OHS education: raising the standard

Safety Systems
Grocon’s award-winning WHS management system

Harmonisation
Contractor management post-harmonisation

Workplace training
Getting the most out of L&D for OHS

News
Opinion
Research
Events
So, you think you know safety? Identify all the safety hazards below.

To find out the answers go to saiglobal.com/safety
(You may be surprised by what you know!)

Identifying safety hazards is one thing - implementing a successful OHS Management System is another. So no matter what your workplace looks like, SAI Global helps to ensure that your teams receive the best possible Safety Training to create a secure and sustainable environment.

As Australia’s largest and most established provider of OHS Management Systems Training, we specialise in delivering Nationally and Internationally Accredited courses for your people and your company. Our training solutions are delivered In-House or Online and can be customised to suit to your organisational needs.

To book a free, personalised Training Consultation call (02) 8206 6783 or visit saiglobal.com/safety
So, you think you know Safety?

Identify all the Safety hazards below

To find out the answers go to saiglobal.com/safety

(You may be surprised by what you know!)

Identifying safety hazards is one thing - implementing a successful OHS Management System is another.

So no matter what your workplace looks like, SAI Global helps to ensure that your teams receive the best possible Safety Training to create a secure and sustainable environment.

As Australia’s largest and most established provider of OHS Management Systems Training, we specialise in delivering Nationally and Internationally Accredited courses for your people and your company. Our training solutions are delivered In-House or Online and can be customised to suit your organisational needs.

To book a free, personalised Training Consultation call (02) 8206 6783 or visit saiglobal.com/safety

OHS education: raising the standard

The latest developments in tertiary OHS education and what they mean for the profession in theory and practice

Grocon: taking a holistic approach to safety

Grocon’s award-winning WHS management system and whole-of-operations approach to safety

Contractor management: after harmonisation, does the song remain the same?

Harmonisation has brought the challenge of contractor management into sharp focus

Getting the most out of OHS training

The impact of compliance and how to get the most out of any OHS training initiative

Safety in the not so small world of nanotechnology

Protecting workers from the potentially adverse health effects of engineered nanoparticles

As the dust settles: a wrap

The Safety Conference Sydney brought together a range of OHS experts and other professionals
Propelling the profession forward

There have been a number of recent developments within the SIA designed to shore up the credentials of OHS professionals and improve standards for future education

Walking across the campus at my Alma Mater the engineering, business, ophthalmology and arts students would refer to us of the Department of Safety & Hygiene as the “Durex & Kleenex lot”. On commencing work at an Australian University, after some embarrassing moments when colleagues asked for sticky tape, I learnt that the same joke did not really work. However, the message behind the joke has stayed with me and previously in these pages I commented that ours is a discipline that is often misunderstood; most people would be able to take a good guess at what engineering and business students are studying and would probably at least recognise what ophthalmology might be concerned with. However, I have taken for granted an understanding of the broader discipline among my fellow practitioners. Thus I was shocked when, during a meeting last week with a colleague of some considerable experience, I was asked if my occupational hygiene qualifications meant that I “do food safety”. I wondered how one can practise safety for years and not cross paths with allied professionals. Perhaps relying on experience alone to develop as practitioners is not sufficient and had this practitioner completed a course of generalist study in OHS the question would not have been necessary.

In this edition of the OHSP we discuss the importance of both knowledge & experience and naturally employers weight real-world experience heavily. However I get a sense that the weighting is becoming significantly greater relative to that applied to qualifications. Should this be a concern? Yes. Formal qualifications deliver the breadth of knowledge of the discipline such that we know, for example, which allied disciplines we need to interact with and when we should. Education means knowledge and experience means you know what to do with that knowledge.

The frameworks used to design educational programs enable study that opens our eyes to the breadth and makes us look in corners for ideas that we may not need or encounter within years of practice but when we do, we know what to do. In addition to discipline-specific knowledge we need lifelong learning skills, information literacy, reflective practice and we need to understand the values that underpin our professional practise and ethics; skills that are unlikely to be accrued though practise alone. Relying on experience alone means that we are likely to continue doing what we have always done. Education takes off the blinkers. Paradoxically, as Pam Pyor points out, the research focus within universities has resulted in a PhD being a basic requirement for engagement as an academic with little or no credit given for industry experience. This has resulted in a severe shortage of qualified academics/teachers in the OHS area.

The education versus experience debate has been going on for years and there is no straightforward answer. In sales we find people with an innate flair and a recruiter may have little interest in their qualifications while in medicine we demand qualifications and expect experience. While health and safety qualifications are increasingly expected, they are not mandatory before we practise and thus some employers may weight them lightly. I am not suggesting that employers should weight education more heavily than experience so much as look at the shifting balance and what a qualified and experienced “rounded” professional can offer.

Qualifications are not, of course, the same as education. Increasing course fees and economic belt tightening making program attendance more difficult increases the pressure to obtain a testamur via the easiest path and why not if experience counts for more?

The importance of the Body of Knowledge should not be underestimated in addressing some of these questions. It offers the basis for the frameworks that individual education providers develop and is now being used as a touchstone for accreditation and thus course assurance through the Australian OHS Education Accreditation Board.

While the BoK itself may seem academic and even extraneous in the world of recruitment, the validity and quality of the courses that candidates have completed are as important as their experience. Thus we should be shouting from the rooftops about the recent developments within the SIA that shore up our credentials and set standards for future education that will propel the profession forwards.

Dr Steve Cowley, FSIA, SIA National Publications, Editor

“For more member information, visit www.sia.org.au"
The frameworks used to design educational programs need to focus on the quality of the courses that candidates have completed. It offers the basis for the frameworks that individual institutions are developing and is now being used as a touchstone for accreditation and thus course assurance.

Increasing course fees and economic belt tightening may have little interest in their qualifications while in medicine we demand qualifications and expect experience. In sales we find people with an innate flair and a recruiter knows that academic with little or no credit given for industry experience is not if experience counts for more? Assessing others weight real-world experience heavily. However I get a sense that the weighting is becoming significantly greater and would probably at least recognise what ophthalmology might be concerned with. However, I have taken for granted an understanding of the discipline of safety and would probably at least recognise what engineering and business students are studying for future education professionals and improve standards for future education that will propel the profession forward.

The education versus experience debate has been ongoing for years and there is no straightforward answer. In this edition of the OHSP we discuss the importance of the Body of Knowledge (BoK) relative to that applied to qualifications. Should this be a concern? Yes. Formal qualifications deliver the breadth of knowledge of the discipline such that we know, for example, which allied disciplines we need to interact with and what engineering, business, ophthalmology and arts students would need to know. The importance of the Body of Knowledge should not be underestimated in addressing some of these questions. The frameworks used to design educational programs need to focus on the quality of the courses that candidates have completed. It offers the basis for the frameworks that individual institutions are developing and is now being used as a touchstone for accreditation and thus course assurance.

Increasing course fees and economic belt tightening may have little interest in their qualifications while in medicine we demand qualifications and expect experience. In sales we find people with an innate flair and a recruiter knows that academic with little or no credit given for industry experience is not if experience counts for more? Assessing others weight real-world experience heavily. However I get a sense that the weighting is becoming significantly greater and would probably at least recognise what ophthalmology might be concerned with. However, I have taken for granted an understanding of the discipline of safety and would probably at least recognise what engineering and business students are studying for future education professionals and improve standards for future education that will propel the profession forward.
Exciting times for the SIA

There have been a number of significant events in the Safety Institute of Australia’s calendar recently, and there is more in store for members

The last quarter has been a big one for the Safety Institute of Australia, with the conclusion of a successful The Safety Conference Sydney 2012, the convening of the SIA Annual General Meeting, the announcement of a new Board and the release of the SIA annual report.

The SIA is fundamentally a volunteer organisation. Even at the very top of the SIA, the Board is made up of volunteers who play a critical role in helping the Institute achieve its aims and objectives in representing members and the safety profession across Australia.

I would like to acknowledge and thank the Board members of 2011/12 who have made a significant contribution to the future of the SIA, including retiring members, Tony Mitchell (former Deputy Chair), Karen Wolfe, Doug Wakefield, Jon Temby and Greg Stagbouer. I would also like to acknowledge and thank continuing Board members, Sue Pilkington (Chair), Malcolm Burgin (Deputy Chair), John Everett, Stephen Thomas, Nathan Winter, John Kirwan and Adam Mroz, and welcome our new Board members, Cameron Montgomery, Roger Fairfax, Patrick Murphy, Maggie Thomas and PJ Fleming.

The Board members of 2011/12 have made a significant contribution to the future of the Institute through their progressive and enlightened approach to management of the organisation, and I look forward to more of the same in working with the SIA’s new Board over the coming year.

As mentioned above, another big event for the SIA recently was The Safety Conference Sydney. Feedback from members and other attendees suggested the conference was very well received.

In particular, the wide variety of conference streams, from safety leadership, healthcare and WHS legislation through to research, safety and design as well as workplace violence, alcohol and drugs, provided something for everyone. For a full wrap-up of the conference, together with photos of the event, please see page 28 of this issue.

