**Guidance FOR the beginning OHS professional**

***Safety Reflections by***

***George Robotham***

**Foreword**

In the last 10 years I have written considerable material and placed it on my web site ohschange.com.au, a number of OHS people in Australia and overseas have indicated the material has been of value. In the last year I have been writing material for the Riskex safety blog which has generated many conversations. Everything I write is grounded in practice and readers seem to recognise and appreciate this. This publication has been prompted by readers and attempts to put a very practical focus on OHS.

Most of the material in this publication is the result of critical reflection on my own practice. With major papers I have quoted references. A small amount of material has been drawn from a variety of other sources where the original source may not have been quoted. I have attempted to reference known, significant sources. In the name of completeness of major papers there is a small amount of repetition in a few areas.

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## Introduction

In nearly 4 decades of involvement in field, corporate, project and consultant OHS roles I have had the opportunity to learn a variety of things. In this publication I have outlined generally 1-2 page thoughts on safety and safety aligned topics, with the aim of providing some brief guidance to the newly developing OHS professional. Where I considered it important I have included major papers on significant topics I believe I cover a fair bit of relevant ground. Whilst there is a smattering of theory in the following, most is based on practical experience. A strong message is that to be effective in OHS you need competency from other areas, as well as your OHS competencies.

### Why read this paper? What will I learn? What is in it for me?

This paper will expose you to the sort of learning about OHS you will be unlikely to find in most tertiary OHS qualifications. It is focused on the real world not theory.

**Lessons learnt from my safety jobs**

In my 38 years in OHS I have helped my employers cope with the aftermath of 13 fatalities, one case of paraplegia, one major stress case and a very serious burns case. Speaking from personal experience the most devastating thing that can happen to a company and its workers is to have an employee killed or seriously injured. The financial and more importantly humanitarian costs are immense. OHS is a joint responsibility of management and employees. My focus is the prevention of permanently life altering person damage.

My first safety related job was in1973 I think as a Training Assistant in the training department of the National Safety Council of Australia. I did all the hack work to organise the various courses and gradually got experience running short training sessions. My 2 bosses were ex-Army, superb trainers and leaders. The Senior Training Officer, Tim Wilson, O.B.E., took me under his wing and tried to teach me about safety and training. Tim was one of the best leaders I have experienced, demanded high standards, showed his appreciation when his standards were met and was passionate about the best interest of his staff. Safety was very much in its infancy in those days and some of the things we taught would be unacceptable now. Much of my later tertiary learning in adult and workplace education was reminiscent of what I learnt with N.S.C.A. N.S.C.A. instilled in me the importance of planning, preparation and rehearsal in training.

In 1975 I moved to the position of Assistant Safety Adviser at Utah Development Company Blackwater open-cut coal mine. It was a very hands on job with lots of training, accident investigation, tool-box talks and safety inspections .A motor vehicle accident occurred where the driver died, I do not want to go into details but it emphasised the importance of the psycho-social side of safety. An employee was crushed between a walking platform and the shoe of a dragline and made a paraplegic; this was my first introduction to the reluctance of manufacturers to change the design of their equipment in the name of safety. I was introduced to the Analysis Reference Tree Trunk method of accident investigation which I still believe is the best despite recent advances.

In those days we used to use gangs of ethnic workers for wash plant maintenance shutdowns, most of them were not proper tradesmen or could understand English. We had a lot of problems with these blokes.

In early 1979 I moved to the position of Safety Adviser for the construction and start-up of Utah Development Company Norwich Park mine. It was a big job for one so young and I struggled initially. It was a very production oriented environment and safety was frequently regarded as getting in the way. There were a number of tough minded managers and supervisors and in my inexperience I was often unsuccessful in getting them on side. As the result of serious burns to an electrician we introduced a critical incident recall process in the electrical department. I have written elsewhere about the work that was done but it was extremely successful and I would recommend the technique. I completed the Graduate Diploma in Occupational Hazard Management at Ballarat University. This was to prove to be a personal and professional turning point.

I got the job of organising the state mining rescue competition. I put a lot of work into the planning and it was a big success. I was later to discover the benefits of project planning software to assist in the planning of such events.

I took up a safety training job with another organisation. I learnt that safety is often watered down by industrial relations considerations and public moneys are not always spent as intended. I also discovered the safety materials government regulators produce can leave a fair bit to be desired

Later in 1986 I took up the position of Senior Safety Adviser with Utah, Brisbane corporate office. Utah underwent numerous name changes to become BHP-Coal by the time I left. I learnt, despite sophisticated recruitment and selection procedures, you can end up with some duds working for you. The people at the mines used to refer to those of us in Brisbane office as “Seagulls” They said we would fly up, crap all over them and then fly away. I learnt in a strategic role you had to frequently get out in the field to maintain your perspective. I also learnt that well structured and planned project teams are a great way to drive safety change. I saw the introduction of 18 internal standards of OHS excellence make a big difference. Training in job safety analysis proved to be a good precursor to the development of safe working procedures.

I started my Bachelor of Education (Adult & Workplace Education), it was an excellent course and revolutionised my approach to learning. The importance of action and experiential learning models, learning by doing and making learning interactive was emphasised. I led the introduction of the N.O.S.A. safety management system in the 350 person corporate office. The safety committee developed a simple yet thorough approach and with good leadership it worked well. A 4 hour training course on hazard identification / risk assessment /hazard control that I developed saw widespread adoption.

One thing that came to me was that OHS people need a broad range of skills over and above their OHS technical skills. Attend short course learning on leadership, organisational change, communications skills, interpersonal skills, project management, quality management, basic human resource management, teambuilding, critical thinking and basic marketing.

I saw the outstanding effect on safety that a senior manager designated as the Safety Champion can have. The importance of learning by doing, avoiding lecture style presentations and making training highly interactive was evident.

While with B.H.P. I worked with Professor T.J. Larkin of Harvard University analysing safety communications in the company. There were 3 main messages to come out of this research-

1. Use face-to-face communications,
2. Use the supervisor to communicate and
3. Frame messages relevant to the immediate work area.

In 1994 the Moura disaster occurred with 11 men entombed in the mine. Andrew Hopkins wrote a book called Managing Major Hazards about Moura which I think is essential reading for all OHS personnel. The Moura disaster emphasises the role of safety culture.

BHP Minerals undertook a major safety benchmarking effort after Moura, the report makes great reading. In what was not the best decision BHP Minerals introduced a particular commercial safety management system from overseas worldwide. The commercial system was culturally unsuited to Australia, people reported having difficulty relating to the auditors, the training was hopeless and at the end of the day the system was not all that clever.

In 1996 I took up the position of Workplace Health and Safety Coordinator with the Beaudesert Shire Council. They were a shock to me and I was a shock to them. They had never has a safety person before me and were quiet backward in their safety approach. Some in supervisor and manager positions were very resistant to the needed safety changes. I developed a very basic safety management plan which they committed to after I left. It was not a high performance culture and after working for BHP I did not fit in well with a slow, ponderous organisation. To a certain extent I was suckered into the job by a smooth talking HR Manager who had delusions of grandeur about what I would be able to achieve. I resolved to check out prospective employers more carefully in the future.

In 1997 I took up the position of Principal Consultant Safety Training and Auditing with A.C.I.R.L. I learnt a lot about risk management and how exacting it is to manage safety in underground coal mines. The importance of having detailed hazard management plans and safety management plans was made clear as was the importance of piloting new training programs.

In 1999 I took up the position as WHS Coordinator with the Qld Main Roads Department. The organisation was buried in bureaucracy and paperwork and it was so hard to get anything done, they would not survive in the commercial world. A lot of the supervisors had been there for ages and were very set in their ways. I developed and piloted a risk assessment course with the latest methods. When it got to the supervisors they rejected it because they preferred a superseded method they had been trained in previously. Some of the safety staff left a lot to be desired.

I started out thinking I could make some changes but after a couple of years gave it up as a lost cause. From where I stood it appeared to be an organisation let down by its leadership.

In 2001 my role as OHS Project Manager with Ergon Energy on the “Safety Essentials Management Systems” project saw me leading a team of safety personnel and employees developing control plans and learning programs for 21 high-risk activities which revolutionised the way safety is managed in the business. This was the biggest test of my leadership and teambuilding skills and I learnt a lot from being thrown in the deep end. It was a highly organised project from a project management and change management perspective and I learnt a lot about project planning.

I started my own safety consultancy company in 2002 and have had good and bad experiences. There was the organisation that had several improvement notices about confined space work, my audit revealed major deficiencies, an audit by an outside consultant slammed them but they still refused to act. There was the organisation that made lots of promises but after I audited their organisation and developed a safety management plan decided it was all too much like hard work. There was the OHS Project Manager contract where we did what I thought was a good job on the project. The senior manager who requested the project fell on his political sword and left the organisation. The project was shelved.

Australian safety researcher Geoff McDonald has been my advisor/coach/mentor /guide in my safety career. Geoff McDonald has a system of classifying personal damage occurrences (“Accidents “) that goes something like this-

Class 1-Permanently alters the future of the individual

Class 2-Temporarily alters the future of the individual

Class 3 –Inconveniences the individual

Geoff has investigated many thousand Class 1 damage occurrences in his career and maintains the most effective way to make meaningful progress in safety is by focusing on the class 1 phenomena. I have been involved in 3 projects with Geoff where we have either analysed critical incidents or personal damage occurrence experience and I found the results very impressive, the analysis of the critical incidents and personal damage occurrences really targeted control actions in an appropriate manner.

I completed a Graduate Certificate in Management of Organisational Change by distance education; I really struggled with distance education and found I prefer the interaction of attending lectures. From my studies I use the motto “When initiating change, remember, people support what they create” you have to involve those affected by the change process in the change process if you are to have any success.

My interest in leadership was heightened by attending a presentation on the topic by General Norman Schwarzkopf. This led me to carry out extensive research into leadership generally and safety leadership specifically. A highlight of this was being invited to facilitate a Safety Leadership workshop in a National forum in Canada. I have since worked with clients to develop leadership approaches. I believe leadership is the often forgotten key to excellence in organisations.

I have been fortunate to work with 3 excellent leaders and have reflected upon and learnt from their approaches.

One of the techniques I learnt on my education degree was force field analysis. I have written on this elsewhere but I find it very useful when developing or revising safety management systems. Another technique worthy of consideration when developing controls is Haddon’s 10 countermeasures. My education degree strongly emphasised the need for learning needs analysis as a precursor to developing learning programs. This is not done well in industry.

With one contract I helped recruit and select new OHS staff. I facilitated 2x1 day teambuilding workshops for safety staff and their supervisors and managers; everyone commented how this helped them to fit into the new team. Teambuilding is an important skill for OHS personnel.

An important fact is the life of an OHS person is very difficult if there is not significant management commitment and leadership from the top management.

Over the years I have used and trained many people in various risk assessment techniques, risk assessment is the cornerstone of many organisations safety approach. The more I see of risk assessment the more I think it is not a valid and reliable technique.

My paper What Makes A Safety Management System Fly, available on request to [fgrobotham@gmail.com](mailto:fgrobotham@gmail.com) has been a work in progress for about 20 years. As I have had safety management system experiences I have added to the paper. The paper was published by the American Safety Engineering Society in an international safety best-practice publication.

There are lessons to be learnt from personal damage occurrences, the reality is that these lessons are often not widely communicated and acted upon. We do not have a National system for reporting, recording and analysing permanently life altering personal damage occurrences, this seems to me to be a priority if we are serious about managing OHS. Taxonomies of industry personal damage occurrence experience are a fertile avenue for improvement.

As a consultant it is always a quandary for do you quote to do a really good job or quote for an average job just to get the work. In my experience many clients do not want a very good job and will go with the cheapest quote. Of course this lowers professional standards.

Something to finish up with

* Thank others for their input and celebrate success.
* Resolve to being a lifelong learner and read widely.
* There is not much sense in taking on a battle you have little chance of winning.
* Deal with the issue not the person.
* I used to make the mistake of letting issues become personal: gives you a lot of aggravation and achieves little.
* Often it is the relationships you build not your technical skills that determines success.
* My mentor, Geoff McDonald talks about displacement activities. A displacement activity is something we do, something we put a lot of energy into but which there is little logical reason for doing it. Geoff says safety is full of displacement activity. Just be sure what you are doing is not a displacement activity.
* Management focus is the key to quality safety performance. Like all other management functions highly effective leadership is essential in OHS.
* Learn the context, culture and past before trying to make changes. Unless a crisis situation is apparent realise effective change requires a lot of effort and time.
* Kotter speaks of 8 steps for successful large scale change- Increase urgency, Build the guiding team, Get the vision right, Communicate for buy-in, Empower action, Create short-term wins, Do not let up, Make change stick.
* People judge you by what they see you doing not by what you say you are doing.
* Learn the skills of reflective listening and appropriate self-disclosure will help with interpersonal relationships.
* A major sin in business is long, overly complicated policy, procedure and other written documentation. Busy people do not have time to write it and busy people do not have time to read it. Keep it simple and ask yourself if it is too much like hard work to read. Use 1 page max. for routine correspondence.
* Have huge but realistic goals.
* Do the simplest thing that will work.
* Remember the 6 P rule-Prior Preparation and Planning Prevents Poor Performance.
* Ask for and give regular feedback.
* Communicate your expectations.
* Good amounts of quality time for you, family and friends is essential for high performance at work.
* Concentrate on the things that give the biggest bang for your buck.

**Major safety technical lessons learnt**

In my 38 years in OHS I have helped my employers cope with the aftermath of 13 fatalities, one case of paraplegia, one major stress case and a very serious burns case. Speaking from personal experience the most devastating thing that can happen to a company and its workers is to have an employee killed or seriously injured. The financial and more importantly humanitarian costs are immense. OHS is a joint responsibility of management and employees. My focus is the prevention of permanently life altering personal damage.

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Introduction

The paper Lessons Learnt From My Safety Jobs talks about the OHS and OHS related things I have learnt from my safety jobs. In this paper I elaborate on the major safety technical lessons learnt.

OHS Problems

Some of the problems I currently see with Occupational Health and Safety in Australia include these-

* There is only half-hearted leadership from government, unions and many companies with regard to safety. Admitting to being a cynic I suggest the rhetoric is not always accompanied by action. I suppose it is naive to think the tripartite partners can put aside their industrial and political agenda when discussing safety.
* There is a poor understanding in the community of the reasons why accidents occur. We are quick to make the assumption that the worker was careless, when one examines accidents carefully one identifies a range of work system factors that contributed to the accident as well, most of these work system factors are the responsibility of the employer at both common and statute law. Blaming workers for their careless behaviour is an emotionally appealing approach that is usually not all that productive in the bigger picture of preventing personal damage at work.
* It is often said about safety that it is just common sense, if this is the case why are we doing such a poor job of managing it in this country? I am reminded of an un-named Chinese philosopher who was reported to have said "The trouble with common sense is that it is never common and rarely sensible"
* The media emphasises personal fault in news releases about incidents and does not consider design and system issues that contribute to incidents.
* We do not have a centralised, consistent method of reporting and recording incident and disease statistics. How can we examine the beast and learn from it if we do not record and report it in a consistent manner?
* In business vast amounts of money can be spent on safety without really defining desired outcomes (I am not doubting peoples motives however, just their effectiveness)
* Government, unions and many companies treat safety as a second priority and industrial relations issues dominate.
* The standard of Occupational Health and Safety practitioner may not be as high as it could be
* The messages of past incidents are not utilised enough in safety decision making. For this to happen past incident information has to be collected, presented and organised in a useable manner.

Major Lessons Learnt

Get your rear end out of the office and in the field

This is the most important thing for OHS people to do. Inspect the worksite, show an interest, talk to the employees, give advice, help out, train, coach, mentor and build relationships. Many safety people get buried in producing and responding to excessive paperwork, produce and expect succinct documentation. Do not do things that have little return for effort.

L.T.I.F.R.

The Lost Time Injury Frequency Rate dominates discussions about safety performance. How can a company be proud of a decrease of L.T.I.F.R. from 60 to 10 if there have been 2 fatalities and 1 case of paraplegia amongst the lost time injuries? The L.T.I.F.R. trivialises serious personal damage and is a totally inappropriate measure of safety performance. Positive performance measures are the way to go.

Emergency Response Plans

Despite our best efforts it is possible that personal damage occurrences (accidents/incidents) will occur. It is essential to have plans to manage specific incidents. Incidents that require emergency response plans include

* Injury
* Fire
* Explosion
* Bomb threat
* Electrical outage
* Oil/fuel/chemical spill
* Gas leak
* Earth wall failure
* Radiation emergency
* Natural disaster
* Missing person

Emergency response plans should include provisions for Critical Incident Stress Debriefing.

The plans should be regularly practiced and audited.

The Compliance with Common Law (in states where applicable)

There are four basic duties under common law:

1. To provide and maintain competent staff.
2. To provide and maintain a safe place of work.
3. To provide and maintain safe plant and appliances.
4. To provide and maintain a safe system of work \* ( a system means generally the way things are done)

The above duties contain few words but the meaning is quite significant. The employer really has to do everything reasonably and practically that he can do. Many would suggest he then has to go a few extra steps. Managers and supervisors really need to be trained in common law duties to fully realise the impact of this important area on how they manage safety. (Refer to the paper Common Law Liability by this author)

Lock out

I am of the view that lock out isolation provides greater protection than tag out isolation. If you want to make the change to lock out visit a few companies using it to see what lessons you can learn.

Zero Harm

The 2 most common complaints I have heard about Zero Harm are-

1. The goal is neither realistic nor achievable. A lot of the workers thus think it is a management wank.
2. People end up using lots of resources on relatively minor issues.

In the book *For the Love of Zero*, Dr Robert Long proposes a multitude of arguments against the zero harm philosophy.

Induction training

The issue of induction training is a contested one and people have different views on the required content and duration. I have come to realise detailed training is not a good idea for the new starter. They can have a myriad of issues in their mind as they settle into a new job and possibly new house and location and this can decrease their focus on induction training. Starting a new job can be a time of stress and confusion and they can easily become overloaded. I tend to think you need to give them the basic safety essentials to start with and get them back a few weeks after for more detailed training. Essential induction topics need to be revised through the tool-box meeting schedule.

Tool-box meetings

Regular, short, sharp, tool-box meetings can be an excellent means of getting the safety message to employees and resolving safety problems. These talks are a visual commitment to safety, open lines of communication and help to meet legislative requirements for consultation.

A search of the internet will reveal many sources of packaged, prepared tool box talks, many free. Whilst these have their uses they cannot beat analysing your audiences’ needs and presenting something to meet their needs.

Some organisations publish a 6 or 12 month schedule of tool box talks and provide training resource material to supervisors. Tool box talks may also be held prior to undertaking high risk or difficult tasks or when problems are noticed. Some organisations have a quick tool box meeting at the beginning of every shift to discuss the safety implications of the work to be done on that shift.

You must create a no-fear, no-blame environment where people are prepared to honestly speak their mind without fear of recrimination. Refer to the paper Tool-box meetings.

Moura disaster

I have written elsewhere in some detail about this. In 1994 the Moura disaster occurred with 11 men entombed in the mine after an underground explosion. Andrew Hopkins wrote a book called Managing Major Hazards about Moura which I think is essential reading for all OHS personnel. The Moura disaster emphasises the role of safety culture. The company was aggressively perusing a goal of reducing L.T.I.F.R. and lost the focus on catastrophic risk. It is difficult to understand why miners went down the mine given there were signs of a heating. Moura was as much about a communications failure as a safety failure. There are many lessons in the documentation about Moura. An important one for me is that the media go for the jugular and sometimes the truth is a casualty.

Behaviour-based safety

This is a relatively new technique in Australia, but may be a useful addition to the range of OHS “tools”. Caution is urged with the use of these techniques in isolation; they are but one tool and cannot be seen as the one and only answer to an organization’s safety problems. Behavior based programs are most effective when used in conjunction with engineering solutions. Colleagues in BHP report considerable success with DuPont behavior-based programs. My experience with B.B.S. has left me with doubts about its ability.

To my mind the B.B.S. literature makes outlandish claims about the success of the technique, often with some less than rigorous studies.

Accident ratio studies misdirect safety.

My grandmother used to say “Look after the pence and the pounds will look after themselves” In the world of traditional safety there seems to be similar thinking that if you prevent minor damage you will automatically prevent major damage. Accident ratio studies (insisting on set ratios between near misses, minor accidents and serious accidents) are prominent and accepted unthinkingly. The much-quoted “Iceberg Theory” in relation to safety does not stand up to scrutiny in the real world! The “Iceberg Theory” is fine if used for statistical description but it cannot be relied upon for statistical inference. (Geoff McDonald)

The result of the “Iceberg Theory” focus is a furious effort to eliminate lost time injuries in the belief that all major incidents will be eliminated in the process. Certainly there are minor incidents that have the potential to result in more extensive damage (and we should learn from them), but personal experience tells me the majority of minor damage incidents do not have this potential. It is a matter of looking at the energy that was available to be exchanged in the incident. The common cold cannot develop into cancer; similarly many minor injuries will never develop into serious personal damage.

The concept that preventing the minor incidents will automatically prevent the major ones seems to me to be fundamentally flawed.

All organisations have limited resources to devote to safety, it seems more efficient to prevent one incident resulting in paraplegia than to prevent 20 incidents where people have a couple of days off work (some will say this comment is **heresy**)

Somewhere in the push to reduce L.T.I’s, reduce the L.T.I.F.R. and consequently achieve good ratings in safety programme audits the focus on serious personal damage tends to be lost.

Auditing

Organisations that are successful at Occupational Health and Safety have regular comprehensive internal and external audits. Standards must be developed for the safety management system e.g. Visitor safety, contractor safety, compliance with statute law, use of personal protective equipment, management commitment, hazard identification/risk assessment, safe working procedures, loss prevention &control, employee involvement, emergency procedures, accident investigation, education/communication, inspections, health & fitness, injury management, etc. and compliance with these standards must be audited. A quality assurance approach where NCR (Non-compliance reports) are issued is recommended.

Auditors must receive training by authoritative training professionals, comprehensive auditing guidelines must be developed and formal processes introduced to follow-up on audit recommendations. A criticism of safety audits is that they are usually not based on an examination of serious personal damage occurrences (accidents) experience. After detailed audits it is surprising how many organizations never actually get around to implementing the recommendations.

Marketing of OHS

Sometimes skills from other disciplines can be applied successfully to OHS, one such skill set is marketing. I have attended some marketing training but admittedly the focus was on marketing consultancy services. OHS people are marketing a product, safety, and need a professional approach.

Learning

The development of OHS learning programs always needs a thorough learning needs analysis as a precursor. Action and experiential learning models are important as is ensuring maximum interactivity in the sessions. The Kirkpatrick model of evaluation is important. Avoid lecture style presentations except when for a very short time. A bit of humour always helps. For more information refer to the papers Adult Learning Principles and Process and How to Give An Unforgettable Presentation.

Coaching and mentoring

An extension of formal learning is coaching and mentoring. After formal learning you can work with participants to cement and put in practice the learning. A big fall down of much learning is there is never put in place a plan on how to implement the learning. A formal mentoring program with a mentoring plan can have benefits for both the mentor and the mentee.

Commercial Safety Management Systems

There are a number of home-grown and international safety management systems commercially available in Australia and these can have an impact on your safety management system BUT you must be conscious of the need to specifically tailor these programs to your organisation’s specific identified needs. You can end up spending a lot of money and using a lot of resources implementing these systems and not get much of a result. You are advised to carefully evaluate systems before coming on board.

Problems with 4801-Many people will have you believe 4801 is the holy grail of safety management systems and the fact that they have a 4801 compliant safety management system means they are doing a good job on safety.

As far as I am concerned 4801 represents a very basic approach to safety management systems and any S.M.S. I would want to implement would substantially exceed the requirements of 4801.

Education for OHS personnel

There is much activity in OHS education but I am unaware a comprehensive learning needs analysis has been carried out. One of the problems I see is that universities do not have a robust OHS body of knowledge to base their course offerings on. The Safety Institute of Australia carried out an OHS body of knowledge project and are to be commended for this. My view is that from a communications, OHS, project management and learning perspective there were major problems with the project. What we see now should just be regarded as the start of the process.

Manufacturers

Manufacturers are slow to acknowledge the safety related problems with their equipment and it is even harder to get them to change the design of their equipment.

Accident investigation

The Analysis Reference Tree Trunk method of accident investigation is the best despite recent advances.

Critical incident recall process

As the result of serious burns to an electrician we introduced a critical incident recall process in the electrical department of one mine. I have written elsewhere about the work that was done but it was extremely successful and I would recommend the technique. Refer to the paper the Critical Incident Recall Process.

Honesty

I learnt that safety is often watered down by industrial relations considerations and public moneys are not always spent as intended. People will lie to you, always seek out solid evidence.

Research

There is not much money for OHS research and much of the research that is done is overly-theoretical.

Keep your feet on the ground

I learnt in a strategic role you had to frequently get out in the field to maintain your perspective. When you are in an operational role you can easily become so busy putting out bushfires, have little time for fire prevention and lose sight of the big picture. When you are in a strategic role you can become so focused on the big picture that you lose sight of the everyday reality of how the business is managed. Strategic people need regular reality checks.

Project teams

I also learnt that well structured and planned project teams are a great way to drive safety change. You have to select team members carefully, have a good team leader and a thorough project plan.

Internal standards of OHS excellence

I saw the introduction of 18 internal standards of OHS excellence make a big difference. OHS lends itself well to having approx. 20 OHS standards. Refer to the auditing sub-heading for examples of standards. The standards are what your team believe are essential to have an excellent safety management system. What excellence in implementation of the standards would look like must be defined and people trained in this. You then need regular searching audits led by a senior manager. Senior management not safety personnel must drive the audits.

Job Safety Analysis

Training in job safety analysis proved to be a good precursor to the development of safe working procedures. The course must introduce the theory and practice using the technique. The commonest mistake the author has seen with safety management systems is the development of extensive safety procedures that the workers do not know about, care about or use. The procedures sit on the supervisor’s bookcase or a computer program and are rarely referred to. The job safety analysis technique must be used to develop safe working procedures and involvement of the workforce is crucial. If your safe working procedures are over 2 pages in length worry about whether they will ever be used. Use flow-charts, pictures and diagrams in your safe working procedures and base them on a very basic level of English. The K.I.S.S. principles apply.

Hazard identification / risk assessment /hazard control training

A 4 hour training course on hazard identification / risk assessment /hazard control that I developed saw widespread adoption and was credited with much improvement. There was a minimum of theory and much use of practical exercises on authentic tasks in the workplace.

Safety champion

I saw the outstanding effect on safety that a senior manager designated as the Safety Champion can have.

Safety communications

While with B.H.P. I worked with Professor T.J. Larkin of Harvard University analysing safety communications in the company. There were 3 main messages to come out of this research-

1. Use face-to-face communications,
2. Use the supervisor to communicate and
3. Frame messages relevant to the immediate work area.

T.J. Larkin’s book Communicating in Times of Change is a must read for safety people.

Safety benchmarking

BHP Minerals undertook a major safety benchmarking effort after the Moura disaster where 11 men were killed, the report makes great reading. Benchmarking needs a highly organised approach to be effective. Over a 14 month period in 1994 -5 BHP Minerals carried out an extensive international safety benchmarking exercise with “best in safety class” companies throughout the world which cost many millions.

25 locations throughout the world participated in the study. An approximate 100 page report on findings has been published.

The following were recurring themes in the world’s best safety performers.

1. **Executive management provides the impetus for safety performance. This means that senior management is not only committed to and supports safety, but that it insists on safety performance in a manner that is clearly understood and echoed at all levels.**
2. **Management focus is a key to quality safety performance.**

**\*1 & 2 above were seen as key factors**

1. Existence of a company-wide framework or systematic, standardised approach to safety. The approach has performance standards that receive regular internal and external audits.
2. Objectives are set and organisations work towards set targets for implementation of the objectives.
3. Safety personnel report in at the highest level in the organisations. They have mainly an advisory function. Management and supervision drives the safety program not the safety personnel.
4. Effective safety training targeted to identify needs at all levels. Induction training and detailed safety training for supervisors and managers was high on the priority list. Regular safety meetings were seen as important.
5. Active personal involvement of senior management personnel in the safety program.
6. Safety is considered in performance evaluations of all staff.
7. Regular, detailed audits of the safety management system.
8. Formal approaches to hazard identification and risk analysis, employees were fully involved in this.
9. Formal emergency response procedures that were practiced and audited.
10. The best in class addressed contractor safety before contractors were allowed on site, they pre-qualified them based on safety and made safety performance a contract condition. Contractors were expected to perform at the same safety level as permanent employees.
11. High on the list of the ways the best in class built safety awareness were management participation and leadership, dissemination of information, safety meetings and rewards or recognition of performance.
12. Safety is a condition of employment and dismissals occur for non-performance.
13. Well-managed rehabilitation programs are in place.
14. The best in class use medical examinations and testing to ensure fitness for duty.
15. There were E.A.P’s in place.
16. There were off the job safety programs.
17. There was an emphasis on vehicle / plant maintenance and driver / operator training programs.
18. There were extensive PPE training, maintenance and audit programs.
19. Lock-out procedures were used instead of tag-out.
20. Best in class managers and supervisors respond positively to safety issues that are raised.
21. Best in class supervisors are responsible for safety auditing, investigating personal damage occurrences (accidents), planned job observations and training.
22. All levels in the organisation make decisions that reflect the philosophy “Safety first-Production will follow”.

It is suggested Safety Management Systems be built around the above benchmarking

Safety Committee

There should be a senior management safety committee to develop policy and an employee safety committee to recommend safety policy to the management committee and to implement policy agreed to by the management committee. Safety committees are much maligned. Safety committee members must be trained for their role and well supported by management. Giving the committee a substantial job to do helps to stop the whinging.

Safety as part of performance appraisal

During the performance appraisal of supervisory and management personnel an initial and high emphasis must be placed on safety. The focus should not be on what personal damage occurrences(accidents), have occurred in the supervisor’s workgroup, rather it should be on what he/she has done to introduce excellent safety programs.

Safety management plans

The importance of having detailed hazard management plans and safety management plans was made clear in several roles as was the importance of piloting new training programs.

Class 1 personal damage

Australian safety researcher Geoff McDonald has been my advisor/coach/mentor /guide in my safety career. Geoff McDonald has a system of classifying personal damage occurrences (“Accidents “) that goes something like this-

Class 1-Permanently alters the future of the individual

Class 2-Temporarily alters the future of the individual

Class 3 –Inconveniences the individual

Geoff has investigated many thousand Class 1 damage occurrences in his career and maintains the most effective way to make meaningful progress in safety is by focusing on the class 1 phenomena. I have been involved in 3 projects with Geoff where we have either analysed critical incidents or personal damage occurrence experience and I found the results very impressive, the analysis of the critical incidents and personal damage occurrences really targeted control actions in an appropriate manner.

Most organisations will not have sufficient Class 1 personal damage to make analysis of their experience result in significantly significant determinations. Establishing standardised industry personal damage reporting schemes is the alternative. Taxonomies, collections of like, of this information is the preferred approach.

Management of Organisational Change

From my studies of Management of Organisational Change I use the motto “When initiating change, remember, people support what they create”.

You have to involve those affected by the change process in the change process if you are to have any success.

Leadership

My interest in leadership was heightened by attending a presentation on the topic by General Norman Schwarzkopf. This led me to carry out extensive research into leadership generally and safety leadership specifically. A highlight of this was being invited to facilitate a Safety Leadership workshop in a National forum in Canada. I have since worked with clients to develop leadership approaches. I believe leadership is the often forgotten key to excellence in organisations.

I have been fortunate to work with 3 excellent leaders and have reflected upon and learnt from their approaches.

Force-field analysis

One of the techniques I learnt on my education degree was force field analysis. I have written on this elsewhere but I find it very useful when developing or revising safety management systems. See the paper Force-Field Analysis

Haddon’s 10 countermeasures

Another technique worthy of consideration when developing controls is Haddon’s 10 countermeasures. The traditional wisdom when developing controls is to use the hierarchy of controls. I would argue you get a better result with the Haddon approach.

Various hazard control strategies and models have been developed by safety professionals over the years. One of the most effective but still easiest to apply is that devised by American researcher Bill Haddon

Haddon’s model for hazard control is as follows:

|  |  |
| --- | --- |
| Countermeasure 1 | Prevent the marshalling of the form of energy in the first place.  E.g. Ripping seams - instead of blasting, substitution of radiation bin level sources with ultra-sonic level detectors, using water based cleaners rather than flammable solvents. |
| Countermeasure 2 | Reduce the amount of energy marshalled.  e.g. Radiation – gauge source strength, explosive store licence requirements, control number of gas cylinders in an area |
| Countermeasure 3 | Prevent the release of the energy.  eg. handrails on work stations, isolating procedures, most interlock systems |
| Countermeasure 4 | Modifying the rate or distribution of energy when it is released.  eg. slope of ramps, frangible plugs in gas bottles, seat belts. |
| Countermeasure 5 | Separate in space or time the energy being released from the susceptible person or structure.  eg. minimum heights for powerlines, divided roads, blasting fuse. |
| Countermeasure 6 | Interpose a material barrier to stop energy or to attenuate to acceptable levels.  eg. electrical insulation, personal protective equipment, machinery guards, crash barriers |
| Countermeasure 7 | Modify the contact surface by rounding or softening to minimise damage when energy contacts susceptible body.  eg. round edges on furniture, building bumper bars, padded dashboards in cars. |
| Countermeasure 8 | Strengthen the structure living or non-living that would otherwise be damaged by the energy exchange.  eg. earthquake and fire resistant buildings, weightlifting. |
| Countermeasure 9 | To move rapidly to detect and evaluate damage and to counter its continuation and extension.  eg. sprinkler systems, emergency medical care, alarm systems of many types. |
| Countermeasure 10 | Stabilisation of damage – long term rehabilitative and repair measure.  eg. clean-up procedures, spill disposal, physiotherapy |

**Note**

Generally the larger the amounts of energy involved in relation to the resistance of the structures at risk, the earlier in the countermeasure sequence must the strategy be selected. In many situations where preventative measures are being considered the application of more than one countermeasure may be appropriate.

Countermeasures may be ‘passive’ in that they require no action on the part of persons, or ‘active in the sense that they require some action or co-operation on the part of the persons, perhaps in association with a design related countermeasure (eg. seatbelts).

**Passive’ countermeasures tend to be more reliable in the long term. A short term solution to an immediate problem may require the adoption of an ‘active’ countermeasure eg. Toolbox sessions on replacing guards over a mechanical hazard, the long term or ‘passive’ countermeasure might be the fitting of interlocks to the guard so that power is off when the guard is off.**

**Further reading**

Haddon, W ‘*On the escape of tigers an ecologic not*e – strategy options in reducing losses in energy damaged people and property’ Technology Review Massachusetts Institute of Technology, 72; 7, 44-53, 1970.

Teambuilding

With one contract I helped recruit and select new OHS staff. I facilitated 2x1 day teambuilding workshops for safety staff and their supervisors and managers; everyone commented how this helped them to fit into the new team. Teambuilding is an important skill for OHS personnel.

Management commitment

An important fact is the life of an OHS person is very difficult if there is not significant management commitment and leadership from the top management.

Risk assessment

Over the years I have used and trained many people in various risk assessment techniques, risk assessment is the cornerstone of many organisations safety approach. The more I see of risk assessment the more I think it is not a valid and reliable technique.

Safety Management System

My paper What Makes a Safety Management System Fly, available on request to [fgrobotham@gmail.com](mailto:fgrobotham@gmail.com) has been a work in progress for about 20 years. As I have had safety management system experiences I have added to the paper. The paper was published by the American Safety Engineering Society in an international safety best-practice publication.

