscape. In M. Pegrum, <i>Mobile learning: Languages, literacies & cultures</i> (pp.1-23). London: Palgrave Macmillan. [Access a digital version in the UWA Library by searching for it using OneSearch]
book chapter	Pegrum, M. (2016). Three agendas for MALL. In A. Palalas & M. Ally (Eds.), <i>The international handbook of mobile-assisted language learning</i> (pp.86-112). Beijing: China Central Radio & TV University Press. [Access a digital version in the UWA Library by searching for it using OneSearch]

During class

Overview: This class will consist of a discussion of both formal and informal learning in the developed world. We will examine the kinds of mobile learning projects common in the developed world, discussing their advantages and drawbacks. We will conclude by talking about the blog and online quiz task. We'll follow the structure below.

1 Reflecting on last week's online activity

- ◆ What did you learn from last week's online activity?

2 Reflecting on the lecture

Look at the slides shown by your tutor, which relate to the two tasks set during the online lecture. Using the notes you made, discuss the following questions together with a partner or group. Be prepared to share your answers with the class.

► **Affordability & affordances**

◆ What is meant by *affordability* and *affordances*? Share the definitions each of you wrote during the online lecture.

◆ Thinking back to the case studies you discussed last week, what are the main similarities and differences you notice between developing world projects and uses of mobile learning in the developed world? Consider these areas:

- Hardware/BYOD
- Software/apps
- Creators/teachers
- Students/users
- Educational approaches
- Learning outcomes

◆ How important are *affordability* and *affordances* in each context?

► **UNESCO policy guidelines**

In answering these questions with your partner or partners, refer to the *UNESCO Policy Guidelines for Mobile Learning* shown in the box below, as well as to the notes you made during the online lecture.

- **Create or update policies related to mobile learning.**
- **Train teachers to advance learning through mobile technologies.**
- **Provide support and training to teachers through mobile technologies.**
- **Create and optimize educational content for use on mobile devices.**
- **Ensure gender equality for mobile students.**
- **Expand and improve connectivity options while ensuring equity.**
- **Develop strategies to provide equal access for all.**
- **Promote the safe, responsible and healthy use of mobile technologies.**
- **Use mobile technology to improve communication and education management.**
- **Raise awareness of mobile learning through advocacy, leadership and dialogue.**

UNESCO (2013)

◆ Which of UNESCO's Policy Guidelines for Mobile Learning, as listed in the box above, do you think apply ...

- mostly to the developing world?
- mostly to the developed world?
- equally to both the developing & developed world?

◆ Which of the guidelines do you think are most important?

3 Preparing for the online activity

Look at the slide shown by your tutor concerning the key themes covered so far this semester. Discuss the following questions together with a partner or group.

► What you have learned in this unit so far

- ◆ What have you learned about general themes connected with mobile learning?
- ◆ What have you learned about your own use of mobile devices for learning?
- ◆ What else would you like to learn about mobile learning?

After class

Required online task:

You should make a short discussion board post about what you have learned so far in this unit, as well as responding to a brief, anonymous online quiz about your experience in the unit to date.

For the blog post, follow these guidelines:

- Log into Blackboard and find the Week 5 discussion forum for your tutorial group.
- Write a post of at least 300 words and no more than 400 words answering all of these questions:
 - What have you learned about general themes connected with mobile learning in this unit so far?
 - What have you learned about your own use of mobile devices for learning in this unit so far?
 - What else would you like to learn about mobile learning in this unit?
- Look at your classmates' posts. Respond to two of them, writing at least 50 words in each case.
- Later in the week, log in again and respond to any comments from your classmates or tutor.

For the online quiz, follow these guidelines:

- Log into Blackboard and locate the anonymous WOML Mid-Semester Online Quiz.
- Answer the multiple choice questions and add any comments you wish. Note that this is a good chance to indicate what you like about the unit, as well as indicating any areas of concern.



Week 6 ● From M-learning to U-learning

Overview

This topic will help you work towards the following general learning outcomes:

- (1) to develop disciplinary and interdisciplinary knowledge and skills through study and research-based enquiry;
- (2) to further develop the skills required to learn, and to continue through life to learn, from a variety of sources and experiences
- (3) to develop personal, social, and ethical awareness in an international context;
- (4) to communicate clearly, effectively and appropriately in a range of contexts.

This topic will help you work towards the following specific learning outcomes:

- (1) **know** and **understand** that new technologies function within complex cultural, social, political, economic and educational ecologies, resulting in different possibilities in diverse cultural contexts;
- (2) **know** and **understand** the specific affordances of mobile handheld devices for formal, informal and networked learning in diverse cultural contexts;
- (3) **know** and **understand** the use of mobile handheld devices for formal and informal learning in both the developing and developed world;
- (4) **apply** your knowledge and understanding of mobile devices to support your own learning in your current and future contexts, and **analyse** and **evaluate** this usage;

Key topics: seamless learning, u-learning, new learning spaces, multimedia recording

Before class

1 View the online lecture

The *minimum expectation* is that you have viewed the online lecture and completed the automated lecture quiz tasks before attending your tutorial. The online lecture will be available in Blackboard from the previous Friday. The final quiz task will form the starting point for the face-to-face tutorial.

2 Consult key references

You are advised to consult at least some of these references to deepen your understanding of the topics covered and provide additional background for your assessed work.

References on u-learning:

magazine article	Gorbis, M. (2013, Apr. 3). The future of education eliminates the classroom, because the world is your class. <i>Fast CoExist</i> . http://goo.gl/IRyNC
book chapter	Kinshuk. (2015). Roadmap for adaptive and personalized learning in ubiquitous environments. In Kinshuk & R. Huang (Eds.), <i>Ubiquitous learning environments and technologies</i> (pp.1-13). Berlin: Springer. [Access a digital version in the UWA Library by searching for it using OneSearch .]
book chapter	Milrad, M., Wong, L.-H., Sharples, M., Hwang, G.-J., Looi, C.-K., & Ogata, H. (2013). Seamless learning: An international perspective on next-generation technology-enhanced learning. In Z.L. Berge & L.Y. Muilenburg (Eds.), <i>Handbook of mobile learning</i> (pp.95-108). New York: Routledge. [Access a digital version in the UWA Library by searching for it using OneSearch .]
magazine article	Parry, D. (2011). On teaching mobile literacy. <i>EDUCAUSE Review</i> , 46(2). http://goo.gl/qgjYz
book chapter	Traxler, J. (2013). Mobile learning: Starting in the right place, going in the right direction? In D. Parsons (Ed.), <i>Innovations in mobile educational technologies and applications</i> (pp.1-13). Hershey, PA: IGI Global. [Access a digital version in the UWA Library by searching for it using OneSearch .]