Also coming up fast is Safety in Action 2013 – SIA National Safety Convention, which will be held from 19-20 March 2013 at the Melbourne Convention Centre. Now organised by professional conference management firm Informa (in conjunction with the SIA Convention Committee), Safety in Action 2013 – SIA National Safety Convention will be bigger and better than ever.

The convention features a wide range of interesting and topical speakers from around the globe, who will discuss everything from harmonised work health and safety laws through to how to create and maintain a safety culture that motivates fellow staff to achieve safe outcomes.

One international speaker of note is Mike Behm, Associate Professor of Occupational Safety at East Carolina University in the US, who will discuss ‘when green met safety’. His presentation will focus on safe design and innovation and how awareness around these two factors has been increased in the US. He will discuss the integration of safe practice with green building systems and certification of green building through safe design.

Singapore will be used as a case study in ‘green safety.’

Stay tuned for more information on Safety in Action 2013 – SIA National Safety Convention. In the lead up to the convention we will feature a range of great news articles with commentary from key speakers in the SIA’s OHS Professional eNews, so keep a close eye on your inboxes over the coming months.

SIA conferences provide individuals and organisations with an opportunity to take a step up in their knowledge and awareness of important and timely OHS issues. Corporate memberships are a great way for organisations to make the most of SIA conferences and the many other benefits that SIA membership affords.

We are developing a new special membership program for organisations, incorporating various options. In addition to becoming corporate members, companies will have the option to take part in our Corporate Partner program, with Bronze, Silver, Gold and Diamond categories.

Both programs can be combined if organisations wish.

Please contact the SIA for further information if you are interested in either program and want to make the most of the benefits the SIA has to offer.

Another significant development for the SIA is the launch of SIA Services Pty Ltd. This will be a commercial arm of the Institute that will be responsible for licensing training programs and conference delivery as well as other commercial activities, while protecting the not-for profit status of SIA. Stay tuned for more information on this as well.

These are exciting times for the SIA, and we have experienced a strong and steady increase in members. OHS Professional is a key member benefit, so I hope you enjoy this issue of the magazine.

Keith Brown, Chief Executive Officer, Safety Institute of Australia Ltd

“These are exciting times for the SIA, and we have experienced a strong and steady increase in members”
How to get involved in the SIA

I am pleased to be able to provide an update on a number of significant activities underway within the Institute.

The Chair of the College of Fellows and his Deputy Chairs have embarked on a comprehensive reform program within the college. This will address a range of critical matters that include the National Technical Panel, management of continuing professional development and reporting and ethics processes. In addition, the Chair of the college has been appointed to manage the completion of the Certification of Generalist OHS practitioners project and dissemination of the Body of Knowledge.

As has been previously reported, we have spent almost twelve months considering the concept of developing a commercial arm to the Institute. I am pleased to advise that we have registered a new company: SIA Services Pty Ltd as a wholly owned subsidiary of SIA Ltd. SIA Services will be responsible for products and services which support businesses and individuals in managing health and safety. Income from this business will be used to broaden our service offering to members and to the profession. This is an exciting development for all of us – more details will be provided in the next few weeks.

Finally, we welcome our new Deputy Chair, Malcolm Burgin, and our new Board members Patrick Murphy, Cameron Montgomery, Roger Fairfax, Maggie Thomas and PJ Fleming. Profiles of all 2012/2013 Board members are now available on the SIA website. We farewell Tony Mitchell (Deputy Chair), Karen Wolfe, Jon Temby, Greg Staqbouer and Doug Wakefield and thank them for their contribution to the Institute and the profession as members of the inaugural Board of SIA Ltd.

We value the input of our members and I encourage you to think about how your capability could contribute to the Institute achieving its aims. It’s not all one way – your involvement in the Institute’s activities can provide you with professional and personal development opportunities not available to you elsewhere. Please consider contacting your Branch representatives to see how you can be involved.

2012/13 is set to be another landmark year in our history. We have a busy year ahead of us and a skilled and enthusiastic team to lead us in carrying on the groundbreaking work of the past few years. Thank you for your continued support of the Institute and its activities.

Sue Pilkington, FSIA, FRMIA
Chair, Board of Directors, Safety Institute of Australia Ltd
South Australia passes WHS laws
Harmonised OHS laws will take effect in South Australia from 1 January 2013 following the passing of the state’s new Work Health and Safety laws through its parliament. South Australia will soon join the Commonwealth and all other states and territories – with the exception of Victoria and Western Australia – in introducing the harmonised OHS laws. SA Minister for Industrial Relations Russell Wortley said any significant new requirements in the WHS regulations will be subject to transitional periods which will allow businesses enough time to prepare for the new arrangements.

Safety lessons from the Pike River tragedy
A short-term focus on production at the expense of health and safety was a major contributor to the New Zealand Pike River coalmine explosion which killed 29 people. In handing down its report into the incident, the Pike River Disaster Royal Commission found there were a number of significant contributing factors to the explosion. Pike River Coal had not completed the systems and infrastructure necessary to safely produce coal in the new mine, and the report found the company’s health and safety systems were inadequate. “The drive for coal production before the mine was ready created the circumstances within which the tragedy occurred,” the Royal Commission’s report said.

BP issued with record fine over oil spill
BP has been fined US$4 billion – the largest criminal resolution in US history – after pleading guilty to felony manslaughter, environmental crimes and other charges following the 2010 Deepwater Horizon disaster. The rig explosion was a disaster that resulted from BP’s culture of putting profit before prudence, according to Lanny Breuer, Assistant Attorney General for the US Justice Department’s Criminal Division. “We hope that BP’s acknowledgment of its misconduct – through its agreement to plead guilty to 11 counts of felony manslaughter – brings some measure of justice to the family members of the people who died onboard the rig,” BP also admitted that the two highest-ranking BP supervisors onboard the Deepwater Horizon, known as BP’s ‘well site leaders” negligently caused the deaths of 11 men and the resulting oil spill.

How to improve safety accountability
While it is important to manage legal and regulatory requirements around safety, constructive leadership provides the most value in building true safety cultures, according to Mark Vollmer, a senior consultant with Conexus Consulting. “By engaging leaders to build a positive culture, there is more emphasis on reinforcing the effective safety behaviours. While there may be a drive to get people to be more compliant, the real impact is that when leaders value safety, they project that to their teams and the teams reflect that value and thinking on the job,” he said at The Safety Conference Sydney. OHS professionals are in a prime position to enable leaders and teams to go beyond legislation by being more consultative and less enforcement driven, Vollmer added.

Managing introduction of health & safety reps
Many businesses are struggling to effectively manage the introduction of health and safety representatives into their business in order to comply with new Work Health and Safety (WHS) laws, according to Holding Redlich partner Michael Selinger. Businesses must comply with a number of key consultation requirements or risk penalties of up to $100,000, and these requirements include providing workers with information about safety issues such as proposed changes at work which will impact health and safety. “Workers must also be given a reasonable opportunity to express their views and contribute to the decision-making process about the safety issue,” said Selinger at The Safety Conference Sydney 2012.
OHS tops business red tape list

The level of complexity in workplace health and safety regulations is higher in comparison to other areas of compliance, and produces the most red tape for business, according to a survey of 870 businesses. It found that 53 per cent reported the highest levels of complexity in workplace health and safety, while safety regulators produced the second highest levels of red tape for business at 56 per cent (behind local government at 58 per cent) when it came to government agencies. Conducted by the Australian Chamber of Commerce and Industry (ACCI), The National Red Tape Survey also found that 44 per cent of businesses spend between one and five hours a week complying with government regulatory requirements in general.

Company officers cautioned over WHS insurance policies

Directors and officers should be careful of insurance policies which purportedly cover criminal penalties arising out of Work Health and Safety law breaches, according to Newcastle Law School’s associate professor Neil Foster. While the law allows directors and officers to take insurance against their liability to pay civil damages for harm, he said insurance coverage for criminal proceedings was a different story. ‘There is a very long-standing and important rule of public policy that it is not possible to take out a valid insurance policy covering possible criminal penalties exacted in criminal proceedings, where there is any element of ‘personal fault’ in the offence,’ said Foster at Comcare’s national conference in Sydney.

Fair Work Australia rules on drug testing methodology

Fair Work Australia has ruled that an energy company should limit random drug testing of its workforce to oral swabs and exclude urine testing. The company, Endeavour Energy, is one of three NSW electricity distribution companies and has written to employees advising that it has accepted the Fair Work Australia ruling and that it will move forward with plans to introduce saliva-based testing. The company had appealed a previous Fair Work Australia decision and said it wanted to seek clarity about the status of urine testing, given two apparent contradictory decisions by FWA – one in 2011 concerning HWE mining, and a March 2012 decision against the use of urine testing at Endeavour Energy.
A safety strategy for the next decade

The Australian Work Health and Safety Strategy 2012–2022 sets a vision of healthy, safe and productive working lives for all Australians, writes Safe Work Australia’s Rex Hoy

In October 2012 the Australian Work Health and Safety Strategy 2012–2022 was launched. The strategy provides a high level framework for the Commonwealth, state and territory governments, industry and unions and other organisations to improve work health and safety during the next decade.