Displacement activities

My mentor, Geoff McDonald talks about displacement activities. A displacement activity is something we do, something we put a lot of energy into but which there is little logical reason for doing it. Geoff says safety is full of displacement activity. Just be sure what you are doing is not a displacement activity.

Management focus

Management focus is the key to quality safety performance. Like all other management functions highly effective leadership is essential in OHS.

Set the example

People judge you by what they see you doing not by what you say you are doing.

Paperwork

A major sin in business is long, overly complicated policy, procedure and other written documentation. Busy people do not have time to write it and busy people do not have time to read it. Keep it simple and ask yourself if it is too much like hard work to read. Use 1 page maximum for routine correspondence.

Conclusion

I have tried to outline what my experience with safety technical issues has taught me. I hope it has been of some use to you.

George can be contacted on [fgrobotham@gmail.com](mailto:fgrobotham@gmail.com); he welcomes debate on the above (it would be indeed a boring world if everybody agreed with George)

George Robotham, Cert. IV T.A.E., Dip. Training & Assessment Systems, Diploma in Frontline Management, Bachelor of Education (Adult & Workplace Education), (Queensland University of Technology), Graduate Certificate in Management of Organisational Change, (Charles Sturt University), Graduate Diploma of Occupational Hazard Management), (Ballarat University), Accredited Workplace Health & Safety Officer (Queensland),Justice of the Peace (Queensland), Australian Defence Medal, Brisbane, Australia, [fgrobotham@gmail.com,](mailto:fgrobotham@gmail.com,) www.ohschange.com.au,07-38021516, 0421860574, My passion is the reduction of permanently life altering (Class 1 ) personal damage

**The Good, Bad & the Ugly of George’s 38 Year OHS Career**

****

Quotable Quote

**"A health & safety problem can be described by statistics but cannot be understood by statistics. It can only be understood by knowing and feeling the pain, anguish, and depression and shattered hopes of the victim and of wives, husbands, parents, children, grandparents and friends, and the hope, struggle and triumph of recovery and rehabilitation in a world often unsympathetic, ignorant, unfriendly and unsupportive, only those with close experience of life altering personal damage have this understanding"**

Introduction

In this paper I have reflected on the Good, Bad & the Ugly aspects of my 38 year career in OHS. The Good has been sub-divided into Routine matters and Things they do not normally teach you in safety officer school. My hope is that particularly the novice OHS professional, does not have to spend the same amount of time as I have learning the lessons I have learnt. The more experienced OHS professional may have had similar or different experiences and find this of interest. The more experienced OHS professional may also find some of the issues I mention quite routine and have far more knowledge than me of a particular topic. If that is the case it would be great if you could share that knowledge with me & others.

One of the techniques I talk about under Good is the reflective journal, to a certain extent this document is a reflective journal of my experiences in safety. The paper is about my personal experiences I have had in safety and my personal conclusions stemming from those experiences. Other people will not have had the same experiences (although they may have had similar experiences) and will have come to different conclusions. The paper may appear self-opinionated but I guess that is the nature of reflective journals.

A number of the things I say question traditional beliefs about safety, I do not expect there will be universal agreement on everything I say. I am more than willing to respond to challenges to my thinking. If you think I am wrong present a solid argument and I will learn from it.

Australian safety researcher Geoff McDonald has been my mentor / coach / guide / advisor during most of my safety career. Geoff has investigated many thousands of serious personal damage occurrences and brings a unique perspective on what works and does not work in safety. Geoff says a number of the things that are done in safety are “displacement activities”, a displacement activity is something we do, something we put a lot of energy into but if we examine it properly there is no logical reason for doing it. My safety career has seen a number of displacement activities. Another observation I have about safety is sometimes emotion gets in the way of logical judgement.

My view is from the trenches where I have had to deal with the aftermath of fatalities and other serious injuries and implement a range of OHS strategies.

I make comment on the following under the -

**Bad &Ugly**

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There are a few places where I have my foot in both the Good and the Bad & the Ugly camps

**The following are the low & high points of George’s safety career**

**Bad & Ugly**

**1. Kinetic Lifting**

In the 1970’s people were trained in Kinetic Lifting (keep the back straight, bend the knees) as a means of preventing manual handling injuries. I used to do a lot of this training and when I used to go back to audit the effectiveness of the training found no-one was using the techniques. Thankfully nowadays we have physios, O/T’s and ergonomists involved in this training as part of an overall process of developing and implementing manual handling injury prevention.

**2. Induction Training**

At one start-up operation I developed a comprehensive safety induction program lasting 2 days and put about 600 people through the training over about a year. I used to feel very proud that they left the training very switched on about safety. The reality was within a few days of hitting the workplace they realised that my safety world I had spoken about was not reality; the safety culture of the organisation did not support my training. The very clear message is anyone seeking to introduce learning programs must do learning needs analysis first (refer to the paper Safety Training Needs Analysis on my web-site ohschange.com.au)

**3. Commercial Safety Management System**

One company I was associated with introduced a commercial Safety Management System. The S.M.S. was technically weak, culturally unsuited to the industry, the back-up training was pathetic, the audits were not searching and people had difficulties relating to the consultants auditing and advising on the system. A huge amount of time, effort and money was wasted that would have been better off expended on existing safety approaches. Relationships were strained. The S.M.S. was rushed into by the senior management team without detailed examination and guidance from practical OHS professionals. The safety charge was led by a senior manager who knew very little about safety and was clearly out of his depth. The really disappointing part was that in his ignorance and arrogance he would not accept counsel from those who knew about OHS. Refer to the paper What Makes a Safety Management System Fly on my web-site ohschange.com.au for some suggestions for S.M.S.

**4. Safety Training Generally**

I have conducted lots of safety training on lots of safety topics and attended a number of train-the-trainer courses myself. I was not too far into my Bachelor of Education with an Adult & Workplace Education major when I realised much of the training I had conducted in the past was not particularly effective. In Australia the Cert IV Workplace Training & Assessment has become the most recognised training qualification, I would suggest this is only a learner’s permit. Adult Learning Principles as outlined on my web-site ohschange.com.au must be used. Refer also to the Safety Learning Discussion Paper on the web-site. Dr Robert long has a great short course that will help those facilitating safety learning.

**5. Safety Committee**

The first safety committee I was associated with was formed reluctantly by management when the unions requested it. The only trouble was the members had this unusual idea that they should actually achieve something. Many requests for action went to management and were ignored or countered with bulldust responses. Tempers got frayed, people got peeved off and at the end of the day the formation of the committee did more harm than good. Safety committee members must be trained in their responsibilities and duties and fully supported by management. Meetings often become a whinge-fest with issues bought up that should be managed in day by day operations. My advice is giving the committee a substantive job to do. It is best to have a senior manager as chairperson of the committee rather than the OHS person.

**6. Complexity**

Many organizations have safety standards, special emphasis programs, policy and safe working procedures that are very thorough and detailed. Unfortunately in the quest for thoroughness the number of words becomes immense and difficult to decipher. It ends up being an immense task for even the most dedicated to wade their way through the paperwork. There is room for succinct summaries of major approaches. OHS professionals should not be judged by the number of words they create.

**7. Lost Time Injury Frequency Rate**

One previous employer had some safety professionals who were experts at manipulating L.T.I.F.R.

* The Lost Time Injury Frequency Rate impedes progress in safety.
* The Lost Time Injury Frequency Rate is the principal measure of safety performance in many companies in Australia. The definition of L.T.I.F.R. is the number of Lost Time Injuries multiplied by 1 million divided by the number of manhours worked in the reporting period
* A Lost Time Injury is a work injury or disease where the injured party has at least 1 complete day or shift off work. Note that a fatality and a cut where a person has 1 complete day off work count the same in Lost Time Injury terms.

The following are my reasons why the L.T.I.F.R. impedes progress in safety.

## The L.T.I.F.R. is subject to manipulation

Some safety people cheat like hell with their L.T.I.F.R. statistics encouraged by managers with an eye to keep their key performance indicators looking good. The more the pressure to keep K.P.I.’s looking good the more creative the accounting. If the same ingenuity was displayed in preventing personal damage occurrences as is displayed in cooking the books we would be in great shape. All this makes inter-company comparisons of L.T.I.F.R. statistics less in value.

I am reminded of one mine I used to deal with who drove L.T.I.F.R. down so they won the inter-mine (out of 7 mines) safety award yet had significantly higher workers compensation costs per employee and a number of compensation days off cases that never made it onto the L.T.I.F.R. statistics (the vagueness of the Australian Standard for Recording and Measuring Work Injury Experience was exploited, very easy to do, particularly for back injuries).

Then there was the mine that won a prestigious Queensland government mining industry safety award and a taxi full of “walking wounded” turned up just as the award for no lost time injuries for the year was being presented. The award was subsequently withdrawn.

## Ponderous deliberations

Safety people spend inordinate periods of time obtaining rulings on what to count and how to count it from bodies such as the Australian Standards Association. Often answers obtained are imprecise and the decisions are left to personal opinion. One is reminded of a sporting analogy where it is more important to play the game than keep the score.

## Measuring failure

Most measures in management are of achievements rather than failures such as the number of Lost Time Accidents. There is a ground swell in the safety movement talking about Positive Performance Measures in safety (refer to the National Occupational Health & Safety Commission and the Minerals Council of Australia web-sites for a discussion on this topic) It is relatively simple to develop measures of what you are doing right in safety as opposed to using outcome measures such as L.T.I.F.R. Positive performance measures can be used to gauge the success of your safety actions.

## Great L.T.I.F.R., pity about the fatalities

I have personal experience with a company that aggressively drove down L.T.I.F.R. to a fraction of its original rate in a space of about 2 years yet killed 11 people in one incident.

The Lost Time Injury Frequency Rate predominates in discussions about safety performance. How can a company be proud of a decrease of L.T.I.F.R. from 60 to 10 if there have been 2 fatalities and 1 case of paraplegia amongst the lost time injuries? The L.T.I.F.R. trivialises serious personal damage and is a totally inappropriate measure of safety performance.

### 8. Accident Ratio Studies Misdirect Efforts

My grandmother used to say “Look after the pence and the pounds will look after themselves” In the world of traditional safety there seems to be similar thinking that if you prevent minor damage you will automatically prevent major damage. Accident ratio studies (insisting on set ratios between near misses, minor accidents and serious accidents) are prominent and accepted unthinkingly. The much-quoted “Iceberg Theory” in relation to safety does not stand up to scrutiny in the real world! The “Iceberg Theory” is fine if used for statistical description but it cannot be relied upon for statistical inference. (Geoff McDonald)

The result of the “Iceberg Theory” focus is a furious effort to eliminate lost time injuries in the belief that all major personal damage occurrences will be eliminated in the process. Certainly there are minor personal damage occurrences that have the potential to result in more extensive damage (and we should learn from them), but personal experience tells me the majority of minor personal damage occurrences do not have this potential. It is a matter of looking at the energy that was available to be exchanged in the personal damage occurrence. The common cold cannot develop into cancer; similarly most minor injuries will never develop into serious personal damage.

The concept that preventing the minor personal damage occurrences will automatically prevent the major ones seems to me to be fundamentally flawed.

All organisations have limited resources to devote to safety, it seems more efficient to prevent one incident resulting in paraplegia than to prevent 20 incidents where people have a couple of days off work (some will say this comment is **heresy**).

Somewhere in the push to reduce L.T.I’s, reduce the L.T.I.F.R. and consequently achieve good ratings in safety programme audits the focus on serious personal damage tends to be lost.

Reducing the L.T.I.F.R. is as much about introducing rehabilitation programmes and making the place an enjoyable place to work as it is about reduction of personal damage.

**9. Terminology**

Probably the best example of a lack of scientific discipline in OHS lies in the terminology “accident”.

The term “accident” implies carelessness (whatever that means), lack of ability to control its causation, an inability to foresee and prevent and a personal failure. How can we make meaningful progress on a major cost to Australian industry if we persist with such, sloppy, unscientific terminology? The term “accident” affects how the general population perceives damaging occurrences and the people who suffer the personal damage, inferring the event is “an act of god” or similar event beyond the control and understanding of mere mortals.(Geoff McDonald)

The term “accident” is best replaced by the term “personal damage occurrence”. Instead of talking about “permanent disability” we should be talking about “life-altering personal damage”

There is a poor understanding in the community of the reasons why personal damage occurs. We are quick to make the assumption that the worker was careless; when one examines personal damage carefully one will also identify a range of work system factors that contributed to the personal damage as well. Most of these work system factors are the responsibility of the employer at both common and statute law. Blaming workers for their careless behaviour is an emotionally appealing approach that is usually not all that productive in the bigger picture of preventing personal damage at work

People talk about “accident” “causes” (another emotionally laden term) Investigating personal damage occurrences thoroughly will reveal at least 30 “essential factors” (an essential factor is one without which the final personal damage could not have occurred)

**10. Moura Disaster**

When I was working in the corporate safety department of a major mining company I was focused on the 7 open-cut mines and had no responsibilities for the 2 company underground mines. My view was and still is that some of the safety work being done in the open-cut mines was very good. On the 7th August 1994 Moura underground coal mine suffered an underground explosion that saw 11 men entombed in the mine and the mine closed. If my memory serves me correctly the head of the Mining Wardens enquiry into the disaster said “What happened at Moura represents a passage of management neglect that must never be repeated in the mining industry” The people who said what happened at Moura was an enormous stuff-up are understating the situation. Professor Andrew Hopkins wrote a book called “Managing Major Hazards” on the Moura disaster that I think should be compulsory reading for every manager, supervisor and OHS professional.

Those who complain about the effort and cost of implementing safety measures should have been around to see the slump in the company share price, shareholder dissatisfaction, pain and suffering, cost, effort, media crucifixion, ruined reputations, wrecked careers, psychological trauma, union backlash, enormous investigation effort, massive counseling effort, threat of regulator action, legal action against the company and company officials and strained relationships I saw.

**11. Behavior-Based Safety**

My view is that there are a number of proponents of B.B.S. who make outlandish claims about the success of the technique without rigorous research studies to back up their assertions. Some of the arguments for the technique get emotive. I was associated with 4 B.B.S. implementations that ended up being fizzers. With the first one the process failed because one of the things the workers were asked to do was observe and report on their mates behaviors. Australians do not “dob” in their mates and the process just did not work. The other 3 implementations were done in the same department at 3 different sites in the one company and for 6 months or so worked very well and a lot was achieved. At all 3 sites after 6 months or so the process was abandoned because both workers and management thought it was too much like hard work and there was not sufficient return for the effort. My view is that you have to have good safety systems and engineering controls in place before you consider introducing B.B.S. There are some safety professionals whose opinion I respect highly who tell me they have had good success with DuPont B.B.S. systems.

**12. Management Commitment**

The life of an OHS professional working with a management team that is not committed to safety is very tough. One of my ex-managers used to make the right noises about safety but there was never any action. I organized a course for the health & safety representatives with an external training provider, opened the course and left to do other business. About 2 hours later the training provider came to me to say the participants wanted to discuss a few safety issues with me. Some of the issues were within my power to fix and we developed a plan to fix them. Most of the issues required senior management action and I asked the manager in to address the participants. Well talk about a Yes Minister performance! I lost count of the number of times he told us how committed to safety he was but he danced around and would not commit to action. Eventually the group got sick of him and told him to leave.

At this point I decided it was a waste of time dealing with the manager on safety so I cut him out of the equation, something you will not always get away with, and turned my attention to the junior managers who were more receptive. One of the best ways of getting supervisors and managers on side is to train them in statute and common law so they can be aware of their personal liability for personal damage occurrences. Training in safety leadership is also beneficial. Going over your manager’s head to his boss or a senior company officer is fraught with danger and you want to be sure it will end up being a positive move. Besides from the above I have no magic solution to this one, sometimes it is easier to move on to somewhere where you are appreciated. Trying to manage any aspect of business without excellent leadership is simply hard work.

**13. Safety Incentive Schemes**

For the 20 years I was in the mining industry we had a variety of safety incentives. There were stubby coolers, belt buckles, caps, jackets, sports bags and so on. Awards were given for various periods without a lost time accident; often a more valuable prize was given for greater periods without a lost time accident. One of the things we found was people using the vagaries of the lost time accident classification system to not count compensable injuries as lost time. We also found the employees came to expect the award as just another perk of employment that had no relationship to safety. There were occasions when employees were injured due to management failures and they argued they should still get the award. These things are also quite painful to administer. The question was also raised about why people should need / deserve an award for working safely. The costs were substantial and some people argued the money could be better spent stopping personal damage occurrences. At the end of the day I believe safety incentives are a distraction and have no place in a safety program. There is plenty of literature to support this view.

**14. Zero Harm**

Zero harm goals are neither realistic nor achievable and I have some doubts about whether they are even desirable. This is yet another safety fad propped up by fuzzy thinkers. I recently encouraged discussion on zero harm on Australian and Canadian safety discussion forums and a paper that discusses the findings and my conclusions can be found on my web site.

The most common problems I hear about zero harm approaches is that they have no credibility with the workforce, organizations expend too much effort on minor issues and they lose the focus on permanently life altering personal damage.

**15. Bulldust**

When I was a young bloke my Father said to me “If you are going to be a bulldust artist you have to have an exceptional memory and be very good at it, otherwise you will get found out.” Over the years I have seen many supervisors, managers and safety professionals try to bulldust their way through questions from the workforce on safety. The workforce is not dumb; they know when they are being conned. It is simply impossible to know everything there is to know about safety. Admitting you do not know, saying you will go away and find out and coming back to people with a quality answer within a reasonable time-frame will build respect and credibility. Sources of information include legislation, Australian Standards, manufactures instructions, the internet (but be careful it is from an authoritative source), company policy, training courses, some government regulatory bodies have phone-in services, your local Safety Inspector and, very importantly, fellow safety professionals (It is important to build a network) Australia, U.K. and Canada have internet safety discussion forums of different types, I find these to be a lot of value. The Canadian one, in particular, will see some quick answers.

**16. Confined space work**

Started with this company with the remit to review the Safety Management System.

Was there a week and they came to me and said, by the way we have these and presented me with 32 Improvement Notices and 5 Prohibition Notices. Has to be a record for one visit from a safety inspector. These were overdue for a response to Workplace Health & Safety Qld.

A number of the Improvement notices were about confined space work. The company made water tank bodies for mining haul trucks, large mixing bowls for concrete mixers and some other confined space work.

Got on talking to the workers and got a few war stories about people being partially overcome by fume in the confined spaces and having had to be assisted out. The workers said they had been trying to get management to improve confined space work procedures in the workshop but the management ignored them.

The interesting thing was some of the workers did confined space work with the company product at the mines and were aware of and used the mines strict confined space working procedures when on the mine-sites.

Some of the problems I discovered were no confined space risk assessments, no confined space entry permit, the fume extraction was not effective particularly in the large water tanks with many baffles, there was no pre-entry test of the atmosphere, there was no continuous monitoring of the atmosphere, there was no off-sider to ensure the worker inside the confined space was safe, there were no emergency procedures, the respiratory protective equipment being worn was inappropriate, there had been no training in confined space work and what procedures that existed were not being followed.

All in all the biggest stuff-up in safety I have ever seen, particularly when you consider we are talking about something that can make a real difference to the workers lives.

Rapidly became obvious management was not interested in my findings or making changes so I got an outside organisation to audit the organisations confined space work. The auditor’s report was very damning as I knew it would be.

George goes about implementing the auditor’s recommendations and eventually the General Manager becomes aware of what is going on and tries to stop the process. He & I had what could be described as a forthright expression of views at a safety committee meeting where he tried to browbeat me into submission. I told him he should get advice from his solicitors on the matter and reminded him this came about because of an Improvement Notice from the government safety inspectorate.

A couple of days later major transformation from the General Manager, I am guessing he saw the solicitors, very keen to see the changes completed.

New gear was bought and other changes made. The union rep. came up to me & said he had been trying for 2 years to get the confined space work changed and I was a bit of a hero to a number of the workers.

As a safety person I was treated like crap by the management team, the same as the way they treated the workers.

While I was with this employer I attended a review by the company solicitor of the circumstances behind a life-altering personal damage occurrence that had occurred previously. It was quite obvious the company managed the issue poorly.

Since then I have noted the company has been the subject of an Enforceable Undertaking with the Qld Government. Not a surprise to me, slackest outfit on safety I have ever come across.

**17. Construction safety management plans**

When started with X road and bridge construction, noise barrier, earthwork , concrete construction organisation the senior OHS person explained to me that an important part of my duties was to prepare safety management plans for the start of every construction project. The organisation had a big template safety management plan and the idea was that one should identify the type of work being done e.g. confined space, trenching, manual handling etc. And put the required safety precautions for this type of work from the template into the safety plan. Basically the safety precautions in the template were based on the statutory requirements for the particular class of work (assumes of course the legislation was right and catered for varying circumstances). I did a few safety plans and noted the expectation was that these be done in the office. There was no inspecting the site or discussion with the workforce and only limited communication from those in charge of the project.

About a month after I started I got a call that an excavator had hit a power line on a road construction job and I go over to investigate. After interviewing the excavator operator and the supervisor I go to the project office and ask the Project Manager for the safety management plan so I can check out what is said in the plan about operating equipment near power lines (The safety management plan had been prepared by the senior safety person) Much scrambling in filing cabinets and cries of “ it is here somewhere” Finally the safety management plan was located and I noted there was nothing on it about operating equipment near power lines. I talk to various workers and it rapidly became obvious none of them were aware a safety management plan existed.

From then on I tried to ensure the development of the plan included input from workers, involved a walkthrough of the site and input from the project manager and supervisor. Prior to each new project being started I would endeavour to have a safety induction that included discussion about the safety management plan. There was a fair bit of resistance to the foregoing approach from, particularly, project supervisors.

This incident was the start of about 5 incidents over 6 months where equipment struck power lines. Fortunately the electrical protection in the system blew and there were no injuries. There were issues about how adequately insulated the operators were from the cab of their equipment. There were many meetings and discussions about the topic and eventually a set of procedures were developed to be included in the safety management plans. The thing that made the most sense to me was the fitting of “tiger tails” on the power lines in the area where equipment was operating to improve visibility of the power lines (operators in the various incidents said they simply did not see the powerlines) A senior member of management held a series of meetings with the workers and supervisors to explain the new procedures.

A week later I go to a road construction job with earthmoving equipment, tip-trucks and excavators operating under power lines. No “tiger tails” The project supervisor ( who had attended one of the sessions with the senior manager) got offended when I suggested, in a caring and gentle way, that he should lift his game. When I complained to the manager he said he was not surprised as supervisor x was pretty slack on most things including safety, this was just accepted and there were no disciplinary actions.

**18. OHS publication**

There is no doubt there are some academic publications that aid OHS. There are some that are excessively long, incredibly boring, waffle on, do not stick to the point, take a long time to say nothing new or earth shattering and are an ego trip for the author and the organisations that publish them. Succinct is the way to go. Many academic papers are a wank as far as I am concerned. Academic papers are overdone in the safety world and there are many other ways of getting safety messages across that are under-utilised.

Core body of OHS knowledge

My critical reflection on practice says the most important thing we must do is develop a robust core body of OHS knowledge, we cannot effect meaningful change if we do not know what to teach people about what they should do. There has been some fiddling at the edges of developing a body of knowledge and those responsible are to be commended for this.

Defining the core body of OHS knowledge will make an enormous contribution to safety in Australia, if only a cursory approach is taken it will be regarded as a de facto standard and mislead badly.

Suggested essential requirements to define the core body of OHS knowledge

* Extensive focussed and succinct communication
* Involvement and equal input of all stakeholders. Stakeholders would include State & Federal Government, business, unions, S.I.A. &S.I.W.A. members, other OHS people, other relevant professional organisations and universities and other OHS education providers.
* Regular updates on progress and response to queries
* An equal emphasis on practice as well as theory
* The body of knowledge must be informed by the permanently life altering personal damage occurrence (“Accident “ ) phenomenon.
* A learning needs analysis to help define the body of knowledge must be part of the process.
* An analysis of the skill requirements of an effective OHS professional must be part of the process
* Thorough research processes to define the body of knowledge must be part of the process.
* Change management and project management processes must be applied; an experienced project manager may be applicable to lead the project.

**19. University education as the panacea for the OHS business**

My proof that I have embraced university education is the fact I have 3 university qualifications, OHS, Management of Organisational Change, Adult & Workplace Education. Ballarat University was very worthwhile and did a very good job of introducing me to applied OHS research; I also learnt how to appreciate cheap red wine. Since my Ballarat days I have had involvement with 2 other universities teaching OHS and was less than impressed.

I have noticed a number of people with stars in their eyes about OHS university education; some see it as the panacea of the safety business. As far as I am concerned a university OHS education is a necessity for OHS people but please put it in perspective. There are many other ways to learn, critical reflection on practice being a very important one.

When we do not have a well-developed core body of OHS knowledge the reality is we do not really know that universities are teaching the right things.

**20. Drink driving**

I spent my late teens and early 20’s in the Australian Army, late20’s and 30’s at mine sites, tough, male orientated environments where heavy drinking was encouraged. I used to regularly drink & drive, sometimes pretty pissed, obviously at odds with my safety role at work.

When I started my first mining safety job the company decided to put me in a day shift relief mining supervisors job for a month to get to know the blokes and understand the operations. My first job Monday morning was to drive down the haul road to see how many guide posts had to be replaced. The haul truck drivers used to start the first shift of the week 11 pm Sunday night and come into work tired and / or pissed from the weekend. They used to lose attention, drift off the road, knock out the guide post and the theory was the stimulus of drifting into the table drain used to wake them up. Sunday night was always the worst time for guide posts.

Was probably 1976 at Blackwater mine when I was at a Christmas function at the mine, got a call that a company car had rolled and the 2 occupants were trapped in the car, I gather together a few mine rescue squad people (all of us pissed), jump in the mine rescue vehicle and proceed to extricate the 2 pissed occupants of the rolled vehicle. Even though they had quite a few injuries they did not want to be taken to hospital as this would attract the attention of the coppers.

Was probably 1979 I had an advanced driving consultant come to another mine to run a course for supervisors, he gets to talk about drink driving, one participant says he cannot understand all the fuss about drink driving as it is only a 6 pack trip from the mine to town (about 20 kilometres)

After a bushfire came through the road from the mine to the town you could see the sun glistening off the empty stubbies on the side of the road from where people threw them out while driving home from the mine.

Driving from a mine to the nearby town we come across an overturned car, the passenger is sitting in the table drain and the driver is in the upside down car, I cut him out of the seat belt, take him out of the car and lay him on the ground, when I check his pulse there is none. The 2 blokes had had a gut full of grog at a happy hour at the mine.

For a number of years my company used to have annual mine picnics at the oval at the mine, great affairs with lots of entertainment for the family. Everybody had a gutful of grog & tucker and people were often seen leaving with a 6 pack for the trip back to town. After far too many car smashes the company put an end to the mine picnics.

The Qld mining industry has had random drug & grog testing at work for many years in an attempt to combat 2 major problems.

I have been very careful about drink driving for many years, I like to tell myself I am more responsible now but I have to admit that lurking in the back of my mind is the fact that I think I have a pretty good chance of being caught if I do drink & drive. I rarely go to a pub and am content to have a few drinks at home.

Despite my advice all of my 3 boys have gone for D.D. The fine, the inconvenience, the humbling requirement to rely on me to get them to work & Uni and their realisation that if they do it again they will get caught has changed their behaviour.

Drink driving is no longer socially acceptable and in some areas in Australia you have a good chance of being caught.

**21. Safe working procedures**

One of the things we like to do in the safety world is develop safety working procedures, this is despite the fact that without training and follow up procedural controls are notoriously unreliable.

At one road construction organisation the corporate safety people developed a S.W.P. for safely crossing a multi-lane freeway, there were good reasons for this. I was given the job of introducing it to the workers. There were 6 pages of complicated, close text and me, with a reasonable grasp of the English language, unlike some of the workers, simply could not understand it. Somehow I could not see the workers reading the document by the light of their torch or truck headlights in the middle of the night in order to carry out the task.

The corporate safety people were ropeable when I said I was not going to introduce it to the workers and it needed to be revised, they refused to revise it. Apparently I was a trouble maker. I gave the job of revising it to one of my crews.

2 pages with simple short steps and a diagram and the blokes were happy to use it because it made sense through their involvement.

I have always had difficulty drawing the line between what you put into a S.W.P. and what you rely on the competency of the worker for.

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**The Good-Routine Matters**

**1. Supervisor and Manager Safety Training**

The following outlines one company’s approach to supervisor and manager learning.

|  |  |  |
| --- | --- | --- |
| **Hazard Identification / Risk Assessment / Hazard Control** | 4 hours | For all levels of personnel |

* Types of hazards
* Practical exercise recognising hazards
* Risk assessment-practical and theory using probability, consequence and exposure
* Practical and theory of hazard control using the hierarchy of controls

|  |  |  |
| --- | --- | --- |
| **Introduction to Occupational Health and Safety** | 1 day | For leading hands, supervisors and managers (mandatory course to be promoted to a supervisor) |

* Company safety policy and procedures
* Supervisor’s responsibility for safety
* Common law principles as they apply to safety management
* Workers compensation and rehabilitation
* Statutory obligations of supervisors

|  |  |  |
| --- | --- | --- |
| **Accident Investigation** | 2 days | For members of accident investigation teams, leading hands.  Supervisors and managers (mandatory course to be promoted to a supervisor) |

* Size of the accident problem
* Myths & misconceptions about safety
* Influence of design on accident causation
* Cause versus essential factors
* Theory and practical (including practical exercises) application of Geoff McDonald Accident
* Reference Tree-Trunk method of accident investigation

|  |  |  |
| --- | --- | --- |
| **Introduction to Occupational Health** | 1 day | For supervisors and managers (mandatory to be appointed as a senior supervisor) |

* History of occupational health and industrial hygiene
* Occupational health principles
* Chemicals control
* Toxic hazards in industry
* Methods of control of occupational health problems (e.g. audiometric testing, noise testing, dust testing and control, control of radiation hazards, RSI, back care)
* Supervisor’s role in occupational health

|  |  |  |
| --- | --- | --- |
| **Management developments in occupational health & safety** | 1 day | For the senior management team at an operating location) |

* Latest Occupational Health and Safety developments-employer association, union, A.C.T.U., and legislative trends
* Significant Occupational Health and Safety issues in the company and emerging trends
* Advanced safety techniques (e.g. auditing, fault-tree analysis, Hazop, safety communications, job safety analysis)
* Analysis of the effectiveness of the sites current safety approach

Generally I thought these courses I presented a major part of put a much needed focus on safety and gave the participants needed skills

**2. Job Safety Analysis**

A section of one organization I was employed at had an event where a person came close to being killed. The regulator investigation gave the organization 6 months to examine and develop safe working procedures, if the regulator was not satisfied with the work done the operation, a vital part of the whole operation, would be shut down. I trained the whole department of some 200 personnel in Job Safety Analysis (refer to the paper on this topic on my web-site ohschange.com.au) and oversaw the development of the Safe Working Procedures. I saw this work as quite positive but I am conscious that Safe Working Procedures are not necessarily the answer to a maiden’s prayer and sometimes it is easy to rely on them unduly. The issue of what you rely on the workers competency for versus what you put on paper is something I have difficulty coming to grips with.

**3. Hazard Identification / Risk Assessment / Hazard Control Training**

I developed the 4 hour course, facilitated the course, and trained safety staff in how to facilitate the course and briefed consultants hired to facilitate the course.

Hazard identification-Discussed about 15 types of hazards & then had a hazard identification exercise in the workplace.

Risk Assessment-Spoke about the risk assessment process and then did a risk assessment on a real job. It was emphasized that the risk assessment process will only give a rough guide and not to get too hung up on the risk ratings.

Hazard control-Spoke about the hierarchy of controls and applied to the job they had just risk assessed.

The course proved very popular and some sites put the entire workforce through the training. The view of many was that the workers were much more aware of the risks of their work and took appropriate action to decrease the risks.

**4. Safety Leadership**

Someone asked me to develop a Safety Leadership workshop so I started to do research into the topic, the outcome being the paper on my web-site ohschange.com.au I have developed a one hour workshop on Safety Leadership that seems to go over well.

I am convinced leadership is the forgotten key to excellence in business. Quite frankly if you do not have excellent leadership you have S.F.A. chance of achieving anything in any avenue of business. Leadership is an under-valued concept in many pursuits.

What the OHS Professional Can Do To Improve Safety Leadership

1. Learn as much as you can about general and safety leadership. Reference to the sources of information in this paper will help.
2. Carry out a survey to identify the workforce perception of company leadership, there are various ways of going about this. Sometimes there is value in collating the answers onto histograms, displaying the histograms to the people who completed the survey, discussing the results and trying to establish why the responses are the way they are. This is best done by as senior a managers as possible who does not react defensively to criticism.
3. Survey the leadership styles of your leaders, various instruments are available. Carrying out a force field analysis on safety leadership may help to focus issues.
4. Identify the relevant learning needs of leaders using a formalized learning needs analysis.
5. Based on the above develop a safety leadership project plan in association with the stakeholders. Form a project team to manage the plan. Get management approval for the plan.
6. Launch and communicate the safety leadership project plan. My general advice with communication is to use face to face communication wherever possible, use the powerful influence of the work group supervisor and frame communication relevant to the work environment of the group being communicated to. High powered communications from senior management about the goals, mission, vision and the objectives of the company will not have much of an impact with many of the workers.
7. Carry out interactive leadership learning using Action and Experiential learning models. The learning must have a focus on the reality of the workplace. My advice is to check out both the process and content of potential providers very carefully, there are some snake oil salesmen in this space. I know it is not everybody’s thing but properly structured outdoor learning experiences can be a powerful means of leadership learning. Just ensure the focus is on the learning not the outdoor experience.
8. As a follow up to learning facilitation engage in authentic safety leadership tasks / activities / projects in the workplace. Progress must be regularly discussed, reviewed and evaluated, celebrate the success of these. McDonalds use WOW projects in their leadership learning.
9. Meet with the people who attended the learning facilitation and discuss what is going well and what opportunities for improvement have been presented. I know it is not everybody’s thing but I encourage leaders to maintain a reflective journal about their leadership experiences, used properly this can be a powerful means of learning.
10. Evaluate, communicate and celebrate success. Establish what was learnt in the process and how you would do it better next time.

The top 10 things that are essential for safety leadership

1. Leaders must visibly demonstrate commitment and focus on safety. Good leaders lead, great leaders develop other leaders.
2. Leaders must set the safety example.
3. Leaders must create high safety expectations.
4. High values and detailed standards of performance must be used
5. Leaders must listen to and involve the workforce
6. Leaders must do what they say they will do.
7. Leaders must value safety goals.
8. Employees must be made to feel they are part of something important and satisfying.
9. Leaders must reinforce, reward and celebrate success.
10. Everyone must be held accountable for safety performance.

**5. Internal Standards of OHS Excellence / Audits**

Standards must be developed for the safety management system e.g. Visitor safety, contractor safety, compliance with statute law, use of personal protective equipment, management commitment, hazard identification/risk assessment, safe working procedures, loss prevention &control, employee involvement, emergency procedures, accident investigation, education/communication, inspections, health & fitness, injury management, etc. and compliance with these standards must be audited.

One company I was associated with introduced the above standards and it put a massive increase in the focus on safety. What excellence in implementation of the standards would look like was defined and people were trained in this. A detailed set of audit questions, based on the fore-going was developed as was a detailed set of auditing guidelines and roles of auditors defined. Sites to be audited were briefed on the auditing guidelines and auditors were trained on the audit questions and auditing guidelines. A series of annual Executive Safety Audits was introduced at the various sites with an audit team led by a senior manager to give the process significant management horsepower. The largest audit team I was involved in had 10 auditors and audited the site for 4 days. A quality assurance approach where NCR (Non-compliance reports) were issued was used and formal processes were introduced to follow-up on audit recommendations.