References on multimedia recording:

website	Pegrum, M. (ongoing). Multimedia recording. <i>Digital learning</i> . https://goo.gl/iYFH8B
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During class

Overview: This class will consist of a discussion of the shift from m-learning to u-learning, especially in the developed world. It will focus on the breaking down of classroom walls and the changing learning spaces and times becoming available. We will conclude by talking about multimedia recording. We'll follow the structure below.

1 Reflecting on last week's online activity

- ◆ What did you learn from last week's online activity?

2 Reflecting on the lecture

Look at the slides shown by your tutor, which relate to the two tasks set during the online lecture. Using the notes you made, discuss the following questions together with a partner or group. Be prepared to share your answers with the class.

► U-learning

- ◆ What do you understand by *seamless learning* and *u-learning*? Share the definitions each of you wrote during the online lecture.
- ◆ How do *seamless learning* and *u-learning* relate to:
 - time?
 - space?

► Learning spaces

- ◆ Show a partner or partners the image of the learning space which you chose during the online lecture, and say why it appeals to you, describing in particular:
 - what role(s) would mobile devices play in your learning space?
 - what kinds of learning would be possible / unlikely / likely in this space?
- ◆ As a pair or group, choose one of your learning spaces, and be prepared to describe it to the class. (If possible, email the image of the chosen space to the tutor so it can be displayed through the data projector, or alternatively choose an image which is large enough to be held up for the class to see.)

3 Preparing for the online activity

Look at the slides shown by your tutor. Discuss the following questions together with the class.

► Multimedia recording

- ◆ What are the advantages of multimedia recording for learning in the image shown?
- ◆ How does multimedia recording relate to u-learning?
- ◆ What are some other areas of study where multimedia recording might be valuable?

► Student glogs (Glogster posters)

- ◆ Have a look at the example Glogster posters by past WOML students. These will give you ideas on what you might include in your own poster.

After class

Required online task:

You should create an annotated multimedia record of a learning space, following these guidelines:

- Choose a contemporary learning space which appeals to you, and which fits with the idea of u-learning. It could be a space from around the campus, or from another educational institution that you have access to.
- Take at least three photos and/or videos of your chosen location.
- Use your images and/or videos to make an annotated poster using a poster-making website or app. We recommend that you use Glogster (<http://www.glogster.com/>) but if you prefer you may use an alternative such as:
 - Biteslide (<http://www.biteslide.com/>)
 - Canva (<https://www.canva.com/>)
 - Posterini (<http://www.posterini.com/>)
 - PowerPoint
- You should annotate your images and/or videos by including information such as:
 - what kind of space/building/institution the images show
 - what kinds of devices could be used there
 - what kinds of learning would be likely there
 - the advantages of such a learning space
 - the disadvantages of such a learning space
- Log into Blackboard and find the Week 6 discussion forum for your tutorial group. Post the link to, and/or a screen capture of, your poster.
- Look at some of the posters created by your classmates. Pose questions about two of them. Write at least 50 words and no more than 75 words per response.
- Later in the week, visit your post again and respond to any questions from your classmates or tutor.
- If you wish to modify your original poster in light of these discussions, you may create a new version and attach a link to it beneath your original discussion forum post in Blackboard.



Week 7 ● Hardlinking the Virtual & the Real

Overview

This topic will help you work towards the following general learning outcomes:

- (1) to develop disciplinary and interdisciplinary knowledge and skills through study and research-based enquiry;
- (2) to further develop the skills required to learn, and to continue through life to learn, from a variety of sources and experiences
- (3) to develop personal, social, and ethical awareness in an international context;
- (4) to communicate clearly, effectively and appropriately in a range of contexts.

This topic will help you work towards the following specific learning outcomes:

- (1) **know** and **understand** the specific affordances of mobile devices for formal, informal and networked learning in diverse cultural contexts;
- (2) **know** and **understand** the use of mobile devices for formal and informal learning in both the developing and developed world;
- (4) **apply** your knowledge and understanding of mobile devices to support your own learning in your current and future contexts, and **analyse** and **evaluate** this usage;

Key topics: mixed reality, hardlinking, QR codes, NFC chips/tags

Before class

1 View the online lecture

The *minimum expectation* is that you have viewed the online lecture and completed the automated lecture quiz tasks before attending your tutorial. The online lecture will be available in Blackboard from the previous Friday. The final quiz task will form the starting point for the face-to-face tutorial.

2 Consult key references

You are advised to consult at least some of these references to deepen your understanding of the topics covered and provide additional background for your assessed work.

References on mixed reality:

magazine article	Ceustemont, S. (2014, Jan. 2). Try mixed reality, where the virtual and real collide. <i>New Scientist</i> . http://goo.gl/GqanCF
Wikipedia	Wikipedia. (ongoing). <i>Mixed reality</i> . http://goo.gl/d517r

References on QR codes:

blog	Hockly, N. (2010, Aug. 12). A dummies' guide to QR codes. <i>E-moderation Station</i> . http://goo.gl/SDI5w
Pinterest	Hoshino, N. (ongoing). QR codes for dummies. http://goo.gl/iVhDH
Glogster	Janning. (2011). <i>What's a QR code?</i> http://goo.gl/iErU5C
website	Pegrum, M. (ongoing). QR codes. <i>Digital learning</i> . https://goo.gl/DLyrZX
magazine article	Robertson, C., & Green, T. (2012, Mar./Apr.). Scanning the potential for using QR codes in the classroom. <i>TechTrends</i> . [Access a digital version in the UWA Library by searching for it using OneSearch .]
blog	Schroeder, B. (2011, Feb. 18). 10 ways to use QR codes in your classroom. <i>Technology Teacher</i> . http://goo.gl/Rk8lmN
Scoop.it	Sneesby, B. (ongoing). <i>QR codes in the 21st century</i> . http://goo.gl/qg30He
Wikipedia	Wikipedia. (ongoing). QR code. http://goo.gl/XINdQ

During class

Overview: This class will consist of a discussion of the relationship between the virtual and the real. After considering the nature of mixed reality, we will focus on the hardlinking of the virtual and the real through QR codes. We'll follow the structure below.

