



Reducing workplace injury and illness through occupational safety and health training and education at UCD

Prof Anne Drummond and David O'Dwyer

UCD Centre for Safety and Health at Work

UCD School of Public Health, Physiotherapy and Sports Science



HEALTH



ECONOMIC



TRAINING

SUMMARY

In 2015, 56 workers died while at work in Ireland, 3.8 per 1,000 workers were seriously injured, and 12.5 per 1,000 workers became ill as a consequence of their work (HSA, 2016). Occupational Safety and Health (OSH) management protects the right of workers to a safe place of work, and is regulated in Ireland. The need for OSH education and training is driven by a) workplace injury and illness statistics, b) health and safety management systems, and c) legislation. The law applies to all sectors and drives a need for sector-wide OSH education and training. The Barrington Report (1983) recommended multidisciplinary training for all relevant professions together.

UCD's Centre for Safety and Health at Work (CSHW) provides professional, multi-disciplinary OSH education and training commensurate with their role for employees with OSH responsibility. The programmes address the training needs of industry-wide, geographically-spread, part-time, busy, working adult, continuing professional education students and their employers. The suite of programmes (NFQ level 7 to 9) uses a variety of learning approaches including part-time, face-to-face, online, and distance learning, thereby reducing time spent both commuting or away from work.

UCD works with a number of large public and private sector organisations, such as ESB and Pfizer, who made policy decisions to train all managers, supervisors and / or safety representatives to a consistent standard. Over 8,500 students have successfully completed OSH training and education in UCD, and their contribution to work-related accident, injury and illness prevention at organisation level plays an immeasurable role in creating a positive safety culture and in reducing injury and illness rates at national level.

Over 8,500 students have successfully completed OSH training and education in UCD and now play a vital role in reducing injury and illness rates at national level.

EDUCATION AND TRAINING CONTEXT

Typical OSH students are busy mid-career adults (predominantly male), with work and family commitments, embarking on a part-time higher education programme. Students come from all professions and sectors of industry. Their choice of UCD programme (Certificate, Diploma, BSc, or MSc) is dictated by the level of OSH responsibility held or anticipated, and not by their highest level of previous education. This ensures all programmes comprise an eclectic skill-mix of students, which is a great peer resource.

Teaching and learning is coordinated by CSHW academics, who teach on their primary disciplines and coordinate a large panel of UCD and external experts, representing the multiple and disparate disciplines relevant to the principles of OSH management (e.g. law, management, health sciences, toxicology, statistics and psychology).



The UCD Certificate in Safety and Health at Work team. Pictured (l-r): Una Hogan, Tutor; Elaine Bowers, Tutor; Professor Anne Drummond, Programme Director; David O' Dwyer, CSHW Centre Manager; Dr Derval Cumiskey, Tutor; Dr Martin Lawless, Tutor; Darrell Fernandes, Tutor; Anna Noble, Programme Administrator.

WHAT WE DO

Flexibility and the ability to anticipate and respond to the needs of industry has sustained UCD's OSH education and training programme since the early 1990s, particularly through the recession, when other Irish third-level institutions discontinued their Diploma and Degree programmes. The post-recession upturn in Certificate numbers (fig. 1) will feed into the professional programmes, as between 5-10% progress to professional programmes from the Certificate.

Adaptations and developments include:

- Maintaining contact with OSH professionals in industry using an annual seminar, newsletters and a job advertisement service.
- Working with large organisations to develop a model that meets UCD's academic requirements and facilitates student participation and retention in their particular workplace.
- Developing new programmes and adapting existing programmes to meet national and industry OSH training needs.
- Adapting course delivery methods (to blended and online) helped overcome reduced training budgets, which were evident during the economic downturn.

Programme developments are underpinned by scholarship (Drummond et al 2007; Drummond and Guerin, 2005; and other conference publications), and teaching methodologies, and the supports provided to students, have resulted in teaching awards at university and at national level.

IMPACT

- 8,500 students completed an OSH Certificate, Diploma, Degree or MSc programme since the early 1990s, making an immeasurable contribution to the national body of OSH professionals and OSH-trained managers, supervisors and safety representatives in Irish workplaces.
- OSH Certificate education and training was delivered by satellite-TV distance education directly into 15 education and training institutions in towns and cities throughout Ireland (fig. 2). This reached students and workers to whom such training would not have been otherwise available (Drummond and Guerin, 2005).
- OSH Certificate education was delivered directly by satellite TV distance education into 12 large organisations (fig. 3) that made policy decisions to incrementally train all managers and/or safety representatives in-house over a planned period of time; such organisations report significant benefits from participation (testimonial video).

- Access to part-time OSH education at NFQ levels 7 and 8 during the day and evening, and by distance education, is provided to a nationally under-represented student group, i.e. working adults, who have no previous education at level 8 (approximately 50% of OSH undergraduate students annually).
- A progression pathway is provided to students from Certificate to Diploma through to BSc or MSc.
- Retention rates are very high compared with similar adult cohorts - in 2015/16, the retention rate on the part-time, blended online, distance Certificate programme was 98% (122 / 124 students).
- Our educational supports addressing transition into university for mature, working, adult students who have no previously studied at third level, have received university an national teaching awards.

