

ISSUES IN PROFESSIONAL OCCUPATIONAL HEALTH AND SAFETY EDUCATION AT THE UNDERGRADUATE LEVEL

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INTRODUCTION

Bachelor Degree programs in Occupational Health and Safety (OHS) have operated in Australia for a little over a decade. Whilst several hundred graduates from these programs are now successfully employed throughout industry there are issues relating to their education that are worth reflecting upon. Whilst the author observes these directly in one university, it is clear that many issues are common elsewhere. This discussion paper is offered to let each involved sector be aware of factors both within and outside educational institutions that bear upon the programs in OHS.

The substance of the issues relates to the interests of the particular stakeholders in the professional education process – the community, industry, governments, the profession, educators and students. These are discussed in turn.

COMMUNITY EXPECTATIONS

In Australia, the community at large expects a high standard of safety and health. Individuals and families who are affected by work-related trauma and disease are simply not prepared to accept that their disablement was inevitable. Hopefully we have moved on from suffering multiple deaths in mines, construction and building projects, or unfettered exposure to hazardous materials and processes. Undeniably, the fatalities, injuries and ill-health that still occur are a matter of serious concern, but tend to occur in individual incidents in a wide range of occupations. This presents a challenge in itself, trying to understand, predict, prevent and manage the risk in an increasingly wide range of hazardous situations.

But does the community at large expect that it is necessary that there should be specific safety practitioners who hold university degrees to be the ones competent at managing occupational health and safety? Anecdotally it would appear that the professional safety practitioner is still not widely recognised publicly. The responsibility for workplace safety and health is invariably sheeted home, particularly legally, to employers.

The point here is that the community at large is not particularly concerned whether safety practitioners are university trained, just so long as work environments are free of risk. To this extent, university programs specific in OHS are generally not acknowledged nor seen as especially important by the community. One might contrast this with community expectations of the engineering or health professions.

INDUSTRY REQUIREMENTS

What then of industry itself? There is really no reason in current times why employers should be unaware of their duty of care towards employees. However, there are many degrees of compliance with that duty. Large organisations may employ, or at least have the capacity to employ, OHS and allied practitioners, or engage consultants practising in particular aspects of the field.

A study of the qualifications expected by employers of OHS personnel during the 1990's indicated a significant change in industry expectations. (Findlay, de Munk and Jackson, 2000). This indicated a distinct shift from a requirement for personnel with industrial experience and possibly a certificate or diploma, to those with Bachelor or postgraduate degrees and relevant experience. Further, there was a trend for more employment positions to couple the functions OHS with environmental management. (de Munk and Findlay, 1998).

Clearly, leaders of larger organisations not only recognise their legal duty, but understand the cost-benefit relationship in engaging suitably qualified personnel. It is most likely that the leaders in such organisations are themselves graduates in one field or another. There is therefore general support in these circles for the contribution of university-level training in OHS.

Smaller organisations understandably cannot employ specific OHS personnel and invariably allocate the OHS function to existing staff with or without any OHS training of substance. Further, there are many self employed, sole operators for whom engaging an OHS professional is not feasible.

So within industry there is a group of employers that will engage OHS professionals and a substantial group that for reasons of size and cost, do not. This supports the community perspective that OHS does not rely absolutely, or even substantially, upon university-trained professionals.

THE POSITION OF GOVERNMENTS

Where do governments stand on the matter of qualifications? Neither the Commonwealth nor State governments set registration or certification requirements upon people who practice in OHS. Some parts of legislation may refer to engaging "suitably qualified" people without specifying what this constitutes. Where plant or equipment must reach safety standards such as with pressure vessels, cranes, etc., the onus is upon the employer to gain certification. This normally involves qualified engineer's designs and the certification of operators, but not a person qualified in OHS. Where occupational health is concerned, practitioners such as doctors, nurses, chiropractors, physiotherapists all require to be state registered in order to practise.

So in matters of risk management, governments do not require practitioners to have formal tertiary education. In essence the OHS professional needs to know the legislation, codes of practice and standards set and administered by governments and statutory authorities, but they are not accountable to any registration body. This has implications for the scope and level of qualifications offered by universities and other educational institutions.

THE INFLUENCE OF THE PROFESSION

Does the profession itself have influence on university programs, or is it merely a group of knowledgeable and like-interested individuals who practise in the field? Occupational health and safety is still relatively young as a stand-alone, multi-disciplinary profession. The Safety Institute of Australia (SIA) fully supports OHS education at all levels and has sought accreditation powers such as are held by the Institution of Engineers Australia (for engineers), the Royal Australian Chemical Institute (for industrial chemists) and other similar professional bodies.

But as governments do not require accreditation in OHS, then the SIA has no formal influence on standards or content of OHS education. Whilst accreditation may be mutually desirable for both the SIA and educational bodies it has not yet happened.

It could be noted that only a fraction of OHS practitioners in Australia are members of the SIA, and conversely that many members of the SIA have no formal tertiary education in OHS.

It can be noted that at the author's university, the Program Advisory Committee includes members who are both professional members of the SIA and others who are not (but may hold other professional affiliations).

Here again the implication is that it may be desirable to have SIA influence upon educational programs, but it is not a requirement of any authority. Further, other professionals may be involved in influencing the standards and content of programs.

THE EDUCATION PROVIDERS

Fifthly, we should consider the view of the educational institutions themselves. The Certificate and Diploma programs offered at TAFE colleges and institutes follow a set curriculum and aim to meet set standards. This has the significant asset of being standardised across Australia.