The technical basis, training and preparation for the audits were sound but the key to success was the fact the audits were driven by senior management.

A criticism of safety audits is that they are usually not based on an examination of serious personal damage occurrences (accidents) experience. Refer to the paper Auditing OHS Systems on the web-site ohschange.com.au

COMMUNICATION

Nothing is more central to an organisation’s effectiveness than its ability to transmit accurate, relevant and understandable information among its members.

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## 6. Communications

From the my studies of Management of Organisational Change I adopt a communications and management philosophy that “People Support What They Create”

While with B.H.P. I worked with Professor T.J. Larkin of Harvard University analysing safety communications in the company. There were 3 main messages to come out of this research-

* Use face-to-face communications,
* Use the supervisor to communicate and
* Frame messages relevant to the immediate work area.

With written communications I aim to be succinct, have an appropriate structure and utilise management summaries with major reports. I use photographs, diagrams, and flow-charts etc. to illustrate main points. Important written communications must always be followed up by a face-to-face meeting. The BHP guideline for general correspondence is that if it takes more than 2 pages to write it is too much for busy people to write and read. The world of safety is famous for well-meaning, ponderous, glossy publications that no one really knows about, cares about or uses. Safety communications are also famous for the use of “weasel-words”. “Weasel-words” promise a lot but deliver little. Corporate OHS people are experts at producing technically brilliant safety communications that the workers do not connect with. Trying to communicate safety change through the company newsletter is a recipe for disaster. T.J. Larkin’s book Communicating in a Time of Change is a must read for OHS people.

Action and Experiential learning models must be used for communicating learning as opposed to lecture style presentations.

Professor T.J. Larkin says “If it is not face-to-face it is not communication”.

**7. Role of the safety professional**

Short-sighted companies think they employ safety people and these people will look after safety. The more progressive companies often do not have many dedicated OHS personnel, management and supervisors are so well trained and effective in safety that few dedicated safety personnel are required. Safety personnel should report to the senior officer so the function has some chance of being perceived as being of importance. The danger when you have too many safety people is that line management gets the safety people to manage safety not themselves. Safety is a line management function and safety personnel should be seen as specialist adviser.

**8. Common Law Liability**

There are four basic duties under Common Law:

* to provide and maintain competent staff;
* to provide and maintain a safe place of work;
* to provide and maintain safe plant and appliances;
* to provide and maintain a safe system of work. (A system means generally the way things are done).

One course I used to conduct had the company solicitor explain common law and then have the course participants do a case study where half of the group were the legal team for the injured employee and half of the team were the solicitor for the company. The company usually got shafted! This exercise put a practical focus on the theory of common law.

**9. Books**

If you refer to my web-site ohschange.com.au you will find a list of recommended reading. The books on this list are the ones that I think have made a difference to me as an OHS professional. I am constantly on the lookout for more relevant books. The safety professional needs skills in management, communications, interpersonal skills, report writing, time management, leadership, to name a few, as well as the OHS technical skills.

**10. Push Versus Push Back**

My safety career probably went through a few stages-Angry young man with the mission to change the world, Aggressive advocate for change, A person who researched safety thoroughly before discussing required changes and a reflective thinker who concentrates on relationships. As they say it is hard to put an old head on young shoulders. I has taken me a while to come to the conclusion it is the relationships you build, not necessarily your technical skills, which determines success. It has to be said you need a fair measure of intestinal fortitude to be an effective OHS person and there will be times when you get kicked in the guts and not achieve 100% of your objectives. You have to take this in your stride and keep going.

A safety professional has to push for safety change but this requires a delicate balance because if you push too hard you will turn some people off. My best advice is to know your people and find out what works for them from their perspective; this requires heaps of open & honest communications. From the my studies of Management of Organisational Change I adopt a communications and management philosophy that “People Support What They Create” Lots of discussion, feedback and involvement will give you the buy-in you need.

**11. Risk Assessment**

My coach / adviser / mentor / guide on safety, Geoff McDonald is a big critic of risk assessment and I recently explored his thinking on this topic. He has compelling arguments against the technique backed up by extensive research and literature. Rather than present his arguments half-heartedly I will leave it until Geoff finishes preparing his paper on the topic.

I have developed 3 risk assessment courses in my time, being an enlightened adult learning facilitator I made sure there were lots of practical exercises where participants could play with and critically reflect on the concepts. One thing I noticed on all 3 courses was that when different groups were set a risk assessment task on the same job the risk ratings were often different. When questioned on this the groups had good reasons why their ratings for Probability, Consequence and Exposure were different. Variations seemed to stem from differences in group members experience with the particular risk and their personality type. All this said to me the risk assessment process was subjective, it is not a precise method and it is dangerous to get too carried away with the risk ratings and make go / no go decisions based on risk assessment only. Risk assessment is the cornerstone of much safety legislation and many company safety approaches, my advice is to be aware of its limitations.

**12. Reporting relationships**

I have reported to an Industrial Relations Adviser, a Production Superintendent, a Human Resources Manager, another OHS Professional and a Finance Officer. My experience reporting to a Human Resources Manager was a disaster. At the end of the day their personality and their willingness to promote and drive safety change is probably more important than their position. Generally I advise the safety personnel should report to the most senior manager or at least a member of the senior management team so the function is perceived as being of importance.

**13. OHS Management Plans**

Strategic and Operational OHS Management Plans are essential to guide implementation of Safety Management Systems. The Force-Field Analysis technique outlined elsewhere can be a good starting point for these. The plans may contain underlying Principles for management of OHS, Objectives, Goals, Targets, Review mechanisms and Means of achieving the objectives. The plans must contain a thorough analysis of needs in the safety area. Refer to the paper Strategic OHS Management Plan on the web-site ohschange.com.au

**14. OHS change project**

Safety Essentials was a major, multi-million dollar organisational change project designed to revolutionise management of OHS in XYZ. I was one of 12 OHS Managers appointed to run specific elements of the project; I had only little contact with the other OHS Project Managers and have no recollection of what they were working on. I think I was with XYZ for about 5 months.

My main task was to lead a team of 6 electrical workers and 2 OHS Professionals developing what were referred to as “Control plans” for 21 identified high risk activities. XYZ were pretty good with their electrical safety but not managing their non-core risks all that well.

The identified high risks I can remember were-Electrical work, fatigue, driving, noise, access to premises, use of personal protective equipment, manual handling, office based ergonomics, animal control, power poles, traffic control, access to safety information, use of compressed gas equipment and so on.

Tasks were divided between myself and the team according to expertise with the aim of providing written information on how to manage particular risks. The electrical workers required some assistance from me in their tasks as it was different from their normal occupation.

**Some of the things my team did were-**

* Look at what documentation already existed. In the electrical area a wealth of good information that had been developed was discovered that had been buried in the system and not routinely used.
* Examine how the risks were currently managed
* Research reliable sources of information such as standards, legislation, published guidelines
* Tap into research by universities and other bodies
* Speak to similar organisations about how they managed all their risks
* Speak to non-electrical multi nationals about how they managed their non-electrical risks
* Networking with personal contacts
* Circulated initial drafts widely for comment and input

XYZ management were very pleased with the work of the team and hosted a celebration for us. When the team phase was over I worked with commercial trainers developing training programs to implement the control plans. I had to report on project progress to a senior Change Management Team on a regular basis.

I would have to say this was one of the most successful OHS projects I have been involved in.

**The Good-Things they do not normally teach you in safety officer school**

**1. Geoff McDonald**

Australian safety researcher Geoff McDonald has been my advisor/coach/mentor /guide in my safety career. Geoff McDonald has a system of classifying personal damage occurrences (“Accidents “) that goes something like this-

Class 1-Permanently alters the future of the individual

Class 2-Temporarily alters the future of the individual

Class 3 –Inconveniences the individual

Geoff has investigated many thousand Class 1 damage occurrences in his career and maintains the most effective way to make meaningful progress in safety is by focusing on the class 1 phenomena. I have been involved in 3 projects with Geoff where we have either analysed critical incidents or personal damage occurrence experience and I found the results very impressive, the analysis of the critical incidents and personal damage occurrences really targeted control actions in an appropriate manner. Geoff has a view that many of the things that are traditionally done is safety programs are “displacement activities”, a displacement activity is something we do, put a lot of energy into but at the end of the day there is little logical reason to do it. My safety career has seen no shortage of displacement activities. Given Geoff’s immersion in serious personal damage I believe he brings a unique perspective and knowledge of what works and does not work in safety and I value his opinion. Geoff is very dismissive of zero harm and risk assessment.

**2. Analysis Reference Tree-Trunk Method of Personal Damage Occurrence Investigation (Developed by Geoff McDonald)**

I have used this technique for ages and believe it produces very high quality investigations. I have been trained in a few other investigation methods and have read widely on the topic, I still keep coming back to A.R.T.T. For a number of years I used to teach a 2 day course on this method and some excellent investigations resulted. The course also allowed people to challenge the more common beliefs about safety.

Essentially the personal damage occurrence is represented by a tree-trunk lying on the ground, at the end of the tree-trunk you have Person elements, Machine elements and Environment elements, along the length of the tree-trunk you have 6 time zones and the annular or growths rings of the tree represent a number of Ergonomic elements. Instead of looking for “causes” you look for “essential factors” (an essential factor is one without which the final personal damage could not have occurred) There are good reasons why the term “cause” is not used. The idea is to look for essential factors where the various categories of the model above intersect.

The model is very easy to use and usually at least 30 essential factors will be found in each personal damage occurrence. This widens your options for control over some other methods of personal damage occurrence investigation.

**3. Critical Incident Recall (Coordinated by Geoff McDonald)**

There is a paper on my web-site ohschange.com.au that talks about this work; the paper probably undersells the technique. This technique is awesome.

**4. Taxonomy**

This is an incredibly simple technique that it is rare to find used. Essentially taxonomy is a collection of like. The most well-known taxonomy is the phylum of plants, their botanical names.

Awhile back I was associated with taxonomy of the more significant personal damage occurrences in the Qld mining industry which I thought was particularly effective in setting priorities for the industry. It is important to do the taxonomy on an industry basis as it is unlikely even the big companies will have enough of the more serious events to be able to develop statistically significant determinations.

The Qld mining industry has a standard personal damage occurrence report form that is sent to the inspectorate. The hard copies of the forms were obtained and sorted into like, i.e. the spinal column damages caused by driving a haul truck were put together ,the spinal column damage caused by lifting gas cylinders were put together, the eye injuries caused by grinding were put together and so on. The personal damage occurrences were then examined for their frequency, severity and the essential factors (An essential factor is one without which the final damage could not have occurred). This process gives insight into where your principal problems are occurring and guides preventative action.

In these days of computerised data systems I still feel it is necessary to go back to the original hard copy report for full details unless this has been scanned into a data base.

I recently had a conversation with Geoff McDonald on this topic which revealed I only have a rudimentary understanding of the importance, benefits and process of this topic. Geoff is preparing a paper on the topic which I will make available.

**5. Access to Earthmoving Equipment**

When I was in the corporate safety department of a major mining company I developed a gut feel that we were having a lot of injuries when people were getting on & off the massive, open-cut earthmoving equipment. My statistical analysis said it was a major loss area so a project was mounted to investigate the issue. Field investigations and discussions were carried out and a report with recommendations developed. I quickly realized the problems being experienced were not unique to my employer. Through the employer association we successfully applied for Federal Government funding to extend the original research work. This work( led by Geoff McDonald) provided significant input into the writing of an Australian Standard for "Access to Earthmoving Equipment”, detailed access purchasing and maintenance guidelines were developed and subsequently most earthmoving equipment in open-cut Australian mines now have hydraulically operated access arrangements. A taxonomy of the industry access personal damage occurrences was part of the process. Many of the recommendations are applicable to access to non-earthmoving equipment, e.g. Trucks.

**6. Force-Field Analysis**

I was introduced to this technique on my Bachelor of Education, with a skilled facilitator it can get some really worthwhile discussion happening.

Force-field analysis (similar to S.W.O.T. analysis) is a simple, yet powerful technique, useful at the beginning of a project to define the nature of the beast you are dealing with. It is particularly useful when seeking to develop new Safety Management Systems.

A small group, 6-8, stakeholders is required. Defining the scope of your deliberations is important-Put some boundaries around your discussions.

The process goes something like this-

**1.** Revise the brainstorming rules

**BRAINSTORMING RULES**

* Say the first thing that pops into your mind
* Do not be judgemental of your or others ideas
* The wilder the idea the better the idea
* Do not be constrained by convention
* Think out of the square
* Quantity not necessarily quality
* Every person and every idea has equal worth
* Build on the ideas put forward by others

Sometimes you may wish to have a fun exercise to practice the brainstorming technique to start with. One exercise I did had a number of OHS professionals one of whom ran a take-away shop as an extra business. We brainstormed how to increase the sales of fish & chips at “Buck’s Greasy Spoon” (That was the name the group came up with for the take-away shop, the owner took this in his stride) One of your members may have a hobby or activity they are trying to improve and you can brainstorm how to help them improve. Main thing is light-hearted & not too serious.

**2**. Brainstorm an objective for the Safety Management System The objective may be zero permanently disabling injuries, may reflect a number of positive performance measures, and may include financial measures and so on. Caution is urged in using measures such as the Lost Time Injury Frequency Rate.

**3**. Brainstorm the promoting / facilitating forces acting towards the objective

**4**. Brainstorm the constraining / restraining forces acting against the objective

**5**. Develop an action plan to boost the facilitating / promoting forces and negate the constraining / restraining forces.

Discussion needs to be recorded on butcher’s paper, on a recording whiteboard or on the fly with a lap-top & data projector. One of the outcomes of the above discussion is that you will define a number of the things you are already doing in safety, in itself, not a bad thing to do.

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**7. A.C.I.R.L. 9 Box Model**

I worked with this model developing controls for underground mining and found it useful.

|  |  |  |  |
| --- | --- | --- | --- |
| 9BOX MODEL | Prevention | Monitoring | Contingency |
| Equipment/Engineering |  |  |  |
| Procedures |  |  |  |
| Skills/Competencies |  |  |  |

The 9 box model says for the control of major hazards you must have equipment, engineering controls, safe working procedures and the appropriate skills / competencies. There must be prevention controls, controls to monitor the effectiveness of the prevention controls and contingency controls if the main controls are not effective. The aim is to fill the whole 9 boxes with as many controls as possible.

**8. Hazard Control Model**

When developing controls for hazards the common wisdom is to apply the hierarchy of controls. It is my experience that applying Haddon’s 10 countermeasures will yield improved results

Various hazard control strategies and models have been developed by safety professionals over the years. One of the most effective but still easiest to apply is that devised by American researcher Bill Haddon

**Haddon’s model for hazard control is as follows:**

|  |  |
| --- | --- |
| Countermeasure 1 | Prevent the marshalling of the form of energy in the first place.  E.g. Ripping seams - instead of blasting, substitution of radiation bin level sources with ultra-sonic level detectors, using water based cleaners rather than flammable solvents. |
| Countermeasure 2 | Reduce the amount of energy marshalled.  e.g. Radiation – gauge source strength, explosive store licence requirements, control number of gas cylinders in an area |
| Countermeasure 3 | Prevent the release of the energy.  e.g. handrails on work stations, isolating procedures, most interlock systems |
| Countermeasure 4 | Modifying the rate or distribution of energy when it is released.  E.g. slope of ramps, frangible plugs in gas bottles, seat belts. |
| Countermeasure 5 | Separate in space or time the energy being released from the susceptible person or structure.  E.g. minimum heights for powerlines, divided roads, blasting fuse. |
| Countermeasure 6 | Interpose a material barrier to stop energy or to attenuate to acceptable levels.  e.g. electrical insulation, personal protective equipment, machinery guards, crash barriers |
| Countermeasure 7 | Modify the contact surface by rounding or softening to minimise damage when energy contacts susceptible body.  E.g. round edges on furniture, building bumper bars, padded dashboards in cars. |
| Countermeasure 8 | Strengthen the structure living or non-living that would otherwise be damaged by the energy exchange.  E.g. earthquake and fire resistant buildings, weightlifting. |
| Countermeasure 9 | To move rapidly to detect and evaluate damage and to counter its continuation and extension.  E.g. sprinkler systems, emergency medical care, alarm systems of many types. |
| Countermeasure 10 | Stabilisation of damage – long term rehabilitative and repair measure.  e.g. clean-up procedures, spill disposal, physiotherapy |

**Note**

Generally the larger the amounts of energy involved in relation to the resistance of the structures at risk, the earlier in the countermeasure sequence must the strategy be selected. In many situations where preventative measures are being considered the application of more than one countermeasure may be appropriate.

Countermeasures may be ‘passive’ in that they require no action on the part of persons, or ‘active in the sense that they require some action or co-operation on the part of the persons, perhaps in association with a design related countermeasure (e.g. seatbelts).

## Passive’ countermeasures tend to be more reliable in the long term. A short term solution to an immediate problem may require the adoption of an ‘active’ countermeasure e.g. toolbox sessions on replacing guards over a mechanical hazard, the long term or ‘passive’ countermeasure might be the fitting of interlocks to the guard so that power is off when the guard is off.

## Further reading

Haddon, W ‘On the escape of tigers an ecologic note – strategy options in reducing losses in energy damaged people and property’ Technology Review Massachusetts Institute of Technology, 72; 7, 44-53, 1970.

**9. Past Approaches to Health & Safety**

I used to break up sessions on safety legislation with the following. The first recorded advice I could find about health & safety was in the period 1347-1350 when the Black Death decimated Europe, approximately half of the population of England died.

The causes of the Black Death were said to be

* + Excessive masturbation (no-one said how much is too much)
  + Conjunction of the planets
  + Wrath of God
  + Evil spirits

The first recorded piece of Health & Safety legislation I could find was the Plague Regulation in Rouen, France 1507

* Do not gamble, drink, fornicate or curse
* Avoid other sinful excesses that are likely to arouse the anger of God

The British Health & Morals of Apprentices of Apprentices Act 1802 appears to be one of the first pieces of health & safety legislation in England

* No night work
* Not to work over 12 hours per day
* Separate sex sleeping accommodation (apparently not all the accidents were industrial)
* Religious instruction provided
* Toilet facilities to be provided
* Clothes to be provided

The next major piece of health & safety legislation in England was the Factories Act 1844

* No children under 8 employed
* Meals not in work rooms
* Dangerous machines fenced
* Alternate days of school & work
* Hours by public clock (some unscrupulous mill owners set their clocks to run slower so they would get more production)
* Children 8-13 to work a max. of 6.5 hours per day

Of course the legislative efforts and approaches to health & safety outlined above appear outmoded and ridiculous in our modern times.

Can we really be sure however that current approaches to health & safety are not similarly dated?

**10. Appropriate Self-Disclosure**

I was introduced to and practised appropriate self-disclosure in a Psychology subject. You will find in a new relationship if you reveal a little bit of you (provided it is appropriate) the other party will reveal a little bit of them (provided it is appropriate), if you then reveal a little bit more of you (provided it is appropriate) they will reveal a little bit more of them (provided it is appropriate), and so the cycle goes on. This is very simple, incredibly effective and I use it all the time to build relationships. Of course if you really hang all your dirty washing out it will probably stuff up the process.

**11. Reflective Listening**

On a counselling subject I was introduced to and practised reflective listening. This is a very powerful technique to get to the core beliefs of those around you. Someone says something, you may say “If I understand you properly you think x” ,this gives the other party the opportunity to expand on their view or “Correct me if I am wrong but I think you are saying y” I suggest all safety professionals read up on this technique, it can make your life much easier.

**12. Reflective Journal**

When I did my Bachelor of Education (Adult & Workplace Education) we had to do a reflective journal on the placements we did in company’s doing practical learning work, when I did the assessment to be admitted to Chartered Fellow of the Safety Institute of Australia I had to do a reflective journal for 3 months on my work experience, I am involved in an adventure-based training program for “at risk” youth and the young people have to do a reflective journal and I have maintained a personal reflective journal for the last 8 years.

One of the prime ways adults learn is through critical reflection and the reflective journal is ideally suited to this. To write the journal you describe what happened or what you or others did and then critically reflect on what went well and what opportunities for improvement were presented. This can be a very powerful personal learning tool. To a certain extent this paper is a personal reflective journal on my work experiences.

**13. Time Management**

The following works for me, I do not know if it will work for you. Trim time wasting e-mails. Attempt to be succinct in all your written documents; you do not have time to write pages of waffle that others will be too busy to read. Use management summaries with major reports. Trim non-essential meetings and use video-conferencing instead of gathering people at a meeting where people have to travel to the meeting venue. An open door policy is fine in theory but can waste a lot of time. Instead let people know you’re not to be disturbed times and the times when you are available for consultation. Come in early, leave early and use the early morning when no one is about to your advantage. At the beginning of the day divide your to do list into the MUST DOS, SHOULD DOS & COULD DOS, your aim is to complete at least all those on the MUST DO list before you go home.

**14. The Two Mandorlas**

A MANDORLA (Italian for almond) is the common area of two overlapping circles. In safety there are two important Mandorlas. One, the Paradox Mandorla, represents the situation that there are far too many fatalities and permanent disabilities but these occurrences are so rare in an individual’s experience that individuals lack both the motivation to make changes and the knowledge of what changes to make.

**Figure 1 – Paradox Mandorla**

Nation’s Experience of Work

Fatality and Permanent Disability

Common or Shared

Experience

Individual’s Experience of Work

Fatality and Permanent Disability

**Too**

**Many**

**So**

**Rare**

The second, the Judgement Mandorla, represents the thinking and the feeling function, both of which are used to make judgements which lead to action. The thinking function involves the linking up of ideas by means of a concept and/or the use of concepts to integrate new ideas into an already linked up set (constellated, organised group) of ideas. Thinking is concerned with “truth” which is necessary if the physical energies of the world are to be controlled to avoid damaging people. The feeling function uses sub-emotional feelings via values to make judgements of the form “like or dislike”, “acceptable or not acceptable”, and is essentially concerned with “goodness”.

Feeling corrupts Thinking (e.g. by using value laden terms) and Thinking corrupts Feeling (e.g. by attempting to rationalise how you feel). Inappropriate judgements come from corrupting one function with the other, or by using the wrong function, (e.g. lack of factual information with which to think will lead to a feeling judgement).

**Figure 2 - Judgement Mandorla**

**Corrupted**

**Judgement**

**T**

**h**

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**eel**

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At present the Paradox Mandorla is very thin and the Judgement Mandorla is very fat. For effective and efficient safety at work The Paradox Mandorla needs to be fat and the Judgement Mandorla needs to be thin. Thinking Judgements (truth) and Feeling Judgements (goodness) are both necessary, each in their own domain. The use of the wrong function or the simultaneous use of both corrupts judgement and renders it counterproductive. The large Mandorla represents the large amount of corrupted judgement which exists at present.

A major problem in safety is we often use the feeling function instead of the thinking function.

**15. Benchmarking**

Over a 14 month period in 1994 -5 BHP Minerals carried out an extensive international safety benchmarking exercise with “best in safety class” companies throughout the world which cost many millions.

25 locations throughout the world participated in the study. An approximate 100 page report on findings has been published.

The following were recurring themes in the world’s best safety performers.

**1. Executive management provides the impetus for safety performance. This means that senior management is not only committed to and supports safety, but that it insists on safety performance in a manner that is clearly understood and echoed at all levels.**

**2. Management focus is a key to quality safety performance.**

**\*1 & 2 above were seen as key factors**

3. Existence of a company-wide framework or systematic, standardised approach to safety. The approach has performance standards that receive regular internal and external audits.

4. Objectives are set and organisations work towards set targets for implementation of the objectives.

5. Safety personnel report in at the highest level in the organisations. They have mainly an advisory function. Management and supervision drives the safety program not the safety personnel.

6. Effective safety training targeted to identify needs at all levels. Induction training and detailed safety training for supervisors and managers was high on the priority list. Regular safety meetings were seen as important.

7. Active personal involvement of senior management personnel in the safety program.

8. Safety is considered in performance evaluations of all staff.

9. Regular, detailed audits of the safety management system.

10. Formal approaches to hazard identification and risk analysis, employees were fully involved in this.

11. Formal emergency response procedures that were practiced and audited.

12. The best in class addressed contractor safety before contractors were allowed on site, they pre-qualified them based on safety and made safety performance a contract condition. Contractors were expected to perform at the same safety level as permanent employees.

13. High on the list of the ways the best in class built safety awareness were management participation and leadership, dissemination of information, safety meetings and rewards or recognition of performance.

14. Safety is a condition of employment and dismissals occur for non-performance.

15. Well-managed rehabilitation programs are in place.

16. The best in class use medical examinations and testing to ensure fitness for duty.

17. There were E.A.P’s in place.

18. There were off the job safety programs.

19. There was an emphasis on vehicle / plant maintenance and driver / operator training programs.

20. There were extensive PPE training, maintenance and audit programs.

21. Lock-out procedures were used instead of tag-out.

22. Best in class managers and supervisors respond positively to safety issues that are raised.

23. Best in class supervisors are responsible for safety auditing, investigating personal damage occurrences (accidents), planned job observations and training.

24. All levels in the organisation make decisions that reflect the philosophy “Safety first-Production will follow”.

It is suggested Safety Management Systems be built around the above benchmarking findings.

**16. Developing trust**

If people do not trust those leading safety change there will never be wholehearted adoption of the leaders approach .People may agree to the leaders face but do little to advance the leaders ideas, innovative ways to sabotage the leader quite often occur in a climate of minimum trust.

Trust is essential for a relationship to grow and develop. In order to build a relationship you must learn to create a climate of trust that reduces your own and the other person’s fears of betrayal and rejection and promotes the hope of acceptance, support and confirmation. There is a risk involved in trusting.

In order to build a relationship, two people must build mutual trust. This is done during a commitment period in which they risk themselves either by disclosing more and more of their thoughts, feelings and reactions to immediate situations and to each other, or by expressing acceptance, support and cooperativeness toward each other. If, when disclosing they do not get the acceptance they need, they may back off from the relationship. If they are accepted, they will continue to risk self-disclosure and continue to develop the relationship. As both people continue to trust and be self-disclosing, the relationship continues to grow. (Refer to People Skills by Bolton, this is suggested as a must read for those involved in OHS Change)

**17. The perfect OHS professional**

Note I do not routinely refer to people who work in OHS as professionals because being a professional implies application of a unique body of knowledge. As previously discussed I do not believe that without a robust core body of OHS knowledge a unique body of knowledge yet exists in the safety side of OHS in Australia.

Skills of the perfect OHS professional

Number 1 Interpersonal skills - Techniques such as reflective listening and appropriate self-disclosure can make a real difference. If you cannot get on well with people your technical OHS skills will go to waste.

Number 1 Communications skills - The biggest and commonest mistake is written communications that rave on to many pages, succinct written communications is the way to go. Not much use having a great message if you cannot get it across.

Number 1 Leadership - Some people say leaders are born, not made, I do not know about this but do know learning programs can enhance leadership abilities. The number 1 job of a leader is to transmit and embed high value standards. In modern business shared leadership is of more relevance than individual leadership.

Number 2 A commitment to a continuous improvement philosophy and ability to implement Quality Management.

Number 2 Change management - OHS management is all about change management and generic skills can be learnt.

Number 2 OHS technical skills - Tertiary training is important but practical experience and critical reflection on practice is vital.

Number 2 Auditing-Well developed auditing questions are the important first step.

Number 2 Project management - OHS lends itself very well to a project management approach for major change.

Number 2 Learning - Avoid the lecture, use Adult Learning Principles & Process and promote interactive approaches and avoid “Death by Power-Point”

Number 2 Team-building skills - These essential skills can be learnt

Number 2 Time management skills-Relatively easy to learn this

Number 2 Sharing-“People support what they create” Not involving the workforce in decisions about OHS change is the road to disaster.

Number 2 Well developed bull-dust detector

OHS Technical skills

Auditing

Facilitating learning

Interpretation of legislation

Safety leadership

Personal damage occurrence investigation

Undertaking safety research

Development and implementation of Safety Management Systems

Development and implementation of Safety Management Plans

Management of workers compensation and rehabilitation

Risk management

Industrial hygiene sampling

Managing safety responsibilities and accountabilities

Measurement, recording and reporting

Fire safety

Using job safety analysis to develop safe working procedures

Management of safety committees and health & safety reps.

Safety inspections

Contractor safety management

Provide advice and training on personal protective equipment

Some people see first-aid as part of the role, stuffed if I see it as relevant

**18. Implementation of an office based Safety Management System**

I was responsible for the implementation of an office-based Safety Management System in an office of some 350 personnel. Personnel consisted of mechanical engineers, electrical engineers, mining engineers, civil engineers, geologists, H.R. professionals, admin staff, payroll people, accountants, purchasing staff, learning personnel, various managers and support staff. Many of these people visited operating sites.

I was charged with implementing the N.O.S.A. (National Occupational Safety Association) Safety Management System out of South Africa in a Brisbane office. Prior to this implementation there was an enormous safety focus at operating sites but virtually nothing in safety was done in Brisbane office. The first step was to appoint Health & Safety reps. and form a Health & Safety Committee that met monthly. I selected an outside provider to train committee members in their role, duties and responsibilities.

The N.O.S.A. safety management system is a 256 element one, primarily designed for high risk environments, the challenge my team successfully overcame was modifying the system to be applicable to the relatively low risk office environment. I trained committee members in the N.O.S.A. Safety Management System and I facilitated a committee workshop where committee members decided which of the extensive N.O.S.A. requirements were applicable in our environment.

A booklet outlining which of the N.O.S.A. elements were applicable was produced and these were explained at the monthly tool-box meeting. In some cases I did this and in some cases I coached the reps in how to do this. Input into the S.M.S. was encouraged from staff. Either I or the reps conducted monthly tool-box meetings in all sections where safety issues were discussed, safety problems were raised and resolved and progress on implementation of N.O.S.A. was discussed and monitored.

The following are some other initiatives introduced-

* Revision of the office safety induction and introduction of a site induction program for those visiting sites
* A competition with a minor safety related prize to name the Brisbane safety system-Brisafe was decided upon
* Publishing of a Brisafe guide book
* Development of a safety induction handbook
* Introduction of monthly safety inspections
* Advanced driver training for those with company cars and their partners. This was an expensive exercise but management considered it a wise investment as it was clearly the highest risk task. Fleet safety and management procedures were also introduced that saved considerable expense. Nowadays many question the value of advanced driving programs.
* Training in the use of fire equipment
* Upgrading of emergency procedures and training
* Upgrading of incident reporting procedures
* Fitting of earth-leakage protection
* Improved reporting of safety performance
* Off-the job safety promotions
* Training in screen-based equipment ergonomics and an ergonomics survey
* Noise survey, attenuation and replacement of noisy office equipment was carried out
* Illumination survey
* Fire risk survey
* Chemical substances management system introduced
* Emphasis on housekeeping & storage
* Upgrade of first-aid facilities
* Establishment of a safety reference library
* 6 monthly internal safety audits and annual external safety audits
* Use of job safety analysis to develop safe working procedures, I trained people in how to go about this
* Dissemination and explanation of workers compensation and rehabilitation procedures

I liaised with senior management to ensure they had a highly visible commitment to safety

\*The majority of these initiatives were low cost ones I carried out, in some cases with help from the health & safety reps.

An extensive effort to introduce the above was carried out over some 8 months and we received a 4 star (out of 5 stars) effort rating at our first external audit.

**19. Fads**

If one examines the history of the industrial safety movement one will recognise a number of fads that have been embraced with gusto in the desire to reduce injuries. Often these initiatives have been the subject of slick promotional campaigns that objective analysis would reveal little basis for. People get carried away in the excitement of believing they are doing the right thing. My admittedly cynical view is that any safety initiative must have an examination of relevant Class 1 personal damage occurrences as a pre-cursor.

**20. Project management**

Over the years I have been a team member of and led a number of highly successful OHS projects driving significant OHS Management and OHS Learning change. OHS seems to lend itself particularly well to a project management approach. Research into the particular topic, good leadership, carefully selected team members; the use of team building principles and a thorough project plan with timelines for deliverables are amongst the necessary requirements.

**21. Change management**

The only thing constant in business is change. General organisational change principles can enhance safety change if they are applied thoroughly. Change has been around a long time.

*I cannot say whether things will get better if we change, what I can say is that they must change if they are to get better.* Georg Christoph Licthenstein, 1742-1799

Dr Merv Wilkinson puts change into perspective when he says: *Organisational change is a generic body of knowledge that is applicable across the board but only when contextualised into the particular workplace within the culture and people characteristics and professions etc. of the situation /workplaces*.

Today’s enterprise must be able to react quickly to external change while managing internal change effectively. Change is a constant in the safety profession. If a safety professional cannot adapt to and manage change their life will be very stressful. Technology is opening up new doors, thus adding to the potential for stress. Those who survive and thrive will be those who can adapt to the changes.

Internal change is successful only when the people involved approve of the change. They understand the need for change. They believe the change is good for the enterprise and for them. They agree that the change being undertaken is the right one.

Kotter speaks about the eight steps for successful large-scale change.

1. Increase urgency. Those who are successful in change begin their work by creating a sense of urgency among relevant people.
2. Build the guiding team. With urgency turned up the more successful change agents pull together a guiding team with the credibility, skills, connections, reputations and formal authority required to provide change leadership.
3. Get the vision right. The guiding team creates sensible, clear, uplifting visions and sets of strategies.
4. Communicate for buy-in. Communication of the vision and strategies comes next-simple heart-felt messages sent through many unclogged channels. Deeds are more important than words. Symbols speak loudly. Repetition is the key
5. Empower action. Key obstacles that stop people working on the vision are removed.
6. Create short-term wins. Short-term wins provide credibility, resources and momentum to the overall effort.
7. Do not let up. Change leaders do not let-up they create wave after wave of change until the vision becomes a reality.
8. Make change stick. Change leaders make change stick by nurturing a new culture. Appropriate promotions, skilful orientation and events can make a big difference.

Kotter’s text “*The Heart of Change*” is a recommended must-read for anyone undertaking cultural change. Safety professionals reading Kotter’s book will quickly realise its relevance to safety change. Refer to the paper Safety and Organisational Change on the web site for more detail.

**22. Professional associations**

Over the years I have been a member of OHS, Learning and H.R. professional associations in Australia, Canada and U.S.A., C.S.S.E. generally impressed me and A.S.S.E. seem to put on excellent safety conferences. These organisations can add substantially to their respective professions provided management does not get comfy and complacent, think they are infallible and lose sight of the fact that the only reason they exist is to serve the needs of the members. The basics of marketing are to identify customer needs and satisfy that need. Professional associations must identify member needs.

Having been privy to some of the thinking and organisation behind the newly formed Australian OHS organisation S.I.W.A. I have to say I am impressed and regard this organisation as a much needed and pleasant change of approach.

**23. Implementation of a learning management system**

In the early 1990’s XYZ mining company revolutionised their approach to learning. I was heavily involved in this work in my role as Senior Safety Adviser in the Brisbane-based corporate OHS department.

1. Existing learning programs were examined and costed, many millions were being spent and it became obvious much of this money was wasted.

2. An exhaustive learning needs analysis was carried out. This worked formed the basis for the introduction of competency-based learning in the Australian mining industry.

3. Doctor Stephen Billett of Griffith University was engaged to research preferred and effective modes of delivering learning. Not surprisingly learning by doing coached by a content expert was favoured. A lot of people saw classroom learning as largely a waste of time. Carrying out authentic tasks in the workplace was seen as important.

4. External trainers and internal trainers, of which I was one, had to attend a week course with a unit that specialised in advanced learning techniques from the Qld. Department of Education. This emphasised interactive techniques and Action and Experiential learning.