The new strategy builds on the existing National OHS Strategy 2002–2012. There was significant progress in improving work health and safety outcomes in the ten years the National Strategy was in place including a reduction in the work-related injury fatality rate of more than 40 per cent.

Poor health and safety practices in workplaces are still a confronting issue. Around 250 workers die each year from traumatic injury fatalities and around 130,000 workers receive injuries that result in them requiring one week or more off work. In the 2008-09 financial year the monetary cost associated with work related injury, illness and disease was estimated at $60.6 billion. This represents 4.8 percent of GDP.

The human cost is immeasurable.

The Australian Strategy sets a vision of healthy, safe and productive working lives for all Australians.

To realise the vision the strategy sets out four high level outcomes to be achieved by 2022:
- reduced incidence of work-related death, injury and illness, achieved by
- reduced exposure to hazards and risks, using
- improved hazard controls, supported by an
- improved work health and safety infrastructure.

Progress against the outcomes will be measured by three targets:
- a reduction in the number of worker fatalities due to injury of at least 20 per cent
- a reduction in the incidence rate of claims resulting in one or more weeks off work of at least 30 per cent, and
- a reduction in the incidence rate of claims for musculoskeletal disorders resulting in one or more weeks off work of at least 30 per cent.

Additional performance indicators will be developed to measure improvements in reducing exposure to hazards and risks that can lead to occupational diseases.

Seven national action areas have been identified in which activities need to be undertaken to help achieve the outcomes and meet the targets:
- healthy and safe by design
- supply chains and networks
- health and safety capabilities
- leadership and culture
- research and evaluation
- government, and
- responsive and effective regulatory framework.

Designed to be broad and high-level, the Australian Strategy will allow governments, industry, unions and other organisations to undertake activities that are tailored to their organisation’s circumstances and priorities but still help meet the desired outcomes of the Australian Strategy.

The role work health and safety professionals play in the success of the new strategy will be crucial.

Safety professionals can directly help achieve the vision and the outcomes of the Australian Strategy through several of the action areas but two in particular. Through the health and safety capabilities action area, this can include:
- ensuring they have the work health and safety training, education and advice they need to provide their services
- encouraging everyone in the workplace to have the work health and safety capabilities they require to work safely, and
- integrating work health and safety skills development into education programs
- ensuring work health and safety is a topic covered in induction packages for new workers, reinforced by the provision of ongoing information and advice, and
- keeping up-to-date on the latest work health and safety knowledge and theories, control technologies, laws and policies.

Under the leadership and culture action area, this could include:
- using their positions in and relationship with organisations to drive improvements in work health and safety
- fostering a culture of consultation and collaboration to identify and resolve workplace issues and to find solutions for improving safety, and
- promoting health and safety as a priority in all work processes and decisions.

The challenge for safety professionals is to continuously expand their own knowledge as well as to encourage opportunities for learning and continuous improvement amongst workers. This is essential to keep work health and safety at the forefront of day to day activities and decision making.

The role and actions of safety professionals will be significant to achieving the vision of the Australian Strategy.

“The role work health and safety professionals play in the success of the new strategy will be crucial”
OHS: everyone’s responsibility – or no one’s?

Under harmonised OHS laws executives are the ‘officers’ liable for safety. But as Richard Swift writes, are they really the only ones with any responsibility for OHS?

2012 saw the introduction of the Work Health and Safety Act and Regulations across many of Australia’s states and territories. Businesses are now six months into complying with the new harmonised legislation.

In conducting workshops with executives across a variety of industries, there is a common sentiment among attendees. I stand in front of yet another group of senior executives and announce, with unrequited cheer, that we will be talking about health & safety. I can almost feel the hackles rise from within the room. Health and safety equals fear.

All too often I am faced with a similar response. It’s unsurprising. Many executives regard health and safety as one of their highest liability risks, hence the fear. In my experience, executives are fearful of the law and frightened of prosecution. They’re afraid of facing the blame, let alone any victims as a result of their negligence. Therefore draw the conclusion that employers (now referred to as ‘Persons Conducting a Business or Undertaking’, or PCBU’s) don’t actually want their people to be injured. This too is unsurprising, yet injuries still occur.

So why do injuries keep happening? Let me rephrase this to “why don’t our current safety systems stop injuries from happening?”

Simply put, the systems are based on an expectation of compliance. With all due respect, executives are number crunchers, so most of their decisions are based on numbers. Success equals profit. Failure equals loss. This way of thinking manifests itself in the expectations held around health and safety.

Speaking the language of executives, we have inadvertently assigned ‘numbers’ to judge the success of health and safety. Success equals no incidents. Failure equals incidents. It should be fairly simple, but unwittingly, it actually looks a bit like this: success equals no incidents reported. My concern now is that for most executives, success equals a false sense of security.

When I ‘suggest’ that this might be the case in their organisations, the penny drops and their reaction is one of frustration, even anger. And why should this be surprising? These executives carry the legal risk from the inaction of their employees. The systems and statistics are being manipulated. Leading indicators have degenerated into misleading indicators and the burden of liability is borne by executives. So what else are they grappling with? Well, to top it off, the definition of workers has now been expanded to include contractors. Bemused executives are astonished that they are now expected to be responsible for their contractors’ health and safety. Some executives are similarly concerned about the responsibility for volunteers and ageing workforce. What about bullying and harassment in the workplace? Seriously, how much control are they supposed to have over these issues?

To some extent I feel their pain. The saying “safety is everyone’s responsibility” has been around for years, but I don’t feel, or see, that everyone gets it. Many employees understand this to mean they will-do-what-they-are-told (sort of). That’s not responsibility. In fact, I would argue that if you were visiting a site, this would be your level of responsibility. As a worker, your responsibility is far greater. Responsibility is connected to something else that surpasses compliance.

Workers have responsibilities to take care of their own health and safety, to make sure that they don’t affect the health and safety of others around them, to comply with lawful instructions and, most importantly, to co-operate with the PCBU. This means working together, participating, being involved. Workers have rights, but rights always come with responsibilities.

What is missing in our current systems? I believe it is the ingredient of commitment. I mean building a culture of commitment. Not the ‘I-will-comply-when-someone-is-watching’ stuff, but the ‘I-will-set-my-mind-to-getting-safety-right’ type of commitment. It’s the right stuff. It’s the ‘behave-because-I-believe’ stuff. It’s responsibility that permeates every aspect, every individual, every task and every situation. It’s about creating a working culture that empowers us all to believe we are individually responsible, not just the person at the top.

How can we fix this? As a good starting point, organisations need to ask themselves where they think the next incident is likely to take place. Organisations that have the fundamental risk management process built into their business (identify your hazards, assess and control your risk) are part way there. The key is consultation with your staff. Organisations that commit themselves to consulting with their workers, and other duty holders, foster a true sense of engagement. These are the companies that will, in my opinion, quickly identify risks and adapt to any changes that are needed to be made to their business.

Richard Swift, EHS manager for WSP Environment & Energy

“I can almost feel the hackles rise from within the room. Health and safety equals fear”
Grocon is the largest privately owned construction and development company in Australia. In recognition of its efforts to work towards a zero harm workplace, Grocon recently won the Safe Work Australia award for Australia’s best private sector workplace health and safety management system.

Identifying a need
Grocon engaged DuPont to undertake a gap analysis of all of Grocon’s operations nationally. The findings highlighted areas where the organisation could improve its existing OHS management system and capture new methodologies to reduce injuries with the objective to eliminate injuries in the workplace.

As a result, the company identified the need to introduce a comprehensive safety approach to reducing injuries and incidents, said Grocon’s national OHS manager, Joe Brinzi. “We have tried to be more proactive in the workplace so as to reflect our company policies, procedures and core values of safety, sustainability, community and innovation. We wanted everyone to embrace this approach,” he said.

Key system features
Grocon’s OHS management system provides a reportable database of all identified hazards, injuries and incidents, and a platform to implement controls to reduce and/or eliminate health and safety concerns within the workplace.

The online system encompasses quality, safety and environmental (QSE) factors, and Brinzi said having all three integrated makes it more user-friendly. All nominated stakeholders within the business can access the online system from any computer that has the Grocon software installed.

A key feature of the system is an incident investigation process, which enables a consistent process to be implemented nationally across all projects. It ensures consistency in reporting and resolution of incidents. From these investigations, findings are then reported nationally and lessons learned are communicated throughout Grocon’s business areas.

The result is a uniform approach to managing OHS in all of Grocon workplaces, from offices to construction sites.

“Grocon recently won the Safe Work Australia award for the best private sector workplace health and safety management system. Craig Donaldson explores the makings of the system and how the company is taking a whole-of-operations approach to safety.”

“Grocon workers on a construction site. In the past two years, we have reduced the TIFR (Total Injury Frequency Rate) by 50 per cent, including subcontractors.”
tion sites, the system gives management the tools to not only conform to the legislative requirements, but to go beyond, according to Brinzi.

“All elements of the system are best practice in that it is constantly reviewed and updated to suit changes, by both the OHS and environmental laws (federal and state) and as directed by management, if any issues are identified,” he said.

