

Parallel Session 11: PCST network: an added value for science communication training?

VALUE OF INDUSTRY LINKS IN NEW SCIENCE COMMUNICATION DEGREES

Jan Dook¹ and Nancy Longnecker²

¹ *Centre for Learning Technology, M408, The University of Western Australia, 35 Stirling Highway, Crawley, Western Australia 6009. Fax: +61 8 6488 1039, Phone: +61 8 6488 2597 Email: Jan.Dook@uwa.edu.au*

² *Centre for Learning Technology, M408, The University of Western Australia, 35 Stirling Highway, Crawley, Western Australia 6009. Fax: +61 8 6488 1039, Phone: +61 8 6488 2492 Email: Nancy.Longnecker@uwa.edu.au*

Abstract

Science communication programs at The University of Western Australia (UWA), include a BSc (Communication Studies), Graduate Certificate, Graduate Diploma and research degrees. Strong links with both the science communication community and scientific research community are vital to the success of our program. Because of space constraints, this paper gives two examples: 1) staff external to the University who supervise student projects in a practical work setting and 2) University staff who provide subject material for a display assignment. Other collaborations not discussed in this paper include guest lectures, press release and fact sheet assignments, case studies and research projects.

Key words: communication, education, industry links

Text

Introduction

Who is ‘*the industry*’? We consider it vital to link with people who work in the “industry of science”, both practising research scientists and science communicators. Strong support from University administration and staff provides excellent links with internationally recognised researchers. Western Australia has a strong science communication community and many contribute to UWA’s Science Communication programs, including staff from Scitech Discovery Centre, Perth Zoo, CSIRO, the Western Australian Museum, and state agencies such as Western Australian Departments of Agriculture, Conservation and Land Management, Fisheries and Health.

The philosophy of the Science Communication program at UWA is based on constructivist theory in that a learner builds on their foundations of knowledge and that personal experience is a powerful way to learn. Assessment in all of the units is assignment based.

As discussed in a separate poster at this conference, we attempt to make all of the assignments in the Science Communication units authentic. Industry colleagues contribute to assignments and provide guest lectures, tutorials and project supervision. In this paper we discuss the contribution of industry

people in terms of students putting their learning into context via personal experience.

External links

Students enrolled in the undergraduate degree participate in a 130-hour practicum in their final year. Each placement involves a specific project as well as general duties in the host organization.

Not surprisingly, students have found the practicum experience to be valuable. Positives such as consolidating previous theoretical knowledge and learning, developing a suite of skills and allowing for a taste of potential further studies have all been identified. Having the opportunity to network and make future contacts are also seen as being significant.

One student mentioned these differences between studies and the workplace:

“The University has deadlines defined in advance along with assignments and expectations that are fixed... Employment involves collaboration with others (especially government) for a shared product. Deadlines change, new projects/ deadlines arise overnight and you impact on other people. I feel this understanding is often lacking in some graduates and so professional placement is useful for all degrees.” (student, 2004)

From the industry point of view, hosting practicum students can be difficult. Substantial time is required to manage the student and ensure that they are getting a worthwhile experience. It is therefore important that the practicum has benefits for the host agency apart from the opportunity to collaborate with the University.

The student might bring skills that are lacking in the organization or work on a task that would otherwise not be attempted. A young person can add a new dimension. One supervisor has said, *“as she is currently studying, she is also bringing contemporary thinking from her field to the E(ducation)&L(earning) Team. It is important for experienced employees to be challenged in their thinking and ways of doing things from time to time. Hosting a practicum student is one way of doing this (supervisor, 2004)*

Internal links

A number of assignments involve working with practising research scientists at UWA. In their ‘Display Assignment’, students work as a team and liaise with a researcher to create a poster.

In their Science Communication units, students learn the fundamental importance of simplifying complexity for communication with the general public. Practising researchers do not necessarily have that understanding. In this and other assignments, students learn the difficult tightrope act of trying to please the researcher they work with and provide a clear, concise picture of a research project(s).

Some staff express frustration by what they see as an oversimplification of their life’s work: *“My impression is that they decided it was too hard to come to grips with the subject matter and therefore did something rather shallow,” (participating academic, 2004)*

Most staff enjoy contributing to the assignments and are happy to do so again. For example, of the 11 staff who participated in the 2004 Display Assignment, ten replied to a survey. All of those were willing to participate again, eight 'anytime' and two 'occasionally'. Even staff who found the experience 'frustrating' or 'okay' as opposed to 'rewarding' were happy to participate again.

There was no correlation between staff perception of assignment end product and their willingness to participate. This may be explained partially by academic staff's acceptance of responsibility of providing learning experiences. In addition, however, we believe that academic and research staff value the experience themselves. "... *we as researchers can get some feedback on what students, the general public and/or other scientists may think about the presentations... ie Do they work? Do they grab people's attention?*" (*participating academic, 2004*).

Summary

Good industry links to education programs provide benefits to students, program coordinators and participating staff. Benefits for students include putting their learning into real-life contexts, getting glimpses into the workplace and networking with potential employers. Program coordinators maintain their awareness of current practise in research and science communication and links help define useful research projects and collaborations. Participating industry staff benefit by the work contribution that students can make. A significant benefit can also be involvement in a university program with bright and enthusiastic students given professional science communicators frequently work by themselves within their own organization.