1 Reflecting on last week's online activity

- ◆ What did you learn from last week's online activity?

2 Reflecting on the lecture

Look at the slides shown by your tutor, which relate to the two tasks set during the online lecture. Using the notes you made, discuss the following questions together with a partner or group. Be prepared to share your answers with the class.

► Mixed reality

- ◆ What do you understand by *mixed reality*? Share the definitions each of you wrote during the online lecture.
- ◆ On the mixed reality continuum, what is the difference between *augmented reality* and *virtual reality*?

► QR codes

Read the quote below. In what way is a QR code a 'manual' link between the virtual and the real?

Today's widespread quick response codes act as hyperlinks from the real to the virtual, and may be seen as a 'manual' stage on the path to the development of more automated AR [augmented reality].

Mark Pegrum (2014)

Using the QR app you downloaded during the online lecture, scan each of the codes you are shown.

- ◆ What kinds of media can QR codes link to?
- ◆ What are the educational advantages of linking to these different kinds of media?

- ◆ How easy was it to scan the codes? Why is this?
- ◆ Which, if any, of the codes was hardest to read? Why is this?
- ◆ What should you keep in mind when designing QR codes?

3 Preparing for the online activity

Look at the slides shown by your tutor, which demonstrate the making and use of QR codes.

► How to make QR codes

- ◆ After looking at the slides about making QR codes, would you like to use this QR generator or another? Remember that you will find a list of QR generators at <https://goo.gl/DfcazX>.

► Student-created QR treasure hunts

- ◆ Have a look at the examples of treasure hunt locations and clues by past WOML students. These will give you ideas on what you might include in your own treasure hunt.

► Getting started!

- ◆ Work in a group of 4-6 people, where at least two people have internet-connected mobile devices. Explore the list of QR code generators at <https://goo.gl/DfcazX> and choose the one you will use.
- ◆ Your group should split into two smaller groups of 2-3 people each; each group will need at least one internet-connected connected device so you can use a QR code generator. Work with your partner or partners in your smaller group to begin creating a simple treasure hunt, which will be taken by the members of the other small group. Follow the instructions in the 'After class' section below.

Do as much of this as you can in class time. You will need to organise to work with your partner or partners, and the members of the other small group, to complete the activity in the 'After class' session this week.

After class

Required online task:

You should work in a group of 4-6 people to create 2 simple treasure hunts, following these guidelines:

- Work in a small group of 2-3 people (half of your large group) to design a simple treasure hunt which should take no more than 15 minutes for participants to complete. You should:
 - choose an area of campus where the treasure hunt will take place
 - choose at least 4 locations for the treasure hunt
 - design a clue for each location, which will lead participants to the next location
 - design a final question, which participants can only answer in the final location
- Make a QR code linked to each clue, and then print each QR code on a separate sheet of paper.
- Select a day and time when the members of the other small group, who have not helped design this treasure hunt, can take your treasure hunt.
- Half an hour before the selected time, post the QR codes in the appropriate locations. Use Blue Tack, sticky tape, pins, etc, as appropriate, but ensure you do not damage any walls or other surfaces.
- After half an hour, remove the QR codes.
- In the same way, you and your partners should be prepared to take the treasure hunt created by the members of the other small group.
- When your treasure hunt has been taken, and you have taken a treasure hunt yourself, log into Blackboard and find the Week 7 discussion forum for your tutorial group. *As a small group*, post at least two photos of QR codes in their location, one from the tour you created and one from the tour you took. Make sure you list the names (i.e., first names + surnames) of all group members in the title or the first line of your post. Then add a *comment of 150 words*, saying:
 - how you found the process of creating a treasure hunt
 - how you found the process of taking a treasure hunt
 - what potential educational benefits you can see
- *As an individual*, look at some of your classmates' posts, and respond to two of them. Write at least 50 words per and no more than 75 words response.
- Later in the week, log in again and respond to any comments from your classmates or tutor.
- **Remember that you must make at least 3 posts as an individual to obtain the credit for this week's online activity.**



Week 8 ● Geosocial Technology

Overview

This topic will help you work towards the following general learning outcomes:

- (1) to develop disciplinary and interdisciplinary knowledge and skills through study and research-based enquiry;
- (2) to further develop the skills required to learn, and to continue through life to learn, from a variety of sources and experiences
- (3) to develop personal, social, and ethical awareness in an international context;
- (4) to communicate clearly, effectively and appropriately in a range of contexts.

This topic will help you work towards the following specific learning outcomes:

- (1) **know** and **understand** that new technologies function within complex cultural, social, political, economic and educational ecologies, resulting in different possibilities in diverse cultural contexts;
- (2) **know** and **understand** the specific affordances of mobile handheld devices for formal, informal and networked learning in diverse cultural contexts;
- (3) **know** and **understand** the use of mobile handheld devices for formal and informal learning in both the developing and developed world;
- (4) **apply** your knowledge and understanding of mobile devices to support your own learning in your current and future contexts, and **analyse** and **evaluate** this usage;

Key topics: situated learning, embodied learning, location-awareness, geotagging, geosocial technology, geosocial apps

Before class

1 View the online lecture

The *minimum expectation* is that you have viewed the online lecture and completed the automated lecture quiz tasks before attending your tutorial. The online lecture will be available in Blackboard from the previous Friday. The final quiz task will form the starting point for the face-to-face tutorial.

2 Consult key references

You are required to consult at least some of these references to deepen your understanding of the topics covered and provide additional background for your assessed work.

References on situated learning:

guide	Situated learning theory (Lave). <i>Learning-Theories.com</i> . http://goo.gl/yfHCPB
report	<i>Situated learning theory</i> . University of South Alabama. http://goo.gl/lcHaU

References on geosocial networking:

journal article	Frith, J. (2014). Communicating through location: The understood meaning of the Foursquare check-in. <i>Journal of Computer-Mediated Communication</i> , 19(4), 890-905. [Access a digital version in the UWA Library by searching for it using OneSearch .]
website	Pegrum, M. (ongoing). Geosocial networking. <i>Digital learning</i> . https://goo.gl/FygrFD
report	Zickuhr, K. (2013, Sept. 12). <i>Location-based services</i> . Washington, DC: Pew Internet. http://goo.gl/d8D6pa x

During class

Overview: This class will consist of a discussion of location-awareness and geosocial technology, linked to a discussion of situated learning and embodied learning. We will examine geosocial technology through the example of Foursquare. We'll follow the structure below.