**System objectives**
To achieve the goal of “zero harm”, the system was developed with the following objectives in mind:

- Ensuring consistency in safety management across all of Grocon's operations
- High accessibility and functionality for management
- Comprehensive safety data acquisition from all business areas
- Meaningful and reportable data that can be used to track progress and identify where strengths and weaknesses lie within operations
- Incident logging and investigation which ensures all information is correctly reported and investigated, ensuring actions raised from the investigations target the failed controls that resulted in the incident taking place
- Comprehensive database of all project subcontractors and employees which incorporates all safety documentation
- Data logging and monitoring system for workplace hazards
- Comprehensive site diary which all management can contribute towards
- Opportunities for improvement internally and externally

**Implementing the system**
Grocon implemented a wide range of training for management and employees to introduce the system. Over the past three years a number of workshops introducing new functions of the system were conducted, with ongoing assessment and workshops also planned.

Some key training areas have included: safety observation/interaction training; AECT (actions employees can take) training (on DuPont’s platform); system managers’ training; DuPont supervisors’ and managers’ safety training; safe work method statement review and audit process training; and safety induction training.

“Workplace systems constantly need updating so it has been a challenge to adapt the system to meet Grocon’s expectations. We hold regular workshops to ensure any lessons learnt are implemented across the business,” said Brinzi.

The system is under constant review and construction, with all managers and employees encouraged to actively communicate to system managers any areas where possible improvement could positively impact the system.

“The company has achieved a great deal with the use of the QSE system, as it helps and identifies trends (incident, injury and others) by use of graphs and figures that assist us in being able to find problem areas and rectify them. In the past two years, we have reduced the TIFR (Total Injury Frequency Rate) by 50 per cent, including subcontractors,” he said.

**A WHOLE-OF-OPERATIONS APPROACH TO SAFETY**
In winning the Safe Work Australia award for Australia’s best private sector workplace health and safety management system, Safe Work Australia Chair Tom Phillips and the awards judging panel said Grocon’s OHS management system takes a whole-of-operations approach to safety.

“Their focus on total workforce participation, and open communication of work, health and safety issues for both employees and subcontractors has resulted in a strong safety culture. Grocon are demonstrating to all Australian employers how they can achieve an integrated, strong work, health and safety culture with all levels of staff,” Phillips said.

**Advice for OHS professionals**
For OHS leaders looking to develop or improve their own safety systems, Brinzi said it is important to understand the business and where it is heading, to ensure they have a workable system that will support the business and its objectives in the future.

“You need to take everyone with you on the journey, and for us, this meant subcontractors and suppliers,” he said. “Regular reinforcement of where we are heading is also crucial.”
The challenge of contractor management has been brought into sharp focus by the model Work Health and Safety Act, writes Angus Macinnis

The management of contractors has always posed a challenge for safety professionals. The risks of getting it wrong can be significant – even if the principal’s safety systems are robust, a failure by contractors to understand and follow those systems can cause injury to the employees of the principal as well as those of the contractor. Equally, if a stoppage of work occurs because of an incident, it doesn’t matter whether the incident arose out of the contractor’s work or the principal’s work; in either event, the work is stopped.

The challenge of contractor management has been brought into focus by the requirement in section 46 of the model Work Health and Safety Act which formalises the obligation to consult, cooperate, and coordinate activities with all other parties who owe safety duties which relate to “the same matter”. Sophisticated principals are increasingly using the focus of section 46 as a central point around which to organise the safety aspects of contractor management.

The first step in effective contractor management is to identify some of the common problems with contractors and to look at why those problems arise. The second step is to identify the legislative obligations which arise under the Act. The third step is to identify the practical ways in which the common problems can be overcome and legislative compliance secured.

Step 1: identifying common problems

Many common problems arise from the fact that contractors are likely to work across a number of sites, so their workers don’t start the with same understanding to the specific procedures of your site that your workers do. Equally, their business is their business, not your business, so, if they have safety systems at all, those systems will be their systems, rather than yours.

To resolve this problem, the principal needs to know what safety systems and procedures the contractor has in place. Ideally, this should be done before the contractor is engaged. It is becoming more and more common for contractors who are tendering for work to be asked to provide evidence of their safety systems (and not just in tenders for construction or engineering work – law firms are also frequently asked to provide copies of their work health and safety policies when they tender to provide legal work).

“Do you know if any work has been subcontracted, and to who? No? Well you’d better ensure that you find out, hadn’t you?”
to be proportional to the size of the job; if no-one is prepared to tender for the job because the requirements are too onerous, this will prevent any safety issues arising, but not in the way that you were intending. However, even on small jobs (which are usually the province of smaller contractors), the answers to questions about work health and safety are likely to be very instructive in relation to both contractor selection and the amount of attention a particular contractor may require.

**Step 2: Identifying Legislative Requirements**

Section 46 provides that if a person (in this case, a principal) has a duty under the Act, then that person “must, so far as is reasonably practicable, consult, cooperate and coordinate activities with all other persons who have a duty in relation to the same matter”.

Before the principal can consult with “all other persons”, it is necessary to identify all these “other persons who have safety duties. Start with your contractors. Then add to the list any subcontractors which your contractors have engaged. Do you know if any work has been subcontracted, and to who? No? Well you’d better ensure that you find out, hadn’t you? If there are workers on your project, and you don’t know where they are from, then it is going to be very hard for you to ensure that you have consulted with “all other persons”. Being able to identify all the relevant “other persons” is not just a legal compliance issue; from a practical perspective, it allows you to ensure that all the relevant people have been inducted, are attending toolbox meetings, and so forth.

However, contractors and subcontractors are not the only “other persons” the principal needs to consider. There may be parties other than the principal who have management or control of the project’s workplace (or workplaces) and there may also be designers, manufacturers and suppliers of plant and substances who need to be considered. You will need to consider all of the sections of the Act which impose duties to ensure that you have a complete list of all of the “other persons” before you are ready to start consultation.

There is one person the principal must not leave off the list; namely, the principal themselves. Before the principal can implement a process of consultation, the principal must first have a very clear understanding of the principal’s own safety obligations. This is not just a matter of leading, as a principal, by example. As we shall see, a key part of the principal’s task is to ensure that obligations fit together without leaving gaps. To prevent gaps, it is necessary to know the precise scope of each obligation.

Once all of the parties, and all of their obligations, have been identified, the process of consultation, co-operation and co-ordination can begin. This brings us to the final, practical, step – in relation to your project, what is this process going to look like?

**Step 3: Putting it all together**

The first issue to consider is how much of the process should be expressly set out in the terms of the contracts between principal and contractor. Plainly, this needs to be done in a commercially sensible way, and if the safety provisions of your contracts are thickets of impenetrable legalese, or consist of telephone-book-sized appendices to the main contract, those provisions will be of little use to anyone. However, it is a good idea to make express reference to work health and safety obligations (and in particular, the section 46 obligations) when engaging contractors.

Firstly, this brings the importance of safety to the fore at the outset, and if a contractor who is presented with such a clause responds by asking, “Err, what’s this safety consultation thing all about?” the principal will be able to make a decision about whether the contractor should be engaged (and, if so, whether particular attention should be directed to assisting that contractor with their safety compliance).

Secondly, an express contractual provision provides a useful tool for encouraging contractors who are either reluctant to comply with their safety obligations (or who want to be paid more money in order to do so). This doesn’t mean that the principal should threaten to sue its contractors for breach of contract; rather, it is a question of having a document to which the principal can point to establish that obligations which the contractor had agreed to are not being met.

The content of the process will depend upon the nature of the project and the parties involved. However, it is important to bear in mind that consultation involves three steps – exchanging information, ensuring that the information which is exchanged is considered by the relevant people, and then ensuring that consideration of information is translated into action. This means that it is important to identify the relevant people to whom information must be communicated, and to identify who is responsible for transforming information into action. You can’t afford any cases of “I didn’t get the memo” syndrome, because even a mild case may see you fined (or your project stopped) and a serious case can be fatal.

**Conclusion**

The requirement in section 46 of the Act for safety consultation to occur horizontally (that is, with other duty holders) as well as vertically (the more familiar consultation with workers) can fairly be described as one of the sleeper issues of the Act. The complexity of the interrelationship between the duty holders in a workplace, which may not be apparent on first glance, can become starkly apparent once the process of identifying those duty holders commences.

However, section 46 also provides a powerful tool for simplifying the complexity of the relationships in modern workplaces. The fact that the obligation under section 46 falls upon all parties in the workplace means that the obligation can be used to encourage compliance by contractors with obligations which might otherwise be dismissed by contractors as being the principal’s problem. Effective safety management does not mean that a principal should carry their contractors’ loads; rather, it means that a principal should identify all of the loads, and allocate the carriage of each, so that each of the contractors arrives successfully, and safely, at the project’s end.

**Angus Macinnis** is a special counsel with Norton Rose Australia

“You can’t afford any cases of ‘I didn’t get the memo’ syndrome, because even a mild case may see you fined (or your project stopped) and a serious case can be fatal”
OHS education: raising the standard

There have been a number of significant developments in tertiary OHS education. Craig Donaldson explores these developments and examines what they mean for the profession in both theory and practice.