5. Consultants were engaged to prepare self-paced, competency-based modules in many areas. The modules were given to learners and they were assigned a content expert to refer to as needed. Some modules articulated to a National certificate IV. My role was to do the T.N.A., write modules, liaise with the consultants writing the modules, assess learners, coach learners and where necessary facilitate the modules.

6. A system was introduced whereby the supervisor had to engage with the learners to develop an action plan to implement the lessons learnt from a learning experience.

7. A matrix of mandatory and recommended learning for all levels of employees was developed.

8. The performance appraisal process put a high emphasis on learning with the result that individual learning plans were developed for all employees.

9. The organisation truly became a “Learning organisation” and a high value was put on learning.

10. A communications plan was developed to communicate learning processes to employees. Various available media were used to communicate learning change.

11. Development of the learning materials involved many project teams and a philosophy that “When initiating change, People support what they create” was used.

12. Assessors of the self-paced learning modules completed learning and set about assessing learners.

13. It was summed up for me when I was sitting in a mine manager’s office that overlooked the coal stockpile and the mine manager said” There was a time when I had evidence the bulldozer operators did not always know what they are doing and the machines were not always well maintained, since this new training I no longer have these concerns”

The precursors to success were the very thorough learning needs analysis and the establishment of the preferred and most effective means of learning.

**24. The Real World**

I have left this to last as it is extremely important. For a number of years I was employed in the corporate safety department of a major mining company and the corporate head office (Commonly referred to as Bulldust Castle by people in the field) was located in Brisbane and the mines were miles away in the bush. Those at the mines used to refer to those of us in head office as “Seagulls” and they said we would fly up, S.t all over them and fly away. As a young, keen corporate Safety Adviser I used to arrive at a particular mine and tell the field Safety Adviser about the latest safety brainwave from head office. Sometimes he would say “That’s a great idea but will it work in the real world?” There were a number of times he convinced me the theory we had developed in head office just would not work in the real world. Everything we promote in safety must pass the real world test. Not involving the workers in the development of your safety strategies is bound to fail. My experience is sometimes safety initiatives are driven by emotion instead of logical analysis.

Conclusion

Well, there is the Good, Bad & Ugly of my safety career. I hope you picked up a few things that will help you with your safety career.

Major lessons learnt-

* + It is often the relationships you build, not your technical skills, which determines success.
  + Do not take yourself too seriously as if you do you will have difficulty coping with the fact many will not share your passion for safety.
  + Use personal damage occurrences, not emotion, to guide your preventative efforts.
  + Be a life-long learner in a variety of fields, not just OHS.
  + Everything you do must pass the real world test.
  + Minimise the use of lecture-style presentations.
  + Challenging the status quo is a lot of fun and very satisfying, much better than putting up with fools and mediocrity. Being a bit of a stirrer is an admirable approach provided it is done sensitively.
  + Do not get too focused on work, your family should come first.
  + If it is not face to face it is not communication.

A ex-manager of mine, who has a way with words, says the trouble with safety is that management and safety professionals sometimes engage in acts of public masturbation! I apologise if anyone finds the foregoing offensive but my belief is it is an admittedly crude, but accurate, way of describing some of the things I have seen happen in safety.

## Why have OHS?

The first fatality I was associated with occurred over 30 years ago to a young, vivacious, pleasant female office employee at a mine site. I was the first on the scene and comforted her as she drifted in and out of consciousness. She died the next day, such a waste!

Since then I have assisted my employers manage the aftermath of 12 fatalities and 2 other incidences of permanently life altering personal damage.

There are many reasons to have OHS-

* Sure we want to obey the legislation and keep the regulators off our back
* Sure we want to have a good company and industry reputation to attract employees
* Sure we want to reduce safety related industrial disputation
* Sure we want to reduce the financial costs of “accidents”
* Sure we want work to be a pleasant place to be
* Sure we want a highly skilled workforce

As an OHS professional I have had to deal with the emotional trauma of life altering personal damage and interacted with loved ones and co-workers. For me the prime reason to have OHS is to-

REDUCE PERMANENTLY LIFE ALTERING PERSONAL DAMAGE

This is referred to as Class 1 personal damage and can be fatal and non-fatal. Whilst we rarely get to hear about it the impact of non-fatal class 1 damage is much higher than fatal class 1 damage.

I would be the first to say there is a lot of bull-dust associated with implementation of safety initiatives. In my time in safety I have seen companies spend tremendous amounts of time, effort and money on dubious safety programs and get little return for their investment.

The challenge is to design your safety programs so they meet the specific, identified needs of your organization.

Discussion on a Canadian safety forum came to the conclusion that you would be lucky to prevent 20% of your "accidents" if all you did was comply with legislation.

I think one of my ex-managers said it well when he said "If you cannot manage safety you cannot manage".

**Note**

My attempt to give advice on how to achieve my objective can be found in the e-book Safety Management Systems under articles on ohschange.com.au

**What Makes a Safety Management System Fly?**

Original published by the American Society of Safety Engineers, International Safety Best-Practice Specialty Newsletter

The most important thing in managing OHS is to have a robust Safety Management System. The following gives some advice on how to achieve this important objective.

Guiding principles

* Use real world approaches not theory
* All paperwork must be succinct
* Whatever is done in OHS must be based on a needs analysis
* Need to get some runs on the board quickly
* Concentrate on the things that give you the biggest bang for your buck
* Aim for simplicity not complexity
* Minimise the bureaucracy and bull-dust
* Face to face communications should be used wherever possible
* Be guided in what you do by taxonomies of Class 1 damage in your industry (Class 1 personal damage is that which permanently alters the future of the individual)

SAFETY BENCHMARKING

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5. Safety personnel report in at the highest level in the organisations. They have mainly an advisory function. Management and supervision drives the safety program not the safety personnel.

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**It is suggested Safety Management Systems be built around the above benchmarking findings**.

Suggested COULD HAVES for a successful Safety Management System (some of the following interventions will work better in your organisation than others; the skill is in recognising and applying the best interventions for your particular organisation).

1. Compliance with the Statute law

In Queensland a number of advisory standards are incorporated under Qld. Workplace Health and Safety legislation. These standards provide worthwhile basic guidance for introduction of a successful Safety Management System.

2. The Compliance with Common Law (in states where applicable)

There are four basic duties under common law :

1. To provide and maintain competent staff.
2. To provide and maintain a safe place of work.
3. To provide and maintain safe plant and appliances.
4. To provide and maintain a safe system of work \* ( a system means generally the way things are done)

The above duties contain few words but the meaning is quite significant. The employer really has to do everything reasonably and practically that he can do. Many would suggest he then has to go a few extra steps. Managers and supervisors really need to be trained in common law duties to fully realise the impact of this important area on how they manage safety. (Refer to the paper Common Law Liability by this author)

3. Highly visible demonstrated commitment to health and safety on behalf of Senior Management

It is not unusual in companies with high profile safety management systems for senior and middle management personnel to spend over 30% of their time directly on OHS issues. Key personnel conduct safety meetings, they personally participate in safety inspections in their area of responsibility, they have safety as a first high-profile agenda item of every meeting they conduct and they make it clear that they expect those below them to place a high priority on safety. It is not enough for top management to be committed to safety; it must be a clear and high profile demonstration of commitment - you get the performance you demonstrate you expect. This is one area where positive action by management can have an overwhelming influence on the culture of the organisation. (Refer to the paper “Safety culture & how to improve it” by this author) A detailed Safety Responsibilities / Accountabilities matrix for management and supervision is appropriate.

4. Safety Committee

There should be a senior management safety committee to develop policy and an employee safety committee to recommend safety policy to the management committee and to implement policy agreed to by the management committee. Safety committees are much maligned. Safety committee members must be trained for their role and well supported by management. Giving the committee a substantial job to do helps to stop the whinging.

5. Safety Meetings

Regular safety meetings coordinated by the supervisor are an ideal medium to transfer safety messages (studies have shown the significant effect supervisor communications can have on the workgroup).Refer to the Tool-box meetings paper by this author.

6. Safety as part of performance appraisal

During the performance appraisal of supervisory and management personnel an initial and high emphasis must be placed on safety. The focus should not be on what personal damage occurrences(accidents), have occurred in the supervisor’s workgroup, rather it should be on what he/she has done to introduce excellent safety programs.

7. Supervisors and employees must be trained and held accountable for safety

Subjects such as compliance with statute law, compliance with common law principles, hazard identification, risk management, hazard control, personal damage occurrences(accidents) investigation, and job safety analysis should be regarded as the basic skills and the knowledge for supervisors (their “tool-kit” of safety skills).

8. Risk Assessment

Notwithstanding the popularity of risk assessment techniques there are some limitations to the techniques that need to be realised. I have always been of the view that what you do to control risk as a result of a risk assessment exercise is more important than the risk rating. Placing too much emphasis on comparison of risk ratings will lead to inappropriate priorities. Risk assessment exercises are often subjective.

9. Incident investigation

Formal incident investigation models e.g. “Analysis Reference Tree Trunk”, “Tripod” should be used to guide observations. Once personal damage occurrence investigations are carried out there must be formal methods of auditing the success of implementing recommendations. After detailed accident investigations it is surprising how many organizations never actually get around to implementing the recommendations.

10. Safety Inspections

Safety checklists tailored to the hazards of the area being inspected must be developed. Involvement of the workforce in actually carrying out the inspections is suggested.

11. Good housekeeping

Good housekeeping encourages better housekeeping, improves morale and generally makes for a better work environment. Good housekeeping is a place for everything and everything in its place.

12. Comprehensive induction program

Induction training must be tailored to the risks of the work environment. Essential subjects in the induction program e.g. isolation procedures can be revised on an annual basis through the safety meeting program. Refresher training on induction subjects must be tailored to employee needs not conducted because of stipulations for regular re-training.

13. Goals

Peter Drucker is reported to have said “What gets measured gets done” Zero permanently life-altering personal damage is a worthwhile annual goal.

14. Auditing

Organisations that are successful at Occupational Health and Safety have regular comprehensive internal and external audits. Standards must be developed for the safety management system e.g. Visitor safety, contractor safety, compliance with statute law, use of personal protective equipment, management commitment, hazard identification/risk assessment, safe working procedures, loss prevention &control, employee involvement, emergency procedures, accident investigation, education/communication, inspections, health & fitness, injury management, etc. and compliance with these standards must be audited. A quality assurance approach where NCR (Non-compliance reports) are issued is recommended.

Auditors must receive training by authoritative training professionals, comprehensive auditing guidelines must be developed and formal processes introduced to follow-up on audit recommendations. A criticism of safety audits is that they are usually not based on an examination of serious personal damage occurrences (accidents) experience. After detailed audits it is surprising how many organizations never actually get around to implementing the recommendations.

Whatever paperwork you produce, be succinct. Auditing documentation tends to get unwieldy and difficult to use in practice. Only the very dedicated or very bored are going to wade through pages and pages of auditing documentation.

Need to audit against a standard, maybe A.S. / N.Z.S 4801, Tri-Safe, internal standards of OHS excellence, Zero Harm principles or a commercial Safety Management System or a combination of the foregoing. There should be guidance on the requirements of implementing whatever standard is used for the audit. (Refer to the paper Auditing OHS Management Systems by this author)

## 15. Critical Incident Recall

Critical incidents (near misses) occur regularly in organisations but are not routinely reported for a number of quite valid reasons. Critical incidents must be surfaced through an organised process. Critical incident interviewers and observers must be trained and they should spend some time in the organisation identifying critical incidents. Exploring why critical incidents occur will provide significant insight to guide the safety management system (Refer to the paper “Practical Application of the Critical Incident Recall Process” by this author

## 16. Emergency Response Plans

Despite our best efforts it is possible that personal damage occurrences (accidents/incidents) will occur. It is essential to have plans to manage specific incidents. Incidents that require emergency response plans include

* Injury
* Fire
* Explosion
* Bomb threat
* Electrical outage
* Oil/fuel/chemical spill
* Gas leak
* Earth wall failure
* Radiation emergency
* Natural disaster
* Missing person

Emergency response plans should include provisions for Critical Incident Stress Debriefing.

The plans should be regularly practiced and audited.

# 17. Safety Learning

Every task that needs to be done by people must be done

* Safely
* Effectively
* At the right cost
* At the right quality
* In the right quantity

With appropriate consideration for people, for the community and for the Environment (Competency-Based Learning)

Detailed task analysis must take place to recognise the safety competencies required to perform all tasks (including supervisory) where gaps exist between required competencies and current competencies appropriate training may be the most appropriate solution. After people attend learning exercises the supervisor should develop a plan, in association with the trainee to implement the lessons learnt.

18. Quality Assurance

Utilise the advantages of a Quality Assurance approach to OHS without succumbing to the blind unthinking devotion to the Quality movement that is evident with some Quality Assurance practitioners. Quality Assurance can add some rigor to a safety management system provided it is not over-done

## 19. Behaviour-based Safety Programs

This is a relatively new technique in Australia, but may be a useful addition to the range of OHS “tools”. Caution is urged with the use of these techniques in isolation; they are but one tool and cannot be seen as the one and only answer to an organisations safety problems. Behaviour based programs are most effective when used in conjunction with engineering solutions. Colleagues in BHP report considerable success with DuPont behavior-based programs.

## 20. Group Approaches

There are ranges of group approaches that can successfully be used in improving safety. Well led, motivated and well researched groups can have tremendous synergy that will enhance your safety management system. The force-field analysis technique is particularly appropriate to use when commencing an OHS change project. Refer to the paper by this author.

## 21. Safety Procedures

The commonest mistake the author has seen with safety management systems is the development of extensive safety procedures that the workers do not know about, care about or use. The procedures sit on the supervisor’s bookcase or a computer program and are rarely referred to. The job safety analysis technique must be used to develop safe working procedures and involvement of the workforce is crucial. If your safe working procedures are over 2 pages in length worry about whether they will ever be used. Use flow-charts, pictures and diagrams in your safe working procedures and base them on a very basic level of English. The K.I.S.S. principle applies.

## 22. Commercial Safety Management Systems

There are a number of home-grown and international safety management systems commercially available in Australia and these can have an impact on your safety management system BUT you must be conscious of the need to specifically tailor these programs to your organisation’s specific identified needs

## 23. Communications

From the author’s studies of Management of Organisational Change he adopts a communications and management philosophy that “People Support What They Create”

While with B.H.P. the author worked with Professor T.J. Larkin of Harvard University analysing safety communications in the company. There were 3 main messages to come out of this research-

* Use face-to-face communications,
* Use the supervisor to communicate and
* Frame messages relevant to the immediate work area.

With written communications the author aims to be succinct, have an appropriate structure and utilise management summaries with major reports. He uses photographs, diagrams, flow-charts etc. to illustrate main points. Important written communications must always be followed up by a face-to-face meeting. The BHP guideline for general correspondence was that if it takes more than 2 pages to write it is too much for busy people to write and read. The world of safety is famous for well-meaning, ponderous, glossy publications that no one really knows about, cares about or uses. Safety communications are also famous for the use of “weasel-words”. “Weasel-words” promise a lot but deliver little.

Action and Experiential learning models must be used for communicating learning as opposed to lecture style presentations.

Professor T.J. Larkin says “If it is not face-to-face it is not communication”.

24. Building Trust

Introducing OHS change inevitably upsets the established order in organizations and forces people to question their existing role in the organization. Often people will be asked to do something that is different from the norm and to do that which they do not agree with. Persons introducing and leading OHS change must ensure they are trusted by those they are seeking to join them in the OHS change journey. Appropriate self-disclosure is an excellent technique for building relationships.

25. Fleet safety programs

Organisations such as Qld University of Technology are developing state of the art fleet safety programs that may be of interest to fleet owners.

26. Well-Being programs

With an increasing realization of the importance of employee health to productivity many organisations are introducing Employee Wellness Programs. Many aspects of these programs have an excellent return from investment for the employer. The employer has to be careful where he invests his resources e.g. subsidized gym membership may be very popular with those who already go to a gym but may not encourage many new people to attend a gym. Lifestyle education programs appear to be beneficial.

27. Contractor safety programs

Australian business is out-sourcing more and more work. Contractors must develop and submit detailed Safety Management Plans including details on how they are going to carry out their work safely as part of the tendering process. This information must be pre-qualified as part of letting tenders. A contractors safety handbook and induction training program may be required.

28. OHS Policy

A dynamic policy statement that is freely distributed throughout the organisation, actually known by employees and actually referred to when making decisions about safety is required. What the policy says will happen must happen in the real world or cynicism will reign supreme. Traditional safety policies may be better replaced with statements of beliefs or values about safety that can be used as a basis of decision-making.

29. Role of the safety professional

Short-sighted companies think they employ safety people and these people will look after safety. The more progressive companies often do not have many dedicated OHS personnel, management and supervisors are so well trained and effective in safety that few dedicated safety personnel are required. Safety personnel should report to the senior officer so the function has some chance of being perceived as being of importance. The danger when you have too many safety people is that line management gets the safety people to manage safety not themselves. Safety is a line management function and safety personnel should be seen as specialist adviser

30. Focus on Class 1 Damage

A method of classifying personal damage that seems appropriate is the following-

CLASS 1- Damage that permanently alters a person’s life e.g. death, paraplegia, amputation of a leg, severe psychological damage.

CLASS 2- Damage that temporarily alters a person’s life e.g. fractured leg that repairs with no lasting impediment, deep laceration that has no underlying tissue damage and repairs without significant scarring

CLASS 3 Inconveniences a person’s life (Geoff McDonald)

The report of the Industry Commission 1995 indicates that safety in Australia is fundamentally a class 1 problem (87% of occurrences were class 2 with18% of cost, 13% of occurrences were class 1 with 82% of cost. Most safety management systems in Australian industry focus on lost time accidents within the organisation. Better returns for effort will be gained by focusing on Class 1 damage in the companies industry or Australia-wide. We must lobby for government to improve methods of collecting, disseminating and analysing personal damage occurrence (accident) data. Collection of personal damage occurrence (accident) data on an industry-wide basis is essential. Taxonomies of industry personal damage occurrences will be of value in managing Class 1 personal damage.

## 31. Benchmarking

In a previous position the author was involved in implementing the findings of an international benchmarking exercise with 25 “best in safety class” companies throughout the world. Such studies, well organised and researched, can provide significant insight into how to improve your safety management system. In Australia it is suggested benchmarking with major chemical, petro-chemical, mining and aviation companies will receive the best return. The BHP Benchmarking study mentioned previously illustrates the important role of senior management in the safety management system. The National Occupational Health & Safety Commission has an interesting paper on Safety Benchmarking on their web-site.

##### 32. Leadership

Excellent safety management systems demand excellent safety leadership. (Refer to the “Safety Leadership” paper by this author)

**Safety management often requires unpopular decisions by leaders, do not shrink from demanding high safety standards from all those around you, take positive action with those who do not meet expectations.**

33. Claims Management

Speedy and efficient claims processing and review of claims experience is important as is timely injury management. Rehabilitation programs can significantly reduce the period employees are on workers compensation. Early intervention, good communications between relevant parties, accurate functional capacity assessment, sensitive case management and a willingness to identify meaningful alternate duties seem to be the keys to success with rehabilitation**.**

34. Employee Assistance Programs (EAP)

Employees bring a whole range of problems to work that impact significantly on their ability to work safely & efficiently. EAP’s have proven their worth in many companies. It is suggested safety personnel and human resource management personnel have basic skills in counseling; in particular the skills of reflective listening are very appropriate.

35. Engineering Change

The author’s experience in Occupational Health and Safety has lead him to believe the engineering approach was not used enough in the companies he worked for, there are so many cases where making positive engineering changes (putting a non-slip coating on a smooth steel-trowelled concrete walkway) are so much more reliable than truckloads of exhorting people to be careful (walk slowly on that concrete when it is wet from rain) The good thing about engineering controls is they do not come to work tired, sick, hungover, drunk, stoned, physically and mentally unsuited to their work, unmotivated, distracted by personal problems, untrained or for some other reason not really thinking.

Both the engineering and behavioural approaches have their strengths and weaknesses; the wise manager uses the strengths of each without succumbing to the weaknesses. Keep in your mind the aim of our safety efforts is positive change for the future.

## 36. Management of Low Probability/High Consequence Risk

How often have we heard in regard to a high consequence risk “We have been doing it that way for 20 years and not had a problem” Disasters like the Moura explosion and the Longford disaster prove that plans must be put in place to manage low probability/high consequence risks. Focus groups experienced in operation of these risks will provide significant insight into management of these risks. Formal risk management approaches as outlined in the paper “The Hazard Management Process” by this author are essential. The December 2001 issue of “Safety in Australia” contains useful advice on managing this type of risk.

|  |  |  |  |
| --- | --- | --- | --- |
| 9 BOX MODEL | Prevention | Monitoring | Contingency |
| Equipment/Engineering |  |  |  |
| Procedures |  |  |  |
| Skills/Competencies |  |  |  |

The 9 box model says for the control of major hazards you must have equipment/engineering controls, safe working procedures and the appropriate skills / competencies. There must be prevention controls, controls to monitor the effectiveness of the prevention controls and contingency controls if the main controls are not effective. The aim is to fill the whole 9 boxes with as many controls as possible.

**Organisations with Major Hazard Facilities bring a new dimension to management of OHS.**

37. Zero Harm

* Zero Harm is best introduced by a set of principles designed to achieve this objective eg.
* The safety of our people is a value that is not compromised
* Safety excellence is recognized as good business
* Leaders at all levels are safety role models
* Effective safety leadership is a pre-requisite for promotion
* People are aware of the hazards and risks of their employment and act accordingly
* Compliance with safety standards and procedures is absolute
* At risk behaviors are not acceptable and are addressed when observed (Source-BHP Billiton)

38. Safety Incentives

Heresy and rumor says safety incentive schemes based on accident experience work. Despite wide reading on this topic the author has identified no robust empirical studies that prove this assertion (there is no shortage of emotional reports, with a poor statistical basis that indicate incentives work.)Public recognition from the boss for a job well done will always be appropriate. A recognition scheme that involves the good safety things that are being done is more appropriate than basing safety awards on accident statistics.

39. Terminology

Probably the best example of a lack of scientific discipline in OHS lies in the terminology “accident”

The term “accident” implies carelessness (whatever that means), lack of ability to control its causation, an inability to foresee and prevent and a personal failure. How can we make meaningful progress on a major cost to Australian industry if we persist with such, sloppy, unscientific terminology? The term “accident” affects how the general population perceives damaging occurrences and the people who suffer the personal damage, inferring the event is “an act of god” or similar event beyond the control and understanding of mere mortals.(Geoff McDonald)

The term “accident” is best replaced by the term “personal damage occurrence”. Instead of talking about “permanent disability” we should be talking about “life-altering personal damage”

There is a poor understanding in the community of the reasons why personal damage occurs. We are quick to make the assumption that the worker was careless; when one examines personal damage carefully one will also identify a range of work system factors that contributed to the personal damage as well. Most of these work system factors are the responsibility of the employer at both common and statute law. Blaming workers for their careless behaviour is an emotionally appealing approach that is usually not all that productive in the bigger picture of preventing personal damage at work

People talk about “accident” “causes” (another emotionally laden term) Investigating personal damage occurrences thoroughly will reveal at least 30 “essential factors” (an essential factor is one without which the final personal damage could not have occurred)

40. Complexity

Many organizations have safety standards, special emphasis programs, policy and safe working procedures that are very thorough and detailed. Unfortunately in the quest for thoroughness the number of words becomes immense and difficult to decipher. It ends up being an immense task for even the most dedicated to wade their way through the paperwork. There is room for succinct summaries of major approaches. OHS professionals should not be judged by the number of words they create.

41. Lost Time Injury Frequency Rate

* The Lost Time Injury Frequency Rate impedes progress in safety
* The Lost Time Injury Frequency Rate is the principal measure of safety performance in many companies in Australia. The definition of L.T.I.F.R. is the number of Lost Time Injuries multiplied by 1 million divided by the number of manhours worked in the reporting period
* A Lost Time Injury is a work injury or disease where the injured party has at least 1 complete day or shift off work. Note that a fatality and a cut where a person has 1 complete day off work count the same in Lost Time Injury terms.

## The L.T.I.F.R. is subject to manipulation

Some safety people cheat like hell with their L.T.I.F.R. statistics encouraged by managers with an eye to keep their key performance indicators looking good. The more the pressure to keep K.P.I.’s looking good the more creative the accounting. If the same ingenuity was displayed in preventing incidents as is displayed in cooking the books we would be in great shape. All this makes inter-company comparisons of L.T.I.F.R. statistics less in value. (Refer to the paper the Lost Time Injury Frequency Rate by this author)

The Lost Time Injury Frequency Rate dominates discussions about safety performance. How can a company be proud of a decrease of L.T.I.F.R. from 60 to 10 if there have been 2 fatalities and 1 case of paraplegia amongst the lost time injuries? The L.T.I.F.R. trivialises serious personal damage and is a totally inappropriate measure of safety performance.

### 42. Accident Ratio Studies Mis-direct Efforts

My grandmother used to say “Look after the pence and the pounds will look after themselves” In the world of traditional safety there seems to be similar thinking that if you prevent minor damage you will automatically prevent major damage. Accident ratio studies (insisting on set ratios between near misses, minor accidents and serious accidents) are prominent and accepted unthinkingly. The much-quoted “Iceberg Theory” in relation to safety does not stand up to scrutiny in the real world! The “Iceberg Theory” is fine if used for statistical description but it cannot be relied upon for statistical inference. (Geoff McDonald)

The result of the “Iceberg Theory” focus is a furious effort to eliminate lost time injuries in the belief that all major incidents will be eliminated in the process. Certainly there are minor incidents that have the potential to result in more extensive damage (and we should learn from them), but personal experience tells me the majority of minor damage incidents do not have this potential. It is a matter of looking at the energy that was available to be exchanged in the incident. The common cold cannot develop into cancer; similarly many minor injuries will never develop into serious personal damage.

The concept that preventing the minor incidents will automatically prevent the major ones seems to me to be fundamentally flawed.

All organisations have limited resources to devote to safety, it seems more efficient to prevent one incident resulting in paraplegia than to prevent 20 incidents where people have a couple of days off work (some will say this comment is **heresy**)

Somewhere in the push to reduce L.T.I’s, reduce the L.T.I.F.R. and consequently achieve good ratings in safety programme audits the focus on serious personal damage tends to be lost.

Reducing the L.T.I.F.R. is as much about introducing rehabilitation programmes and making the place an enjoyable place to work as it is about reduction of personal damage

**In my view a concentration on the Lost Time Injury Frequency Rate has hijacked the Australian safety profession for far too long.**

43. Hazard Control Model

When developing controls for hazards the common wisdom is to apply the hierarchy of controls. It is the author’s experience that applying Haddon’s 10 countermeasures will yield improved results

Various hazard control strategies and models have been developed by safety professionals over the years. One of the most effective but still easiest to apply is that devised by American researcher Bill Haddon

**Haddon’s model for hazard control is as follows:**

|  |  |
| --- | --- |
| Countermeasure 1 | Prevent the marshalling of the form of energy in the first place.  eg. Ripping seams - instead of blasting, substitution of radiation bin level sources with ultra-sonic level detectors, using water based cleaners rather than flammable solvents. |
| Countermeasure 2 | Reduce the amount of energy marshalled.  eg. Radiation – gauge source strength, explosive store licence requirements, control number of gas cylinders in an area |
| Countermeasure 3 | Prevent the release of the energy.  eg. handrails on work stations, isolating procedures, most interlock systems |
| Countermeasure 4 | Modifying the rate or distribution of energy when it is released.  eg. slope of ramps, frangible plugs in gas bottles, seat belts. |
| Countermeasure 5 | Separate in space or time the energy being released from the susceptible person or structure.  eg. minimum heights for powerlines, divided roads, blasting fuse. |
| Countermeasure 6 | Interpose a material barrier to stop energy or to attenuate to acceptable levels.  eg. electrical insulation, personal protective equipment, machinery guards, crash barriers |
| Countermeasure 7 | Modify the contact surface by rounding or softening to minimise damage when energy contacts susceptible body.  eg. round edges on furniture, building bumper bars, padded dashboards in cars. |
| Countermeasure 8 | Strengthen the structure living or non-living that would otherwise be damaged by the energy exchange.  eg. earthquake and fire resistant buildings, weightlifting. |
| Countermeasure 9 | To move rapidly to detect and evaluate damage and to counter its continuation and extension.  eg. sprinkler systems, emergency medical care, alarm systems of many types. |
| Countermeasure 10 | Stabilisation of damage – long term rehabilitative and repair measure.  eg. clean-up procedures, spill disposal, physiotherapy |

**Note**

Generally the larger the amounts of energy involved in relation to the resistance of the structures at risk, the earlier in the countermeasure sequence must the strategy be selected. In many situations where preventative measures are being considered the application of more than one countermeasure may be appropriate.

Countermeasures may be ‘passive’ in that they require no action on the part of persons, or ‘active in the sense that they require some action or co-operation on the part of the persons, perhaps in association with a design related countermeasure (eg. seatbelts).

## Passive’ countermeasures tend to be more reliable in the long term. A short term solution to an immediate problem may require the adoption of an ‘active’ countermeasure eg. toolbox sessions on replacing guards over a mechanical hazard, the long term or ‘passive’ countermeasure might be the fitting of interlocks to the guard so that power is off when the guard is off.

## Further reading

Haddon, W ‘On the escape of tigers an ecologic note – strategy options in reducing losses in energy damaged people and property’ Technology Review Massachusetts Institute of Technology, 72; 7, 44-53, 1970.

44. Management systems

I am impressed by the I.S.O. Quality and Environment Management System Standards but would suggest A.S. 4801 Safety Management Systems is an inferior standard. Many corporate OHS Managers and operational managers have told me they have a robust Safety Management System because it complies with A.S. 4801.As far as I am concerned A.S.4801 is a minimalist approach to safety and I would hope a Safety Management System I have responsibility for far exceeds the requirements of A.S. 4801.

45. Gut-feel instead of solid research

Much of the approaches to safety rely on gut-feel as to what seems good, rather than solid research. The extraordinary claims about the success of safety posters, safety newsletters, incentive schemes and behavior-based safety programs are prime examples. Solid research is necessary to establish the facts.

46. Force-field analysis

This technique is particularly useful when seeking to review a Safety Management System

Force-field analysis (similar to S.W.O.T. analysis) is a simple, yet powerful technique, useful at the beginning of a project to define the nature of the beast you are dealing with. It is particularly useful when seeking to develop new Safety Management Systems. (Refer to the paper Force-Field Analysis by this author)

47. Get the right people

As with any aspect of management, OHS demands you have the right people. Motivated, caring and intelligent people, well led, can transform any organization. This will probably appear arrogant but I have to say many so-called OHS professionals I have worked with were idiots. Detailed procedures must be put in place to select, recruit and retain quality OHS people.

**Special note –Most of the work in this paper is the result of the author critically reflecting on a number of years of safety practice, some of the concepts expressed in this paper reflect the work of the author’s long-term adviser / mentor / coach on OHS matters, Geoff McDonald. A number of the topics briefly covered are explained in more detail on the web site**

**Conclusion**

The above is quite a simple approach to OHS but detailed implementation of the above will achieve significant improvements. Listen to your people, make significant efforts to seek out their ideas on OHS, reduce the bull-dust that surrounds the safety effort, keep the lines of communication open, act upon good ideas, maintain a good sense of humor, show the troops you are fair-dinkum about safety, use the powerful influence front-line supervisors have on their employees and do not take yourself too seriously! Do not make the mistake of talking to workers about the company safety goals and mission, instead talk about the effects of safety in their immediate work environment. Do not think your safety efforts end when you have written a safe working procedure, procedural controls in isolation are notoriously ineffective.

Focus on “What is in it for me”

As a manager and a supervisor you need a personal action plan on how to manage safety and you need to regularly review progress on the action plan with a process and content expert.

Use Class 1 personal damage occurrences to guide your actions.

You cannot underestimate the power of excellent leadership in OHS.

**30 Ways to Stuff up a Safety Management System**

1. Lack of management commitment, leadership and drive from the top of the organisation.

2. Lack of understanding and implementation of sensible safety legislation.

3. Lack of understanding and implementation of common law principles.

4. Too much concentration on lag indicators such as the Lost Time Injury Frequency Rate at the expense of leading indicators. Thinking minor personal damage is a good predictor of life-altering personal damage.

5. Not using the continuous improvement philosophy and other facets of Quality Management in your safety approach.

6. Lack of succinct paperwork. There is not much point in having detailed paperwork that is too much like hard work to read.

7. Using theory instead of real world approaches-Whatever you do reality test it with the workforce first.

8. Ignoring “When implementing change-Remember, people support what they create”

9. Not using face to face communications whenever possible. Research by Harvard professor T.J. Larkin suggests when communicating change with the workforce use the supervisor not senior management, use face to face communications and frame communications relevant to the immediate work area and processes.

10. Not using a needs analysis to guide all your actions.

11. Ignoring the simplicity not complexity rule.

12. Not creating an expectation for people at all levels to perform in safety.

13. Not developing goals, objectives, targets etc. for the Safety Management System.

14. Not using Learning Needs Analysis to guide conduct of learning. Not using Adult Learning Principles & Process to guide facilitation. Using lecture style presentations and Death by Power-Point.

15. Not training formal and informal leaders in Safety Leadership.

16. Not having regular audits of the Safety Management System.

17. Not practicing Emergency Response Plans.

18. Not having simple, succinct Safe Working Procedures, aim for 2 pages at the most, use pictures, diagrams, flow-charts etc.

19. Not using team-building principles in your safety approach.

20. Taking yourself too seriously and not celebrating success.

21. Using enterprise “accident” experience to guide action rather than industry taxonomies of permanently life-altering personal damage.

22. Putting too much emphasis on the risk ratings from risk assessments, the reality is that a lot of risk assessment is very subjective.

23. Not having formal approaches to follow up on investigations.

24. Not having formal approaches to follow up on audits.

25. Spending too much time in the office instead of the field where the action is happening.

26. Using unscientific terminology. Probably the best example of a lack of scientific terminology lies in the terminology “accident”

The term “accident” implies carelessness (whatever that means), lack of ability to control its causation, an inability to foresee and prevent and a personal failure. How can we make meaningful progress on a major cost to Australian industry if we persist with such, sloppy, unscientific terminology? The term “accident” affects how the general population perceives damaging occurrences and the people who suffer the personal damage, inferring the event is “an act of god” or similar event beyond the control and understanding of mere mortals.

The term “accident” is best replaced by the term “personal damage occurrence”. Instead of talking about “permanent disability” we should be talking about “life-altering personal damage”

27. Relying on tertiary OHS education as the panacea for the safety business.

28. Not developing a thorough, well defined body of OHS knowledge guided by the personal damage occurrence phenomenon and having an equal focus on practice as theory.

29. Employing OHS people based on technical skills alone. Effective OHS people need many skills over and above the technical skills, eg. Communications, interpersonal, leadership, project management, learning, change management etc.

30. Looking for a small number of root causes in personal damage occurrence (“Accident”) investigations. Instead concentrate on multi factor analysis through essential factors methodology and the Analysis Reference Tree-Trunk method of investigation (Geoff McDonald).

**Note**

There is increasing discussion that reveals weaknesses in Zero Harm approaches to safety. Some say they tend to drive reporting down and one ends up spending inordinate amounts of time on very minor issues. Instead of a blanket Zero Harm approach it is suggested a Zero Class 1 personal damage occurrence approach is used, this can be regarded as a targeted rifle approach compared to a shotgun approach.