1 Reflecting on last week's online activity

- ◆ What did you learn from last week's online activity?

2 Reflecting on the lecture

Look at the slides shown by your tutor, which relate to the two tasks set during the online lecture. Using the notes you made, discuss the following questions together with a partner or group. Be prepared to share your answers with the class.

► Situated & embodied learning

- ◆ What do you understand by *situated learning* and *embodied learning*? Share the definitions each of you wrote during the online lecture.

► Location-awareness

◆ With your partner(s), come up with a list of at least 6 *location-aware* apps, based on the shorter lists each of you wrote during the online lecture. Explain the functions of any apps which your partner(s) doesn't/don't know.

◆ Among the location-aware apps you and your partner(s) have identified, choose the 3 which you think have the greatest educational potential. Consider:

- Are they geosocial apps?
- Do they promote situated or embodied learning?
- What other educational approaches do they promote?

3 Preparing for the online activity

Look at the slides shown by your tutor, which relate to the Foursquare app.

► Exploring a geosocial app

◆ Refresh your memory of how the Foursquare app works as you revisit examples of the uses of the app from the lecture.

► Student tips

◆ Have a look at the example Foursquare tips by past WOML students. These will give you ideas on what you might include in your own tip.

► Getting started!

◆ Work in a group of 3-4 people, where at least one person has an internet-connected mobile device. Open the Foursquare app and make sure you understand how it works, including:

- how to find nearby sites
- how to read tips left by others
- how to check in
- how to leave geotagged comments
- how to leave geotagged images

When you are ready, you may leave the classroom to begin exploring, checking into, and creating nearby sites. You are also free to start work on the 'After class' section.

After class

Required online task:

You should work in a group of 3-4 people, using Foursquare as follows:

- Identify 2 locations on or near campus where others have left tips connected

with study or learning. Take a screenshot of one tip which you think is helpful, and one which you think is inappropriate or unhelpful.

- Check into a location on or near campus, or create a location and then check in, and leave a geotagged multimedia post (i.e., a text-based comment plus an image). Take a screenshot of your tip.
- Log into Blackboard and find the Week 8 discussion forum for your tutorial group. *As a group*, post all three screenshots. Make sure you list the names (i.e., first names + surnames) of all group members in the title or the first line of your post. Then, add some commentary, saying:
 - why the first tip you identified is helpful
 - why the second tip you identified is inappropriate or unhelpful
 - how the text and image you added may help others
 - whether you think Foursquare or similar apps are useful for learning
- *As an individual*, look at some of your classmates' posts, and respond to two of them. Write at least 50 words and no more than 75 words per response.
- Later in the week, log in again and respond to any comments from your classmates or tutor.
- **Remember that you must make at least 3 posts as an individual to obtain the credit for this week's online activity.**



Week 9 ● Augmented Reality

Overview

This topic will help you work towards the following general learning outcomes:

- (1) to develop disciplinary and interdisciplinary knowledge and skills through study and research-based enquiry;
- (2) to further develop the skills required to learn, and to continue through life to learn, from a variety of sources and experiences
- (3) to develop personal, social, and ethical awareness in an international context;
- (4) to communicate clearly, effectively and appropriately in a range of contexts.

This topic will help you work towards the following specific learning outcomes:

- (1) **know** and **understand** that new technologies function within complex cultural, social, political, economic and educational ecologies, resulting in different possibilities in diverse cultural contexts;
- (2) **know** and **understand** the specific affordances of mobile devices for formal, informal and networked learning in diverse cultural contexts;
- (3) **know** and **understand** the use of mobile devices for formal and informal learning in both the developing and developed world;
- (4) **apply** your knowledge and understanding of mobile devices to support your own learning in your current and future contexts, and **analyse** and **evaluate** this usage;
- (7) **create** a series of recommendations on using mobile technologies to support learning, for other learners in your major study area.

Key topics: augmented reality (AR), situated learning, augmented reality apps

Before class

1 View the online lecture

The *minimum expectation* is that you have viewed the online lecture and completed the automated lecture quiz tasks before attending your tutorial. The online lecture will be available in Blackboard from the previous Friday. The final quiz task will form the starting point for the face-to-face tutorial.

2 Consult key references

You are required to consult at least some of these references to deepen your understanding of the topics covered and provide additional background for your assessed work.

References on augmented reality:

web article	Bonsor, K. (n.d.). How augmented reality works. <i>How stuff works</i> . http://goo.gl/FI5F
journal article	Delello, J.A., McWhorter, R.R., & Camp, K.M. (2015). Integrating augmented reality in higher education: A multidisciplinary study of student perceptions. <i>Journal of Educational Multimedia and Hypermedia</i> , 24(3), 209-233.
book chapter	Dunleavy, M., & Dede, C. (2014). Augmented reality teaching and learning. In J.M. Spector, M.D Merrill, J. Elen, & M.J. Bishop (Eds.), <i>Handbook of research on educational communications and technology</i> (4th ed., pp.735-745). New York: Springer. [Final draft: http://goo.gl/nrALJL]
report	Kilby, J., Gray, K., Elliott, K., Martin-Sanchez, F., Waycott, J., & Dave, B. (2012). <i>Interface, information and interaction: An exploration of mobile augmented reality present and future</i> . Melbourne: Institute for a Broadband-Enabled Society, The University of Melbourne. http://goo.gl/az3V7Z
blog	Klein, E. (2013, May 26). Tons of classroom examples using augmented reality with @Aurasma - A complete how-to guide. <i>Kleinspiration</i> . http://goo.gl/C7nW8
web article	Lewis, D. (2016, Sep. 16). The top 10 companies working on education in virtual reality and augmented reality. <i>Touchstone Research</i> . https://goo.gl/cxnAR4
book	Peddie, J. (2017). <i>Augmented reality: Where we will all live</i> . Cham: Springer. [Access a digital version in the UWA Library by searching for it using OneSearch .]
website	Pegrum, M. (ongoing). Augmented reality. <i>Digital learning</i> . https://goo.gl/221Zie
web article	Samani, K. (2015, Aug. 5). What augmented reality is - and isn't. <i>ReadWrite</i> . http://goo.gl/svRSc4
YouTube	Specht, M. (2016). <i>Future trends in mobile learning</i> . [Interview with Rob Power.] https://goo.gl/AsnbZy