Formal qualifications play a fundamental role in lifting the standing of the OHS profession in both theory and practice across Australian workplaces. While there are a number of education options for individuals, university-level qualifications continue to form the cornerstone of OHS education in Australia.

There have been a number of recent developments in this area which have broader meaning for the field of OHS, according to Bruce King, emeritus professor at the University of South Australia and adjunct professor at the University of New England.

These developments derive from the Bradley Review of Higher Education in 2008 and the subsequent establishment of the Tertiary Education Quality and Standards Agency. The first aspect which is particularly relevant is the requirement that all higher education programs conform to the levels of required graduate intellectual capability established for all qualifications (for example, Bachelor’s Degree, Graduate Diploma, and Master’s Degree) within the Australian Qualifications Framework (AQF), he says.

The second relevant aspect is a required focus on the learning outcomes achieved by students in determining the quality of programs, and King says this aspect explicitly emphasises the outcomes of learning, rather than the inputs to the process, as a basis for judgments of quality.

Is OHS education occupational?

One of the challenges with OHS education in adequately preparing and equipping future OHS professionals is that the required outcomes of OHS education have not been well defined, according to Pam Pryor, registrar for the Australian OHS Education Accreditation Board (AOHSEAB).

“The role of the OHS professional is not clearly defined and many employers and those giving OHS advice do not differentiate between the OHS professional and OHS practitioner,” says Pryor, who noted that the recently released Australian Work Health and Safety Strategy 2012–2022 has the strategic outcome that “those providing OHS education, training and advice have appropriate capabilities”; and the first task will be to define the capabilities.

A major step has been achieved by the AOHSEAB in
working with OHS educators and OHS professionals to develop OHS professional capabilities for new graduates of OHS Bachelor, Graduate Diploma and Masters qualifications. The learning outcomes based on the OHS Body of Knowledge also provide guidance in what an OHS professional should be able to do. Entry-level qualifications for the OHS professional may be a Bachelor, Graduate Diploma or Masters qualification, and in line with the AQF the level of knowledge and skills will be different depending on the qualification level. As such, Pryor says educational outcomes must be compared to the role the person is expected to fill, as it is not a “one-size-fits-all”.

Phillip Gilmore a teacher in OHS at the University of Ballarat’s VIOSH (Victorian Institute for Occupational Safety and Health) Australia, believes OHS education is in a state of change and development. “There are changes stemming from development of the Body of Knowledge, introduction (even if imperfectly) of harmonised laws, and updating of training frameworks – all having implications for training,” he says. “The fitness of OHS education to prepare future OHS professionals is less certain.”

In aligning OHS education with the needs of industry, he says this could mean OHS education needs to produce graduates with not only technical knowledge, but also social and interpersonal skills that enable businesses to adapt and develop creative solutions. “Increasing numbers of people employed in service industries may mean OHS graduates need greater ability to understand complex interactions of people and more occupational flexibility to move between business types,” says Gilmore.

**Trends and developments**

There are a number of industry-related factors impacting on OHS education and the demand for education, according to Pryor. These include: a push for qualifications; development of professional certification; and globalisation of the OHS role.

Recent salary surveys indicate a push by employers for OHS qualifications (see box, where theory and practice meet). “In response to changes in the Australian Qualification Framework most universities are reviewing their OHS programs and, as a result, are offering a Masters program with the option of a Graduate Diploma, rather than just a Graduate Diploma,” she says.

Professional certification is one of the outcomes of the OHS Body of Knowledge project, Pryor adds. Due to commencement in mid-2013, the requirements for certification are based on a combination of qualifications, experience and competence. “There will be a further emphasis on qualifications not only by practitioners and professionals seeking certification, but employers requiring that their OHS advisers be certified,” she says.

There are also university-based factors impacting on OHS education. The research focus within universities, which is emphasised by government funding models, has resulted in a PhD being a basic requirement for engagement as an academic, with little or no credit given for industry experience. “This has resulted in a severe shortage of qualified academics/teachers in the OHS area,” says Pryor.

In addition, OHS programs usually have relatively small numbers compared with other discipline areas, and while they produce significant income for the university, may not meet the university funding model and as such may not be valued by the university.

**Three OHS education gaps**

In organisations, there are different levels of operational activity that require different knowledge and skills, which may be reflected in appropriate qualification levels. However, there also needs to be a common understanding of the different level and roles by OHS educators, OHS advisers, employers and regulators.

“The implementation of the professional certification for generalist OHS professionals will assist in developing a common understanding of the OHS practitioner, OHS professional and continued on p18

**AN INDUSTRY PERSPECTIVE**

Chris Sutherland, managing director of Programmed Group, a leading provider of staffing and maintenance services across all industry sectors, believes that the current state of OHS education is unable to fully deliver the future OHS professionals business requires. “It is fragmented and too focused on specific, narrow technical areas, without enough focus on the management of risk, key OHS principles and methods to develop safe behaviours,” he says.

Sutherland believes the key gaps in Australian OHS education include: understanding the key principles in managing risk and in particular the “hierarchy of controls”; methods and understandings to manage and influence a workforce to change common practices; the influence of best practice safety leadership and safe behaviours in an organisation; and the ability to communicate and teach.

“Major companies across Australia are seeking better qualified, more rounded OHS professionals,” he says. “That’s why I have joined the Australian OHS Education Accreditation Board (AOHSEAB) to assist in kick-starting the process. Indeed that’s why companies such as QBE, Leighton Contractors, Sparke Helmore Lawyers, Goodman Fielder as well as Programmed have all agreed to provide some funds to support this initiative. One of the activities of the AOHSEAB will be to promote to businesses the benefits of hiring OHS professionals whose qualifications arise from an AOHSEAB accredited university course.”
higher level professional role. The development of OHS professional capabilities reflecting the various qualification levels will give a benchmark for OHS practice,” says Pryor.

The second gap is the knowledge underpinning the OHS education. The OHS Body of Knowledge project commenced in 2009 to address the identified lack of a defined body of knowledge that informed the education and practice of generalist OHS professionals. One of the OHS education accreditation criterion addresses program content related to the OHS Body of Knowledge. “This does not mean that all universities must teach the same content nor does it require that the whole body of knowledge is covered in any one program. Instead it sets out a basis for developing a shared knowledge base,” says Pryor.

The third gap is around a shared understanding of OHS education by educators, professionals, employers and regulators. “Ideally educators should have some industry experience or access to OHS work environments. This engagement by industry with OHS education should be a mutually beneficial one. This engagement should occur at both the broader education and individual program level,” she says.

“Australia currently has four OHS bachelor programs and thirteen graduate diploma/masters programs,” says Pryor. “There is a high demand for graduates from these programs so they are filling a need. OHS educators as a whole are committed to quality OHS professional education and recognise the importance of continual improvement.”

Bridging the gap

“Work readiness” is a phrase often used when discussing suitability of professional education. When making judgements as to effectiveness of education in terms of work readiness, it is important to be realistic regarding the role of education.

The term work readiness was discussed at a recent forum held by Professions Australia, Pryor says. “A representative of CPA Australia commented that they do not consider accountants ‘work ready’ until they have completed their ‘professional year’ while Engineers Australia advised that they consider new engineering graduates as ‘ready to commence supervised practice’.

While it is important to incorporate ‘practice’ into OHS education, post-qualification supervision and mentoring is also important. “This may be logistically difficult as the OHS professional may often operate as a sole practitioner. There is an important role for the Safety Institute of Australia here, which could be filled by further development of their mentoring program,” says Pryor.

Julie Honore, managing director of specialist OHS recruitment firm Safesearch, agrees that professional roles.

“The role of the OHS professional is not clearly defined and many employers and those giving OHS advice do not differentiate between the OHS professional and OHS practitioner”

Study QUT’s new Master of Health, Safety and Environment from home

If you’re keen to have a recognised health, safety and environmental management qualification to expand your career opportunities in industry or government, consider Queensland University of Technology’s nationally recognised Master of Health, Safety and Environment*.

This new flexible course can be completed on-campus or online, and you can choose the two years full-time or four years part-time study mode. Graduates of the QUT Graduate Diploma in OHS or QUT Graduate Diploma in Environmental Health are eligible to complete the Masters program in one year full-time. Graduates from other universities with similar Graduate Diplomas may be eligible to receive advanced standing towards the study requirements of the Master of Health, Safety and Environment.

Apply now for Semester 1, 2013.

To learn more, visit www.qut.edu.au/public-health

*currently only available to domestic students

a university for the real world®
associations have a role to play in continuing to lift the bar, ensuring rigour in membership levels and communicating both the importance of qualifications and what that translates to in terms of actions in the workplace. “Ideally there would be a dedicated education program for employers, so they better understand what various qualifications mean,” she says.

One practical way universities can achieve momentum in the meantime would be through placement programs and feedback sessions between students, employers and the university and/or by participating in graduate programs and arranging work experience through some of the larger employers.