However, at Bachelor Degree level, universities may conduct programs as they see fit, choosing their own curriculum, meeting internally established standards. There are six or seven universities that offer OHS-specific bachelor degree programs. Others may offer OHS majors as part of other degrees. Most follow the guidelines provided by the National Occupational Health and Safety Commission (Worksafe Australia, 1994). But the particular curriculum tends to be influenced by the interests of the Faculty or Department providing the program. This may typically be Applied Science, Business, Life or Behavioural Sciences. Therefore, whilst there may be a common interest, there is no set, uniform OHS Bachelor Degree activity across Australian universities.

As the conduct of degree programs is relatively recent, the various universities may also have different levels of staffing and degrees of research activity to support the programs. The recruitment of suitably qualified and experienced staff is an issue because of the relatively small pool of available people. Not the least of the problems is the ability of a university to attract OHS academic staff from industry at higher levels, where salaries are often considerably higher than universities can (or are

allowed to) offer. This issue has not altered since being identified almost ten years ago (Quinlan, 1995).

Most universities are currently facing difficult financial times. Whilst the reasons are varied and not to be argued here, it does mean that all programs are operating under tight budgets. Government funding for undergraduate programs hardly supports relatively small programs, a characteristic of most OHS programs. Apart from normal teaching activities, staff are expected to be involved in attracting income from research, consulting, conduct of short courses or other activities.

It can be noted that any education program requires a certain “critical mass” of students, teaching staff, technical and administrative support in order to function. Government funding to universities is based on clearly defined budgeted profiles. As a general rule, any growth in student intakes in one area is at the expense of another. Conversely, programs with small numbers of participants, as are most OHS Bachelor Degree programs, are at risk of closure. They are relatively less efficient to conduct compared with, for example, many business and information technology programs. Further, there is a moral question of expanding simply to exist, when there may be little chance of large numbers of graduates in a specifically orientated program finding appropriate employment.

So issues of staffing and economy are internal university matters which influence the existence and maintenance of most university OHS undergraduate programs. Significant expansion of undergraduate OHS programs in the foreseeable future is not likely.

STUDENT ISSUES

There are then issues about the applicants and students themselves in the programs. RMIT University recruits two groups of students into the OHS undergraduate program.

RMIT University believes, as do most other universities and many individuals, the OHS is a stand-alone profession worthy of supporting with an undergraduate program. Consequently the main input is expected from school-leavers. The major issue here is that OHS is not well known or understood as a profession by parents, school students and career advisors alike. Therefore, at the end of year 10 level when school students need to select their subjects for the next two years, appropriate for their proposed tertiary studies, many students are quite unaware of the opportunities in OHS.

This is reflected two years later when they apply for university places and don't know about the OHS programs, or lack the prerequisite places, or confuse OHS with occupational therapy and other similar titles. Arguably, there is a place for the United States approach to tertiary education of having all students complete a generalised undergraduate program before embarking on major studies in their field of interest.

The RMIT experience is that a relatively small number of applicants identify OHS as their first preference and really know what they are getting into. It is also noted that only a few applicants have very high entry scores from year 12. These aspects may reflect some of the issues raised earlier. The profession needs people of high intellect and ability both in practice, in research and in academe, and should seek to gain the interest of the most able.

Both RMIT and the executive of the Victorian Division of the SIA are conscious of the difficulty in promoting the profession and the undergraduate program within schools. Access to staff and students and availability of university staff and practitioners are two issues. Another factor that may contribute is that the profession has no career or salary structure such as exists in some other professions. The study by Findlay, de Munk and Jackson (2000) illustrated also that position titles for graduates varied considerably from OHS (or just safety) officers, advisers, co-ordinators, consultants, practitioner, etc..

Within parts of industry and amongst some practitioners themselves, there is still a feeling held that new, young graduates who have gained an OHS university degree cannot really hold a place in industry as an OHS professional without significant working experience and authority. This author would argue that such a pathway for school-leavers is no different from most other professions.

RMIT University and most other universities, have recognised the issues with school-leavers raised above and have been successful in “value-adding” to the student intakes that provide a challenge. Amongst other aspects, the program in OHS includes comprehensive work experience and off-campus project components. Graduation rates and graduate demand are high, indicating some level of achievement in overcoming perceived difficulties.

The second group of students, those of mature age and often with considerable work experience, are not so much a challenge for the university but to themselves. Full-time programs in OHS are normally of three year’s duration. For a mature age person often with family responsibilities, facing a loss of three year’s salary to gain a degree is a significant burden. Government financial support for students is meagre and the Higher Education Contribution Scheme can be crippling.

Part-time study then becomes the enforced choice. The likelihood of a minimum six year’s part-time study is also a considerable burden to contemplate. This is made more difficult at some universities because the program is offered only in the day-time, requiring broken hours away from work.

Alternative modes of study are therefore desirable for some people, and on-line and distance learning at undergraduate level is now offered at some universities. These are not cheap to develop and conduct.

CONCLUSION

These various issues are raised in order to let people from each sector of interest appreciate the influences upon the conduct of undergraduate programs in occupational health and safety. Whilst there are no requirements for OHS professionals to be formally qualified or registered, there should be a continuing demand from industry for university-trained OHS professionals. There has been a change in the expectations of industry with regard to the capabilities of graduates. There are growing pressures on viability and funding of small undergraduate programs. There are continuing difficulties in finding ways to influence secondary schools to support occupational health and safety as a recognised and desirable professional career.

Notwithstanding these issues, Bachelor Degree programs in occupational health and safety are likely to continue to hold a very significant place in the education and training in of practitioners.

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