Case studies of augmented reality learning:

case study	Case Study 8: Augmented reality gaming in the USA. Excerpt from: Pegrum, M. (2014). <i>Mobile learning: Languages, literacies and cultures</i> (pp.118-120). Basingstoke: Palgrave Macmillan. [Access a digital version in the UWA Library by searching for it using OneSearch .]
case study	Case Study 13: Persuasive mobile in Europe. Excerpt from: Pegrum, M. (2014). <i>Mobile learning: Languages, literacies and cultures</i> (pp.175-178). Basingstoke: Palgrave Macmillan. [Access a digital version in the UWA Library by searching for it using OneSearch .]
case study	Case Study 14: Augmented reality learning trails in Singapore. Excerpt

from: Pegrum, M. (2014). *Mobile learning: Languages, literacies and cultures* (pp.180-183). Basingstoke: Palgrave Macmillan. [Access a digital version in the UWA Library by searching for it using [OneSearch.](#)]

During class

Overview: This class will consist of a discussion of augmented reality learning, linked to the notion of situated learning. We will examine AR technology through the examples of the FreshAIR and Pocket Trips apps. We'll follow the structure below.

1 Reflecting on last week's online activity

- ◆ What did you learn from last week's online activity?

2 Reflecting on the lecture

Look at the slides shown by your tutor, which relate to the two tasks set during the online lecture. Using the notes you made, discuss the following questions together with a partner or group. Be prepared to share your answers with the class.

► VR vs AR

We've previously discussed the difference between VR and AR (see week 7). Now is your chance to experience this difference.

Following your tutor's instructions, experiment with both:

- VR by watching a video using the Google Cardboard sets supplied
- AR by opening up an AR browser like Layar or Wikitude

- ◆ Referring back to the *conceptual* and *technocentric* definitions of AR you wrote down during the online lecture, try to explain briefly what the key differences are between VR and AR.
- ◆ What are the possible educational applications of VR and AR?

► 3 case studies of mobile learning

- ◆ Which case study did you select to read (about Europe, Singapore or the USA)? Find a partner or partners who chose a different case study.
- ◆ Explain to your partner(s) what you learned from your case study, focusing on the 3 advantages and 3 disadvantages of mobile learning you listed for the context you studied. Say whether you think the AR approach taken in your case study corresponds to a conceptual or a technocentric definition, or both.
- ◆ After everyone in your group has described their case study, try to list at least 3 common themes (positive, negative or neutral) which you notice in these AR case studies.

3 Preparing for the online activity

Look at the slides shown by your tutor, which review key information about the FreshAiR and Pocket Trips apps which you learned about in the online lecture.

► Student AR trails

- ◆ Have a look at the example AR trails by past WOML students. These will give you ideas on what you might include in your own trail. Which tool would you prefer to use, FreshAiR or Pocket Trips?

► Getting started!

- ◆ Work in a group of 2-3 people *from your major area of study*, where at least one person has an internet-connected mobile device with the FreshAiR app installed.

Work with your partner or partners to begin creating a simple AR learning trail, whose purpose is to introduce new students to your area of the campus. Follow the instructions in the 'After class' section below.

Do as much of this as you can in class time. You will need to organise to work with your partner or partners to complete the activity in the 'After class' session this week.

After class

Required online task:

Work in a group of 2-3 people *from your major area of study* to create an AR learning trail, following these guidelines:

- Make sure you have downloaded the FreshAiR app or Pocket Trips app from the iTunes Store (<http://goo.gl/rAOqfv>) for Apple devices, or the Google Play Store (<http://goo.gl/UOdFf>) for Android devices. If you are using FreshAiR, register an account with the FreshAiR Editor (<http://goo.gl/LF4TN2>), which is where you will create your own learning trail. If you are using Pocket Trips, request a user name and password from your tutor so you can log into the Pocket Trips Editor (<https://goo.gl/bz9dE0>). You will create your trail using one of these Editors.
- Design a simple AR learning trail to introduce new students to your area of campus (or any other area of campus you consider important to know about). You should incorporate at least 4 markers, and should try to include:
 - text-based information provided to students
 - multimedia information provided to students
 - a yes/no or multiple choice question
 - an open-ended question
- Create a PowerPoint slideshow (you may use different presentation software if you prefer) containing the following slides:

- a bullet point overview of the learning objectives (i.e., what will participants have learned by the end of the tour?)
 - a brief overview of the educational approach (i.e., what educational approach or approaches does your tour correspond to?)
 - a screenshot of a map of the area, showing at least one of your 4 markers
 - a screenshot of each of the pieces of information or questions that will be pushed to participants
-
- Log into Blackboard and find the Week 9 discussion forum for your tutorial group. As a *group*, post your slideshow. Make sure you list the names (i.e., first names + surnames) of all group members in the title or the first line of your post.
 - As an *individual*, look at some of the other groups' slideshows, and respond to two of them, saying how educationally effective you think they are. Write at least 50 words and no more than 75 words per response.
 - Later in the week, log in again and respond to any comments from your classmates or tutor.
 - **Remember that you must make at least 3 posts as an individual to obtain the credit for this week's online activity.**



Week 10 ● Future Mobile Trends

Overview

This topic will help you work towards the following general learning outcomes:

- (1) to develop disciplinary and interdisciplinary knowledge and skills through study and research-based enquiry;
- (2) to further develop the skills required to learn, and to continue through life to learn, from a variety of sources and experiences
- (3) to develop personal, social, and ethical awareness in an international context;
- (4) to communicate clearly, effectively and appropriately in a range of contexts.