She also suggests that CEOs, other executives and HR should be involved in focus groups to clarify their specific requirements. “Typically these kind of focus groups will attract academics or those with a strong academic focus, however in order to be truly effective we suggest considerable effort needs to go into engaging a very different audience who will be typically difficult to access. This could perhaps be facilitated through industry groups or similar groups with a high degree of influence,” says Honore.

THE ROLE OF THE AUSTRALIAN OHS EDUCATION ACCREDITATION BOARD

The Australian OHS Education Accreditation Board (AOHSEAB) was established in August 2011 as an independent body under the auspices of the Safety Institute of Australia.

Mike Capra, Chair of the AOHSEAB and Professor of OHS at the University of Queensland, says the role of the Board is to facilitate the education of graduates who are equipped with the necessary knowledge and skills to enter the workplace as effective entry-level OHS professionals. To achieve this, Capra says the Board is recognising through the process of program accreditation, those universities that meet the accreditation criteria assessed by the Board and based on the OHS Body of Knowledge.

Program accreditation by professional bodies is a key factor in maintaining and enhancing the currency, content and quality of professional education delivered by Australian universities. “The formation of the AOHSEAB and the concomitant development of the OHS Body of Knowledge will ensure that our profession can now, like most other professions in Australia, be assured that there will be a consistency in terms of attributes and capabilities of graduates from the many OHS university programs,” he says.

Certificate IV in OHS begins January 2013


The Certificate IV in Occupational Health and Safety with VIOSH enables learners to develop sound knowledge and skills to contribute to managing OHS including the identification, assessment and control of risks.

This practical program is ideal for OHS representatives with organisations wishing to further their career in OHS; or for managers and supervisors with OHS responsibilities.

VIOSH, at the University of Ballarat, was the first provider of tertiary level OHS programs and has offered training to professionals in workplaces for over 30 years.

Undertaking VIOSH training will allow you to experience our outstanding reputation for excellence and provide you with comprehensive OHS skills.
Harmonisation has placed OHS high on the agenda for many organisations, and many large organisations have conducted external audits of their safety processes as a result, according to Hays’ 2012 Salary Guide. At the same time, organisations have committed to upskilling their workforce and promoting a safety culture, which has increased demand for OHS training specialists, particularly in the e-learning space.

Matthew Perriman, regional manager (VIC/TAS/SA) for HBA Learning Centres, says the goal for any organisation’s approach to OHS should be to aim for a resilient culture where safety is seen as a part of the organisational ethos, a workplace where the right people are in the positions best placed to engender a culture of safety and reporting and a workplace where safety is seen as part of ‘how we do business’.

“Historically, many workplaces have compartmentalised their approach to health and safety, which can lead to scenarios where health and safety is constantly seen as ‘someone else’s problem’. Thankfully, we are seeing a slow but gradual paradigm shift in the attitudes towards OHS within the workplace to a culture of empowerment and accountability,” he says.

To this end, one of the major noticeable trends Perriman has observed is the number of organisations which are committed to training all their staff, and not just OHS-specific employees, so all employees are able to take “an active and participatory role in maintaining the health and safety of themselves and those around them”.

Many workplaces are also making a gradual move to a behavioural-based approach to their management of OHS, which also requires appropriate training and development for all employees, he says.
Getting the most out of OHS training

Harmonisation has placed OHS high on the agenda for many organisations, and many large organisations have conducted external audits of their safety processes as a result, according to Hays’ 2012 Salary Guide. At the same time, organisations have committed to upskilling their workforce and promoting a safety culture, which has increased demand for OHS training specialists, particularly in the e-learning space.

Matthew Perriman, regional manager (VIC/TAS/SA) for HBA Learning Centres, says the goal for any organisation’s approach to OHS should be to aim for a resilient culture where safety is seen as a part of the organisational ethos, a workplace where the right people are in the positions best placed to engender a culture of safety and reporting and a workplace where safety is seen as part of ‘how we do business’.

“Historically, many workplaces have compartmentalised their approach to health and safety, which can lead to scenarios where health and safety is constantly seen as ‘someone else’s problem’. Thankfully, we are seeing a slow but gradual paradigm shift in the attitudes towards OHS within the workplace to a culture of empowerment and accountability,” he says.

To this end, one of the major noticeable trends Perriman has observed is the number of organisations which are committed to training all their staff, and not just OHS-specific employees, so all employees are able to take “an active and participatory role in maintaining the health and safety of themselves and those around them”.

Many workplaces are also making a gradual move to a behavioural-based approach to their management of OHS, which also requires appropriate training and development for all employees, he says.
The rise of online training

In terms of training delivery, Jane Ahern, director of Laser Safety Services, observes that a lot of companies and government agencies are delivering their OHS training online. Online channels are not unique to OHS training, but because there is legislative compliance involved and it involves all employees, she says OHS is one area that most organisations start with when they decide to invest in online platforms for learning and development.

This is driven primarily by a need to increase efficiency or make cost savings. “When supported by a good backend, online learning systems also help to save a bunch of time and money on course administration activities,” says Ahern, who gives the examples of streamlining record-keeping and payment processes, keeping on top of compliance with automated alerts and reminders for expired competencies.

For organisations that are geographically dispersed, online training also offers the opportunity to save in another way, through reduced downtime and negating the need to travel. “The more remote the worksite, the greater the saving,” she says.

Deborah Scott, general manager of Interskill Learning, has also experienced an increase in requests for OHS training to be delivered either online or via distance education. “It seems that organisations are finding it more difficult to have staff going offsite for training and they are looking for more flexible training offerings,” she says.

“Online training is also an effective option for small to medium companies who really cannot afford to have a staff member out of the workplace. Changes in OHS legislation nationally have also created a demand for training where states have implemented either all or part of the OHS harmonisation legislation.”

Compliance and training

Compliance seems to be the biggest driver for needing OHS training in the workplace, according to Scott. “Our experience is showing that small to medium enterprises are now more aware of their obligations with regard to OHS training, and are actively looking for flexible OHS training solutions.”

Enshrined in state and federal work health and safety legislation is the requirement for the employer or PCBU to provide requisite training to their staff in order to work in a safe and efficient manner, and Perriman says this legislative requirement will continue to be one of the major drivers for workplaces to commit to appropriate OHS training.

“A focus on compliance, however, has an inherent danger in looking solely at the compliance of the organisation and losing track of the number one priority for effective OHS systems and processes: the commitment to reducing workplace injuries and fatalities. This goal is best attained when the right people
have the right skills and knowledge,” he says.

“Anecdotally, these two areas are the strongest drivers for workplaces to engage with a structured sequence of OHS training and development.”

**Common training challenges**

Companies face a range of issues and challenges in making the most of their OHS training initiatives. Two of the most common challenges are that of time and commitment, according to Perriman.

“It is unavoidable that training can and will have a short-term impact on production, however he says the long-term benefits of the training far outweigh and mitigate these negative impacts. Too often however, businesses will focus solely on these small impacts and decide that training is not feasible or commonly not top priority,” he says.

In addition, the culture and attitude towards OHS of an organisation at all levels can often be a major mitigating factor in the success of safety training. “If the business is one where safety is not seen as important – or worse as a hindrance to production – it can be very hard to procure allocation of funds, time with staff and so on, which are required to conduct an effective sequence of safety training.”

Paul Brabender, SAI Global’s OHS lead facilitator, agrees that the expense of time away from work when undertaking training is a common issue for organisations undertaking OHS-related training.

In terms of training itself, he says it must be directly applicable to the real world, while organisations must understand that Diploma and Advanced Diploma level courses are not just about spoon-feeding information to participants. “There is an inherent expectation that the participants will consider concepts developed in the classroom and work out for themselves how these concepts can be applied (or not) in their current and future roles,” he says.

Scott observes that budget and getting the training to all employees seem to be the biggest challenges for companies. “Training budgets have been cut over the past few years, so companies need to provide more training with less cost,” she says.

continued on p24

---

**“We are seeing a slow but gradual paradigm shift in the attitudes towards OHS within the workplace to a culture of empowerment and accountability”**

---

**Minimise risk – help keep your workplace safe - ensure your staff are WHS compliant!**

The eLearning People online Work Health and Safety Induction training has been designed by health and safety experts to provide fast, inexpensive, consistent, measurable WHS training that will reduce injuries, improve the safety culture in your organization and fulfill WHS training requirements.

Flexible and convenient online delivery ensures staff can undertake training from work or home at anytime, with 24x7 access to training.

**Online Work Health Safety Training – Anytime, Anywhere!**

For more information, email sales@elearningpeople.com or visit www.elearningpeople.com
Delivering training to all employees also poses significant challenges for most companies. Employees in remote locations, high employee turnover, shift workers and rescheduling training for employees who miss a session are all issues that impact a company’s ability to implement its OHS initiatives.

Getting training traction

There are a number of steps organisations should take to get the best results from workplace OHS training. Firstly, companies need to consider the cost/benefit of engaging RTOs to customise training courses to suit their particular needs, according to Brabender.

“It is perfectly valid for an RTO to tailor course content to suit the exact needs of an organisation (with job, task, and/or industry-specific training) without sacrificing the universal applicability of the educational content. That is, broad principles which are applicable to all industries (education aspect) can be explained and demonstrated using industry or even company specific examples (training aspect),” he says.