FEEDBACK FROM CORPORATE BODIES

"In recent years, we have put 117 students through the UCD Certificate in Health and Safety at Work and that has been of great benefit to the students that have taken the course, but also to the organisation. It has given us a framework and structure within our organisation in which we can manage safety very successfully..."

Bruce Phillips, Senior Executive, Dublin City Council.

"Safety is a core value with ESB. Many of our employees have qualifications in the engineering and technical fields already, but they needed something to augment these skills in safety and health; this course was identified as addressing those needs. Almost 400 of our employees have graduated from the [UCD] Certificate since 1996. I believe that their participation in the programme has been a significant contribution to our improved performance. From one lost-time injury per day to one per month now over that period. These statistics speak for themselves; ESB's participation in this course has been a very worthwhile investment."

**Ronan Collier, Corporate Safety,
Health and Wellbeing Manager, ESB**

See Testimonial Video at:

<https://www.youtube.com/watch?v=h5bYJj5OstI>

POTENTIAL FUTURE IMPACT

UCD OSH education programmes will continue to contribute to injury and illness prevention and the development of sustainable health and safety management in organisations throughout Ireland. This will be done by providing high quality education, by adapting programmes to facilitate participation for a working cohort, and by educating graduates to be competent to cope with prevailing and constantly changing working conditions. Most recently developed was the distance-education blended-learning Professional Certificate in Environmental Management, which addresses the needs of OSH graduates whose remit has widened to include the environment.

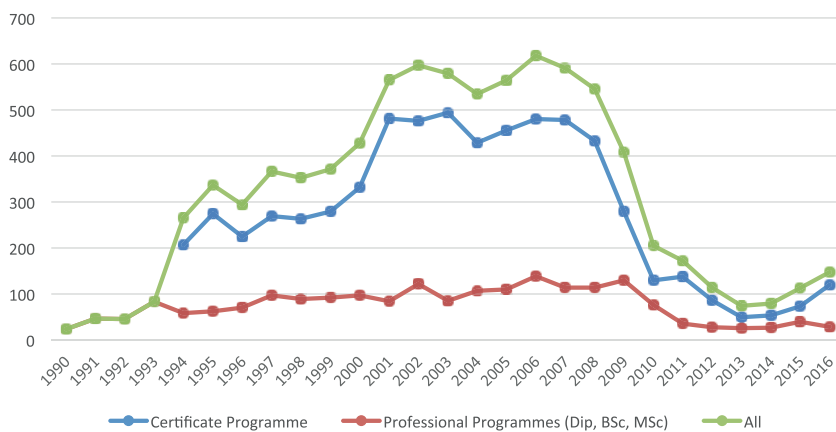
ACCREDITATION

All courses are accredited by the Institution of Occupational Safety and Health (IOSH), UK.

Awards

- College Teaching Award (2009) UCD
- University Teaching Expert Award (2015) UCD
- Teaching Expert Award (2015) National Forum for the Enhancement of Teaching and Learning
- Special Category Award: Teaching for Transitions (2015) National Forum for the Enhancement of Teaching and Learning.

Figure 1. Students completing professional (HDip, BSc, MSc) and Certificate (Managers, Safety representatives) programmes 1990 - date



RESEARCH REFERENCES

Drummond, A. and Guerin, H. (2005) *Blended learning model in Occupational Safety and Health* International Commission on Occupational Health, Scientific Committee on Education and Training in Occupational Safety and Health 7th International Conference: OH education and training for everyone everywhere. Council of Europe, Strasbourg.

Drummond, A., Killeavy, M. and Hussey, C. (2007) *The Extent and Role of Employer Engagement in a Part-time Continuing Professional Higher Education Programme* The 16th European Access Network Annual Conference: Access to Success: The Student Experience from Pre-entry to Employment NUI Galway.

Health and Safety Authority (2016) *Summary of Workplace Injury, Illness and Fatality Statistics*. Dublin: HSA.

Barrington, J. (1983) *Report of the Commission of Inquiry on Safety, Health and Welfare at Work*. Dublin: Stationery Office.

Figure 2. Education or training bodies (local centres)

1. Athlone RTC/IT
2. Carlow RTC/IT
3. Cavan Innovation and Technology Centre
4. Cork RTC/IT
5. Dundalk RTC/IT
6. Dungannon Higher Education Institute
7. Galway RTC/IT
8. Tallaght RTC/IT
9. Tralee RTC/IT
10. Laois Third Level Centre
11. Letterkenny RTC/IT
12. Limerick RTC/IT
13. Nenagh College
14. Sligo RTC/IT
15. Waterford RTC/IT

Figure 3. In-company centres

1. Dublin City Council
2. ESB
3. IBEC
4. ICTU
5. Pfizer Loughbeg (DP), Cork
6. Pfizer Loughbeg (API), Cork
7. Pfizer Little Island, Cork
8. Pfizer Grangecastle, Dublin
9. Pfizer Shanbally, Cork
10. Pfizer Ringaskiddy, Cork
11. RTE
12. Wyeth Nutritionals, Limerick