This topic will help you work towards the following specific learning outcomes:

- (1) **know** and **understand** that new technologies function within complex cultural, social, political, economic and educational ecologies, resulting in different possibilities in diverse cultural contexts;
- (2) **know** and **understand** the specific affordances of mobile devices for formal, informal and networked learning in diverse cultural contexts;
- (3) **know** and **understand** the use of mobile devices for formal and informal learning in both the developing and developed world;
- (4) **apply** your knowledge and understanding of mobile devices to support your own learning in your current and future contexts, and **analyse** and **evaluate** this usage;
- (7) **create** a series of recommendations on using mobile technologies to support learning, for other learners in your major study area.

Key topics: future trends, embedded computing, wearable computing, the internet of things, big data, learning analytics

Before class

1 View the online lecture

The *minimum expectation* is that you have viewed the online lecture and completed the automated lecture quiz tasks before attending your tutorial. The online lecture will be available in Blackboard from the previous Friday. The final quiz task will form the starting point for the face-to-face tutorial.

2 Consult key references

You are required to consult at least some of these references to deepen your understanding of the topics covered and provide additional background for your assessed work.

References on various aspects of future mobile trends:

conference proceedings	Alvarez, V., Bower, M., de Freitas, S., Gregory, S., & de Wit, B. (2016). The use of wearable technologies in Australian universities: Examples from environmental science, cognitive and brain sciences and teacher training. In L.E. Dyson, W. Ng & J. Fergusson (Eds.), <i>Mobile learning futures – Sustaining quality research and practice in mobile learning: 15th World Conference on Mobile and Contextual Learning, mLearn 2016, Sydney, Australia, October 24-26, 2016 Proceedings</i> (pp.25-32). Sydney: UTS. https://goo.gl/daXcsZ
white paper	Barnett, T., jr. (2015, Feb. 3). Cisco VNI global mobile data traffic forecast update. Cisco. http://goo.gl/OL6mYY
journal article	Bower, M., & Sturman, D. (2015). What are the educational affordances of wearable technologies? <i>Computers & Education</i> , 88, 343-353. [Access a digital version in the UWA Library by searching for it using OneSearch .]
web article	Briggs, S. (2014, Jan. 13). Big data in education: Big potential or big mistake? InformED. http://goo.gl/QyUpCc
web article	Curry, D. (2016, May 2). School wearables to surge over next five years. ReadWrite. https://goo.gl/5hbQJQ
guide	EDUCAUSE Learning Initiative. (2016). <i>7 things you should know about affective computing</i> . EDUCAUSE. https://goo.gl/sZdaNY
magazine article	Grossman, L., & Vella, M. (2014, Sep. 22). iNeed? <i>Time</i> . [Access a digital version in the UWA Library by searching for it using OneSearch .]
book chapter	Mayer-Schönberger, V., & Cukier, K. (2014). <i>Learning with big data: The future of education</i> . Boston: Eamon Dolan. [Access a digital version in the UWA Library by searching for it using OneSearch .]
newspaper article	Nield, D. (2015, Jul. 28). Wearable technology in the classroom: What's available and what does it do? <i>The Guardian</i> . http://goo.gl/1YhDg7
infographic	Open Colleges. (n.d.). <i>How Google Glass might be used in education</i> . http://goo.gl/Pg0m9p
magazine article	Rolston, M. (2013, Jun. 26). Today's phones and tablets will die out like the PC. <i>MIT Technology Review</i> . http://goo.gl/koXzq
magazine article	Smith, P. (2013, Oct.). Internet of things: A network of objects connected to other objects via the internet. <i>Open Skies</i> , pp.138-148. http://goo.gl/Z4slbH

References for keeping up-to-date after the course:

portal	GSMA. (ongoing). Mobile for development impact. http://www.m4dimpact.com/
website	Pegrum, M. (ongoing). Twitter feeds to follow. <i>Digital learning</i> . https://goo.gl/KbCWsF
website	Pegrum, M. (ongoing). <i>Ubiquitous learning</i> . http://goo.gl/oRMru9
e-book	Woodill, G. (2015). Keeping up with new developments in mobile

During class

Overview: This class will consist of a discussion of future mobile trends, covering developments such as embedded computing, wearable computing, the internet of things, big data and learning analytics. We will conclude by talking about the major assessment task. We'll follow the structure below.

1 Reflecting on last week's online activity

- ◆ What did you learn from last week's online activity?

2 Reflecting on the lecture

Look at the slides shown by your tutor, which relate to the two tasks set during the online lecture. Using the notes you made, discuss the following questions together with a partner or group. Be prepared to share your answers with the class.

► What wearable computing looks like

- ◆ Show a partner or partners the image of wearable computing which you chose during the online lecture, describing in particular:

- what it does?
- what its advantages are?
- what its disadvantages are?
- what its educational applications might be?
- whether it has any connection with *big data* and *learning analytics*?

- ◆ As a pair or group, choose one of your wearable technologies, and be prepared to describe it to the class. (If possible, email the image of the technology to the tutor so it can be displayed through the data projector, or alternatively choose an image which is large enough to be held up for the class to see.)

► Keeping up-to-date

- ◆ What are 3 ways you will be able to keep up with developments in mobile learning after this course is over? Share the lists that each of you wrote down during the online lecture.

3 Preparing for the major assessment: A digital mobile learning guide

Your tutor will discuss with you the requirements and recommendations for the major assessment, as detailed in the boxes below.

— MAJOR ASSESSMENT: LEARNING OUTCOMES —

This assessment relates to all **general learning outcomes** and **specific learning outcomes**.

— MAJOR ASSESSMENT: INSTRUCTIONS —

Overview

This assessment takes the form of a **digital guide** to the **use of mobile devices in your major study area**, directed at your peers in the same study area. You should **carefully integrate a range of multimodal elements** (such as text, images, audio, video, and animations) to deliver your message in an **effective and concise manner** to your **intended target audience**. Your guide should also **include feedback from two peers** as well as **your response to that feedback**.

Components

Your guide should include the following elements:

- ◆ a general comment on **global trends in mobile education** (consider: affordability & affordances)
- ◆ a general comment on **your own cultural setting** (consider: the developing or developed world) and how global trends relate to that setting
- ◆ an overview of **learning objectives** (i.e., what those who read your guide can expect to learn from it)
- ◆ a rationale for the **educational approach or approaches** you are suggesting that your peers adopt. Options covered during the course include:
 - information transmission
 - behaviourism
 - social constructivism
 - situated learning
 - embodied learning

Note: if you wish to include educational approaches other than those listed above, please check with your tutor first to ensure that you have selected a valid approach or approaches.