Ensuring that the training is relevant, engaging and targeted to the workplace is at the heart of ensuring uptake and positive results, according to Perriman. Training needs to be planned and structured to actually lead to a development in skills, knowledge or attributes, and he says training needs to be delivered by individuals who are passionate about the goal of reducing workplace injuries and understands the goals of the organisation.

“Training must also be followed up; it is very common for businesses to engage their staff in training, leading to short-term improvements only for poor behaviours and non-conformities to increase after a period of time due to a lack of currency for OHS training. The effective OHS practitioner then will ensure that any skills, knowledge or behaviours are maintained by frequent evaluation of workers – either via formal routes or informal, consultative approaches.”

Ahern agrees that keeping people engaged in OHS after they have walked out of the room, (or away from their computer) is the biggest challenge. People have good intentions when they are in the middle of a course, but she points out that it’s easy to forget when they’re back on the job with many other things to think about.

“One way to combat this is to focus on developing habits – making the training initiatives just one component of a bigger OHS strategy that might also use communications, work processes and team building to embed good OHS practices,” she says.

Most participants of OHS (or any) training will learn content that they won’t use immediately on returning to the workplace, and Ahern says that giving people access to training content and post-course advice can assist them to use skills and knowledge when they need it. “Applying content to real-life situations in a supported way allows people to understand the content more fully and helps with knowledge retention,” she says.

BUILDING THE BUSINESS CASE

Time and time again, it has been demonstrated that a safer workplace will inevitably be, in the long run, a more productive and hence profitable workplace, according to Matthew Perriman, regional manager (VIC/TAS/SA) for HBA Learning Centres. “This can be attributed to any number of different factors, from a reduction in loss time or shutdown incidents, increases in staff morale or a reduction in staff turnover,” he says.

“The role of the OHS practitioner then is to build a case for OHS training initiatives that clearly demonstrate a causal relationship between the provision of training, improvements in safety and ultimately an increase in profitability for the workplace.”

Need a Laser Safety Officer or just some basic knowledge about safe laser use?

Laser Safety Services run scheduled courses in Melbourne and Brisbane catering to laser users, OHS professionals and managers. If you work in construction, mining, timber, manufacturing, packaging, research, light shows or similar industries, it’s wise to understand the rules and risks around using lasers.

MELBOURNE Monday 18 Feb 2013
BRISBANE Friday 1 Feb 2013

For details, alternate dates or to make a booking, go to www.lasersafetyservices.com.au

Can’t make it to a course? Contact us to discuss on-site training.

Email info@lasersafetyservices.com.au or call 07 3160 9220

“Applying content to real-life situations in a supported way allows people to understand the content more fully and helps with knowledge retention”
OHS PROFESSIONAL

in profitability for the workplace. "

provision of training, improvements in safety and ultimately an increase in initiatives that clearly demonstrate a causal relationship between the increases in staff morale or a reduction in staff turnover, " he says.

of different factors, from a reduction in loss time or shutdown incidents, TAS/SA) for HBA Learning Centres. "This can be attributed to any number of factors that impact a company's ability to implement its OHS initiatives. "

Time and time again, it has been demonstrated that a safer workplace will inevitably be, in the long run, a more productive and hence profitable workplace, according to Matthew Perriman, regional manager (VIC/NSW) for HBA Learning Centres.

A D O HS SD EC _12. pdf  Page 1 29/ 02/ 12,  10: 02 AM

on-site training.

Contact us to discuss

Can't make it to a course?

BRISBANE Friday 1 Feb 2013

packaging, research, light shows or similar industries, it's wise to understand the rules and risks around using lasers.

If you work in construction, mining, timber, manufacturing, you're likely to use communications, work processes and team building to embed good OHS practices, " she says.

Ensuring that the training is relevant, engaging and targeted to the workplace is at the heart of ensuring uptake and positive results, according to Brabender.

"It is perfectly valid for an RTO to tailor course content to suit the exact needs of an organisation (with job, task, and/or industry-specific training) without sacriﬁc ing the universal applicability of the educational content. That is, broad principles which are applicable to all industries (education aspect) can be explained and demonstrated using industry or even company speciﬁc examples (training aspect), " he says.

We are a national RTO (31261) and deliver in every state and territory of Australia. Our delivery schedule is at www.hbalearningcentres.com.au

HBA hosts industry leading discussion forums on each of the above qualifications and we enrol many thousands of Learners each year. We have 4 assessment centres to assist our Learners through the complex and demanding qualifications we offer. If you would like to chat about what we do, call our national call centre or simply order an information pack direct from our website.

HBA Learning Centres Pty Ltd
Level 2, 53 Walker St
North Sydney NSW 2060

1300721503  www.hbalearningcentres.com.au
Safety in the not-so-small world of nanotechnology

While science hails the benefits of engineered nanoparticles, safety practitioners must help protect workers from their potentially adverse health effects, write Lisa Stevens and Neale Jackson

The world of “nano” is the new frontier of science. However, with this new world comes a number of questions relating to the safety of nanoparticles. Could nanotechnology, or more specifically, engineered nanomaterial (ENM), be the “asbestos” of the 21st century?

While science hails the benefits of ENMs and the ability to manufacture particles to one billionth of a metre, safety legislation and regulation need to keep pace with developments to address the safety concerns associated with this technology.

What do we know about ENM?
You cannot assume you understand the behaviour of nanomaterial just because you understand the same material at the atomic/molecular or macroscopic levels. Nanoparticles commonly have unique or enhanced physical, chemical, biological and toxicological behaviour, quite different from the larger (macro) form of the same material.

Things such as chemical reactivity, colour, crystal structure, electrical conductivity, magnetic properties, mechanical strength and melting temperature can change as the result of molecular manipulation. Traditional yellow gold (Au) is a non-magnetic, chemically inert and conductive material, but at the nano level, it becomes red, less conductive (at ~ 1-3 n) magnetic ~ 3 nm and is both explosive and catalytic (Kulowski, K M and Lippy B, 2011).

Some nanoparticles have the ability to translocate organ systems, making them ideal for the development of targeted therapies; nonetheless we do not want the nanoparticles in sunscreens to transcend the outer layers of the skin.

While the scientific community is still investigating the effects of engineered nanoparticles on the human body and developing efficient and cost-effective ways for measuring and monitoring workers’ exposure, the question for the safety practitioner is how to ensure workers are protected from potentially long-term health effects?

What do we know about health effects?
Not all nanoparticles are harmful, but without further research, especially into newly engineered nanoparticles, it is impossible to tell. Given potentially long latency periods, evidence regarding effects on humans is non-conclusive. Animal studies and in-vitro (cell culture) studies have suggested that ENM located in the lungs may be able to enter the bloodstream and translocate to other organs. Potentially, carbon nanotubes are not only toxic but have the ability to penetrate cell walls due to their structure. How does this translate to humans? Well it may be 30 years or more before we truly have an answer. By that time, it may be too late for this generation of nanotechnology workers.

Because of their size, ENMs are inhaled into the lower part of the lung (the alveolar) and when clumped together, they have the potential to physically block the small air passages and to eventually physically block the airways.

While research on the effect of nanoparticles and the ability of nanoparticles to translocate the skin is limited, research does show that unbroken or intact skin does provide a barrier. Studies have shown that when the skin has been mechanically stretched, that particles of between 500 and

“Could nanotechnology, or more specifically, engineered nanomaterial (ENM), be the ‘asbestos’ of the 21st century?”
1000nm penetrate the dermis. This is evident for titanium dioxide and zinc oxide nanoparticles which are found in sunscreens. In-vitro studies using human skin cells have established the ability of oxides, metals, quantum dots and carbonaceous nanoparticles to damage skin cells (Crosera et al, 2009).

Accidental ingestion through poor hygiene and laboratory practices is always a concern. While not a key focus for research, the limited studies on the health effects of post-ingested nanoparticles suggest there is potential for damage to intestinal cells.

**Exposure: where and when**

Within the life cycle of the nanomaterial where does the highest risk of worker exposure occur? The highest level of risk is when workers handle free particles. This may occur during: cleaning equipment; cleaning up spilled nanomaterial; transfer of nanomaterial in open systems; or maintenance of equipment and associated systems (such as exhaust ventilation ducts).

However, when working with embedded nanoparticles or enclosed systems the risk of exposure is less.

**How to protect workers**

In line with Jackson et al (2010) the hierarchy of controls is an important and invaluable tool in controlling exposure in the workplace. However, it is difficult to apply the controls in an environment where there is little data about potential health effects. While legislative requirements highlight the need to eliminate the risk or the hazard, this is often not a practical solution, particularly in the world of science.

The key to dealing with hazards, such as ENM, cytotoxics or material about which very little is known regarding the health hazards, is a more structured and multilayered approach. For many this is not a new idea, yet for others the strict need to eliminate and substitute is based on an ingrained protocol which creates obstacles between scientists and OHS professionals, just reinforcing that OHS is a hindrance rather than a means to improve methodology and productivity.