F.G. (George) Robotham,

George can be contacted on [fgrobotham@gmail.com](mailto:fgrobotham@gmail.com); he welcomes debate on the above (it would be indeed a boring world if everybody agreed with George)

**Advice to new OHS people, George Robotham, “Failure is not an option”**

The following is based on many years experience in field, corporate, project and consultant OHS roles, in a variety of industries. Critical reflection on experience, tertiary study in OHS, Adult & Workplace Education, Management of Organisational Change and Human Resource Management, wide reading, attendance at many courses, seminars and conferences, long term mentoring by Brisbane OHS Consultant Geoff McDonald and a tendency to question the accepted has guided these comments.

Quotable Quote

"A health & safety problem can be described by statistics but cannot be understood by statistics. It can only be understood by knowing and feeling the pain, anguish, and depression and shattered hopes of the victim and of wives, husbands, parents, children, grandparents and friends, and the hope, struggle and triumph of recovery and rehabilitation in a world often unsympathetic, ignorant, unfriendly and unsupportive, only those with close experience of life altering personal damage have this understanding"

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I make no apologies for the fact that I challenge the accepted wisdom in some of what follows!

Your journey towards being a very effective OHS person has a solid grounding in your studies but this is just the start of the journey. Tertiary learning is very important but it is hard to beat practical experience, particularly practical experience backed up by critical reflection.

I have had my difficulties at times but these have been more than balanced out with many successes and a great feeling of achievement. Reducing personal damage to others is amongst the noblest things one can do with your life.

You have to resolve to be a life-long learner; often learning in fields allied to your major discipline will increase your effectiveness in your major discipline.

Focus on Class 1 personal damage and use this in considerations of analysis. Class 1 damage is that which permanently alters the future of the individual. Minor injuries are not a good predictor of more serious personal damage. Taxonomies (collections of like) of your industry personal damage occurrences provide better guidance than enterprise experience.

Remove the term “accident” from your vocabulary, instead use the term “personal damage occurrence”. Accident is an emotionally laden term that infers blame.

Look for “Essential Factors” not “causes” (Another emotionally laden term) in ‘accident” investigations. An essential factor is one without the final damage would not have occurred. Use the Analysis Reference Tree-Trunk method of investigation developed by Geoff McDonald. Do not believe the people who tell you “human error” (Another vague, un-useful and emotionally laden term) is responsible for the majority of “accidents”, even if it was true it is unhelpful. .Every personal damage occurrence will have Person, Machine & Environment essential factors. Concentrating on Person fixes often leaves avenues of control in Machine and Environment underdeveloped. Often engineering change is more effective than attempting to change the people.

Use personal damage occurrences, not emotion, to guide your preventative efforts. Beware of the many fads that crop up from time to time in safety, they are usually emotionally appealing but may misdirect your efforts. My mentor, Geoff McDonald uses the term displacement activity, a displacement activity is something we do, something we put a lot of energy into, but when we examine it closely there is no valid reason to do it. The history of the industrial safety movements has had and continues to have many displacement activities.

Be a sponge and soak up all the knowledge and experience you can. Never be scared to ask for advice and experience, never stop learning.

OHS is all about change management; expertise in this area will serve you well. A motto from organisational change management theory that I have found very valuable in OHS work is “When initiating change, People support what they create” Major efforts in communication, participation and involvement are usually necessary.

One of the things you must develop is leadership skills. Leadership is the often forgotten key to excellence in all aspects of life. Developing excellent presentation skills will also be very important.

As I get older my critical reflection on practice tells me communications skills and interpersonal skills are just as important as technical skills. There is not much point having a great message if you cannot get it across, if you have great technical skills but cannot get along with people you will not succeed. The biggest problem with written communications is its length; generally I think you must try to get your message across in a maximum of 2 pages. Busy people do not have time to write more and busy people do not have the time to read more. Interpersonal skills can be enhanced by use of techniques such as appropriate self-disclosure and reflective listening. When it comes to presentations be aware of the pitfalls of lecture style presentations. Use interactive learning approaches. There are things you can do to improve your communications, interpersonal and presentation skills.

Finding yourself a mentor will be of real value and constantly discuss issues with your peers.

Speaking from personal experience the most devastating thing that can happen to a company and its workers is to have an employee killed or seriously injured. The financial and more importantly humanitarian costs are immense. OHS is a joint responsibility of management and employees.

My view from the trenches is that there are many things wrong with the way OHS is managed in Australian industry. Gut feel and emotion rather than solid research often guides action. Fads driven by emotion are a real problem. Quite frankly a lot of the government and company approaches to OHS are strangled by complexity. Many employers are more interested in profits than their employees. The unions adopt the moral high ground in safety but my experience is that maintaining membership numbers is more important to them. I am reticent to mention the role of academic institutions but I have developed a perception that in the academic world practice sometimes suffers.

\*When I was a mine-site Safety Adviser I led a Critical Incident Recall process in the mine electrical department over a period of some 3 months and was disappointed with the resistance to change from some of the stakeholders. I persevered and was happy with the results. A few years later I went camping in the bush and 2of the electricians from work were in the group. Around the campfire at night we got talking about the Critical Incident recall work and they explained to me that prior to the work some pretty dodgy work practices were happening and everybody was covering up for each other. They assured me that if they had continued as they were fatalities would have occurred. It is these moment that make the hard work of being a safety person worthwhile!

Many of the safety people I have worked with have been idiots who are a disgrace to the safety business. Many of the safety people I have met have been the most fantastic people you will meet anywhere. You will notice I do not refer to the OHS profession; this is because I do not believe the body of OHS knowledge has yet developed to a professional level.

A major challenge is the development of a robust OHS Body of Knowledge; the Safety Institute of Australia is to be commended for beginning this development. My view is much more work is required.

OHS is a very frustrating occupation, there will be no shortage of knockers, you just have to focus on your goals and push through the crap. If you only save one person from serious injury it has been worthwhile.

One thing you will have to do to be a successful safety person is to challenge the status quo, this often gets you in a lot of strife, but frankly it is a lot of fun. Three favourite sayings of mine are” You do not know what you can get away with until you try”,” It is easier to ask for forgiveness than permission and “Doing the impossible is very satisfying”.

The issue of professional organisations is a vexed one. At various times I have been a member of an Australian, Canadian and an American OHS professional organisation, 2 Australian Learning professional organisations and an Australian Human Resource Management professional organisation. I have not been a member of any for about 2 years and do not feel like I have missed out on much. I am considering rejoining an OHS, Learning and HRM. Organisation .I must say the non-OHS organisations can give a broad management perspective that the OHS ones do not do.

I was a Chartered Fellow of the Safety Institute of Australia and found going through the rigorous assessment process taught me a lot about myself on both a personal and work basis. At the end of the day I cannot give much advice on joining OHS professional organisations, it is up to you to determine the benefits for yourself.

I suspect the drivers behind harmonisation were more about reducing cost to industry rather than improving OHS. I generally believe a national approach to OHS is an excellent concept. Harmonised safety legislation may have some advantages but the current situation seems a mess to me given the piecemeal implementation. I find it difficult to recognise significant OHS advantages that have accrued from the work so far.

The fact that the Qld. W.H.S.O. concept was not picked up nationally and national data collection and analysis remains incomplete are amongst the opportunities that have been missed.

Many people will have you believe 4801 is the holy grail of safety management systems and the fact that they have a 4801 compliant safety management system means they are doing a good job on safety.

As far as I am concerned 4801 represents a very basic approach to safety management systems and any S.M.S. I would want to implement would substantially exceed the requirements of 4801.

I completed a few psychology subjects as part of formal study and found them fascinating and very useful. As an OHS person I have come to the conclusion that all this safety stuff would work well if only we were not working with the unreliable buggers we are, i.e. the fallible human being. The biggest challenge in any profession is dealing with the people issues.

Looking to the future I see the time when OHS people should have a basic understanding of how psychological theory relates to safety and an ability to use psychological techniques in safety. Dr Robert Long has written valuable material on this topic.

Sometimes skills from other disciplines can be applied successfully to OHS; one such skill set is marketing. I have attended some marketing training and see some advantages for OHS.

Marketing is putting the right product in the right place, at the right time, at the right place. You have to create a product people want.

OHS people must have technical OHS skills. My experience is that broader skills such as leadership, communications, interpersonal and team building skills are also necessary. I have facilitated some team building interactive learning for OHS team members and believe such learning has significant benefit for both established and new teams.

Teams are small groups of people with complementary skills who work together as a unit to achieve a common purpose for which they hold themselves collectively accountable.

My web site ohschange.com.au discusses a number of safety related issues.

An ex-manager of mine, who has a way with words, says the trouble with management and safety is that management and safety professionals sometimes engage in acts of public masturbation! I apologise if anyone finds the foregoing offensive but my belief is it is an admittedly crude, but accurate, way of describing some of the things I have seen happen in both safety and general management.

The last thing I will leave you with are risk assessment and Zero Harm approaches to safety. I seriously question the effectiveness of both approaches and believe the safety people of the future will be amazed at why we believed in them so much. It will be interesting to hear what people are saying in 20 years time.

I would like to finish by wishing you all the best. Nothing worthwhile is easy, but despite the occasional set back I have found OHS to be exceptionally rewarding and you end up meeting some great people. I have found using project teams has been a fantastic way of driving significant safety change.

A final bit of advice is to have a well-developed bulldust detector; by the hell you will need it!

**The permanently life altering personal damage occurrences (Accidents) I have been associated with-George Robotham**

Introduction

During my 38 years involvement in OHS I have been associated with 13 fatalities, a case of paraplegia, a serious burns case and a major stress incident. The following are brief details of the permanently life altering personal damage occurrences (Accidents) I have been associated with and some close calls. With many it was good luck, not good management that more serious life altering personal damage did not occur.

There are lessons to be learnt from personal damage occurrences, the reality is that these lessons are often not widely communicated and acted upon. We do not have a National system for reporting, recording and analysing permanently life altering personal damage occurrences, this seems to me to be a priority if we are serious about managing OHS. Taxonomies of industry personal damage occurrence experience are a fertile avenue for improvement.

The life of an OHS person can be tough, we are often ignored by all and sundry and when the inevitable happens we have to help organisations cope with the aftermath.

Terminology used in OHS,

Probably the best example of a lack of scientific discipline in OHS lies in the terminology “accident”

The term “accident” implies carelessness (whatever that means), lack of ability to control its causation, an inability to foresee and prevent and a personal failure. How can we make meaningful progress on a major cost to Australian industry if we persist with such, sloppy, unscientific terminology? The term “accident” affects how the general population perceives damaging occurrences and the people who suffer the personal damage, inferring the event is “an act of god” or similar event beyond the control and understanding of mere mortals.(Geoff McDonald)

The term “accident” is best replaced by the term “personal damage occurrence”. Instead of talking about “permanent disability” we should be talking about “Permanently life-altering personal damage”

There is a poor understanding in the community of the reasons why personal damage occurs. We are quick to make the assumption that the worker was careless; when one examines personal damage carefully one will also identify a range of work system factors that contributed to the personal damage as well. Most of these work system factors are the responsibility of the employer at both common and statute law. Blaming workers for their careless behaviour is an emotionally appealing approach that is usually not all that productive in the bigger picture of preventing personal damage at work

Personal damage

1. Damage to people at work has a number of adverse outcomes:-

* Financial loss to employer, worker and community
* Pain and suffering
* Dislocation of lives
* Permanence of death

1. Damage to people from work falls naturally into one of three Classes.
   * Class I damage permanently alters the person’s life and subdivides into
     + fatal
     + non-fatal
   * Class II damage temporarily alters the person’s life
   * Class III damage temporarily inconveniences the person’s life (Geoff McDonald & Associates)

Geoff has investigated many thousand Class 1 damage occurrences in his career and maintains the most effective way to make meaningful progress in safety is by focusing on the class 1 phenomena. I have been involved in 3 projects with Geoff where we have either analysed critical incidents or personal damage occurrence experience and I found the results very impressive, the analysis of the critical incidents and personal damage occurrences really targeted control actions in an appropriate manner.

One of the biggest myths in the safety business is that preventing Class II and Class III personal damage will automatically prevent Class I personal damage.

Taxonomy

This is an incredibly simple technique that it is rare to find used. Essentially a taxonomy is a collection of like. The most well-known taxonomy is the phylum of plants, their botanical names.

Examination of personal damage occurrence taxonomies on an industry basis can provide meaningful insight into your safety problems. Examination on a national basis is even more powerful, I find it hard to believe our national government is serious about safety when we do not have a national method of collecting, reporting and analysing Class 1 personal damage.

**A. Permanently life altering, Class 1, fatal, 13 at work**

*Lorraine’s Story*

18 year old office girl drove a company car from the mine to the nearby township to do company business, on the return journey she was observed driving excessively fast. She was attractive, friendly, vivacious and liked by all. What ended up happening was such a waste. On the return trip she was driving very fast around a curve and lost control of the car, the car rolled several times and she was catapulted out through the windscreen. She was not wearing a seat belt.

I comforted her until the ambulance arrived. As she lapsed in and out of consciousness she said “George, please do not let me die” We put her on the aerial ambulance to Rockhampton Base Hospital where she died the next day. Subsequent investigation revealed some sensitivities about the causes. Had the organisation been more responsive to her problems and needs the incident could have been prevented.

I do not mind admitting I hit the grog for a while after this. Of course this was before the days of critical incident stress de-briefing.

*Moura Disaster Story*

When I was working in the corporate safety department of a major mining company I was focused on the 7 open-cut mines and had no responsibilities for the 2 company underground mines. My view was and still is that some of the safety work being done in the open-cut mines was very good.

On the 7th August 1994 Moura underground coal mine suffered an underground explosion that saw 11 men entombed in the mine and the mine closed. If my memory serves me correctly the head of the Mining Wardens enquiry into the disaster said “What happened at Moura represents a passage of management neglect that must never be repeated in the mining industry” The people who said what happened at Moura was an enormous stuff-up are understating the situation. Professor Andrew Hopkins wrote a book called “Managing Major Hazards” on the Moura disaster that I think should be compulsory reading for every manager, supervisor and OHS professional.

What happened at Moura was about the culture of the organization and communications as much as it was about safety. A small number of the local management team came under intensive criticism at the Warden’s enquiry. It is important to realize that the culture imposed by senior management and the expectations of senior management impacted on decisions made locally.

Those who complain about the effort and cost of implementing safety measures should have been around to see the slump in the company share price, shareholder dissatisfaction, pain and suffering, cost, effort, media crucifixion, ruined reputations, wrecked careers, psychological trauma, union backlash, enormous investigation effort, massive counseling effort, threat of regulator action, legal action against the company and company officials and strained relationships I saw.

There was a massive investigation effort after Moura and much chest thumping about implementing the lessons learnt. While I only have media reports to go by an incident in a New Zealand underground coal mine where a number of men were killed said to me some of the lessons from Moura had not been implemented.

*The Reversing story*

An employee on an open-cut coal mine was killed when a service truck reversed into him, one of the essential factors was that the service trucks reversing beeper was not working. Whilst not necessarily relevant in this case it has been noticed drivers of trucks and operators of earthmoving equipment display all sorts of innovative ways of disabling reversing beepers because they find them annoying.

*The Snake story*

Draglines have a crew of 3 to operate the dragline and the associated bulldozer and 4wd.An employee drove the 4wd near the bulldozer and got out and spoke to the operator. He then walked back to the 4wd and commenced to get in it. When earthmoving equipment operators are working on a standard path they often do not look behind themselves when reversing, people who work around earthmoving equipment know they have a responsibility to be vigilant about the proximity of the earthmoving equipment. The bulldozer was reversed into the 4wd, killing the employee. During the investigation a snake trail was discovered in close proximity to the 4wd. The hypothesis was that the employee who was killed was distracted from the proximity of the bulldozer by the snake.

*Motor vehicle accidents story*

As a mine Safety Adviser and volunteer ambulance bearer I attended a number of motor vehicle accidents. It was quite noticeable that the dead ones were often the ones who were not wearing seat belts; too much grog did not help.

**B. Permanently life altering, Class 1, non-fatal**

*Tom’s story*

Tom was cleaning inside a dragline and was overcome by solvent fumes. He squatted on the shoe of a dragline to clear his head and get his breath back and was crushed between the shoe and a walking platform when the dragline walked.

Most major bones in his body were broken and he received a punctured lung, he was made a paraplegic and had shortened life expectancy.

It was clearly a design fault in the dragline that was reluctantly recognised by the manufacturer. I would not be surprised if draglines are currently being constructed around the world with the same design fault.

*Vibration in earthmoving equipment story*

The effect of vibration in earthmoving equipment is well documented. There was a time when the so-called anti-vibration seats in earthmoving equipment actually made the situation worse, hopefully we have moved on from those days. Serious spinal column damage was often an outcome.

*The Electrician story*

An electrician was seriously burnt in a 415 volt switchboard explosion; he experienced massive burns with much scarring, psychological damage and about 18 months off work. Some of the essential factors were production pressure, inexperience, suspect high voltage testing equipment, the ergonomics of the switchboard and test and prove dead not carried out.

As a result of this incident the organisation carried out a comprehensive critical incident recall process that resulted in many safety enhancements. This process was by far the most effective safety change process I have ever seen.

*Clive’s story*

Clive was a miner in the crew that maintained draglines. The massive chains that are attached to the massive dragline buckets are referred to as jewellery. Through lack of communications Clive got 2 fingers crushed by the jewellery and was referred for surgery. The only trouble was the doctor amputated a finger that was perfectly ok.

*Access to earthmoving equipment story*

A number of serious incidents had occurred during access to earthmoving equipment. A project I led was the Access to Earthmoving Equipment project. Work required included:

* Carrying out a literature review;
* Thorough statistical analysis of company accident data
* Developing a check-list to assess access systems;
* Field assessment of access systems
* Discussing access requirements with maintenance and operational personnel;
* Designing and installing prototype access modifications;
* Assessing the adequacy of the prototype modifications;
* Developing access purchasing specifications and maintenance guidelines; and
* Providing written guidance on desired characteristics of access systems.
* Presenting to industry forums in Qld. W.A. & N.S.W.

Through the employer association we successfully applied for Federal Government funding to extend the original research work. Thorough statistical analysis of Qld mining industry accident data was the starting point. This work provided significant input into the writing of an Australian Standard for "Access to Earthmoving Equipment”.

As part of the project I visited a major earthmoving equipment supplier who expressed contempt that we would dare to question the safety of their equipment.

The project gathered a fair head of steam at the time and changes were made. I note examples now of where the lessons learnt are not being applied in the Australian mining industry. The report and recommendations were never fully utilised as the recommendations have a lot of applicability to access on smaller earthmoving equipment used in the construction industry, trucks and a wide range of general equipment used in industry.

Anne’s story

Anne was a female secretary who was being harassed and bullied by a female supervisor. The manager decided to manage the situation himself without help from the people trained to work with these matters and he attempted to keep the matter under wraps because of the senior and sensitive position of the supervisor. By the time I became involved as a rehabilitation coordinator Anne had a certificate for 3 months off work with a stress-related condition, her lawyers had commenced legal action against the company in the Anti-Discrimination Commission and all parties involved were bitter & twisted. It was interesting to see how some in management closed ranks and made Anne out to be the problem. I emerged from this matter pretty disgusted about how Anne had been treated by a company that made a lot of noise about their commitment to health and safety.

**C. Should have been permanently life altering except for luck**

*Oxy-acetylene equipment story*

When I worked in the mining industry the industry experienced a number of potentially fatal explosions in oxy-acetylene equipment gauges and regulators. Investigations revealed coal dust was accumulating in the equipment through faulty design. It was a major task to get the equipment manufacturers to acknowledge there was a problem and change their design.

*The grinding wheel story*

A machinist was doing some work with a 3 inch tool post grinder. The grinder changed speeds by fitting drive belts onto drive pulleys. The machinist thought he was halving the speed of the grinding wheel but doubled it so the speed rating of the grinding wheel was exceeded and the grinding wheel exploded. The machinist lost a bit of his ear, it was a miracle he was not killed. The area where the incident occurred was a high pedestrian traffic area; fortunately no one was in the area at the time the grinding wheel exploded.

*The Toyota Hilux story*

I think it was the early 1980’s when the company I worked for replaced Toyota Landcruiser utes with the newly released Toyota Hilux utes in many applications. The early Hiluxes had a high centre of gravity, stiff suspension and a marked tendency to roll over. I got to dread the combination of apprentice, wet road and a Hilux

*The explosion story*

Open cut coal mines use a lot of explosives to loosen the overburden prior to mining. I was called to a crib hut that was peppered with holes in the walls. The inhabitants of the crib hut reported they had dived to the floor for their safety when an overburden explosives shot had been detonated. The Drill and Blast foreman had mucked up his calculations of the powder factor of the shot and put nearly twice as much power into the shot as he really wanted.

Alex’s story

I got a call about midnight one night to go to the mine to investigate a company motor vehicle accident. At the scene I found a Falcon sedan on its roof, backtracking the skid marks in the dirt road it became obvious the car had become airborne as it topped the sharp hill in the road. The driver came staggering out of the bush all covered in blood, I made arrangements to take him to hospital. His storey was he swerved to miss a dingo and he stuck to this.

It rapidly became obvious he had been drinking at the onsite boozer for several hours and decided to race another person back to town in their company cars. He took the dirt road thinking it would give him a short cut and an advantage in the race to town.

Through a combination of circumstances he was not terminated. I was told to ensure his replacement car was dingo coloured when the rest of the company cars were white and to tell everyone about this.

*Sam’s story*

Like a lot of people in the mining industry in those days Sam, a foreman, had a drinking problem. He had a history of incidents involving the grog. After spending a long time at the onsite boozer he had a motor vehicle accident in his Toyota Hilux 4wd on the way back to town. The ute rolled several times and end for ended at least twice, the early model Hiluxes were renowned for their lack of stability. Virtually every panel on the Hilux was bent and the cab smashed down to dashboard level. Sam said to me that he released the seat belt and lay down on the driver’s seat when he saw what was happening, that probably saved his life.

*Safety construction management plans story*

When started with X road and bridge construction, noise barrier, earthwork , concrete construction organisation the senior OHS person explained to me that an important part of my duties was to prepare safety management plans for the start of every construction project. The organisation had a big template safety management plan and the idea was that one should identify the type of work being done eg confined space, trenching, manual handling etc. and put the required safety precautions for this type of work from the template into the safety plan. Basically the safety precautions in the template were based on the statutory requirements for the particular class of work (assumes of course the legislation was right and catered for varying circumstances). I did a few safety plans and noted the expectation was these be done in the office. There was no inspecting the site or discussion with the workforce and only limited communication from those in charge of the project.

About a month after I started I got a call that an excavator had hit a power line on a road construction job and I go over to investigate. After interviewing the excavator operator and the supervisor I go to the project office and ask the Project Manager for the safety management plan so I can check out what is said in the plan about operating equipment near powerlines (The safety management plan had been prepared by the senior safety person) Much scrambling in filing cabinets and cries of “ It is here somewhere” Finally the safety management plan was located and I noted there was nothing on it about operating equipment near powerlines. I talk to various workers and it rapidly became obvious none of them were aware a safety management plan existed.

From then on I tried to ensure the development of the plan included input from workers, involved a walkthrough of the site and input from the project manager and supervisor. Prior to each new project being started I would endeavour to have a safety induction that included discussion about the safety management plan. There was a fair bit of resistance to the foregoing approach from, particularly, project supervisors.

This incident was the start of about 5 incidents over 6 months where equipment struck power lines. Fortunately the electrical protection in the system blew and there were no injuries. There were issues about how adequately insulated the operators were from the cab of their equipment. There were many meetings and discussions about the topic and eventually a set of procedures were developed to be included in the safety management plans. The thing that made the most sense to me was the fitting of “tiger tails” on the power lines in the area where equipment was operating to improve visibility of the power lines (operators in the various incidents said they simply did not see the powerlines) A senior member of management held a series of meetings with the workers and supervisors to explain the new procedures.

A week later I go to a road construction job with earthmoving equipment, tip-trucks and excavators operating under power lines. No “tiger tails” The project supervisor ( who had attended one of the sessions with the senior manager) got offended when I suggested, in a caring and gentle way, that he should lift his game. When I complained to the manager he said he was not surprised as supervisor x was pretty slack on most things including safety, this was just accepted and there were no disciplinary actions.

*Confined space work-story*

Started with this company with the remit to review the Safety Management System.

Was there a week and they came to me and said, by the way we have these and presented me with 32 Improvement Notices and 5 Prohibition Notices. Has to be a record for one visit from a safety inspector. These were overdue for a response to Workplace Health & Safety Qld.

A number of the Prohibition notices were about confined space work. The company made water tank bodies for mining haul trucks, large mixing bowls for concrete mixers and some other confined space work.

Got on talking to the workers and got a few war stories about people being partially overcome by fume in the confined spaces and having had to be assisted out. The workers said they had been trying to get management to improve confined space work procedures in the workshop but the management ignored them.

The interesting thing was some of the workers did confined space work with the company product at the mines and were aware of and used the mines strict confined space working procedures when on the mine-sites.

Some of the problems I discovered were no confined space risk assessments, no confined space entry permit, the fume extraction was not effective particularly in the large water tanks with many baffles, there was no pre-entry test of the atmosphere, there was no continuous monitoring of the atmosphere, there was no off-sider to ensure the worker inside the confined space was safe, there were no emergency procedures, the respiratory protective equipment being worn was inappropriate, there had been no training in confined space work and what procedures that existed were not being followed.

All in all the biggest stuff-up in safety I have ever seen, particularly when you consider we are talking about something that can make a real difference to the workers lives.

Rapidly became obvious management was not interested in my findings or making changes so I got an outside organisation to audit the organisations confined space work. The auditor’s report was very damning as I knew it would be.

George goes about implementing the auditor’s recommendations and eventually the General Manager becomes aware of what is going on and tries to stop the process. He & I had what could be described as a forthright expression of views at a safety committee meeting where he tried to browbeat me into submission. I told him he should get advice from his solicitors on the matter and reminded him this came about because of an Improvement Notice from the government safety inspectorate.

A couple of days later major transformation from the General Manager, I am guessing he saw the solicitors, very keen to see the changes completed.

New gear was bought and other changes made. The union rep. came up to me & said he had been trying for 2 years to get the confined space work changed and I was a bit of a hero to a number of the workers.

As a safety person I was treated like crap by the management team, the same as the way they treated the workers.

Since then I have noted the company has been the subject of 2 Enforceable Undertakings with the Qld Government. Not a surprise to me, slackest outfit on safety I have ever come across.

**What Makes A Safety Management System Fly**

I first wrote the above paper nearly 20 years ago when the C.E.O. of an organisation I worked for came to me and asked me to give him 10 things the organisation had to do to have a good safety management system. The paper now contains about 50 suggestions; copies are available on request from [fgrobotham@gmail.com](mailto:fgrobotham@gmail.com) The paper reflects my practical experience in safety and the personal damage occurrences outlined above.

**Lessons I have learnt from my exposure to personal damage occurrences**

* Organisations need robust safety management systems and plans. Employees must be involved in the development of these and the information needs to be communicated to the workforce. Safety management systems can easily become overly complex and driven by masses of paperwork that the workers do not know about, care about or use. The safety management system must be real world stuff that makes a meaningful difference up the sharp end. I say the acid test of your safety management system is what happens in the field at 2am, when it is pouring down rain and there is no supervisor around. The safety management system must be thoroughly audited regularly.
* Highly visible, demonstrated management commitment and strong safety leadership are vital to the success of the above. Having a few senior management Safety Champions needs consideration. The leadership style of formal and informal leaders needs to be assessed, feedback from the workforce on leadership style is important as is appropriate learning.
* OHS personnel must be determined, have strong personalities and understand management of organisational change.
* Properly constructed safety culture / safety climate survey instruments can provide useful feedback.
* An emerging field is using psychological data gathering, principles, process and techniques in OHS.
* The inexperience and psychological makeup of younger people can lead to personal damage occurrences.
* Relying on compliance with legislation to prevent Class 1 personal damage is a false hope.
* Developing effective emergency response plans is difficult, they must be regularly practiced.
* Team building, change management and project management methodologies can aid safety change.
* Do not take things too seriously and celebrate success.
* The OHS person needs to spend a lot of time in the field and not become office bound.
* Communications must be succinct and relevant to the workplace of the receiver.
* Not wearing seat belts and driving under the influence is the pathway to disaster.
* When initiating change, remember, People support what they create.
* Critical incident recall is a highly effective means of improving safety standards.
* Harassment and bullying can have devastating effects on victims and is difficult to manage.
* A focus on permanently life altering personal damage (Class 1) is essential. If you are not careful you can waste far too many resources on minor incidents that have little potential to progress to Class 1 damage. Many have said this is one of the problems with zero harm approaches.
* Behaviour based safety is but one weapon in the safety armoury and is not the definitive solution it is often made out to be. Human behaviour is extremely complex and I doubt the relatively simple approach of B.B.S. caters for this.
* Taxonomies of industry Class 1 experience are a powerful means of positive change.
* Australia needs a National system of reporting, recording and analysing Class 1 personal damage.
* OHS project teams using change management and project management methodologies can be an effective means for positive change.
* When serious accidents occur management sometimes indulge in arse covering and the injured party does not receive much understanding or sympathy.
* The lessons from serious accidents are easily lost with the passage of time.
* Properly targeted, interactive learning is a fantastic means of positive safety change. Learning must have a learning needs analysis as a precursor and use action and experiential learning models.
* Equipment manufacturers are often slow to acknowledge the safety problems with their products.
* There are a lot of incidents where good luck, not good management reduces the extent of personal damage.
* Developing and introducing procedural controls is not always to be relied upon. Safe working procedures should be succinct, use simple English and boosted by photographs and diagrams, If you do not make them easy to use they will not be used.
* Get to know your people and be responsive to their concerns. Interpersonal problems can result from relatively minor issues, be constantly alert for these problems.
* Managers, supervisors and OHS personnel must manage by walking around.
* Sometimes people pay a high price for a moments inattention.
* Human beings inevitably make mistakes at times and it is not appropriate to rely on their behaviour to be safe at all times. The work environment, systems and equipment must be designed to accommodate this.

George can be contacted on [fgrobotham@gmail.com](mailto:fgrobotham@gmail.com); he welcomes debate on the above (it would be indeed a boring world if everybody agreed with George)

**What is Wrong with the Way OHS is Managed in Australia**

Quotable Quote

"A health & safety problem can be described by statistics but cannot be understood by statistics. It can only be understood by knowing and feeling the pain, anguish, and depression and shattered hopes of the victim and of wives, husbands, parents, children, grandparents and friends, and the hope, struggle and triumph of recovery and rehabilitation in a world often unsympathetic, ignorant, unfriendly and unsupportive, only those with close experience of life altering personal damage have this understanding"

**OHS is about Change For The Future NOT Blame For The Past.**

An ex-manager of mine used to say “Bring me solutions, not problems” The best way to influence management is to provide solutions and not bury them in problems.

I normally write about solutions and leave the problems to the many who love a whinge; in this case I have decided part of developing solutions is to define the problems.

What Is Wrong With The Way OHS Is Managed In Australia

Traditional approaches

My understanding is that there has been some improvement in Australia in the occurrence of fatal permanently life altering personal damage but little improvement in non-fatal permanently life altering personal damage. Traditional approaches to OHS have a less than satisfactory record yet many seem to be locked into traditional approaches. Some seem to think doing the same things will give different results. Questioning the status quo seems a favoured approach to me. There is an enormous amount of activity in safety in Australia nowadays, how purposeful some of that activity is remains open to question. As I look back on approximately 38 years involvement in OHS I see little that struck me as being particularly effective.

Why personal damage occurs

There is a poor understanding in the community of the reasons why personal damage occurs. We are quick to make the assumption that the worker was careless, when one examines personal damage carefully one identifies a range of work system factors that contributed to the personal damage as well; most of these work system factors are the responsibility of the employer at both common and statute law. Blaming workers for their careless behaviour is an emotionally appealing approach that is usually not all that productive in the bigger picture of preventing personal damage at work.

Common sense

It is often said about safety that it is just common sense, if this is the case why are we doing such a poor job of managing it in this country? I am reminded of an un-named Chinese philosopher who was reported to have said "The trouble with common sense is that it is never common and rarely sensible"

Media

The media emphasises personal fault in news releases about incidents and does not consider design and system issues that contribute to personal damage. The media loves juicy stories about safety and often the truth becomes a casualty

Complexity

Much of safety is made out to be quite complex and simply hard work, we would not want to be simplistic but there is room for less hard work.

Body of OHS knowledge

A fundamental requirement of a profession is to have a robust body of knowledge; we do not yet have this in OHS in Australia. A major challenge for the OHS industry is to advance the initial efforts in this area

OHS learning

Because we do not have a robust body of OHS knowledge, learning organisations find it difficult to develop effective, targeted learning. Much of the learning OHS people facilitate lacks guidance from modern adult learning principles and process. Lecture style presentations should be limited to the very short and interactive approaches used.

Safety stuff

OHS people do safety stuff and often do not use the learning from other disciplines in their work.

Interpersonal and communications skills

These are a weakness with many OHS personnel.

Class 1 personal damage occurrence data systems

Australian safety researcher Geoff McDonald has been my advisor/coach/mentor /guide in my safety career. Geoff McDonald has a system of classifying personal damage occurrences (“Accidents “) that goes something like this-

Class 1-Permanently alters the future of the individual (Fatal and non-fatal)

Class 2-Temporarily alters the future of the individual

Class 3 –Inconveniences the individual

Geoff has investigated many thousand Class 1 damage occurrences in his career and maintains the most effective way to make meaningful progress in safety is by focusing on the class 1 phenomenon. Whilst we hear about some of the fatal occurrences, Geoff’s research indicates that in terms of financial cost and personal hardship the non-fatal class 1 category has the most significant impact.

One of the things people do in organisations is analyse their “accident” experience with the view to gaining insight into ways to prevent the problem, this analysis is predicated on the belief that stopping minor events will stop the major ones. In his extensive writings Geoff explains many reasons why Class 3 and Class 2 events are usually not good predictors of Class 1 personal damage, it is a bit like saying the common cold will develop into cancer.

My interpretation of Professor Andrew Hopkins work says he supports Geoff’s views on this.

Unless organisations are quite large and frequently experience Class 1 personal damage they will not have a solid predictive data base for Class 1 damage.

A number of years ago the Qld mining industry introduced a standardised “accident” reporting system in the industry which allowed meaningful interpretation of data, it seems to me that standardised industry reporting systems can have many benefits. I might mention this did not happen without a bit of pain and resistance to change.

From the above it seems pretty obvious to me that we need to be encouraging standardised industry personal damage occurrence data systems and Australia needs a National Class 1 personal damage system that is easily accessible, consistent and able to be interrogated easily.

L.T.I.F.R.

The Lost Time Injury Frequency Rate dominates discussions about safety performance. How can a company be proud of a decrease of L.T.I.F.R. from 60 to 10 if there have been 2 fatalities and 1 case of paraplegia amongst the lost time injuries? The L.T.I.F.R. trivialises serious personal damage and is a totally inappropriate measure of safety performance

AS 4801

4801 is regarded as the ultimate standard by which safety management systems are judged and a whole industry has been developed around it. I would suggest AS4801 is but a basic starting point in developing a safety management system.

Zero Harm

There has been considerable discussion, led by Dr Robert Long, on the various OHS forums, about the dangers of zero harm approaches. A number of people appear to be saying zero harm is neither an achievable nor realistic goal. A number of people have said zero harm approaches shift the focus on major events to minor events and great amounts of resources are wasted on the inconsequential. For my money it is time we stopped wasting resources on zero harm and moved onto more productive pursuits.

Harmonisation

I suspect the drivers behind harmonisation were more about reducing cost to industry rather than improving OHS.I generally believe a national approach to OHS is an excellent concept. Harmonised safety legislation may have some advantages but the current situation seems a mess to me given the piecemeal implementation. I find it difficult to recognise significant OHS advantages that have accrued from the work so far. Interestingly the Prime Minister claimed success in the harmonisation of Australian OHS laws; I do not share her optimism.

