Knowing What Your Graduates Do: Tracking Geoscience Alumni Employment Using LinkedIn

A: INTRODUCTION - Geoscience graduates commonly leave university and gain employment as professional geoscientists. Despite efforts by faculty individuals, universities, government and industry, alumni employment data are often limited and lacking in both detail and geoscience focus. Here we describe a simple and powerful approach for using the professional social media platform LinkedIn as a tool for gathering and visualising plentiful and detailed geoscience alumni data.

1. Set up LinkedIn profile
2. Acquire graduate names
3. LinkedIn search
4. Connect with graduate
5. Online conversation & permission
6. Update database
7. Database analysis

IRB implications - The ethical implications and guidelines for using information publicly available on social media for this type of research are not clearly stated. The advice from our institution was to apply for full IRB approval, which was granted. Other institutions may advise differently. We are happy to share further details about our IRB application.

Fig. 1: Procedural steps for using LinkedIn to track geoscience alumni employment.

B: PROCEDURE (Fig. 1):
1. A faculty member, preferably one who has plenty of teaching contact and is familiar with, and to, the students, creates a LinkedIn profile (Fig. 4).
2. A database of graduate names is compiled (Fig. 2). The current Plymouth database spans 2007-2013 and contains 467 graduates.
3. A search of graduate names is conducted using LinkedIn. Positive returns are examined and basic information (further education, job role and company etc.) can be viewed.
4. The graduate is sent an invitation to connect.
5. If accepted a follow-up online conversation discussing career experiences can be conducted and a request to use such information in an anonymised way is made.
6. The database is updated.
7. The content is analysed, from which visual representation of the data, i.e. word clouds (e.g. http://www.wordle.net/) can be generated depicting, for example, the most commonly occurring job roles (Fig. 3.) and companies employing Plymouth University graduates (Fig. 5).

Fig. 2: Example of database entries.

Fig. 3: Top 50 professional roles of Plymouth geoscience graduates (2007-2013).

Fig. 4: Example of a faculty member LinkedIn profile.

C: OUTCOMES - Figures 3 and 5 show that Plymouth geoscience graduates are most commonly employed within the geoscience sector, specifically engineering geology and hydrocarbon exploration, in a wide range of organizations from small enterprises through to large multinationals. Further outcomes that have been planned to be generated include:

• An indication of the proportion of graduates who go on to further academic study (e.g. MSc);
• An indication of the time lag between graduation and gaining employment into a professional role, i.e. embarking upon a career (Fig. 6);
• Examples of early career paths followed by geoscience graduates entering the professional workforce.

Fig. 5: Companies currently employing ≥2 Plymouth geoscience graduates (2007-2013).

Fig. 6: Change in employment status of students graduating in 2012.

Fig. 7: Beneficiaries of using LinkedIn for geoscience graduate employment tracking.

D: WHO BENEFITS AND HOW? (Fig. 7)

Students
• Provides insights into potential job roles and companies;
• The information is empowering as it demonstrates success of their peers;
• Demonstrates entering into a career may not be immediate (Fig. 6).

Faculty
• Provides an evidence-based dataset on geoscience graduate employability;
• Data can be used as a marketing tool for student recruitment;
• Can attract interest from potential employers (e.g. geo-careers fair).

Prospective students
• Demonstrates the careers potential resulting from a geoscience degree;
• Indicator of employment success for Plymouth University geoscience graduates;

Employers
• Demonstrates Plymouth University geoscience graduates are worth employing;
• Initiates, maintains and builds contacts between university geoscience departments and industry.