

Expanding Undergraduate Professional Practice (Integration of WIL & Laboratory Health & Safety Best Practice)

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The Context

- Knowledge and application of Workplace, Health & Safety (WH&S) procedures are now major aspects of most industrial research, teaching and other professional positions.
- Many undergraduate students are unaware of the importance of WH&S, possess only a theoretical knowledge with little opportunity to develop a working knowledge

The Problem

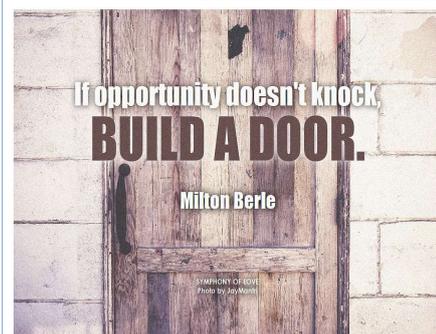
- New WH&S Qld legislation requires that all chemicals be relabelled according to the GHS by the end of 2016, otherwise the institution could be deemed legally non-compliant.
- Infringement of current legislation pertaining to occupational health and safety (OHS) procedures may result in substantive fines and/or closure of teaching and/or research laboratories.
- If chemicals were not labelled according to GHS users may not be fully aware of risks and could endanger health of themselves or others.
- Significant challenges to meet requirements in a timely manner lead to a potential risk of non-compliance
- In addition, undergraduate students find it exceedingly difficult to find laboratory work experience opportunities prior to completing their final year of their degree program

The Initiative



Aims

- Provision of opportunity to participate in a mutually beneficial project developing long-term skills and networks
- Developing middle year science program student employability skills especially in lower academically achieving students
- Implementing the Globally Harmonised System (GHS) of chemical labelling & classification
- Develop WH&S Standard Operating Protocols for staff & students



Program Outcomes



- A low cost, rapid and sustainable mechanism by which both participants and laboratories all gained a number of positive outcomes
- **For Laboratories**
 - More than 4500 unique chemicals were inventoried and re-labelled in a very short period of time.
- **For Staff and Postgraduate Students**
 - Development of the chemical database and SOPs generated by the students for future reference by users.
 - Scholarship students trained both academic and postgraduate students on how to prepare labelling
- **For the University**
 - Meeting GHS compliance by the required deadline
- **For the greater scientific community**
 - The suitability and sustainability of the scholarship programs has prompted other faculties and research centres to look at implementing similar systems to address the same need.

Short-term Evaluation Findings

- Comparison of pre and post student perceptions regarding their knowledge and implementation of GHS and ChemWatch showed a distinct increase over all three cohorts.
- Comparison of pre and post student confidence regarding their capability to develop SOPs, undertake appropriate risk assessments, prepare and implement compliant labelling systems showed a distinct increase over all three cohorts.
- Many students indicated they felt the opportunity to network with both academic and technical staff and postgraduate students to be highly beneficial
- Students indicated that the working knowledge of WH&S processes and experimental procedures gained was of significant value and enjoyment to them
- Many students also highlighted the value of the networks they developed during the scholarship period
- **Need a statement here about staff perceptions**

Evaluative Methodology

- Student perceptions and confidence regarding a variety of different activities associated with the scholarship program were recorded both prior to beginning the program and the again on conclusion of the program.
- Staff feedback regarding their perceptions of the program were also collated.
- **This project received Human Ethics Approval BPS/14/HREC**

References

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