The tripartite partners bring their vested interests to the discussion table and at times real progress in OHS is a casualty. It is very easy to make a lot of noise about OHS and look like you are doing effective things in safety. The challenge for all tripartite partners is to really make a difference.

The fact that the Qld. W.H.S.O. concept was not picked up nationally and data collection and analysis remains incomplete are amongst the opportunities that have been missed.

OHS Leadership

Having survived a number of years in industry the author is acutely aware that leadership of an organisation can make or break the organisation. The importance of leadership is vastly underrated in Australian industry; leadership is the forgotten key to excellence in business. Leaders send out messages, often subtly, about what they value and expect.

Livermore(in Carter, Ulrich & Goldsmith, p46) observes “The best system or model in the world is not going to do your organisation a bit of good unless you have a top down commitment to making it work. Once mid-level management and low level employees see top executives leading the way, most of them will begin to support the initiative as well.”

Terminology used in OHS

Probably the best example of a lack of scientific discipline in OHS lies in the terminology “accident”

The term “accident” implies carelessness (whatever that means), lack of ability to control its causation, an inability to foresee and prevent and a personal failure. How can we make meaningful progress on a major cost to Australian industry if we persist with such, sloppy, unscientific terminology? The term “accident” affects how the general population perceives damaging occurrences and the people who suffer the personal damage, inferring the event is “an act of god” or similar event beyond the control and understanding of mere mortals.(Geoff McDonald)

The term “accident” is best replaced by the term “personal damage occurrence”. Instead of talking about “permanent disability” we should be talking about “life-altering personal damage”

There is a poor understanding in the community of the reasons why personal damage occurs. We are quick to make the assumption that the worker was careless; when one examines personal damage carefully one will also identify a range of work system factors that contributed to the personal damage as well. Most of these work system factors are the responsibility of the employer at both common and statute law. Blaming workers for their careless behaviour is an emotionally appealing approach that is usually not all that productive in the bigger picture of preventing personal damage at work

Need for psychological approaches to OHS

I completed a few psychology subjects as part of formal study and found them fascinating and very useful.

As an OHS person I have come to the conclusion that all this safety stuff would work well if only we were not working with the unreliable buggers we are, i.e. the fallible human being. The biggest challenge in any profession is dealing with the people issues.

Looking to the future I see the time when OHS people should have a basic understanding of how psychological theory relates to safety and an ability to use psychological techniques in safety. Dr Robert Long has written valuable material on this topic.

Fads

The safety business has a tendency to pick and run with various safety fads that emerge, often the smooth marketing disguises the inherent weaknesses in the approaches. Pig poo is made to look, smell, taste and feel like strawberry jam.

Professional associations

Despite substantial flapping of gums not all OHS professional organisations provide a good service to their members.

Standard of OHS people

The vast majority of OHS people I have met have been dedicated people who try very hard, unfortunately I have also worked with a few incompetent idiots. OHS is yet to emerge as a profession; I put this down to the lack of a robust body of knowledge. OHS professional associations need to me doing more to elevate the status of the OHS business.

Tripartite partners

The partners bring their vested interests to the discussion table and at times real progress in OHS is a casualty.

Ponderous paperwork

The safety industry revels in the production of long, ponderous, detailed paperwork that no one reads, cares about or uses. Ploughing through the detail is just too much like hard work. There is room for succinct summaries of major approaches.

Recruitment of OHS personnel

Many OHS personnel will tell you horror stories of how OHS recruitment was managed; recruitment consultants appear to come under particular criticism. One experienced OHS person described recruitment consultants as essentially salesman who had little understanding of safety and often had little idea what the employer needed in safety people.

Arrogant tendency

I note a tendency to arrogance in some OHS people, some companies with high profile OHS systems and some OHS organisations.

Unless you are very careful to avoid it, a natural consequence of progression to more senior positions is that you get embroiled in the strategic world and quickly lose touch with the operational world. I have lost count of the times when managers and OHS personnel have told me how OHS is managed in their facility and when I went out in the paddock found a vastly different scenario. A lot of people do not realise that the OHS approach that works well in one organisation can be a disaster in another. A lot of people do not realise that whatever you do in OHS must be targeted at the identified needs of the organisation. What happens up the sharp end is what matters.

Any organisational change will inevitably be a disaster if you do not involve those affected by the change in the change process. As we used to say in the Army you are stuffed without your private soldiers.

Conclusion

The above are what my training and experience tells me is wrong with the way OHS is managed in Australia. You may well have different training and experience and have come to different conclusions. The challenge obviously is to solve any identified problems. Some may say the views above represent a cynical view of OHS, in my defence I have to say the majority of what I write is about proactive approaches to the function. Someone said it is a thin line between cynicism and realism.

**What is Right With the Way OHS is Managed in Australia**

Quotable Quote

**"A health & safety problem can be described by statistics but cannot be understood by statistics. It can only be understood by knowing and feeling the pain, anguish, and depression and shattered hopes of the victim and of wives, husbands, parents, children, grandparents and friends, and the hope, struggle and triumph of recovery and rehabilitation in a world often unsympathetic, ignorant, unfriendly and unsupportive, only those with close experience of life altering personal damage have this understanding"**

Introduction

The following is written from approximately 38 years’ experience in senior field, corporate, project and consultant OHS roles. I have attempted to come at this paper from a practical as opposed to a theoretical perspective.

OHS is about Change For The Future NOT Blame For The Past. Most OHS people realise this as do many in management.

In approximately 38 years involvement in OHS I have had to help my employers cope with the aftermath of 13 fatalities, one case of paraplegia and a case of significant burns with massive scarring and severe psychological damage. A major harassment / bullying case revealed some very nasty behaviour and an organisation supposedly committed to high standards of OHS, manage the situation badly.

I must admit to a certain level of cynicism about the way OHS is managed in Australia.

Moura Disaster

When I was working in the corporate safety department of a major mining company I was focused on the 7 open-cut mines and had no responsibilities for the 2 company underground mines. My view was and still is that some of the safety work being done in the open-cut mines was very good. On the 7th August 1994 Moura underground coal mine suffered an underground explosion that saw 11 men entombed in the mine and the mine closed. If my memory serves me correctly the head of the Mining Wardens enquiry into the disaster said “What happened at Moura represents a passage of management neglect that must never be repeated in the mining industry” The people who said what happened at Moura was an enormous stuff-up are understating the situation. Professor Andrew Hopkins wrote a book called “Managing Major Hazards” on the Moura disaster that I think should be compulsory reading for every manager, supervisor and OHS people.

Those who complain about the effort and cost of implementing safety measures should have been around to see the slump in the company share price, shareholder dissatisfaction, pain and suffering, cost, effort, media crucifixion, ruined reputations, wrecked careers, psychological trauma, union backlash, enormous investigation effort, massive counseling effort, threat of regulator action, legal action against the company and company officials and strained relationships I saw.

A massive effort went into investigating the Moura disaster and developing recommendations for prevention. There was an incident in an underground coal mine in New Zealand where a number of men were killed. Whilst I am only going by media reports, not necessarily the most accurate source of information, this incident said to me that some of the lessons from Moura had not been put in place. Sometimes we just do not learn from personal damage occurrences.

What Is Right With the Way OHS Is Managed In Australia

Class 1 personal damage occurrence

Australian safety researcher Geoff McDonald has been my advisor/coach/mentor /guide in my safety career. Geoff McDonald has a system of classifying personal damage occurrences (“Accidents “) that goes something like this-

Class 1-Permanently alters the future of the individual (Fatal and non-fatal)

Class 2-Temporarily alters the future of the individual

Class 3 –Inconveniences the individual

Geoff has investigated many thousand Class 1 damage occurrences in his career and maintains the most effective way to make meaningful progress in safety is by focusing on the class 1 phenomenon. Whilst we hear about some of the fatal occurrences, Geoff’s research indicates that in terms of financial cost and personal hardship the non-fatal class 1 category has the most significant impact (That is not to downplay the devastating impact of fatalities)

There is a minor realisation in Australian industry that the focus must be on Class 1 personal damage. The myth that preventing minor personal damage (Heinrich accident ratios) will automatically prevent major personal damage remains ingrained in many people’s minds.

The need for industry based personal damage occurrence data systems escapes the majority.

Risk assessment

Many organisations carry out risk assessment processes and place great importance on it. In recent years my critical reflection on practice has led me to question the validity and reliability of typical risk assessment approaches. I have some faith in the risk management processes as outlined in the paper The Hazard Management Process as described under articles on ohschange.com.au

Performance appraisal

Many organisations have safety incorporated in the regular performance appraisal of staff. The focus must be on what has been done to introduce excellent approaches to safety and not what personal damage has occurred.

Audits

Many organisations have regular internal and external OHS audits. My concern is that 4801 audits often do not drill down to the core of how safety is managed.

Emergency response plans

Many organisations have highly developed emergency response plans; the cynic in me says that sometimes the effort put into these would have been better spent on preventative aspects.

E.A.P.

Many organisations have an E.A.P. approach and in my experience these work well.

Standard of OHS people

The vast majority of OHS people I have met have been dedicated people who try very hard, unfortunately I have also worked with a few incompetent idiots. There have been a few who were technically weak and some who were arrogant and thought they were God’s gift to safety, mainly new graduates. Some were weak in interpersonal skills and communications skills. A few buried their incompetence through playing political games and some lacked independent action through sucking up to their boss.

OHS people have a difficult job and often their training does not prepare them well for the requirements of the job. I enjoy networking with OHS people and believe we have a lot to be proud of. My experience is that the majority of OHS people have a thirst to learn and improve; I hope my contributions to various forums and my web site ohschange.com.au help in this.

OHS is yet to emerge as a profession; I put this down to the lack of a robust body of knowledge. OHS professional associations need to me doing more to elevate the status of the OHS business.

Human resource management processes

There is a raft of human resource management processes in Australia that support OHS, unfortunately they sometimes get overly complex and difficult to apply.

OHS conferences

There are regular, major OHS conferences in various states that attract many delegates. A number of people will tell you attendance at these conferences is beneficial. The posturing and self-promotion by politicians, professional associations, regulators and consultants are a turn off for me. Lecture style presentations and the lack of interactivity in the presentations are a frequent problem. Having attended a Canadian Safety Engineering Society safety conference I can tell you the Canadians can teach Australians a few things about running safety conferences. I am to attend the American Society of Safety Engineers conference in 2013; the Americans appear to have a very practical focus to their conferences that is sadly lacking in Australia.

Traditional approaches

My understanding is that there has been some improvement in Australia in the occurrence of fatal permanently life altering personal damage but little improvement in non-fatal permanently life altering personal damage. Traditional approaches to OHS have a less than satisfactory record and many are looking for alternate approaches. There is a greater realisation that doing different things is necessary to get different results. Questioning the status quo is becoming more prominent.

Media

The media emphasises personal fault in news releases about incidents and does not consider design and system issues that contribute to personal damage. The media loves juicy stories about safety and often the truth becomes a casualty. Many in the community are realising that there is more to safety than is portrayed in the media.

Complexity

Much of safety is made out to be quite complex and simply hard work, we would not want to be simplistic but there is room for less hard work. Many organisations are seeking to make their OHS approaches less complex.

Caring

In my experience most employers have a caring attitude towards their employees and have a genuine desire not to see them injured. It is just that some are not particularly skilled at achieving this objective. I did however work briefly with one organisation that displayed what I regarded as a callous disregard for the safety of the employees, for the only time in my professional life I liaised with the regulator on the more life threatening issues.

LinkedIn OHS forums

The advent of the LinkedIn OHS discussion forums has done a great deal for OHS debate in Australia. The Riskex associated safety blog has many worthwhile safety articles.

Body of OHS knowledge

A fundamental requirement of a profession is to have a robust body of knowledge; we do not yet have this in OHS in Australia. A major challenge for the OHS industry is to advance the initial efforts in this area. Whilst S.I.A. is to be commended for its initial efforts in this area, many have come to the realisation that more work is required.

OHS learning

Universities continue to offer new and revised graduate and post-graduate OHS learning. Much of the learning OHS people facilitate lacks guidance from modern adult learning principles and process. Cert IV T.A.E. continues to improve. It is difficult for learning organisations to provide focused learning without a robust body of knowledge.

Interpersonal and communications skills

OHS personnel are gradually coming to a realisation of the importance of these. You can be technically great but if you cannot get your message across you will not be effective. Often it is the relationships you build not your technical expertise that determines success.

L.T.I.F.R.

Many OHS people now understand the deficiencies of The Lost Time Injury Frequency Rate.

AS 4801

Many OHS people and some in management realise 4801 is but a basic starting point in developing a safety management system.

Zero Harm

There has been considerable discussion, led by Dr Robert Long, on the various OHS forums, about the dangers of zero harm approaches. A number of people appear to be saying zero harm is neither an achievable nor realistic goal. A number of people have said zero harm approaches shift the focus on major events to minor events and great amounts of resources are wasted on the inconsequential. For my money it is time we stopped wasting resources on zero harm and moved onto more productive pursuits.

OHS Leadership

The importance of leadership is vastly underrated in Australian industry; leadership is the forgotten key to excellence in business. Many larger organisations are conducting leadership learning and refining their leadership approaches. Senior leaders of many organisations are making public statements about the importance of safety; one hopes the gloss is backed up by action.

Need for psychological approaches to OHS-

As an OHS person I have come to the conclusion that all this safety stuff would work well if only we were not working with the unreliable buggers we are, i.e. the fallible human being. The biggest challenge in any profession is dealing with the people issues.

Looking to the future I see the time when OHS people should have a basic understanding of how psychological theory relates to safety and an ability to use psychological techniques in safety. Dr Robert Long has written valuable material on this topic and raised its profile.

In my experience a small number of organisations have engaged organisational psychologists to deal with cultural and behavioural issues. Surveys have been carried out and results analysed for improvements.

Ponderous paperwork

The safety industry revels in the production of long, ponderous, detailed paperwork that no one reads, cares about or uses. Many have realised the problems associated with this approach.

Justification

Funds for capital expenditure are more likely to be spent if it has a safety justification. Unfortunately we sometimes see the safety justification inappropriately applied.

Questioning

If you follow the LinkedIn OHS forums you will see healthy questioning of the state of safety play in industry.

Contractor safety

Many organisations have come to the realisation that contractors need the same safety emphasis as ordinary employees. Developing best practice in contractor safety inductions appears to be an issue.

Rehabilitation programs

Many organisations have well developed rehabilitation programs. . I have found early intervention, extensive communications and consultation, identification of appropriate, meaningful alternative duties; preferably prior to when needed, accurate functional capacity assessment and a determination to succeed are essential. What sometimes seems to be forgotten in the rehabilitation debate is the fact that preventing the incident is the best sort of rehabilitation management.

Accident investigation

An industry has developed around accident investigation with commercial models, licensed systems and designated training. For my money the Analysis Reference Tree Trunk model from Brisbane based Intersafe is the best.

Safe working procedures

Many organisations have extensive safe working procedures. Keeping them short and simple, developing them using job safety analysis and involving the users seems essential. Despite many years in OHS and discussing the matter with many people I have difficulty establishing the distinction between when you rely on procedural controls and when you rely on the competency of the people performing the task.

Enforcement

My experience in Qld. is that, with the exception of the mining industry, the regulator is not very active in enforcing safety legislation. This has been a disappointment to me. At least we do not suffer from what appears to be the excesses of O.S.H.A. in America.

Wellbeing programs

More organisations are introducing wellbeing programs. Sensible approaches need to be adopted eg. Subsidised gym membership will be loved by those already going to a gym but may not necessarily increase the numbers of people going to a gym.

Haddon’s 10 countermeasures

The traditional wisdom in the safety world is to apply the hierarchy of controls. More people are realising the advantages of Haddon’s 10 countermeasures.

Customer service

Sam Walton of Wal-Mart said you must treat your customer like a King or a Queen, because if you do not, your competitors will. There is a slow realisation that provision of OHS services is all about customer service. Separating customer needs from wants is vital and customers often need help with this. There are a small number of really smart OHS people who incorporate broader marketing principles into their work.

Involving the workforce

Based on my study of Management of Organisational Change I have adopted the motto “When initiating change, remember, People support what they create” for my OHS work. Generally I think involving the stakeholders in discussions and decisions about OHS is a good idea.

My mentor, Geoff McDonald, says “Consignorance” is alive and well in OHS in Australia. “Consignorance” is what you get when you combine consensus with ignorance.

Many realise the importance of involving those affected by OHS change processes in the change process.

OHS standards

A small number of organisations have developed OHS standards describing the essential elements of how the safety management system is implemented. Audits of these standards replace 4801 audits.

Project teams

I have found an effective way of driving OHS change is through project teams. Well led, well researched project teams with carefully chosen members and using project management and change management methodologies can have a significant impact. Development of a detailed project plan is essential. A number of companies are now using OHS project teams.

Professional versus practitioner

I do not routinely refer to people who work in OHS as professionals. This is because I do not believe OHS can be referred to as a profession when there is not a well-developed, specific body of OHS knowledge. The professional versus practitioner debate has been done to death a number of times, it would be ideal if the OHS professional bodies could work together to finalise the issue.

Field focus

There is a strong realisation among OHS people that there is a need to spend time in the field instead of the office if one is to be effective.

Conclusion

The greatest strength I see in OHS in Australia is in the many dedicated, hardworking people who work in the function. Ours is a difficult job, often without much in the way of rewards. OHS is not the job for the faint-hearted and you have to be tough to survive. Many, at all levels, are not backward in explaining their beliefs about where we are going wrong.

There are many things wrong with the way safety is managed in Australia and driving change can place a significant emotional and psychological burden on the OHS person. It is essential to be flexible, maintain a sense of humour and within limits, not take things too seriously. If you do not do these 3 things, situations will get on top of you and you will be of little use to yourself, your family or the OHS business.

Ours is an inherently caring occupation, unfortunately, sometimes, we do not show sufficient care for ourselves.

**Discussion Paper-Professional Association Effectiveness**

George Robotham, Certificate IV Workplace Training & Assessment, Diploma in Workplace Training & Assessment Systems, Diploma in Frontline Management, Bachelor of Education (Adult & Workplace Education), (Queensland University of Technology), Graduate Certificate in Management of Organisational Change, (Charles Sturt University), Graduate Diploma of Occupational Hazard Management), (Ballarat University),Currently completed one third of a Masters of Business Leadership, Accredited Workplace Health & Safety Officer (Queensland),Justice of the Peace (Queensland), Australian Defence Medal, Brisbane, Australia, [fgrobotham@gmail.com,](mailto:fgrobotham@gmail.com,) www ohschange.com.au, 07-38021516, 0421860574,16/10/2010

The major topics in this discussion paper are-

1. Introduction
2. Purpose
3. Scope
4. Objective
5. Guiding principle
6. Recommendations for ensuring an effective professional association
7. Appendix 1 What members say they value in their professional organisation
8. Appendix 2-Major management lesson
9. Appendix 3-George’s experience with professional organisations
10. Appendix 4- Organisational effectiveness lessons paper

1. Introduction

This discussion paper represents critical reflection of the author’s experiences with a number of professional organisations, tertiary study in 3 disciplines, extensive OHS and Learning experience, working with 2 excellent leaders, extensive research on leadership and comment from a number of OHS, Training and Human Resource Management associations and their members in Australia and overseas. My long term mentor in OHS, Brisbane based OHS consultant, Geoff McDonald, has influenced my thoughts as this paper relates to OHS. I thank the many people who contributed. Most of the comment has come from Australia and Canada, approximately 50 people contributed.

2. Purpose

The purpose of this document is to provide practical and helpful advice to professional organisations and their members with the aim of ensuring maximum effectiveness.

3. Scope

It is considered this report is particularly applicable to Occupational Health & Safety, Training and Development and Human Resources professional organisations in Australia, United Kingdom, New Zealand, Canada and the United States of America. Other professional organisations may also benefit from this report.

4. Objective

This paper is a private project not aligned to any organisations I have been associated with. My objective is to provide guidance to professional organisations and their members with the view of ensuring effective professional organisations that are-

* Leading and monitoring professional principles, process and practice and promoting a body of knowledge specific to the profession.
* Encouraging and prioritising research and development to advance professional knowledge and disseminating this knowledge to the stakeholders.
* Influential with government, business, unions and other key stakeholders
* Credible and increasing the profession’s visibility and reputation
* Identifying and satisfying member needs
* Challenging the status quo
* Providing excellent learning for members
* Providing a pleasant and enjoyable social outlet for members
* Facilitating networking of members and enabling communication and connection
* Minimising disputes with members
* Being loyal to members and professional ideals
* Treating all interactions with dignity, respect and compassion
* Having an appropriate sense of humour

5. Guiding principle

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6. Recommendations for ensuring an effective professional organisation

It has been suggested that the following must be in place AND seen to be in place to have an effective organisation-

* Dynamic, visible, accessible, caring leadership
* Open, honest, focussed and succinct communication
* Transparent governance

If you do not have the above, you will have trust issues and when trust goes out the door you are in big trouble.

A major reason why professional organisations exist is to advocate for the profession. Liaising with and seeking to influence business, government, unions and other stakeholders is essential.

Professional organisations must have huge but realistic goals. One of the goals of an OHS professional organisation should be the minimisation of Class 1 personal damage occurrences (Personal damage occurrences are more commonly referred to by the emotive and divisive term “accidents”) Class 1 personal damage is that which permanently alters the future of the individual. Another goal of an OHS professional association should be to encourage government to establish a nation-wide, consistent and practical Class 1 personal damage occurrence data system that is readily able to be accessed and interpreted. Whatever goals are decided upon there must be a determined effort to achieve those goals.

Professional associations must encourage and support research into the profession.

It appears the development of a body of knowledge specific to the profession is not generally facilitated well in some professions. Learning needs analysis and consultation with all the stakeholders is necessary. Development of the body of knowledge must be guided by both theory and practice. For an OHS professional organisation, for example, the body of knowledge must be informed by the permanently life altering personal damage occurrence phenomenon. A body of knowledge will be useful to guide universities and other education providers in developing learning programs really targeted at the profession’s needs.

Have an appropriate balance between strategic and operational approaches.

It is essential to treat everyone you interact with in a caring, compassionate and respectful manner even if you disagree strongly with them. To not do so will build antagonism, weaken trust and in a litigious society will land you in a lot of trouble. When people express opinions contrary to yours it is wisest to explain your point of view rather than leave the other person in limbo. Internal and external interactions of all parties must reflect the fore-going.

Management must be held accountable to members and their performance monitored. They must be conscious of the need to avoid the psychological process of group-think.

Professional organisations must monitor the latest thinking in their country and overseas to ensure they are aware of latest professional principles, process and practice.

Beware of displacement activities, a displacement activity is something we do, something we put a lot of energy into, but when we examine it closely there is no valid reason to do it. Some professions have many displacement activities.

Standards and / or requirements to maintain membership of the professional body may be appropriate.

It could be argued that those in management positions in professional associations are there primarily for their management skills not their technical skills. Notwithstanding this they will be seen as much more credible if they have technical skills aligned to the profession they represent.

Grading of levels of professional membership will be advantageous, reaching the highest levels must be seen as a significant achievement and assessment procedures must be rigorous and involve significant academic achievement, practical experience in senior, influential, positions and submission of a significant, work based reflective journal. There will be many effective hands on members in organisations that may not have high academic qualifications, value their contribution through appropriate recognition mechanisms.

Credibility in organisations and their leaders is the most important quality people are looking for; credibility is the foundation of leadership. There is no place for big egos and self interest in leadership.

Trade shows at conferences can be a useful and satisfying adjunct. Political speakers at conferences need balance, the organisation needs to be and be seen to be apolitical. There is a fine line between consultants presenting the latest technical information and their marketing their products and services, procedures need to be in place to manage this.

Think about using interactive approaches rather than lectures at conferences and associated courses.

Formal coaching / mentoring programs for organisation members can have excellent results. Often informal get togethers over a coffee provide significant learning and are not to be ignored. Networking requires time and effort to get the best results.

It sounds so basic I hesitate to mention it but responding quickly and thoroughly to member communications is often overlooked in my experience. Follow up appears to be the weakest link in the chain.

Many organisation members will want their work published by the organisation, in some cases the work will not come up to organisational standards. Rather than reject with little or no feedback it is wise for editors to liaise with members on bringing the work up to the required standard. Rigorous academic papers and research has its place but papers on members critical reflection on practice is another ripe avenue for learning.

It is appropriate for professional organisations to aim for the highest standards possible, often this will involve strategic and academic approaches. Do not forget a considerable number of your members will be hands on and practical and also deserve the organisations assistance.

Be beyond reproach in everything you do, if you are not, you will be found out eventually.

Employment services, job postings or job board, will provide a useful service to members.

Have a balance with how much you tell members how good the organisation is, if you are really good they will figure it out for themselves.

Discussion forums are powerful tools for professional organisations but can make things worse if there is lack of response and action by management to issues raised. There are a number of restrictions that must be applied to discussion forums for very good reasons eg. Nothing illegal, sexual in nature etc. but the really vexed issue is what to do with criticism of the organisation. Within limits I suggest the criticism of the organisation should be allowed on discussion forums so as to give greater insight into perceived problems in the organisation. Deleting posts that are critical of organisations can invoke freedom of speech arguments and erode trust. Discussion forums require intelligent moderation and clear rules.

While criticism of the organisation may be unwelcome it may also be valid. Mature organisations will respond to criticism, engage the critic and build a solution. If there is a volume of criticism it may be that the organisation is doing things well but not being seen to do so.

A member needs analysis and a needs analysis on the publications seems mandatory. You cannot satisfy needs if you do not identify them.

Response to member concerns is one of the most important issues. There will be times in a managerial role that you think the request and / or issue raised by a member is just plain dumb. It is important to remember the member thinks it is a valid issue, he / she is your customer, and without customers you do not have a job. Fobbing people off works sometimes but often builds up resentment that can erupt with catastrophic results.

Disputes often occur in organisations. Detailed constitutions, rules, procedures etc. must be developed consistently and fairly applied AND seen to be applied with compassion. Sometimes hard decisions have to be made and people will not like it, if processes were seen to be fair that will defuse a lot of the tension.

A Solutions Data Base is an idea with considerable merit.

Regular, short activities with a relevant guest speaker are important.

When wishing to drive significant change in the profession form a project team of representative stakeholders and use change management and project management methodologies. It is wise to give organisation members the opportunity to make comment on the project plan early in the process. Participation=Involvement=Commitment.

Using expert advisers in specialities is important.

It helps to have a credible champion of change and a high profile sponsor for your organisation.

There is a wealth of expertise amongst members that goes untapped; I do not know how to do it but this expertise needs to be surfaced. Unleash the potential of your members.

There will be things the board of management members cannot comment publically on, confidential matters but be conscious of the effect this has on member relations. Minutes of committee meetings can be put on the web site with confidential things removed.

Services to members in remote locations continues to be an issue, I am not sure how to overcome this but I note regional / remote locations seminars are used by some organisations. Technology such as video conferencing, Skype etc. may assist.

Member satisfaction must be constantly monitored.

A new management team needs to acknowledge and thank those prior but not be slow in getting the message across that they see the need for reform and inviting member input on that reform.

7. Appendix 1 -What members say they value in their professional organisations

Informative, responsive to member needs, issues addressed quickly and without fuss, strong support for local chapters, you are not just another number, regular meaningful e-mails, follow up on issues raised, association moves the profession forward, transparent, open, honest communication that promotes valuable discussion, trade shows with conferences valuable, pre and post conference courses good, keeps me up to date, gives practical advice, has influence with government, can get answers to practical problems, have a good time at conferences, like it when conferences and courses involve the audience, get to know people to network with, getting the international perspective from speakers and fellow delegates at conferences is valuable, like it when members get publically recognised, increases the visibility of the profession, good networking, identifies and services the needs of a diverse range of people in the profession, encourages connection and communication between members, having reciprocal arrangements for recognition by equivalent associations overseas, management is accountable to members, has an e-mail address I can direct enquiries to, when I ring I get a quality answer, they thank you for your efforts and for getting in contact with them, not too much time spent telling me how good they are, organisation has credibility and membership helps get a job, large member base, relevant papers on the web site.

8. Appendix 2 - Major management lesson

As a young Corporal in the Australian Army a Regimental Sergeant Major with a chest full of medals that said he had been there, done that, said to me that that the most important thing in leadership is to look after your private soldiers because you are stuffed (not quite his words) without them.

I would suggest one of the most important things professional associations must do is identify and focus on member needs.

I have carried out extensive research on leadership which can be found in my paper Safety Leadership on ohschange.com.au My belief is that leadership is the often forgotten key to excellence in organisations. Unfortunately leadership is sometimes the refuge of scoundrels.

9. Appendix 3 - George’s experience with professional associations

I have been a member of 6 professional bodies (OHS, Training & H.R.), one of which has folded and 2 of which were overseas. One overseas organisation had services that were pretty specific to its country of origin and I decided not to stay a member because of this. I joined these in the hope of receiving high quality journals, conferences and courses, basically about learning.

I am tempted to say my membership of the associations has not really done a lot for me personally or professionally but there are some exceptions-

* Some reasonable but not earth shattering conferences, I must admit the politicians these tend to attract in order for them to tell you how great a job their particular brand of government is doing annoys the hell out of me. Having attended a Canadian Society of Safety Engineers conference I believe there are some learning’s about how to run conferences from them. I have not got there yet but I am impressed by what I perceive to be the very practical focus of the American Society of Safety Engineers conferences.
* I learnt a lot about myself personally and professionally from doing the rigid assessment to become a Chartered Fellow of a particular organisation, this was a real highlight for me.
* I have found the discussion forums very valuable but I have been very disappointed that what looks like many good ideas raised on a particular forum receive little feedback and / or follow up from management.
* A number of members have shown sufficient trust in me that they have opened up to me on a number of relevant issues, I have learnt from this.
* I have spoken at a few conferences and had a few papers published, hopefully this has assisted others.
* A small number of papers in the publications from various associations have been of practical use.
* There have been occasional activities in my home town I have participated in.
* I have had some pleasant social gatherings and met some interesting people who have developed into good contacts.

There have probably been other things going on that were not communicated to me well.

Some of the organisations appear to have the ear of government and big business. I suspect some behind the scenes lobbying for the profession has been happening.

10. Appendix 4 - Organisational Effectiveness Lessons

Guiding principle****

Various functions in business eg. Occupational health & safety, Quality, Environment, Learning, Human resources etc. find it difficult to be effective unless there is a climate of general organisation effectiveness in business. To determine where you are going (your objectives) you need to determine where you are at, carry out a gap analysis, talk to both internal and external customers, customer satisfaction is vital. A continuous improvement approach will aid customer satisfaction.

Lesson 1

People judge you by what they see you doing not by what you say you are doing. Treating people with the upmost respect at all times is essential.

Lesson 2

It is rare for organisational change to be effective if those affected by the change process are not fully involved in the change process. “When initiating change remember, People support what they create” The 5 P rule is very important in change-Prior Preparation Prevents Poor Performance.

Remember that across any group of people the need for change varies greatly from the 5% of people who have to have the latest technology/ clothes/ systems at any price, through to the much larger group who are happy to accept justifiable change (change that is justified, affordable, and introduced at an acceptable rate); and another large group who don’t like change (prefer things to be predictable, constant ...) and another small group of “luddites” who strongly resist change in any form. All these groups have valuable roles in organisations so must not be ignored or bulldozed; otherwise change will be seriously undermined.

Lesson 3

“Nothing is more central to an organisations effectiveness than its ability to transmit accurate, relevant and understandable information among its members” There is a big difference between saying you have open communications and actually achieving it. Keep all your communications simple.

Keep written communications focussed and succinct. Busy people do not have time to read lengthy documents and busy people do not have time to write them. Always check for understanding.

Where ever possible use face to face communication, it is a big mistake to rely on e-mails for communicating major issues. Frame communications relevant to the receivers work environment.

As a young bloke my Father told me if you are going to be a bull dust artist you have to be incredibly good at it and have a phenomenal memory or you will be found out eventually.

Techniques such as force-field analysis can open up communications channels. Appropriate self-disclosure and reflective listening are an aid to communications and building interpersonal relationships.

Lesson 4

A lack of open communications will inevitably lead to the development of a lack of trust amongst some of the organisations members. Organisation leaders will find when trust goes out the door the perception of their messages will become skewed.

Lesson 5

General Colin Powell is reported as saying you should worry when soldiers no longer come to you with their problems. This is because they have either concluded that you cannot help or you do not care, either is a crisis in leadership.

Lesson 6

General Norman Schwarzkopf said “Failures in leadership are invariably failures in character, not competence” The biggest test of a leader’s ability that he / she will be judged by is how he / she reacts in a crisis.

Lesson 7

Do the things that give you the biggest bang for your buck.

Lesson 8

Minimise the bureaucracy and bull dust.

Lesson 9

Do the simplest thing that will work.

Lesson 10

Remember it is the relationships you build combined with your technical skills that determines success – either alone will not guarantee success.

Lesson 11

Have huge but realistic goals with set timelines.

Lesson12

Whatever you do, but particularly learning, must have a needs analysis as a pre-cursor. Encourage your staff to be lifelong learners. Use Action & Experiential learning models and avoid lecture style presentations.

Lesson 13

Communicate your expectations and react when they are not met. Manage by walking around and see for yourself what is going on in your organisation.

Lesson 14

Ask for and give regular feedback.

Lesson15

Focus on the outcome and use team building approaches with your teams.

**Note**

A Google search should give a basic understanding of terms like force-field analysis, reflective listening, appropriate self-disclosure, action learning and experiential learning.

A ex-manager of mine, who has a way with words, says the trouble with management is that management professionals sometimes engage in acts of public masturbation! I apologise if anyone finds the foregoing offensive but my belief is it is an admittedly crude, but accurate, way of describing some of the things I have seen happen in management.

**“People do not care about how much you know until they know how much you care”**

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## Geoff McDonald

Geoff has been my coach, mentor, guide and adviser on OHS for in excess of 35 years and is one of the very few consultants on the safety scene who inspire much confidence in me. The following are examples of material I have written guided by Geoff.

### Safety Myths

One important factor that influences how OHS is managed is the attitudes and pre-conceptions of those leading the charge. This paper explores beliefs, philosophies, concepts and attitudes and suggests some common ideas may be incorrect or unhelpful, that is they may be myths and misconceptions.

**People cause accidents**

We would not suggest that people are not essential in personal damage occurrences (Accidents) but the people cause accidents myth and misconception is often used as an excuse for not carrying out positive action. What often happens is we blame the person and forget about making positive changes to the machine and the environment. There are few occasions when it is appropriate to blame the person for their past actions, this is only appropriate when the blame leads to change in the future.

The people cause accidents philosophy has been reinforced in a number of ways over the years.

* Heinrich-Although this belief has been part of our culture for centuries, it received official sanction in the writings of Heinrich, widely held to be the father of the industrial safety movement in the 1930’s.
* His domino theory whereby unsafe acts, unsafe conditions, errors and hazards combine to produce incidents has tended to focus on the person to blame and has been a serious impediment to meaningful progress.
* Legal system-This reflects the belief that people cause accidents.
* Insurance industry-Closely tied in to the legal system, seeks to identify some person to blame and pursue through legal channels for any claim.
* News media-Media scream driver error in motor vehicle incidents; they scream pilot error in aviation incidents without taking account of the other multitude of essential factors.
* Published studies-Many published studies will have you believe 90% of accidents are caused by human error. The reality is all personal damage occurrences will have people essential factors and machine and environment essential factors.

**The main aim of safety activities is to prevent accidents**

Certainly safety activities aim to prevent personal damage occurrences. However we must take one step further by also seeking to minimise and control damage. A classic example being the wearing of seat belts and fitting R.O.P.S. to tractors.

