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Online education: An emergent response or a necessity?

Purpose and context of the presentation

At the Australian Maritime College, courses moved from face to face to fully or partly online during COVID-19. Four courses were the focus of this presentation.

Delivery best practice

It was found that the provision of pre-recorded content and knowledge through PowerPoint slides combined with live sessions which focused on problem solving, discussions and group work were the most effective.

Challenges of moving to online teaching

- **Time and resources** – emergency response, limited time to switch and plan delivery.
- **Standards and consistency** – how to meet the standards of external accreditors, confusion for students when different lecturers had different practices.
- **Digital literacy of staff and students** – multiple programs were confusing for students with lower digital literacy, academic staff needed support including technical support for online learning design.
- **Attendance and engagement**.
- **Practical components** - the need to move away from lab-based and practical work.
- **Assessment** – the need to redesign content and assessment, potential compromise of authority and integrity of assessment in at-home assessment. This led to the questions: *What kind of engineers are we training? Can we redesign the assessment and keep its integrity? Are we assessing the real attainment of students' learning outcomes?*

Success factors

Three success factors were identified: commitment, engagement and monitoring.

Commitment – commitment by the staff and university was critical. Key enablers included:

- Provision of resources and support by university, e.g. providing online learning templates, workshops and professional learning, practical support, online resources, tips with assessment (re)design and a pre-existing LMS.
- Teaching staff willing and motivated to try innovative approaches and respond creatively.
- Community of practice in which formal and informal sharing of best practice, experiences, student feedback and success stories supported reflective teaching and peer learning across disciplines.
- Student feedback from the beginning of the transition and continuously thereafter and responding to feedback through actions to adjust teaching and learning.

Presentation Summary - Extracted Key Points from June AAAF Presentations

- Staying in contact, by checking in with students on their wellbeing, combatting isolation, recognising the broader student experiences outside of study and having coordinators call students to check on them.

Engagement – engagement was a challenge. Key enablers included:

- Detailing clear steps (the *how*) for achieving the *what* (clear learning outcomes) and the *why* (clear reasons for what students are doing).
- The asynchronous online forums were a powerful resource.
- Reminders to students that it is a challenging time, motivating them to succeed and encouraging them on their successes.
- Regular communication by teaching staff, their availability and willingness to help.

Monitoring – ensuring students are engaged and committed relies on monitoring to ensure that students are engaged with the content, are completing tasks on time, are interacting in the online space and their study is progressing. Enablers included:

- Use of the LMS analytics to monitor student engagement.
- Use of Intelligent Agents to notify teaching staff of issues – automatic emails to disengaged students, high achievement emails to celebrate success, weekly monitoring and email check-ins, encouraging students to make contact.

Assessment

When planning assessment, ask:

- Authenticity – is the assessment related to the learning outcome?
- Integrity – how do we know that student is doing the work?

Best practice includes online discussions for students to practise giving and justifying opinions, not designing content that students can easily find answers to online, providing scenarios and case studies, and making assessment context based.

Conclusion

Harnessing technology will be key to ensuring authentic learning and student integrity with assessment. For example, Prof Fei is experimenting by designing a 5-mark assessment followed by a 20-mark assessment. Students usually do not cheat for only 5 marks. Any inconsistencies between the small and large assessments will be obvious. Artificial intelligence is useful here to identify patterns and inconsistencies.

Overcoming student challenges:

- Poor internet can be mitigated by making all learning available up front so that students can download the entire package when they have secure internet access. Material can also be provided in physical formats, e.g. USB, CD-ROM, DVD.
- Coordinating assignment deadlines between units helps to take pressure off students.
- Ensure case study or scenario-based work is possible within the home, relevant to the home context (so that students do not need to travel anywhere)

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