- ◆ at least **5 distinct uses of mobile technologies** (tools or techniques), **contextualised with respect to your chosen subject area**. Clear links to the educational approaches should be apparent. Options covered during the course include:
 - mind mapping
 - e-books
 - educational apps
 - polling

- multimedia recording (i.e., students actively making recordings)
- QR codes
- geosocial apps
- AR apps

Note: if you wish to include mobile technologies other than those listed above, please check with your tutor first to ensure that you have selected a valid technology or technologies, and that your five choices do in fact constitute distinct uses.

- ◆ an overview of **feedback you received from 2 named peers** (with student numbers) who have viewed your digital guide, and an overview of any **modifications you made as a result** of that feedback. These peers should ideally be from your faculty, or at least have some knowledge of the major subjects you are studying. They may, but do not have to be, students who have taken or are taking this unit.
- ◆ a written transcript of your narrated text (which will be scanned used plagiarism detection software) – to be uploaded through LMS.

Other Requirements

You should include a *minimum* **10 references to written texts**, of which at least half should be academic texts. You may wish to refer to the readings set each week in this unit, though you may also include other texts of your own choice. At least half the texts should be academic (e.g., books or journal articles) but the rest may be sourced elsewhere (e.g., from newspapers or magazines). You may reference the online lectures, but these will not count among your 10 texts. You are required to include **in-text references to all 10 texts** in your guide, either in the form of quotations or through bracketed references to the authors. You are also required to **include a reference list** in your guide, using a standard, recognised bibliographic format such as APA, Harvard, or MLA. For a guide to referencing in APA format, which is the most commonly used format in Education, please see the Referencing section at the end of the unit outline.

Note that every image, video or other multimedia artefact used should be **fully referenced**, again using a standard, recognised bibliographic format. You may find the Referencing section at the end of the unit outline helpful with this.

You should create your guide with either PowerPoint or Prezi with a voiceover and automate it so that **viewing time is 5 minutes or less**. This reflects today's typical short-form presentations, where much can be communicated in 5 minutes because of the multimodal format. A short time limit is also intended to reduce your overall workload. For equity reasons, the limit will be enforced by deducting marks; guides may take less time but no more time to view. (Note that in PowerPoint, this means recording a voiceover for each slide and exporting the whole file as a video. Mac users who are unable to export PowerPoints with voiceovers as videos may submit them in PowerPoint format.)

You may submit your digital guide in the following ways:

- as a weblink (e.g., to a Prezi, or to a video uploaded to YouTube or Vimeo);
- as a compressed video (e.g., a video exported from PowerPoint and compressed before uploading into Blackboard);
- as a PowerPoint (e.g., if you are working on an Apple device and are unable to export a video from PowerPoint);
- as a video sent to your tutor directly through Google Drive or Dropbox (e.g., if your video is too large to upload into Blackboard; however, please email your tutor about this directly).

Note that if you are uploading a document, such as a video or PowerPoint, please follow this protocol in naming it: [Surname] – [Year], e.g., “Smith 2017”.

Your digital guide, or a link to it, should be **uploaded to the Blackboard LMS** by **5pm Friday in Week 11** (i.e., Friday 18 May). To seek an extension, you *must* lodge an Application for Extension form (<http://goo.gl/vY31Vn>) along with supporting documentation at the Faculty Office. You will normally hear the outcome of your request within 3 working days.

Note that the written portion of the guides will be run through TurnItIn.

— MAJOR ASSESSMENT: FURTHER GUIDANCE —

This section provides some additional guidance on how to do as well as possible in the Major Assessment.

The instructions ask for a digital guide to the use of mobile devices in your major study area. The best advice is to think of friends or acquaintances in your faculty and write this assignment as a 'how to' guide for those people. Make it an instructional guide on how they might integrate mobile technologies/tools into their studies. Give them some interesting facts about global trends and point out the advantages they have in the developed world as opposed to if they were in the developing world. Tell them what they will learn from your guide (learning objectives) and the benefits of social constructivism, situated learning, embodied learning, etc., that are part of your guide. Then suggest how they might use a range of five mobile technologies in their subject area to benefit their studies and perhaps also their future careers. Make the guide interesting, creative and challenging for your friends, and inspire them to experiment with mobile technologies in their studies. In essence, provide them with five minutes of motivation and inspiration about what can be achieved through integrating mobile technologies into their learning.

Regarding the content, and the way you present the information, remember to integrate key references (a minimum of 10). You might like to keep Bloom's Taxonomy, as described at the start of the unit outline, in mind: ensure that you incorporate the higher order thinking skills (analysing, evaluating and creating) into your own thinking, as showcased in your guide. Aim to make connections between different aspects of the WOML unit so that your viewers get an integrated picture of what you now know about mobile technologies. This higher level thinking may make the difference between a lower grade and a higher grade.

Lastly, remember that there is no separate written part to this assignment. All the information will need to be included in the five-minute PowerPoint video or Prezi, where you should attempt to present a powerful multimodal message for the benefit of your friends or acquaintances. You might even like to ask them to provide the required sets of feedback on your assignment!

— MAJOR ASSESSMENT: MARKING —

You will be assessed on the following elements of your assignment:

CONTENT:

- ◆ contextualisation of your guide with respect to global trends in mobile education regarding affordability and affordances
- ◆ contextualisation of your guide with respect to your own developing or developed world context

- ◆ appropriate learning objectives
- ◆ an appropriate rationale for your educational approach/es
- ◆ adequate explanation of 5 appropriate tools and/or techniques
- ◆ contextualisation of your explanation with respect to your subject area
- ◆ presentation of two sets of peer feedback
- ◆ an appropriate rationale for making (or not making) modifications on the basis of this feedback

PRESENTATION:

- ◆ structure & organisation
- ◆ integration of appropriate text, images, audio and/or video
- ◆ accurate referencing of quoted texts, images, audio and/or video

— MAJOR ASSESSMENT: MARKING RUBRIC —

A digital or paper-based version of the rubric below will be used by the tutors to mark the digital guides. Students will receive feedback on their performance in each of the categories indicated in the rubric. See LMS for the rubric.