If we think of nanoparticles in the same way we think of fine powders, dusts and dusty materials then the approach to controlling the hazard becomes a lot clearer: Elimination of the hazard. The unique and unusual properties of engineered nanoparticles (as distinct from the parent chemical or material) and their application in medical research and novel products means that elimination is unlikely. This is particularly the case for medical research facilities, where their role is to identify health hazards, new chemicals, materials etc.

Substitute the hazard with something safer. The control options for substitution of nanomaterials and modification of nanomaterials and/or processes have not yet been widely used in the workplace. Therefore, simple generic modification options can be considered, for example, using wet pastes, slurries or pellets nanomaterials, instead of dry powders wherever possible, especially if the material is highly combustible. Isolate the hazard from people. The development of designated work areas, which incorporate specific engineering controls such as local exhaust ventilation and HEPA filters, provide a more secure and safe environment. However it should be noted that this approach does not require the implementation of other controls. At the laboratory benches, things like glove boxes again help reduce the potential of exposure. Engineering controls. Worker exposure is significantly reduced or negated through the use of correctly designed and implemented local exhaust ventilation (LEV) and HEPA filtration for processes involving ENMs that would normally result in the release of airborne particles (Jackson et al. 2010). Administrative controls. Encompassing everything from documenting the types of ENM workers are using to limiting access, developing safe work statements or SOPs, or specific safety training are just a few of the main administrative controls that need to be implemented for workers involved in using ENMs. Sometimes, it’s the little things that reduce an individual’s exposure to a hazardous substance. For example, the following go a long way to reduce the workers’ exposure to nanomaterial:

- Signage highlighting the hazard
- Sticky mats at the entrance of work areas
- Wet wiping protocols for powders or vacuum cleaners (with a HEPA filter)

Ensuring an appropriate spill kit is available and that staff know how to use it

- Designated waste containers and protocols for ENM waste (and ENM contaminated waste, such as gloves and masks)
- Good hygiene (such as hand washing) and good housekeeping practices

**Conclusion**

Applying only one level of hazard control when dealing with nanomaterial would be unwise. The key to hazard control is via a multilevel approach at each stage of the material/process lifecycle. No one level of control will provide the worker with full protection.

As further data becomes available about engineered nanomaterials and their effects on workers, risk control strategies will become more focused. Until then, it is suit up, gloves on, isolate the material and follow the Safe Work method statements.

Lisa Stevens is a sessional lecturer in the School of Applied Science, Science, Engineering & Technology Portfolio at RMIT University, while Neale Jackson is program leader and senior lecturer in OHS in the School of Applied Sciences at RMIT University. For more information see Nansafe Australia.

**References**


As the dust settles: a wrap

“As the dust settles” was the theme of the recent The Safety Conference Sydney, which brought together a range of speakers to discuss issues of significance for OHS professionals.

Held from 23-25 October at Sydney Olympic Park, The Safety Conference Sydney brought together a number of nationally recognised OHS experts and other speakers.

One of the most engaging presentations was delivered by Peter Baines, who spent 22 years with the NSW Police leading teams in response to acts of terrorism and natural disasters.

While there is usually an opportunity to anticipate and implement contingency planning, he said it is often the case that large scale disasters or emergencies don’t go according to a plan. “Prior to the Boxing Day tsunami, for example, it would have been considered almost nonsensical to plan for the events that we were faced with when deploying to Thailand,” he said.
The Safety Conference Sydney brought together a number of nationally recognised OHS experts and other speakers.

One of the most engaging presentations was delivered by Peter Baines, who spent 22 years with the NSW Police leading teams in response to acts of terrorism and natural disasters. While there is usually an opportunity to anticipate and implement contingency planning, he said it is often the case that large scale disasters or emergencies don’t go according to a plan.

“Prior to the Boxing Day tsunami, for example, it would have been considered almost nonsensical to plan for the events that we were faced with when deploying to Thailand,” he said.

Consider this; there are 5395 people confirmed dead, 3500 of those have been taken to a temple and lay on the ground of that temple in the blistering heat. There are 400 forensic staff from around the world who deploy representing 36 different countries. There is no international leadership structure in place and the area where the staff are deployed to has been devastated by one of the largest tsunamis to hit this region.”

Having worked in disaster or emergency situations in Bali after the 2002 bombings, Thailand following the Boxing Day tsunami, Saudi Arabia following the floods in Jeddah and Japan after the devastating earthquake and tsunami of 2011, he said there are a number of key points that leaders should try to adhere to in their response.

“It’s easy to compromise safety and sound work principles in times of crisis or emergency, but it’s because of the crisis or emergency situation that extra attention should be focused on the safety and welfare of those responding,” he said.

“Despite the pressure that will bear down on everyone, particularly the leaders, to get results and fast, my advice is to take time to plan the response. It will seem unnatural and almost counterproductive to want to stop and plan, but it’s exactly what is needed.”

Also speaking at the conference was Michael Costello, principal policy officer for WorkCover NSW, who observed...
that the design and implementation of OHS regulation can sometimes have unintended consequences for both regulators and employers. In discussing the evolution of safety regulation in recent times, he said changing industrial, social and political environments had been the main drivers of such changes.

“Such legislation then impacts in various ways with consequences, sometimes unintended, for both the regulator and the regulated. Coupled with these consequences is environmental change which requires further adaption. It is a dynamic process in which design of the regulatory system and adapting to the environment creates ongoing change. Evolution appears to be the opposite of this process,” he said.

He also noted that the most interesting feature of the new Work Health and Safety (WHS) legislation is the change from the employer/employee relationship to the person conducting business or undertaking/worker relationship.

“This has been in response to the complexity of the modern workplace where there are not only employees but also contractors, labour hire workers and even volunteers engaged in an enterprise. A consequence of this approach is the introduction of the concept of shared duties for workers’ safety,” said Costello.

Andrew Douglas, principal with M+K lawyers, also spoke at The Safety Conference Sydney, and said OHS professionals must not allow themselves to become “compliance correction” policemen and should instead play a proactive role in ensuring safety is embedded into an organisation’s chain of command.

“Safety belongs in the chain of command, not with OHS managers,” he said. “Every day they need to find ways to make safety operational in the business, remove blocks from safety performance, advance the safety embedment process in the governance structure and provide knowledge and resources to the delivery of that model.”

Douglas also noted that safety leadership cannot exist where there is no safety system embedded into the governance structure, stating that each person in the chain of command must know their safety responsibility and the relevant law, be held to account for their performance, and have the skills and authority to lead in their area.

“Safety leadership starts at the floor. Authority, capability, competence and accountability are the levers of leadership. Every person should have a safety leadership KPI,” he said.
that the design and implementation of OHS regulation can sometimes have unintended consequences for both regulators and employers. In discussing the evolution of safety regulation in recent times, he said changing industrial, social and political environments had been the main drivers of such changes. “Such legislation then impacts in various ways with consequences, sometimes unintended, for both the regulator and the regulated. Coupled with these consequences is environmental change which requires further adaption. It is a dynamic process in which design of the regulatory system and adapting to the environment creates ongoing change. Evolution appears to be the opposite of this process,” he said.

He also noted that the most interesting feature of the new Work Health and Safety (WHS) legislation is the change from the employer/employee relationship to the person conducting business or undertaking/worker relationship. “This has been in response to the complexity of the modern workplace where there are not only employees but also contractors, labour hire workers and even volunteers engaged in an enterprise. A consequence of this approach is the introduction of the concept of shared duties for workers’ safety,” said Costello.

Andrew Douglas, principal with M+K lawyers, also spoke at The Safety Conference Sydney, and said OHS professionals must not allow themselves to become “compliance correction” policemen and should instead play a proactive role in ensuring safety is embedded into an organisation’s chain of command. “Safety belongs in the chain of command, not with OHS managers,” he said. “Every day they need to find ways to make safety operational in the business, remove blocks from safety performance, advance the safety embedment process in the governance structure and provide knowledge and resources to the delivery of that model.”

Douglas also noted that safety leadership cannot exist where there is no safety system embedded into the governance structure, stating that each person in the chain of command must know their safety responsibility and the relevant law, be held to account for their performance, and have the skills and authority to lead in their area. “Safety leadership starts at the floor. Authority, capability, competence and accountability are the levers of leadership. Every person should have a safety leadership KPI,” he said. Despite the pressure that will bear down on everyone, particularly the leaders, to get results and fast, my advice is to take time to plan the response.”
Protect your people with OH&S certification.

With occupational health and safety training and certification from LRQA, you can be confident you are creating a healthier, safer working environment for your staff and business.

Protect your business
Training and certification to OHAS 18001 or AS/NZS 4801 from LRQA provides confirmation of your business ability to effectively manage audits, legal reviews, incident investigations and business risks.

Why choose LRQA?
We have been assuring the management systems of some of the world’s best known brands for over 25 years, and are one of the most trusted and respected organisations in the world to provide OH&S assurance certification and training.

LRQA Business Assurance
Improving performance, reducing risk

Scan this QR Code to learn more about LRQA

For more information about OH&S certification call 1800 624 117 or visit lrqa.com.au/about-us