**Look after the pence and the pounds will look after themselves**

There is a belief in safety that if you bring controls to bear on all minor injuries then the Lost Time Injuries will look after themselves. This belief has misdirected effort with the result that inordinate effort is directed at minor incidents that have little potential for more serious damage. Certainly we should prevent minor incidents but remember to concentrate our efforts where we get the best results. The Pareto Effect says 20% of incidents will give 80% of damage. This 20% must be identified and concentrated upon. In Managing Major Hazards Professor Andrew Hopkins outlines how a focus on Lost Time Injuries led to insufficient emphasis on high risk events. Papers are emerging questioning the wisdom of Zero Harm approaches to safety.

**It cannot happen to me**

There is a need for each and everyone of us to subscribe to this theory, for the sake of our own psychological well-being and to be able to cope with situations outside our control. This belief is often no more than an excuse for taking no action. Often you will wonder why the silly bugger did what they did; sometimes it is because of this belief.

**Punishing wrongdoers**

I am not saying we should not punish people who do the wrong thing in safety. I am saying that the fact that we do punish wrongdoers will often lead to highly imaginative efforts to avoid punishment and thus make things harder. The history of the safety movement records numerous cases of punishing the wrongdoers not being effective. We should seriously consider the full range of options rather than making hasty decisions to punish the wrongdoers.

**W.A.S.P. ethic**

This work ethic had its origins in the great religious upheaval know at the Reformation. The ethics emphasis is just reward for effort; conversely people who are hurt in accidents are receiving their just reward for lack of effort. The W.A.S.P. may side-track our prevention efforts.

**Displacement activities**

A displacement activity is something we do, something we put a lot of energy into but when we examine it closely there is no valid reason for doing it. The industrial safety movement reeks of poorly considered displacement activities often marketed by smooth consultants.

**Lost Time Injury Frequency Rate is a valid and reliable measure of safety performance**

I have personal experience with a company that aggressively drove down L.T.I.F.R. to a fraction of its original rate in a space of about 2 years yet killed 11 people in one incident.

### LTIFR

The Lost Time Injury Frequency Rate dominates discussions about safety performance. How can a company be proud of a decrease of L.T.I.F.R. from 60 to 10 if there have been 2 fatalities and 1 case of paraplegia amongst the lost time injuries? The L.T.I.F.R. trivialises serious personal damage and is a totally inappropriate measure of safety performance. (Refer to the paper on this topic under articles on ohschange.com.au)

### Personal Damage Occurrence Investigation Models

I have been exposed to a number of investigation models-Root cause analysis, Tripod, I.C.A.M., Tap Root and A.R.T.T. Of the above the author has found A.R.T.T. (Analysis Reference Tree Trunk) the most useful. This method was developed by Brisbane OHS consultant, Geoff McDonald.

Essentially the personal damage occurrence is represented by a tree-trunk lying on the ground, at the end of the tree-trunk you have Person elements, Machine elements and Environment elements, along the length of the tree-trunk you have 6 time zones and the annular or growth rings of the tree represent a number of Ergonomic elements. Instead of looking for “causes” you look for “essential factors” (An essential factor is one without which the final personal damage could not have occurred) There are good reasons why the term “cause” is not used. The idea is to look for essential factors where the various categories of the model above intersect.

The model is very easy to use and usually at least 30 essential factors will be found in each personal damage occurrence. The author hears good reports on training in this technique conducted by Intersafe.

American author Ted Ferry has written publications that provide practical, how to advice on this topic. Readers may find the advice on an investigation kit in Accident Investigation on ohschange.com.au of benefit.

### Analysis of “Accident” experience

Many organisations analyse their “Accident” experience in the hope of gaining insight into how to prevent their problems. Most organisations will not have sufficient serious “Accident” experience to make statistically significant determinations.

1. Damage to people at work has a number of adverse outcomes:-

* Financial loss to employer, worker and community
* Pain and suffering
* Dislocation of lives
* Permanence of death

1. Damage to people from work falls naturally into one of three Classes.
   * **Class I damage** permanently alters the person’s life and subdivides into
     + fatal
     + non-fatal
   * **Class II damage** temporarily alters the person’s life
   * **Class III damage** temporarily inconveniences the person’s life (Geoff McDonald & Associates)

**Taxonomy**

This is an incredibly simple technique that it is rare to find used. Essentially taxonomy is a collection of like. The most well-known taxonomy is the phylum of plants, their botanical names.

Awhile back I was associated with taxonomy of the more significant personal damage occurrences in the Qld mining industry which I thought was particularly effective in setting priorities for the industry. It is important to do the taxonomy on an industry basis as it is unlikely even the big companies will have enough of the more serious events to be able to develop statistically significant determinations.

The Qld mining industry has a standard personal damage occurrence report form that is sent to the inspectorate. The hard copies of the forms were obtained and sorted into like, i.e. the spinal column damages caused by driving a haul truck were put together ,the spinal column damage caused by lifting gas cylinders were put together, the eye injuries caused by grinding were put together and so on. The personal damage occurrences were then examined for their frequency, severity and the essential factors (An essential factor is one without which the final damage could not have occurred). This process gives insight into where your principal problems are occurring and guides preventative action.

In these days of computerised data systems I still feel it is necessary to go back to the original hard copy or a scanned in copy.

Examination of personal damage occurrences on an industry basis can provide meaningful insight into your safety problems.

### Access to earthmoving equipment

A highly practical safety project in the early 1990’s was the Access to Earthmoving Equipment project. Work required included:

* Carrying out a literature review;
* Thorough statistical analysis of company accident data
* Developing a check-list to assess access systems;
* Field assessment of access systems
* Discussing access requirements with maintenance and operational personnel;
* Designing and installing prototype access modifications;
* Assessing the adequacy of the prototype modifications;
* Developing access purchasing specifications and maintenance guidelines; and
* Providing written guidance on desired characteristics of access systems.
* Presenting to industry forums in Qld. W.A. & N.S.W.

Through the employer association we successfully applied for Federal Government funding to extend the original research work by further research by an ergonomist / mechanical engineer. Thorough statistical analysis of Qld mining industry accident data was the starting point. This work provided significant input into the writing of an Australian Standard for "Earthmoving Equipment Access” and subsequently much earthmoving equipment in open-cut Australian mines now have hydraulically operated access arrangements.

The focus of this work was the large earthmoving equipment used in open-cut mining but the lessons are equally applicable to smaller earthmoving equipment and the back of trucks.

This research developed an industry manufacturing and developing earthmoving equipment access systems. With the passage of time this work is not well known in the mining industry nowadays, whilst the work has significant application outside the mining industry few will be aware of it.

I can supply further information if necessary, [fgrobotham@gmail.com](mailto:fgrobotham@gmail.com)

Geoff was a driving force in this work.

### Critical Incident Recall

Many organisations will tell you they report near misses or critical incidents. My advice is unless you have organised processes in place to surface near misses or critical incidents you will only hear about a fraction of them.

Critical incident recall is an awesome technique particularly suited to high risk environments. The technique will not work unless there is a climate of trust created between management and workers. Communications must be open & honest and managers and supervisors must be prepared to put up with a lot of criticism and not react defensively. In the interests of getting to the truth there must be no disciplinary actions. The senior department manager must be prepared to put his reputation on the line. The potential for some to push industrial issues is high with this technique, open & honest communication and a determination to improve will defuse this.

Neither management nor workers will be prepared to commit to the work required in this technique unless there is a general realisation that problems exist.

**What was done**

All department members attended a short learning session where the Person, Machine, Environment concepts were explained. If I was to do this again I would include a case study of a complex class 1 personal damage occurrence to bring out the principles. The process they would go through was explained.

Some department members were trained as critical incident participant observers and observed what was happening in the workplace, some department members were trained as critical incident interviewers and interviewed their workmates. It was essential that those chosen for these tasks were trusted by the workforce. The identified critical incidents were communicated to management.

It was planned to let the above process go for 6 months but after a short period of time the frequency and severity of the critical incidents set the alarm bells ringing.

Based on the identified critical incidents a questionnaire was developed and all department members were asked to complete it in a series of meetings.

Responses to the questionnaire were collated and displayed on histograms

In what was a very brave move considering the industrial climate the senior department manager led a series of meetings with the workforce where he displayed the histograms and asked for feedback on reasons why the responses were the way they were. The manager was advised that no matter how severe the criticism he was not to react defensively. In these circumstances if a senior person is criticised severely you will usually find someone in the work group will come to his rescue if he is being fair dinkum, if that does not happen the facilitator can come to his rescue.

Changes that occurred included upgrading of diagrams & plans, purchase of new high voltage testing equipment, better understanding of some test equipment, training, improved maintenance, improved procedures, changes to isolation procedures and improved practice. An environment of open and honest communication also developed.

(Refer to the paper Practical Application of the Critical Incident Recall Technique on ohschange.com.au Geoff was a driving force in this work.

**George’s Philosophy on Life, Work and Relationships**

* Challenging the status quo is fun and much better than putting up with fools and mediocrity, occasionally this really gets you in the poop. Do not let this deter you, most of the time you will have a win
* Win-Win is bull dust, you have to win and the other bloke has to lose, preferably big time, this is the only way people will take you seriously. Any other approach will be seen as a sign of weakness by some of your opponents and it will be used against you to your detriment
* Within the limits of the above be respectful and caring of others
* Learn the skills of reflective listening and appropriate self-disclosure, helps with interpersonal relationships
* Look after your team and the little people because you are stuffed without them
* If he / she deserves it, it does not hurt to do things to make your boss look good
* When communicating change use the supervisor, use face to face communications and frame messages relevant to the work environment of the person receiving the message. Road shows by senior management discussing change are often perceived as a bit of a wank by the workers
* Have a well-developed bull-dust detector. While it is tempting to be a bit of a bull-dust artist you have to be very, very good at it and have a fantastic memory or you will be found out eventually and lose all credibility, much easier to simply tell the truth
* It is preferable that people like you but this will not always happen so do not worry about this too much, be concerned however if they do not respect you.
* Do not take yourself too seriously and enjoy what you do
* Never reveal your true bottom line in negotiations
* If you want to understand how an organisation functions talk to the workers, the more senior people become in organisations the more removed from the reality of how the organisation operates they become
* Celebrate success
* Understand people will lie to you, ask for the solid evidence
* Try to be uncomplicated and succinct in everything you do. Limit general correspondence to a maximum of 2 pages. Limit the size of major reports, busy people do not have the time to write long correspondence and busy people do not have the time to read it.
* Admit your mistakes and fix them publically. Be graceful when others admit mistakes, this will give a return with time
* Not everybody will be happy with your decisions, that is life
* Integrity is everything
* If you have to tell people you are in charge, you are not
* Determination-Never give-up!
* You cannot succeed unless you know your goals, you cannot succeed and know you have arrived without goals. Planning increases your chances of achieving the goals. If you do not take action you will never attain anything. Direction and purpose are two of the most vital factors that you must have in your life if you are going to be successful.
* Do not procrastinate
* Successful people are usually positive people. They think about what they want and are optimistic, they expect the best and they expect to win. Faced with problems and obstacle, the positive minded person will look for solutions and a way forward. The negative person will spend so much time whingeing they never move forward. We chose in life. The one thing that can bring success or failure in our lives is our attitude.
* A handy thing to remember is that no matter how bleak things look there will always be someone worse off.
* See every challenge and responsibility as an opportunity to sell yourself.
* Be a life-long learner in many fields.
* “When reading your correspondence the reader must say “Wow” in the first third of the page”
* “When listening to your presentation the listener must say “Wow” within the first 3 minutes”
* Get damn good at what you do through practice and focus, give and receive regular feedback.
* Push through your difficulties.
* Serve others something of value. Whatever you do must be based on a needs analysis.
* Use personal damage occurrences, not emotion, to guide your preventative efforts. Taxonomies of your industry personal damage occurrences provide better guidance than enterprise experience.
* Persist through failure.
* Remember your example affects the behaviour of others.
* Never be late, start & finish on time.
* When initiating change remember “People support what they create” Initiating change is difficult at the best of times, if you do not involve those affected by the change in the change process it is unlikely to work.
* Remember the 7 P rule - Prior Planning and Preparation Prevents Piss-Poor Performance.
* It is often the relationships you build not your technical skills that determine success.
* Be squeaky clean in whatever you do or you will be found out, ask Bill Clinton .
* Network actively both in business and personal life, people prefer to deal with people they know.
* Whatever you do ask yourself “How will this work in the middle of the night when it is pouring down rain?” Use “real world” approaches not theory alone.
* Do not complain.
* Do not engage with idiots, they just drag you down to their level
* Do not criticise others, compliment instead when you really mean it.
* Do not make excuses, accept 100% responsibility for everything that happens to you.
* Use humour in your interactions, no-one likes a grouch. Learn how to use humour
* Grab the opportunity to speak publically about your passion whenever you can. Learn how to speak well. Influencing others, but particularly your peers, can be very satisfying. Avoid lecture style presentations and build activities for your audience into the presentation. Refer to the papers “*Adult Learning Principles and Process*” and “*How to give an unforgettable presentation* “on ohschange.com.au for practical tips.
* Read up on written communications, oral communications, attentive listening, interpersonal skills (probably the most important of all), team-building, personal excellence, leadership, project management, change management and time management and practice improving your skills.
* Remember the number one job of a leader is to transmit and embed high value standards.
* Learn about and apply a continuous improvement philosophy.
* Plan ahead and the unexpected will not cause an emergency, always have a contingency approach.
* Coach / mentor / guide / advise the inexperienced, this is the way life-long friendships are built. Try to get your own mentor.
* Wherever possible use on the job learning to compliment theory.
* Beware of the person who can make pig poo, look, taste, smell & feel like strawberry jam
* Strategic approaches are important but make sure you spend enough time in the field that you do not lose contact with the everyday reality of how the business is managed
* Always think about “What is in it for me” from the perspective of others you are trying to influence
* Identify and separate customer needs from wants
* Use Action and Experiential learning for adults that promotes critical reflection
* Get some runs on the board quickly
* Do what gives you the biggest bang for your buck
* Keep promises
* Give 100% support to your team all the time, help them with mistakes and acknowledge good work
* Minimise the bureaucracy and bull-dust
* Project teams with defined deliverables, timelines and milestones can be a great way to drive change
* Carefully define the scope of any project you take on
* COMMUNICATE, COMMUNICATE, COMMUNICATE in a way that inspires
* Force-Field Analysis is a great way to start off any project
* Use the Pareto Principle to maximise the effectiveness of what you do
* Passive countermeasures (that do not rely on action by the human being) are preferred to Active countermeasures
* Give something for nothing
* Differentiate yourself from the others doing similar things
* Knowledge of the customer is essential
* Say thank you to customers
* Show the customer how the product will benefit them
* Keep in contact with old customers much easier to sell to than getting new customers
* Always treat the customer like a King or Queen-If you do not your competitors will
* People buy benefits but want to know features
* Word of mouth from satisfied customers is the best advertising, if they are happy they may tell one person, if they are not they will tell 20
* Market on value not price, saving the customer time will always be valued
* Your family and your health should always take precedence.
* Have a pet and go for walks / camping in the bush and on the beach.
* Give up the smokes and the fast food and drink the grog sparingly.
* It does no harm to do something silly every now and again, relax and generally chill out.
* Get away from the television and read.

Laurie Lawrence says “Excellence is no accident”

General Norman Schwarzkopfsays “Failures in leadership are invariably failures in character, not competence”

A mate of mine says “The trouble with business is some professionals engage in acts of public masturbation”

To sum up-FAILURE IS NOT AN OPTION

## Background to OHS

The 10 most important things in a robust safety management system

1. Have well developed internal standards of OHS excellence.
2. Define what excellence in implementation of the standards will look like.
3. Train everyone in the above.
4. Have thorough audits of implementation of the standards led by senior managers.
5. Comply with statute law as a minimum.
6. Ensure you have highly effective OHS personnel, often difficult to achieve.
7. Ensure highly effective safety leadership is driven from the top of the organisation.
8. Keep safety communications succinct and targeted at the needs of the receiver, COMMUNICATE, COMMUNICATE, COMMUNICATE.
9. Involve the relevant stakeholders in the development of an OHS plan truly applicable to your needs.
10. Use industry accident experience, not just your enterprise accident experience to guide action. Have a focus on Class 1 personal damage.

### Behaviour-Based Safety

Many will have you believe around 90% or more of accidents are caused by human behavior. I have written elsewhere questioning this assertion, even if it were true it is unhelpful.

My view is that there are a number of proponents of B.B.S. who make outlandish claims about the success of the technique without rigorous research studies to back up their assertions. Some of the arguments for the technique get emotive.

I was associated with 4 B.B.S. implementations that ended up being fizzers. With the first one the process failed because one of the things the workers were asked to do was observe and report on their mates behaviors. Australians do not “dob” in their mates and the process just did not work.

The other 3 implementations were done in the same department at 3 different sites in the one company and for 6 months or so worked very well and a lot was achieved. At all 3 sites after 6 months or so the process was abandoned because both workers and management thought it was too much like hard work and there was not sufficient return for the effort.

My view is that you have to have good safety systems and engineering controls in place before you consider introducing B.B.S. There are some safety professionals whose opinion I respect highly who tell me they have had good success with Dupont B.B.S. systems.

I would welcome feedback from people who have had success with BBS

### Role of the safety professional

It is interesting to read job advertisements and see what employers expect of OHS personnel. Statements are often made that the OHS person is to be responsible for implementing and managing OHS. Of course this flies in the face of management obligations at both common and statute law.

Short sighted companies think they employ safety people and these people will look after safety. The more progressive companies often do not have many dedicated OHS personnel, management and supervisors are so well trained and effective in safety that few dedicated safety personnel are required. Safety personnel should report to the senior officer so the function has some chance of being perceived as being of importance. The danger when you have too many safety people is that line management gets the safety people to manage safety not themselves. Safety is a line management function and safety personnel should be seen as specialist adviser.

In their keenness many inexperienced safety personnel get over involved in doing safety and take the responsibility away from supervision and management. By all means assist them to do their safety job but do not do it for them.

I recall visiting one organization that won a prestigious industry safety award. They had no safety staff, no health & safety representatives and no safety committee. When questioned, the Managing Director said all employees are our safety officers, all employees are our health and safety representatives and all employees are on the safety committee. They invested considerably in training all employees in safety, a similar approach was taken in other functions.

The organization was the benchmark for the industry in many management aspects, interestingly they went broke after about 5 years operation.

I find it difficult to think an OHS person can be effective if he is not a bit of a stirrer and questioner of the status quo. Always research issues thoroughly so you are sure of your facts and be prepared to stand your ground. There will be times when unreasonable demands are made for you to compromise your safety principles.

### Safety incentives

For the 20 years I was in the mining industry we had a variety of safety incentives. There were stubby coolers, belt buckles, caps, jackets, sports bags and so on. Awards were given for various periods without a lost time accident; often a more valuable prize was given for greater periods without a lost time accident.

At one job I gave out stickers for 1, 2, 3, years etc. without a lost time accident. Between ordering different stickers for each year, keeping track of who was due for a sticker, placating those who could not get a sticker because they had had an accident and supplying extra stickers for peoples collections it sucked up a lot of time

One of the things we found was OHS people using the vagaries of the lost time accident classification system to not count compensable injuries as lost time. We also found the employees came to expect the award as just another perk of employment that had no relationship to safety. There were occasions when employees were injured due to management failures and they argued they should still get the award.

Inter-mine safety competitions saw amazingly innovative ways of not counting accidents and generally fudging the figures.

These things are also quite painful to administer. The question was also raised about why people should need / deserve an award for working safely. The costs were substantial and some people argued the money could be better spent stopping personal damage occurrences. At the end of the day I believe safety incentives are a distraction and have no place in a safety program. There is plenty of literature to support this view.

### Lost Time Injury Frequency Rate

The Lost Time Injury Frequency Rate is the principal measure of safety performance in many companies in Australia. The definition of L.T.I.F.R. is the number of Lost Time Injuries multiplied by 1 million divided by the number of man hours worked in the reporting period

A Lost Time Injury is a work injury or disease where the injured party has at least 1 complete day or shift off work. Note that a fatality and a cut where a person has 1 complete day off work count the same in Lost Time Injury terms.

The following are my reasons why the L.T.I.F.R. impedes progress in safety.

Some safety people cheat like hell with their L.T.I.F.R. statistics encouraged by managers with an eye to keep their key performance indicators looking good. The more the pressure to keep K.P.I.’s looking good the more creative the accounting.

Safety people spend inordinate periods of time obtaining rulings on what to count and how to count it from bodies such as the Australian Standards Association. Often answers obtained are imprecise and the decisions are left to personal opinion

Most measures in management are of achievements rather than failures such as the number of Lost Time Accidents. There is a ground swell in the safety movement talking about Positive Performance Measures in safety. It is relatively simple to develop measures of what you are doing right in safety as opposed to using outcome measures such as L.T.I.F.R.

I have personal experience with a company that aggressively drove down L.T.I.F.R. to a fraction of its original rate in a space of about 2 years yet killed 11 people in one incident.

The Lost Time Injury Frequency Rate dominates discussions about safety performance. How can a company be proud of a decrease of L.T.I.F.R. from 60 to 10 if there have been 2 fatalities and 1 case of paraplegia amongst the lost time injuries? The L.T.I.F.R. trivialises serious personal damage and is a totally inappropriate measure of safety performance.

All organisations have limited resources to devote to safety, it seems more efficient to prevent one incident resulting in paraplegia than to prevent 20 incidents where people have a couple of days off work (some will say this comment is **heresy**)

Somewhere in the push to reduce L.T.I’s, reduce the L.T.I.F.R. and consequently achieve good ratings in safety programme audits the focus on serious personal damage tends to be lost.

Reducing the L.T.I.F.R. is as much about introducing rehabilitation programmes and making the place an enjoyable place to work as it is about reduction of personal damage. For further information refer to the L.T.I.F.R. paper on ohschange.com

### Alternatives to the hierarchy of controls

The traditional wisdom when developing hazard controls is to use the Hierarchy of Controls. The author’s experience is that a better result will be achieved by using either Haddon’s 10 Countermeasures or the A.C.I.R.L. 9 Box Model. The main advantage of these approaches is that it expands your options for control

**Hazard Control Model**

Various hazard control strategies and models have been developed by safety professionals over the years. One of the most effective but still easiest to apply is that devised by American researcher Bill Haddon

Haddon’s model for hazard control is as follows:

|  |  |
| --- | --- |
| Countermeasure 1 | Prevent the marshalling of the form of energy in the first place.  eg. Ripping seams - instead of blasting, substitution of radiation bin level sources with ultra-sonic level detectors, using water based cleaners rather than flammable solvents. |
| Countermeasure 2 | Reduce the amount of energy marshalled.  eg. Radiation – gauge source strength, explosive store licence requirements, control number of gas cylinders in an area |
| Countermeasure 3 | Prevent the release of the energy.  eg. handrails on work stations, isolating procedures, most interlock systems |
| Countermeasure 4 | Modifying the rate or distribution of energy when it is released.  eg. slope of ramps, frangible plugs in gas bottles, seat belts. |
| Countermeasure 5 | Separate in space or time the energy being released from the susceptible person or structure.  eg. minimum heights for powerlines, divided roads, blasting fuse. |
| Countermeasure 6 | Interpose a material barrier to stop energy or to attenuate to acceptable levels.  eg. electrical insulation, personal protective equipment, machinery guards, crash barriers |
| Countermeasure 7 | Modify the contact surface by rounding or softening to minimise damage when energy contacts susceptible body.  eg. round edges on furniture, building bumper bars, padded dashboards in cars. |
| Countermeasure 8 | Strengthen the structure living or non-living that would otherwise be damaged by the energy exchange.  eg. earthquake and fire resistant buildings, weightlifting. |
| Countermeasure 9 | To move rapidly to detect and evaluate damage and to counter its continuation and extension.  eg. sprinkler systems, emergency medical care, alarm systems of many types. |
| Countermeasure 10 | Stabilisation of damage – long term rehabilitative and repair measure.  eg. clean-up procedures, spill disposal, physiotherapy |

**Note**

Generally the larger the amounts of energy involved in relation to the resistance of the structures at risk, the earlier in the countermeasure sequence must the strategy be selected. In many situations where preventative measures are being considered the application of more than one countermeasure may be appropriate.

Countermeasures may be ‘passive’ in that they require no action on the part of persons, or ‘active in the sense that they require some action or co-operation on the part of the persons, perhaps in association with a design related countermeasure (eg. seatbelts).

Passive’ countermeasures tend to be more reliable in the long term. A short term solution to an immediate problem may require the adoption of an ‘active’ countermeasure eg. toolbox sessions on replacing guards over a mechanical hazard, the long term or ‘passive’ countermeasure might be the fitting of interlocks to the guard so that power is off when the guard is off.

**Further reading**

Haddon, W ‘*On the escape of tigers an ecologic note – strategy options in reducing losses in energy damaged people and property*’ Technology Review Massachusetts Institute of Technology, 72; 7, 44-53, 1970.

**A.C.I.R.L. 9 Box Model**

This model says that to have effective control one must have at least one control in each of the boxes. Experience in industry suggests many organizations have many Prevention controls and many Contingency controls (nice trucks with flashing red lights, first-aid kits, trained first-aiders etc.) but that they are poor at monitoring the effectiveness of these controls

|  |  |  |  |
| --- | --- | --- | --- |
|  | Prevention | Monitoring | Contingency |
| Equipment/Engineering |  |  |  |
| Procedures |  |  |  |
| Skills/Competencies |  |  |  |

### Young worker safety

Working with young people brings unique safety challenges to the OHS professional, supervisors and managers. Workers 15-24 have a 75% greater chance of being killed on the job, often their accidents happen in the first 2 weeks of employment. Work in construction, using motor vehicles and moving machinery is particularly hazardous to young people.

They are still developing physically and mentally, lack experience and are unfamiliar with the demands of work. They usually will not speak up and question what they are asked to do. They are generally unsure of their OHS rights and responsibilities. Young workers can find it difficult to fully grasp risks so they may make impulsive decisions. For some young people giving them something physical and / or with their hands to do is a better option than activities that require a lot of thought or are otherwise theoretical.

Although the brain reaches its full adult weight by the age of 21, it continues to develop for several years. In fact, a study done by the National Institutes of Health found that the region of brain that inhibits risky behavior does not fully form until age 25. This is the final stage of brain development.

The sleep hormone melatonin is produced later at night in young people making it harder to wind down at night and results in a struggle to wake up in the morning.

Adolescent behaviour can be associated with risk taking and recklessness. Some young workers will want to impress and this can lead to risky behaviour. Young males are more prone to make aggressive responses to a range of situations. Many young people are unsure of themselves and will not reveal their inner selves in group situations, working one on one with them can be productive however .They will often not reveal their uncertainty about instructions they have been given. Some younger workers are more prone to fatigue than older workers. Alcohol and / or drugs can be a factor.

* An important message is to advise them to ask their supervisor if they are unsure of any aspect of the work they are asked to do. If they think the work is hazardous refer to the supervisor and refuse to do it if there is no satisfactory conclusion. They need to know they should not get in trouble for not doing hazardous work.
* Get them to write down instructions or use a documented safe working procedure.
* Be very specific in your instructions to young people.
* Induction training and general training needs special emphasis for young people, they will not understand common workplace terms and equipment, detailed checks for understanding are necessary.
* Supervision of young people also requires special emphasis. One must allocate appropriate tasks in line with their experience.
* Performance feedback and using positive adult role models is particularly important
* Allocating a coach or mentor to work with them can be productive.

*Source-Safework Victoria, Workcover N.S.W.*

In my research to write the above I found it difficult to obtain good source material, I would appreciate it if others could advise relevant references.

### Zero harm

Many companies in Australia will proudly tell you they have a Zero Harm approach to OHS. My understanding, from admittedly not widespread research, is that Zero Harm approaches are not widespread in other countries. I am told the Canadians tried it and abandoned it.

A small number of companies in Australia have been doing Zero Harm for many years but it appears to have been discovered by a larger number of organisations in more recent years. In recent times I have been receiving communications from a senior operational manager in a prominent Qld organisation arguing strongly that Zero Harm is doing more harm than good. There have been papers at some major OHS conferences in recent times questioning the value of Zero Harm. There was extended discussion on the topic on the Safety Institute of Australia OHS discussion forum some months ago. I found the paper on this topic on the Intersafe web-site quite informative.

The most commonly reported problems with Zero Harm that I hear reported are-

1. It leads to covering up and under reporting of personal damage.
2. Inordinate amounts of time, effort and resources are spent on very minor issues thus making a mockery of the safety management system

Zero harm is warm, fuzzy stuff with an emotional appeal; the trouble with emotional appeal is it sometimes prevents logical analysis.

Some people say zero harm is a fallacy and the goals are impossible or unachievable and there is far too much focus on minor injuries to the detriment of the serious side of town.

I think my major objection to zero harm is it does not target attention, effort and limited resources on the serious injuries where you get the biggest bang for your buck. Of course you are also kidding yourself if you think you can actually achieve zero harm. Goals must be realistic and not only admirable.

Australian safety researcher Geoff McDonald has a system of classifying personal damage occurrences (“Accidents “) that goes something like this-

Class 1-Permanently alters the future of the individual

Class 2-Temporarily alters the future of the individual

Class 3 –Inconveniences the individual

Geoff has investigated many thousand Class 1 damage occurrences in his career and maintains the most effective way to make meaningful progress in safety is by focusing on the class 1 phenomena.

A study into Australia’s personal damage experience by the Productivity Council said 13% of occurrences were Class 1 with 82% of the damage.

Zero Class 1 damage is the approach I would take in order to target our efforts and limited resources in the most productive area.

### Commercial Safety Management Systems

No doubt there are commercial safety managements systems that add value to organisation’s safety effort but I experienced one that was a disaster.

The introduction of the overseas S.M.S. was led aggressively by senior management despite a workshop of safety staff rejecting the concept. The first step was a consultant conducting a series of briefings for management, supervisors and workers. The consultant started talking about the thousands of people killed in industry in his country and a union rep asked him what made him think he could teach us anything about safety when fatalities in Australian industry were much less.

It went downhill from there. At smoko the 4 senior managers came to me to ask that the consultant wrap the show up quickly because he was doing more harm than good. I wrote a report on the training session which was not warmly received by those leading the charge. The manager leading the charge got a significant touch up about the training at the next senior managers meeting.

The safety staff requested detail about the system but it only became apparent when the auditors came to Australia and showed us their auditor’s books. The detail was kept close to the chest prior to that and when it was revealed I did not think it was anything earth shattering. There were a few things that were probably pretty silly in an Australian context. One of my jobs was to accompany the auditors on their audits, a task I did not relish. The auditor’s book was their bible with little interest in other things. The auditors were definitely no stars and would have not lasted long working for me.

Somewhere along the way we had a 2 week auditor’s course that was woeful. Early in the piece a meeting of participants was called to give the presenter guidance on how to do it better. I was in the middle of my Bachelor of Education (Adult & Workplace Education) and it was obvious the presenter was making a number of fundamental mistakes.

The system had a number of training courses we were required to do as part of the audit process but there was significant concern about the standard so we flew the training manager over from overseas so we could discuss a process for Australianising their courses. This was done with considerable cost and effort.

The system ran a few years in the company but died a natural death.

Even if the system had been technically good it was socially and culturally difficult for Australia. The psychological process of group think was evident in the consultants and those leading the charge in the company. Many commented on the arrogance of the auditors. The difficulty of using a standardised approach without identifying the unique needs of organisations was emphasised.

Since my association with this system I have had dealings with a number of Australian commercial S.M.S All suffer from the deficiency of lacking a focus on the Class 1 personal damage occurrence phenomenon.

The following are my observations on the above systems-

* They usually lock you into having audits with their auditors at considerable cost
* Some lock you into specified training with their trainers at considerable cost
* All adopt a standardised approach where it is difficult to accommodate the unique identified needs of organisations
* Lag indicators of safety performance rather than lead indicators tend to be used.
* My experience is that some have had poor quality auditors
* Generally costs are high

### Major mistakes I have seen made in implementing OHS

* The biggest mistake is management and supervision making decisions about safety without input from the workforce. Bear in mind some are not interested in contributing, give them the opportunity but do not force them.
* Lack of management demonstrated commitment, leadership and drive from the top of the organisation.
* Too much concentration on lag indicators such as the Lost Time Injury Frequency Rate at the expense of leading indicators.
* Thinking minor personal damage is a good predictor of life-altering personal damage.
* Not using the continuous improvement philosophy and other facets of Quality Management in your safety approach.
* Lack of succinct paperwork. There is not much point in having detailed paperwork that is too much like hard work to read. Bear in mind however your paper work needs to be detailed enough to be defensible in court.
* Using theory instead of real world approaches-Whatever you do reality test it with the workforce first.
* Ignoring “When implementing change-Remember, people support what they create”
* Not using face to face communications whenever possible.
* Communicating change with the workforce use the supervisor not senior management, use face to face communications and frame communications relevant to the immediate work area and processes.
* Not training formal and informal leaders in Safety Leadership.
* Using enterprise “accident” experience to guide action rather than industry taxonomies of permanently life-altering personal damage.
* Putting too much emphasis on the risk ratings from risk assessments, the reality is that a lot of risk assessment is very subjective.
* Spending too much time in the office instead of the field where the action is happening.

For further guidance refer to the free e-book on ohschange.com.au

### The toughest safety assignment I have had

George gets a call from a management consultant, can I commit a bit of time to review a company’s Safety Management System? Said yes and was told 2 of the company directors want to meet me before going ahead. I think they must take safety seriously if the directors want to meet me, big mistake!

Am there a week or so and they present me with 5 Prohibition Notices and about 32 Improvement Notices, these are overdue for a response to the regulator. About 20 of the Improvement notices are about confined space work, they build big steel tanks.

I discovered the management style of the organisation was very autocratic. The workers were expected to follow the orders of management without question or discussion. The organisation had massive turnover, what happens when you treat your people like crap.

I look at the relevant legislation and relevant Australian Standard, work with the health & safety representative, talk to the blokes, observe practice and do an audit. They have confined space working procedures that cover possibly 50% of the requirements but even these are not being followed. In talking to the blokes who do the work I hear stories of blokes being overcome by fume and having to be dragged out of the confined space.

My audit report detailed the many areas where practice was not meeting legislative and Australian Standard requirements. In my innocence I thought my audit would galvanise management into action. When I realised my audit had little impact I convinced the director in charge of the workshop to get an outside consultant to do an audit. They did a very thorough job and as expected slammed the organisation. There was grudging acceptance from management that there was possibly a need for minor work. The reality was that a major overhaul was required.

I came under a fair bit of pressure from management to pull my head in and back off on the matter.

Meantime the Managing Director comes back from overseas and is aghast that I have spent a few grand on an external audit. I suspect he is getting a filtered version of events from the directors who do not wish to admit what a mess things are in.

We have a safety committee meeting where I report on the consultant’s audit. The Managing Director fought me every inch of the way and tried to get me to back down. He got quite angry because he was not used to people sticking to their guns when he opposed them. I advised the M.D. to talk to his solicitors and he would find out I was right. After the meeting one of the safety officers said he had never seen anyone stand up to the Managing Director the way I did.

Deadly silence for a couple of weeks and then the M.D. bounces into my office all keen to make the changes, we all reckoned he had been to see his solicitors. One of the directors said it was the biggest turnaround he had ever seen in the M.D.

I got the approval to make the required changes but it was like pulling teeth because of management reluctance. I finally got something reasonably acceptable but hell it was hard work. I was later told I was a bit of a hero to the workers as they had been trying to get the changes made for a couple of years.

