CASE STUDY

Exploring the use of Open Educational Resources (OER) in medical education at the University of Tasmania

Institution & Institutional Context

The University of Tasmania (UTAS) is the only higher education institution (HEI) in the state of Tasmania. It is a regional, multi-campus institution with internationally significant research institutes centred on the Antarctic, agriculture and health. UTAS has undergone a period of significant growth, with over 30 000 students currently enrolled. The university has a tradition of face to face teaching but has recently adopted a blended learning model, where all units have an online presence.

Keywords and OEP themes

Student use of OER, Student voice

What is the case study about?

The use of Open Educational Resources (OER) has the potential to make significant impact upon medical education, but the understanding, use and opinions of OER amongst Australian medical students has not been described in the literature. In order to understand these factors, students and staff within the School of Medicine at University of Tasmania were surveyed. The project was carried out as part of the 2014 Students as Change Agents initiative, through the Student evaluation, review and reporting unit (SERRU) of the University of Tasmania.

What is the issue or need you are addressing?

In medical education, there has been some attempt to engage with open teaching and learning resources, including what is known as FOAM (Free Open Access Medical Education), often referenced on social media as FOAMed for search purposes. In the FOAM movement, content is primarily based around social media discussion and resources such as blogs and podcasts. Although other specialties are increasingly engaging in FOAM, this is particularly active in the field of Emergency Medicine (Nickson and Cadogan, 2014). While this represents one area of engagement with OER in postgraduate training, there are further opportunities for OER in undergraduate medical education.

OER are likely to be an important tool for Australian undergraduate medical students. Internationally the cost of textbooks is increasing (Bureau of Labor Statistics, 2014) meaning that it is more difficult for students to afford texts required to complete their study (SPARC, 2014, U.S. PIRG Education Fund and the Student PIRGs, 2014). Two thirds of Australian students are worried about their finances, and textbooks are the study related expense that students most struggle to afford (Bexley et al., 2013). Furthermore, the rapid pace of discovery in medical and scientific research including evidenced-based medicine demands up-to-date information. Thus, there is potential for OER to benefit undergraduate medical students. However, utilisation and knowledge about OER in undergraduate medical education remains unclear.

How was the initiative implemented?

The project aims were to survey participants on their knowledge of OER, to assess the benefits and barriers in OER adoption, as well as to build upon previous research by directly comparing student and lecturer responses within the same faculty. A survey was designed to assess student and staff understanding, use and opinions of OER. Due to the additional use of the term FOAM in the medical community, understanding of FOAM was also checked to compare with OER. Students and staff completed a nearly identical survey (e.g. replacing the word 'learning' with 'teaching') so that results were able to be compared. The survey was sent out to all students in the Bachelor of Medicine/Bachelor of Surgery (MBBS) course in the Faculty of Health at University of Tasmania, and all staff potentially teaching into this course. The target population is therefore 559 medical students and up to 143 academic staff.

Outcomes

At the time of closing the survey, responses were received from 44 students and 15 staff. This represented 8% and 10% of the eligible cohort respectively. Staff taught into a variety of years in the course. However, 85% of students were in years 3-5 of the course, with increased clinical teaching. Therefore the student results primarily reflect opinions of clinical students.

The major findings of this study were:

- A significant proportion of both students and staff had limited understanding of both OER and FOAM.
- Some students and staff in the medical school are already involved in the creation of OER.
- Websites were the most utilised form of OER in both learning and teaching.
- Both students and staff have found ease of access, and lack of cost, to be encouraging factors in using OER.
- Students have difficulty in selecting OER resources, either because they cannot find them, or are unsure if a resource is reliable.

In addition, for both students and staff, the most frequently mentioned factors that have encouraged them to use OER in the past were accessibility and cost (free). Other factors encouraging students to use OER included resources being up to date, broadening knowledge and

portability. On the other hand, the factors preventing students from using OER were around selecting resources: either firstly not knowing resources exist or where to find them; or secondly not being able to assess their quality, reliability or trustworthiness. A number of students again noted factors relating to needing memberships or paid subscriptions to online services as a barrier to use.

Issues & challenges

According to the researchers, the main limitation of this study was the low response rate. This could be attributed to a number of factors, such as: lack of interest in the study topic, lack of understanding about the topic of the study, time taken, timing during semester and lack of a reward for completing the survey. However, of those who participated, the majority provided useful answers in content and length. Another challenge faced by the researchers was the short timeline in which the project had to be run (one semester) and the limited funding. They believed that with more time and fund, response rates would have been higher. Despite the small number of participants, it was possible to note a number of responses in common, particularly for the students.

Insights and Recommendations for National and/or Institutional Development

The understanding of student factors encouraging or preventing OER use fills a gap in the current literature. Understanding staff and students' knowledge and utilisation of OER is important for informing the university about OER uptake, barriers and benefits in medical education. Furthering this study with measures to increase survey participation may provide useful recommendations as to how OER may be incorporated into the undergraduate medical curriculum. In particular, students and staff had similar encouraging and preventing factors for using OER, suggesting that collaboration will be important in addressing these.

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