MOOCs @ UNSW

This presentation introduces UNSW’s work in MOOCs

- Distinctive elements of MOOCs
- Rationale for UNSW engaging in MOOCs
- UNSW and Coursera
- UNSW approach to develop MOOCs
- Schedule of required activities to develop a UNSW MOOC
- Resources to support UNSW MOOC Development
- UNSW course design model
- Application process to develop a UNSW MOOC

For more information, please contact LTU:
Bob Fox bobfox@unsw.edu.au or
Patrick Stoddart p.stoddart@unsw.edu.au
MOOCs @ UNSW

Distinctive Elements of MOOCs

MOOCs (Massively Open Online Courses) are large-scale, open access, interactive courses available via the web.

Open Educational Resources or OER are freely available educational resources used for teaching or learning and do not usually constitute a course.

MOOCs are composed of:

• **Resources** (e.g., subject content, practical demonstrations, mini-lectures on video, etc.).
• **Activities** (tasks and problems for participants to solve in engaging with and through content)
• **Support** (help to build learning communities, understanding and learning competencies)
• **Evaluation** (formative evaluation to monitor and improve learning)

MOOCs leverage new technologies to enable interactive study on-line.

MOOCs are not content repositories but courses that enable active, interactive, connected learning
Rationale for UNSW engaging in MOOCs

As part of the *Learning & Teaching Strategy 2014-2018*, UNSW has agreed to develop a small number of flagship MOOCs:

- **To learn from the experience of developing and delivering MOOCs and from data collected from our MOOCs** to further improve the quality of on campus and blended learning programs/courses across all faculties at UNSW and to build institutional capacity for quality learning.

- **To conduct research into effective learning and teaching** through the use of *emerging practices* in the context of MOOCs.

- **To provide widespread support for remediation** in key areas (e.g., English, Maths, Science) to current and prospective UNSW students.

- **To deliver non accredited continuing professional education** opportunities in defined professional areas.

- **To enable admission** by ensuring students have opportunities to develop and demonstrate the necessary pre-requisite knowledge and skills to be admitted to a UNSW program/course.

- **To market and recruit students** by showcasing quality UNSW program/course and teacher expertise and to help develop student understanding of the standards required to pursue a program/course at UNSW.
UNSW & Coursera

- UNSW has entered into a partnership with Coursera to develop and deliver its MOOCs.

- Coursera is currently the largest of the 4 primary MOOC platform companies (the others edX, Udacity and the nascent FutureLearn). It is a for-profit company currently operating with venture capital founded by Stanford Computer Scientists Andrew Ng & Daphne Koller.

- Coursera provides the platform and hosting of content, inc. bespoke China CDN and support for course operations and design & explores monetization models on behalf of the company & its partners. Aggregated analytics are provided as part of the agreement.

- UNSW can offer closed courses to registered students & company will not contact those students nor use data. May require fee negotiation on course elements.

- All IP resides with the respective partners independently.

- UNSW’s contract with Coursera stipulates a number of Acceptance, Accessibility & Quality Assurance milestones before a course can be launched & during course offerings.

- The courses must be project managed and actively supported by UNSW staff commitments. Course Leads & Guests must action agreements individually.

- Course design is unlimited beyond requiring a modular approach where Learning Outcomes are achievable within the module (and may work to broader outcomes).
MOOCs @ UNSW

Schedule of required activities to develop a
UNSW MOOC
UNSW Approach to Develop MOOCs

Key stages in initiating, developing and reviewing UNSW MOOCs

1. **EOI** - identifying rationale and reasons for developing the MOOC

2. **Course Descriptor & Introductory Video**
   Coursera requires introductory information about each course, one semester before the course is offered

3. **Course Outline**
   Articulation of learning outcomes for course and for each week; outlines for resources, activities, support, formative evaluations, assessments, etc.

4. **Courseware Development**
   Design and development of course components identified within Coursera applications; video and course components production. Summative mid-course and end-of-course assessments, within course templates

5. **Evaluation & Reporting**
   Development of evaluation and reporting parameters and strategies
MOOCs @ UNSW

Resources to Support UNSW MOOC Development

The University will make the following resources available to faculties to support individual MOOC development:

1 FTE Educational Developer Project Manager

0.5 FTE Educational Technologist

Funding to support video production & web development/scripting

Funding for partial time release of key teaching staff to develop the MOOC

Funding to support Graduate Teaching Assistants for the first offering of the MOOC

Other resources to be provided by the University:

• LTU support for curriculum design, courseware development, technical support, evaluation and reporting, analysis of learning analytics, quality assurance and improvement

• UNSW Library support for copyright and intellectual property advise and guidance

For more information, please contact LTU:
Bob Fox bobfox@unsw.edu.au or
Patrick Stoddart p.stoddart@unsw.edu.au
UNSW Course Design Model

UNSW uses the RASE model as a basis for course design. The model emphasises that courses typically comprise the following components to support and scaffold learning:

• **Resources** - e.g., crafted content to engage students through video experiments, demonstrations, mini-lectures, or readings, etc., enabling students to learn *with*, not just learn *from* resources

• **Activities** - for students to engage in using resources and working on tasks such as experiments and problem solving leading through experience towards achieving learning outcomes

• **Support** – including peer, GTA, course leader and technology-platform support to help students solve emerging difficulties

• **Evaluation** - to provide structured information to guide and enable students’ self-progress and to serve as a tool for understanding what else is needed to ensure that learning outcomes are being achieved

along with a range of summative **assessment** activities to assess and provide a basis for the certification of learning.
UNSW Course Design Model

Determine the Purpose of the Course

Articulate Learning Needs & Intended Learning Outcomes

Resources
- Foundation content
- Case studies
- Readings
- Critical commentary
- Podcasts
- Vodcasts
- Lectures

Activities
- Self-paced
- Cohort-based
- Automated / Smart Tutorials
- Virtual Laboratories
- GTA supported Tutorials / labs

Support
- Peer support
- GTA/Peer-led forums
- Social networking
- FAQs
- Individual consultation
- Campus based learning support services

Evaluation
- Rubrics enabling self & cohort monitoring progress
- Auto-assessment & feedback
- Authenticated auto-review

Assessment – Measuring Actual Learning Outcomes
- Auto/Self/Peer Assessment of Factual, Conceptual, Procedural knowledge
- Auto/Self/Peer/Teacher Facilitated Assessment of Factual, Conceptual, Procedural knowledge and generic skills
- Auto/Self/Peer/Teacher Facilitated Assessment of Factual, Conceptual, Procedural knowledge and graduate capabilities

Align Method of Recognising Learning in the Course with Purpose
- Certificate of Completion
- Certificate of Achievement
- Advanced Standing
Application Process to Develop a UNSW MOOC

1. Complete the Expression of Interest (EOI)

2. EOI reviewed by the DVC(A) - applicants notified of outcome

3. LTU works with the Faculty/School/applicant to develop a Project Plan and schedule for their MOOC development.

For initial assistance/information, please contact: Bob Fox bobfox@unsw.edu.au or Patrick Stoddart p.stoddart@unsw.edu.au