— MAJOR ASSESSMENT: MODERATION —

When all the tutors have marked their students' digital guides, there will be a moderation process, led by the unit co-ordinators, to ensure marking is fair and equal across all tutorial groups. Only after the moderation process is complete, and any necessary adjustments have been made, will marks be released to students. In light of university-wide regulations governing the grading of undergraduate units, scaling of marks may be carried out if necessary to comply with university requirements.

— MAJOR ASSESSMENT: REMARKING —

If, once you have received your mark and read your tutor's feedback, you are not satisfied that your digital guide has been fairly marked, you are advised to take the following steps:

- 1) Approach your tutor for clarification. Most concerns can be settled through this process.
- 2) If you are not satisfied with your tutor's clarification, you may request a Stage 1 review, but should note that formal requests for review must be lodged within 5 working days of receipt of the academic decision. Please note that this process may result in a lower mark than the one initially received.

After class

Required online task:

You should spend the week working on the major assessment, ready for submission on the Friday of Week 11. Please contact your tutor with any queries about the content, presentation or submission of this assessment.



General Guidelines

Grades and Marks

The following grades are standard at UWA:

Grades		Marks
Higher Distinction	HD	80-100%
Distinction	D	70-79%
Credit	CR	60-69%
Pass	P	50-59%
Fail	N+	45-49%
Fail	N	0-44%

Working Out Your Grades and Marks

Marks you receive during the year are provisional only. Marks are only official after they have been passed by the Board of Examiners.

Your marks for your **automated lecture quizzes** will be automatically calculated each week, and you can see these marks within Blackboard. Your marks for your **online discussion board activities** will be assessed by your tutor on a three point scale.

Students who joined the World of Mobile Learning unit late (i.e., in Weeks 2 or 3) will not lose any marks for the period where they were not yet enrolled.

Literacy Requirement

The University has a responsibility to the community at large to set high standards in all fields, including literacy. It is imperative that we ensure our graduates possess the skills of tertiary literacy and can communicate well in their chosen disciplines. Literacy in this context can be conceived of in two ways:

- ◆ generally, the competence to express oneself using a standard variety of English appropriate to a tertiary level;
- ◆ specifically, the ability to think, read, listen, and write well within particular contexts, according to the traditions and usages of particular disciplines.

This unit aims to help you progress towards the University's literacy goals.

Referencing

You are required to include references in your major assessment. When doing so, please use a standard bibliographic format. The most commonly used style in the Graduate School of Education at UWA is the APA style adopted by the American Psychological Association, details of which can be found at:



<http://libguides.library.uwa.edu.au/apa>

This is the referencing style followed in this unit outline. The following examples may be useful as models of common reference types:

STANDARD REFERENCE TYPES:

► **Book:**

Shirky, C. (2008). *Here comes everybody: The power of organizing without organizations*. New York: Allen Lane.

► **Chapter in book:**

Cochrane, T. (2013). A summary and critique of m-learning research and practice. In Z.L. Berge & L.Y. Muilenburg (Eds.), *Handbook of mobile learning* (pp.24-34). New York: Routledge.

► **Article in journal:**

Warschauer, M. (2007). The paradoxical future of digital learning. *Learning Inquiry*, 1(1), 41-49.

► **Web document:**

EDUCAUSE Learning Initiative. (2012). *7 things you should know about flipped classrooms*. EDUCAUSE. Retrieved from <http://www.educause.edu/library/resources/7-things-you-should-know-about-flipped-classrooms>

NEW REFERENCE TYPES:

► Image (taken from internet):

Unsworth, J. (2015). DSC_8561. *Flickr*. Under CC BY-NC 2.0 licence from <https://www.flickr.com/photos/44937957@N05/18636784574/>

► Image (photo taken by you or on your behalf):

Smith, J. (2015, Apr. 20). Classroom activity. Used with written permission of J. Smith (photographer) & M. Jones (subject).

► App:

British Council. (2015). *Johnny Grammar's word challenge* [app] V. 3.1.3. Screenshot by J. Smith (2015).

Plagiarism

Introduction

All forms of cheating, plagiarism and copying are condemned by the University as unacceptable behaviour. The Faculty's policy is to ensure that no student profits from such behaviour.

What is Plagiarism?

Plagiarism is the presentation of the work of other people as one's own work, without referencing its source or attributing it to its intellectual proprietor. Such misuse of the work of others constitutes plagiarism, whether that work is in published or unpublished physical form, or in the form of thoughts or ideas. Plagiarism is the most serious of academic offences because it is a form of cheating.

Principles to be Applied

All work submitted by any student in the Faculty of Education is to be the work of that student alone, unless otherwise indicated, such as in group assignments. Students may, and indeed are encouraged to, draw upon the work of others, but it must be duly acknowledged and referenced in accordance with standard academic conventions. Work that, in whole or in part, is not that of the student or students submitting it will be regarded as plagiarised, and will be dealt with in the manner outlined below.

Dealing with Plagiarism

Detailed information on plagiarism and its consequences can be found in the Academic Conduct guidelines of the University, which can be found at:



<http://www.governance.uwa.edu.au/procedures/policies/policies-and-procedures?policy=UP07%2F21>

Appeals against Academic Assessment

If you feel you have been unfairly assessed, you have the right to appeal your mark by submitting an Appeal Against Academic Assessment form to the Head of School and Faculty Office. The form must be submitted within *twelve working days* of the formal despatch of your unit assessment. It is recommended that students contact the Guild Education Officers to aid them in the appeals process. They can be contacted on +61 (0)8 9380 2295 or at: education@guild.uwa.edu.au. Full regulations governing appeals procedures are available on the Student Complaints webpage of the University at:



<http://www.student.uwa.edu.au/life/complaints>

Charter of Student Rights and Responsibilities

This Charter of Student Rights and Responsibilities upholds the fundamental rights of students who undertake their education at the University of Western Australia.

It recognises that excellence in teaching and learning requires students to be active participants in their educational experience. It upholds the ethos that in addition to the University's role of awarding formal academic qualifications to students, the University must strive to instil in all students independent scholarly learning, critical judgement, academic integrity and ethical sensitivity.

The Charter also refers to the responsibilities of students. In particular, it is important to understand that despite all efforts to promote successful teaching and learning outcomes, a student may still not reach the required standard to pass a unit. Please refer to the full Charter of Student Rights and Responsibilities at the URL below:



<http://www.secretariat.uwa.edu.au/home/policies/charter>