Between a number of Improvement Notices, a review of legislation, a review of the relevant Australian Standard, my audit and an external audit I have never been on firmer grounds to make safety recommendations. I was lied to, treated like an idiot and pressure was applied to make me back down. It would have been very easy to walk away but that would continue to put the workers at risk.

For the first time in many years as an OHS professional I found it necessary to speak to the regulator about my experiences. I am aware the company has been the subject of 2 Enforceable Undertakings since I left

### How to have an effective safety committee

Safety committees are much maligned and often ineffective. They can easily denigrate to a whinge-fest and end up covering topics that should be dealt with on a routine, every day basis. There is a tendency to save issues up to a committee meeting rather than action straightaway. There is also a tendency to deal with minor issues.

1. Have a well-developed charter for the committee, searching educational institution and government department web sites will find some good examples.
2. Train members in their roles and responsibilities.
3. Deal mainly with substantive issues; give the committee a meaty job to do.
4. Carrying out a force field analysis (Refer ohschange.com.au) with the committee can be very valuable.
5. A good way to use the committee is to have them do the leg work to recommend major change to senior management.
6. Produce succinct minutes.
7. Ensure people are given the necessary time to attend meetings and carry out necessary tasks; this is a common failure with committees.
8. The OHS professional often ends up being the chairperson, much better to have someone with management horsepower so decisions can be made on the spot.
9. An occasional guest speaker will liven the show up.
10. Substantive discussion and decisions must be feedback to the workforce.
11. Do not take yourself too seriously.
12. Celebrate success.
13. Require members to do their homework
14. Be conscious of Group-Think (Look the term up on Google if you are not familiar with it)
15. COMMUNICATE, COMMUNICATE, COMMUNICATE

Remember that management must respond positively to well researched recommendations from the committee

### Common law

Common law is not applicable in all states in Australia but in states where it is, educating supervisors and managers in it can bring additional benefit to your safety management system.

**The Compliance with Common Law (in states where applicable)**

There are four basic duties under common law :

1. To provide and maintain competent staff.
2. To provide and maintain a safe place of work.
3. To provide and maintain safe plant and appliances.
4. To provide and maintain a safe system of work \* ( a system means generally the way things are done)

The above duties contain few words but the meaning is quite significant. The employer really has to do everything reasonably and practically that he can do. Many would suggest he then has to go a few extra steps. Managers and supervisors really need to be trained in common law duties to fully realise the impact of this important area on how they manage safety.

A way I found successful to train supervisors and managers was for me to talk about common law from the safety perspective for about 30 minutes and then have the company solicitor to talk from the legal perspective for about the same period of time (You have to be careful the solicitor does not get too technical) We then had a mock court with half the participants presenting the case for a seriously injured employee and half the participants defending the employer. The solicitor was the judge and the employer usually loses (Refer to the paper Common Law Liability on ohschange.com.au)

### Safety Benchmarking

Over a 14 month period in 1994 -5 BHP Minerals carried out an extensive international safety benchmarking exercise with “best in safety class” companies throughout the world which cost many millions.

25 locations throughout the world participated in the study. An approximate 100 page report on findings has been published.

The following were recurring themes in the world’s best safety performers.

1. Executive management provides the impetus for safety performance. This means that senior management is not only committed to and supports safety, but that it insists on safety performance in a manner that is clearly understood and echoed at all levels.
2. Management focus is a key to quality safety performance.

\*1 & 2 above were seen as key factors

1. Existence of a company-wide framework or systematic, standardised approach to safety. The approach has performance standards that receive regular internal and external audits.
2. Objectives are set and organisations work towards set targets for implementation of the objectives.
3. Safety personnel report in at the highest level in the organisations. They have mainly an advisory function. Management and supervision drives the safety program not the safety personnel.
4. Effective safety training targeted to identified needs at all levels. Induction training and detailed safety training for supervisors and managers was high on the priority list. Regular safety meetings were seen as important.
5. Active personal involvement of senior management personnel in the safety program.
6. Safety is considered in performance evaluations of all staff.
7. Regular, detailed audits of the safety management system.
8. Formal approaches to hazard identification and risk analysis, employees were fully involved in this.
9. Formal emergency response procedures that were practiced and audited.
10. The best in class addressed contractor safety before contractors were allowed on site, they pre-qualified them based on safety and made safety performance a contract condition. Contractors were expected to perform at the same safety level as permanent employees.
11. High on the list of the ways the best in class built safety awareness were management participation and leadership, dissemination of information, safety meetings and rewards or recognition of performance.
12. Safety is a condition of employment and dismissals occur for non-performance.
13. Well-managed rehabilitation programs are in place.
14. The best in class use medical examinations and testing to ensure fitness for duty.
15. There were E.A.P.s in place.
16. There were off the job safety programs.
17. There was an emphasis on vehicle / plant maintenance and driver / operator training programs.
18. There were extensive PPE training, maintenance and audit programs.
19. Lock-out procedures were used instead of tag-out.
20. Best in class managers and supervisors respond positively to safety issues that are raised.
21. Best in class supervisors are responsible for safety auditing, investigating personal damage occurrences (accidents), planned job observations and training.
22. All levels in the organisation make decisions that reflect the philosophy “Safety first-Production will follow”.

It is suggested Safety Management Systems be built around the above benchmarking findings.

## OHS tools for managing safety

**Job Safety Analysis**

Job Safety Analysis (J.S.A.) is a simple yet highly effective technique that is under-utilised in industry.

J.S.A. should be used with **critical** tasks-

* High risk tasks
* Tasks with an incident history
* New tasks

J.S.A. is based on the principle that any job or task can be separated into a set of relatively simple steps and that the hazards associated with each step can be identified. Solutions to control hazards at each step can then be developed and written into safe working procedures.

The advantages of J.S.A. are

1. S.W.P.’s can be developed for skills training and use on the job
2. Developing J.S.A.’s helps to raise the safety awareness of workers
3. Assists in making observations of safe behaviour
4. Involves workers in the safety programme in a relevant, meaningful manner

**J.S.A. Technique-Summary**

1. Select the job or task to be analysed
2. Separate the job into its basic steps
3. Identify all the hazards / potential losses associated with each step
4. Evaluate your options for hazard / loss control action
5. Establish controls for each hazard or other potential loss area
6. Prepare a Safe Work Procedure

For further information see the Job Safety Analysis paper by this author under OHS articles on ohschange.com.au

### George’s down to earth advice to safety representatives and safety committee members

I have been working in OHS for nearly 4 decades and in that time have been stuffed around by OHS professionals, employers, employees, unions, government, employer associations and educators. I have developed a fair bit of cynicism about how fair dinkum the various parties are about safety.

At the risk of being crucified, castrated and thrown out of the safety club I have to say I have a philosophical objection to the need for safety representatives and safety committees. I believe if organisations have their involvement and communications mechanisms working properly there is no real need for these safety mechanisms. Of course I realise this ideal situation rarely exists.

From my study in management of organisational change I have adopted the motto “When initiating change-Remember-People support what they create” Widespread communication, involvement and participation is essential for effective health, safety & environment change.

I have to tell you a number of the so-called OHS professionals I have worked with would not have the competency to make the lamingtons for the school fete.

The idea that safety is the number one priority of a company is crap and anyone who tells you this is playing with himself, making money is the prime reason companies exist.

Entering on the OHS battlefield is not for the faint-hearted and is not easy. You have to present well thought out and researched arguments and accept you will often get an unreasonable response.

Some of the people you end up dealing with are bloody-minded with little interest in the workers welfare.

Elsewhere I have given some thoughts on how to have an effective safety committee so for the rest of this I will concentrate on the role of the safety representative.

* Make sure you are trained in your role and responsibilities.
* Have a weekly inspection of your area of responsibility.
* Familiarise yourself with company safety policies and procedures.
* Try to keep the OHS professional on side, If they are any good they should be a source of assistance.
* It is easy in safety matters to take an emotional approach; often a well-researched argument with financial justification is required.
* Depending on the industrial climate in your organisation will determine how useful getting unions involved in safety disputes is.
* If you have a solid argument stick to your guns and show no signs of weakness.
* Do not be afraid to tell your fellow workers when they are falling down on safety; by the same token communicate your expectations to management.
* If your first attempt to introduce change fails, analyse the situation and work smarter next time.

### Risk assessment tips

The risk management process consists of hazard identification, risk assessment and hazard control. Some people tend to get fixated on the risk assessment part and do not place enough emphasis on hazard control. Personally I find Haddon’s 10 countermeasures more useful than the hierarchy of controls when developing controls

Risk assessment is the cornerstone of many organisations approach to OHS. The reality is that it can be a very subjective process and an over-concentration on risk scores can mislead badly.

The traditional wisdom for simple risk assessments is to use a matrix consisting of Probability and Consequence or Probability, Consequence and Exposure. I prefer the latter method developed by Fine.

The following tips are given to improve the efficiency of the risk assessment process-

* Replicate the situation you are assessing as accurately as possible
* Use a team approach, about 5 people seems a workable number
* Ensure team members are highly experienced in the risks being assessed.
* Reality check the risk assessment with the workforce
* Ensure team members are trained in risk assessment
* Have developed risk assessments reviewed by an appropriately qualified and experienced, objective third party

**Personal damage occurrence (“Accident “) Investigation**

Introduction

Personal damage occurrences (“Accidents”) may be a source of learning and improvement for the safety management system if they are well investigated and appropriate corrective action implemented. The term accident is an emotionally laden term that infers blame, the term should be avoided.

Why do we investigate?

* Statutory requirement-Various safety legislation requires specified events is to be investigated
* Corporate policy-Various company policy requires investigations
* Aid to common law actions-Common law determinations require detailed evidence
* Io maintain employee relations-The majority of employers will say our people are our greatest assets and investigation is part of caring for employees
* Most importantly-Change for the future, not BLAME for the past

Analysis Reference Tree-Trunk Method of Personal Damage Occurrence Investigation (Developed by Geoff McDonald)

I have used this technique for ages and believe it produces very high quality investigations. I have been trained in a few other investigation methods and have read widely on the topic, I still keep coming back to A.R.T.T. For a number of years I used to teach a 2 day course on this method and some excellent investigations resulted. The course also allowed people to challenge the more common beliefs about safety.

There are 2 mental shifts required to use A.R.T.T.

Mental shift 1

Look for essential factors not causes. An essential factor is one without which the final damage would not have occurred. Cause is an emotionally laded term that infers blame.

Mental shift 2

Essentially the personal damage occurrence is represented by a tree-trunk lying on the ground, at the end of the tree-trunk you have Person elements, Machine elements and Environment elements, along the length of the tree-trunk you have 6 time zones and the annular or growths rings of the tree represent a number of Ergonomic elements. Instead of looking for “causes” you look for “essential factors” (an essential factor is one without which the final personal damage could not have occurred). The idea is to look for essential factors where the various categories of the model above intersect.

The model is very easy to use and usually at least 30 essential factors will be found in each personal damage occurrence. This widens your options for control over some other methods of personal damage occurrence investigation.

Brisbane-based OHS consultants, Intersafe conduct reportedly excellent courses on the essential factors methodology and A.R.T.T.

Team approach

The type of investigation conducted depends on the seriousness or complexity of the incident, but it is best done as a team so all parties can contribute their skills and expertise to achieve the best result.

Investigators are collectors of evidence and must base their conclusions on that evidence.

Take the time to choose the right people to conduct the investigation.

The following people should be considered for the team:

* Safety representatives where they exist;
* Line manager/supervisor;
* Safety person from the worksite; and
* People with the relevant knowledge.
* One person who knows little about the Person, Machine and Environment64

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Investigation procedures need to be systematic. For any investigation the team should:

* Act as soon as possible after the incident;
* Visit the scene before physical evidence is disturbed;
* Not prejudge the situation;
* Not remove anything from the scene;
* Enquire if anyone else has moved anything; and
* Take photographs and/or sketches to assist in reconstructing the incident.

After the initial investigation is complete the team should:

* Identify, label and keep all evidence. For example, tools, defective equipment, fragments, chemical samples etc.;
* Interview witnesses separately;
* Check to see if there have been any “near misses” in similar circumstances;
* Note down all sources of information;
* Keep records to show that the investigation was conducted in a fair and impartial manner;
* Review all potentially useful information, including design specifications, operating logs, purchasing records, previous reports, procedures, equipment manuals, job safety analysis reports, records of training and
* Instruction of the people involved and experiences of people in similar workplaces/industries; and
* reconstruct the incident (while ensuring that another incident doesn’t occur) to assist in verifying facts, (Worksafe W.A.)

The best investigation approach I saw was where about 10 people per shift were trained to be part of investigation teams, this ensured a reasonable number of people were available at any one time taking account for normal absences.

General investigation tips

* Provide first-aid and medical care to injured persons and make the site safe
* Ensure Emergency Response Plans are activated
* Conduct an assessment to determine level of notification, investigation and reporting
* Report the event as required by local regulations and site procedures. Many organisations have a matrix outlining what types of incidents are reported to various company officers. Workplace Health & Safety Qld and the Police may have to be notified
* Secure the site until the organisations and D.W.H.S. investigation is complete.
* Notify next of kin
* Investigate and report essential factors.
* Sources of information include original design, design specification, drawings, operating logs, purchasing records, previous reports, maintenance logs, procedures, verbal instructions, inspection and test records, alteration or change of design records, job safety analysis, records of previous training and job performance of the employees and supervisors involved. Never make assumptions, it is appropriate to develop a hypothesis and test it against available evidence.
* Have relevant persons sign a written statement
* Use open questions.
* Take heaps of photos from many angles
* It may be appropriate to develop a sketch or diagram
* Take samples, tag & preserve them
* Do not move evidence
* Identify the people involved and isolate and separate them. Interviews at both the scene and a quiet place will probably be required. It is essential to put those being interviewed at ease
* It may be necessary to recreate the incident with due regard to safety
* Report the findings
* Develop a plan for short- and long-term corrective action using Haddon’s 10 countermeasures
* Disseminate key learning’s to stakeholders
* Implement the corrective action plan
* Obtain sign-off by management
* Evaluate the effectiveness of the corrective action
* Make changes for continuous improvement
* Notify other sections of the organisation and your industry about the circumstances of the incident.

Implementation of recommendations

The investigation is not over until the recommendations have been implemented. Investigations often do not reach their potential because recommendations are not implemented.

Some of the factors to be considered when assessing the degree of controllability include-

* Technical feasibility
* Reliability
* Initial and ongoing cost
* Durability
* Extent of change required
* Impact on other activities

Hazard Control Model

When developing controls for hazards the common wisdom is to apply the hierarchy of controls. It is my experience that applying Haddon’s 10 countermeasures will yield improved results

Various hazard control strategies and models have been developed by safety professionals over the years. One of the most effective but still easiest to apply is that devised by American researcher Bill Haddon

**Haddon’s model for hazard control is as follows:**

|  |  |
| --- | --- |
| Countermeasure 1 | Prevent the marshalling of the form of energy in the first place.    eg. Ripping seams - instead of blasting, substitution of radiation bin level sources with ultra-sonic level detectors, using water based cleaners rather than flammable solvents. |
| Countermeasure 2 | Reduce the amount of energy marshalled.  eg. Radiation – gauge source strength, explosive store licence requirements, control number of gas cylinders in an area |
| Countermeasure 3 | Prevent the release of the energy.  eg. handrails on work stations, isolating procedures, most interlock systems |
| Countermeasure 4 | Modifying the rate or distribution of energy when it is released.  eg. slope of ramps, frangible plugs in gas bottles, seat belts. |
| Countermeasure 5 | Separate in space or time the energy being released from the susceptible person or structure.  eg. minimum heights for powerlines, divided roads, blasting fuse. |
| Countermeasure 6 | Interpose a material barrier to stop energy or to attenuate to acceptable levels.  eg. electrical insulation, personal protective equipment, machinery guards, crash barriers |
| Countermeasure 7 | Modify the contact surface by rounding or softening to minimise damage when energy contacts susceptible body.  eg. round edges on furniture, building bumper bars, padded dashboards in cars. |
| Countermeasure 8 | Strengthen the structure living or non-living that would otherwise be damaged by the energy exchange.  eg. earthquake and fire resistant buildings, weightlifting. |
| Countermeasure 9 | To move rapidly to detect and evaluate damage and to counter its continuation and extension.  eg. sprinkler systems, emergency medical care, alarm systems of many types. |
| Countermeasure 10 | Stabilisation of damage – long term rehabilitative and repair measure.  eg. clean-up procedures, spill disposal, physiotherapy |

**Note**

Generally the larger the amounts of energy involved in relation to the resistance of the structures at risk, the earlier in the countermeasure sequence must the strategy be selected. In many situations where preventative measures are being considered the application of more than one countermeasure may be appropriate.

Countermeasures may be ‘passive’ in that they require no action on the part of persons, or ‘active in the sense that they require some action or co-operation on the part of the persons, perhaps in association with a design related countermeasure (eg. seatbelts).

## Passive’ countermeasures tend to be more reliable in the long term. A short term solution to an immediate problem may require the adoption of an ‘active’ countermeasure eg. toolbox sessions on replacing guards over a mechanical hazard, the long term or ‘passive’ countermeasure might be the fitting of interlocks to the guard so that power is off when the guard is off.

## Further reading

Haddon, W ‘On the escape of tigers an ecologic note – strategy options in reducing losses in energy damaged people and property’ Technology Review Massachusetts Institute of Technology, 72; 7, 44-53, 1970.

Meetings with the stakeholders using the above model to develop controls can be beneficial.

Conclusion

Personal damage occurrences (“Accidents”) may be a source of learning and improvement for the safety management system if they are well investigated and appropriate corrective action implemented. Investigation is best done in teams and appropriate training in investigation techniques is necessary. The Analysis Reference Tree Trunk method of investigation is the best method I have experienced. Some of the material in this paper is adapted from 2 accident investigation texts by Ted Ferry.

**Appendix 1-PERSONAL DAMAGE OCCURRENCE INVESTIGATION KIT (To be left in vehicle)**

**Note**

This is what I regard as the ultimate kit; it will need to be tailored to your situation

* Digital camera with spare batteries
* Micro cassette recorder with spare batteries & tapes
* Tape measure (up to 50 metres)
* Specimen containers
* Number of sealable plastic bags
* Clipboard & writing paper
* Copies of accident report forms
* Stat. Dec. Forms witnessed by a J.P. may be necessary
* Disposable gloves
* High visibility barrier tape
* 4 cans Florescent spray pack paint (various colours)
* Dolphin torch & spare battery
* Stanley knife
* Marking pens
* Biros
* 2xPortable flashing yellow lights
* 6xWitches hats
* P.P.E. and high visibility, reflective vest
* First-aid kit
* Water
* Identification tags
* Compass
* Lock-out padlock may be needed
* Magnifying glass
* Paper towelling
* Danger & Out of Service tags
* Workers compensation claim paperwork
* Bag to carry stuff in

### Accident investigation summary

The term accident is an emotionally laden term that implies blame. I prefer to use the term personal damage occurrence.

**Summary of the personal damage occurrence investigation process**

* Provide first-aid and medical care to injured persons and make the site safe
* Ensure Emergency Response Plans are activated
* Report the event as required by local regulations and site procedures.
* Secure the site until the organisation’s and regulator’s investigation is complete.
* Notify next of kin
* Investigate and report essential factors.
* Have relevant persons sign a written statement
* Use open questions.
* Take heaps of photos from many angles
* It may be appropriate to develop a sketch or diagram
* Take samples, tag & preserve them
* Do not move evidence
* Identify the people involved and isolate and separate them. Interviews at both the scene and a quiet place will probably be required. It is essential to put those being interviewed at ease
* It may be necessary to recreate the incident with due regard to safety
* Report the findings
* Develop a plan for short- and long-term corrective action
* Disseminate key learning’s to stakeholders
* Implement the corrective action plan
* Obtain sign-off by management
* Evaluate the effectiveness of the corrective action
* Make changes for continuous improvement
* Notify other sections of the organisation and your industry about the circumstances of the incident.

### Auditing OHS Systems

There is some confusion in practice between the terms inspection and audit, I distinguish between the two by saying you inspect things and you audit systems.

Organisations that are successful at Occupational Health and Safety have regular comprehensive internal and external audits where OHS standards are introduced. What excellence in implementation of the standards would look like should be defined and people trained in this. A detailed set of audit questions, based on the fore-going should be developed as well as a detailed set of auditing guidelines. The roles of auditors should also be defined. Sites to be audited should be briefed on the auditing guidelines and auditors on the audit questions and auditing guidelines. A series of annual Executive Safety Audits should be introduced at the various sites with an audit team led by a senior manager to give the process significant management horsepower. A quality assurance approach where NCR (Non-compliance reports) are issued should be used and formal processes introduced to follow-up on audit recommendations.

* Whatever paperwork you produce, be succinct. Auditing documentation tends to get unwieldy and difficult to use in practice.
* A method of rating findings must be used.
* Need an opening meeting with stakeholders, including senior management. The auditing process must be explained.
* Need a closing meeting with stakeholders, including senior management to discuss findings and allow rebuttal. Some organisations like to have all supervisors and health & safety representatives at this meeting.
* Need a written report with a concise management summary.
* A physical inspection of the workplace will identify safety system deficiencies.
* Need to examine the safety “paper trail”.
* It is essential that the guidelines to implement whatever standard you are auditing against are well publicised and agreed to beforehand as well as the auditing process agreed to.
* Be prepared for people to lie to you. Be prepared for people to genuinely think an issue was addressed when it was not. Ask for solid evidence to back up people’s assertions.

## Non OHS tools for managing safety

### Safety communications

There is not much point having an excellent safety message if you cannot get it across to the stakeholders. Communications failure is a major impediment to success in safety. The world of safety is famous for well-meaning, ponderous, glossy publications that no one really knows about, cares about or uses. Safety communications are also famous for the use of “weasel-words”. “Weasel-words” promise a lot but deliver little.

“When reading your correspondence the reader must say “Wow” in the first third of the page”

“When listening to your presentation the listener must say “Wow” within the first 3 minutes”

The following tips are given to enhance communications-

1. Use face-to-face communications whenever possible
2. Use the supervisor to communicate whenever possible
3. Frame messages relevant to the immediate work area not some obscure corporate goal
4. Avoid management road shows to communicate major change, a lot of the workers will see it as propaganda and a bit of a wank
5. Aim to be succinct in both written and verbal communication; there is no need to wade through a whole pile of superficial detail to get to the essential message. For routine correspondence aim for 1 page, 2 pages maximum
6. Stick to the must knows
7. Use photographs, diagrams, flow-charts etc. to illustrate main points.
8. Important written communications must always be followed up by a face-to-face meeting
9. Do not be surprised if your e-mail messages are misinterpreted
10. Use active listening and questioning to quickly identify relevant issues
11. Provide detailed feedback seeking confirmation as required
12. Communications must be targeted at the needs of the audience, jargon must be avoided and one must be conscious of body language
13. Be clear about your goal and communicate this to the reader
14. Explain what you want the receiver to do
15. Establish your credibility early up
16. Have someone proof read your work.
17. Have an executive summary with major reports
18. Use short sentences and scannable paragraphs
19. Never send when angry, big temptation with e-mails
20. If possible write a draft, sleep on it and proof read the next day. If you have a few days grace write the draft and go back to it at least once every day
21. Always spell-check
22. Have a strong opening and conclusion

### Safety culture

A good safety culture is an elusive thing those responsible for safety management systems struggle to achieve. Culture is often defined as “The way we do things around here”. Schein (1990) defines organisational culture as the system of shared beliefs and values that develops within an organisation and guides the behaviour of its members.

Senior managers are the key to a successful safety culture. A true safety culture is established when safety is valued as highly as productivity. Managers and supervisors need to be held accountable for safety in the same manner as production.

Like many things in safety and business generally, leadership is the key.

### How to improve safety culture

1. Development of a robust Safety Management System guided by the lessons from the paper “What Makes a Safety Management System Fly” under OHS articles on ohschange.com.au
2. Using industry data on Class 1 personal damage occurrences to guide your safety efforts
3. Recruitment, selection and retention of safety-focused staff
4. Excellent leadership / build trust between all levels of personnel/ Rewards for excellent performance and lesser rewards for those that are really trying
5. Excellent teamwork
6. Excellent communications, employees really value face to face communications from their supervisor
7. Role modelling by supervisors and managers is important
8. Clearly defined responsibilities and accountabilities that are reinforced
9. Regular, rigorous audits of key functions
10. Short, succinct written procedures for key tasks (use diagrams, pictures, flow-charts wherever possible)
11. Written management plans for key performance areas
12. Benchmarking against the excellent performers
13. Excellent learning programmes guided by a detailed Learning Needs Analysis

**Note**

For further detail refer to the paper “Safety culture and how to improve it “under OHS articles on ohschange.com.au

**References**

Schein E., 1990, Organizational *Culture*, American Psychologist, vol 45, no.2, pp109-19

### Interpersonal skills

When interviewing OHS professionals many interviewers focus on their technical skills. Frankly I think communications and interpersonal skills are much more important than technical skills. You can be really bright, you can be highly qualified and trained, you can be well read but if you cannot get on well with people and influence them to change, you will be a waste of space as an OHS professional.

I adopt a philosophy that “People Support What They Create” Lots of communication, discussion and identification of needs will give you the buy in you need. A bit of humour never goes astray AND please get to the point and do not give excessive detail. Focus on the benefits of initiatives to the other person.

When interacting with others you need to try to see the situation from the other person’s perspective and focus on What is in it for me from their view.

The following 3 techniques are invaluable-

**Appropriate Self-Disclosure**

You will find in a new relationship if you reveal a little bit of you (provided it is appropriate) the other party will reveal a little bit of them (provided it is appropriate), if you then reveal a little bit more of you (provided it is appropriate) they will reveal a little bit more of them (provided it is appropriate), and so the cycle goes on. This is very simple, incredibly effective and I use it all the time to build relationships. Of course if you really hang all your dirty washing out it will probably stuff up the process.

**Reflective Listening**

This is a very powerful technique to get to the core beliefs of those around you. Someone says something, you may say “If I understand you properly you think x”, this gives the other party the opportunity to expand on their view or “Correct me if I am wrong but I think you are saying y”

The formula

There will be times others do things that annoy you, often they will have what they think are good reasons for what they are doing and they will have no idea they are annoying you. A good formula for these situations is to express your feelings as follows-

“When you A, I feel B, because C, and I would like you to do D, because E”

The only person who knows how you feel is you and most people will not know how you feel and many will be happy to adjust their behaviour accordingly. If this does not happen at least you have the basis for ongoing discussion.

I suggest all safety professionals read up on these techniques, it can make your life much easier!

**Needs analysis**

A major lesson in my professional life is that whatever is done in OHS must be preceded by a thorough needs analysis. The perceptions on needed change that managers, supervisors and workers have must be incorporated in the change process. There must be organised processes in place to surface these perceptions.

**Needs Analysis Project-Generic Approach**

* Identify stakeholders
* Separate stakeholder’s needs from their wants
* Define the objective of the project or work to be carried out and facilitate a force-field analysis
* Identify project risks
* Define current state
* Define desired state
* Explore how important the gap is
* What is the cause of the gap
* What are the solutions to close the gap
* What are the benefits of the solutions
* What are the costs / commitment of the solutions
* What are the risks of the proposed solutions
* How do you measure success

\* Throughout define Phases / Activities / Milestones / Targets of the project

Refer to “Safety Project Steps” on ohschange.com.au for more detail.

**Continuous Improvement**

Continuous improvement is a long-term business strategy to improve your business in terms of customer value and satisfaction, quality, speed to market, flexibility and reduced cost. One of the principal objectives of continuous improvement is to increase the skills and capacities of all the organisation’s employees so they can effectively engage in problem solving.

**Author’s experience with Continuous Improvement / Quality Management**

While the author was employed in a senior OHS role with a major Australian organisation he was involved in implementation of a robust approach to Continuous Improvement / Quality Management.

Some of the initiatives were-

* Customers were spoken to in order to define what the customers wanted from the organisation.
* The work necessary to ensure success in meeting customer needs was identified.
* How to carry out the work necessary for success was defined.
* Detailed work instructions and working procedures were developed for core tasks necessary for success.
* A document control system was introduced.
* All employees received training in Continuous Improvement / Quality Management.
* Continuous Improvement / Quality Management champions were appointed in major departments.
* A senior manager was appointed to lead the Continuous Improvement / Quality Management effort.
* There were regular audits of the Continuous Improvement / Quality Management system.
* All employees were actively encouraged to question the efficiency of the work they did and suggest continuous improvement initiatives.
* There were regular meetings and other communications about the Continuous Improvement / Quality Management.
* An extremely aggressive approach to upgrading employee skills in all areas was embarked upon after an exhaustive learning needs analysis.

Since leaving this organisation the author has worked in organisations that have had no Continuous Improvement / Quality Management systems or systems, that while they have had their systems pass certification audits, do not really have a continuous improvement philosophy.

Some of the things he has noticed in these organisation are-

* Customers, both internal and external, complain that their needs are not being met.
* Work processes are dependent on the knowledge of individuals rather than defined procedures. When Fred goes on long service leave for 3 months the organisation struggles because how to do some of the things Fred does are only known by Fred.
* The bureaucracy and bull-shit swamps the organisation and impedes efficient operation.
* Communication is confused and inefficient.
* Responsibilities are unclear.
* Employees mutter about how ineffective some of the work they do is and their efforts to improve things with their supervisors fall on deaf ears.
* Politics rather than efficiency shape practice.
* Those who question procedure and practice quickly learn this is not an approach received favourably by management.
* Employees talk to others who do similar work and realise there are better ways of doing things.
* Some of the workforce are un-empowered and dissatisfied with their lot.
* Management is perceived as being remote from the real needs of the business and not interested in the thoughts of the employees.
* The learning function is under-developed and attendance at learning is guided by un-structured approaches rather than thorough learning needs analysis.

The author’s observation is that many organisations have Continuous Improvement / Quality Management systems that are only partially enacted and do not reap all the benefits to be gained from these systems .

**Question**

In these economic times can your business survive without a continuous improvement philosophy?

**Report writing**

OHS professionals write many reports, read many reports and ask others to prepare reports for them. A major sin is long rambling reports that do not get to the point quickly and succinctly! Prepare succinct reports yourself and make it clear that your expectation is that others do likewise. If you receive a long report ask the author for a succinct summary of the major points. Often people just want to know what has to be done and why and can do without all the padding.

* Need to consider your audience-Personal style, technical background, formality and their likely attitude to your communication.
* Generally a team approach to preparing your report has advantages, put a fair bit of work into defining the scope of your report.
* Use relevant means of gathering necessary data. Search the internet but be certain of your source, experiments, surveys, interviews, questionnaires.
* Draft, set aside after get comments on the draft and re-draft.
* Spell check and get at least one other person to edit the final.
* Structure
* Front-Cover, title, introduction, contents page, list of illustrations, abstract or executive summary.
* Report body, discussion, conclusions, recommendations.
* End, references, appendices.
* Pictures, diagrams, sketches and flow charts can have a powerful impact and save a lot of written words.
* Use short words and short sentences and avoid jargon, use concrete rather than abstract terms.
* Try to present both sides of the case.
* Be succinct, busy people do not have time to write waffle that others are too busy to read. Bear in mind however your paper work needs to be detailed enough to be defensible in court.
* Follow up an important report with face-to-face communication or a presentation.

The above is adapted from “*Writing and Presenting Reports*” by B Eunson which is well worth a read.

**Change management**

Implementing OHS management systems is essentially about change management. The OHS professional who learns about change management will have a better chance of being effective.

Change has been around a long time. The only thing constant in business is change.

“I cannot say whether things will get better if we change, what I can say is that they must change if they are to get better” (*Georg Christoph Licthenstein, 1742-1799*)

Dr M. Wilkinson puts change into perspective when he says “Organisational change is a generic body of knowledge that is applicable across the board but only when contextualised into the particular workplace within the culture and people characteristics and professions etc. of the situation /workplaces”

Today’s enterprise must be able to react quickly to external change while managing internal change effectively. Technology is opening up new doors, thus adding to the potential for stress. Those who survive and thrive will be those who can adapt to the changes.

Change can be exciting; a welcome relief from the monotonous tedium of daily life and it may open new doors. On the other hand change may mark the boundaries of the comfort zone, beyond which lies unknown territory full of nasty surprises, signposts leading to hard work ahead and holding the real possibility of final failure.

Employees often resist changes which diminish skill requirements in jobs, personal status, authority, power or influence, personal or job security, remuneration, workplace communication and opportunities for social interaction. They also resist changes which are forced on them, are not fully understood, affect accepted ways of doing things, violate behavioural norms, disrupt established social relationships, make people feel ineffective or incompetent or expose personal weaknesses.

Wood outlines several organisational change principles

1. honesty is critical during organisational change
2. without knowledge of organisational change aims people cannot participate
3. organisational change is unsettling for most people
4. when people participate in defining organisational change objectives the more they will be comfortable getting results
5. people value recognition for their change management endeavours more than material reward
6. traditional cultures do not recognise or respect mature individuality yet change management expects people tobehave like adults
7. organisational change cannot be effective without the full commitment of every person involved in the change
8. it is the people’s behaviour during organisational change linked to clearly defined values that promote the change management process
9. team work and interpersonal relationship are fundamental if the change management process is to be successful
10. for unity to be  maintained during the change management process people need a clearly defined shared vision of the change aim
11. organisational change is more effective when people are empowered and given the time needed  to build  quality into the change process
12. organisational change needs individual behaviour and attitude change
13. to achieve individual behaviour and attitude change first the organisational change of culturemust occur
14. the change management process must inspire and motivate people if it does then organisations enhance productivity

Kotter speaks about the 8 steps for successful large-scale change.

1. Increase urgency-Those who are successful in change begin their work by creating a sense of urgency among relevant people
2. Build the guiding team-With urgency turned up the more successful change agents pull together a guiding team with the credibility, skills, connections, reputations and formal authority required to provide change leadership.
3. Get the vision right-The guiding team creates sensible, clear, uplifting visions and sets of strategies.
4. Communicate for buy-in-Communication of the vision and strategies comes next-simple heart-felt messages sent through many unclogged channels. Deeds are more important than words. Symbols speak loudly. Repetition is the key
5. Empower action-Key obstacles that stop people working on the vision are removed.
6. Create short-term wins-Short-term wins provide credibility, resources and momentum to the overall effort.
7. Do not let up-Change leaders do not let-up they create wave after wave of change until the vision becomes a reality.
8. Make change stick-Change leaders make change stick by nurturing a new culture. Appropriate promotions, skilful orientation and events can make a big difference.

Kotter’s text “*The Heart of Change*” is a recommended must-read for anyone undertaking cultural change.

**Conclusion**

Change can be exciting or boring, satisfying or frustrating but never easy.

The ways the author has driven OHS change includes-Continuous improvement / Quality management programs, leading OHS project teams, implementing OHS management systems, facilitating OHS learning and leading OHS problem solving groups using techniques such as force-field analysis.

**Prosci Change Management (Look them up on the web)**

When a group undergoes change it is not the organisation that changes but rather it is the behaviour of individuals. Organisational change management and individual change management must be used together to manage change successfully.

A.K.A.R. Model

Awareness of the need for change

Knowledge of how to change

Ability to implement change

Reinforcement to sustain the change

Organisational change depends on individual change

Refer to “*Organisational Change Management Principles and OHS*” on ohschange.com.au for further detail.

**Customer service**

The customer is king and you are stuffed without them. Always treat your customer like a king or queen or your competitors will.

There will be times when your customer is disorganised and a pain in the bum, when this occurs refer to the above.

I advise most people in organisations, regardless of how lowly their position, to think of themselves as an internal consultant. Their “customers” are their boss, their boss’s boss and everyone else they interact with and who rely on them, even though it may be in a small manner. Your success and future advancement relies very heavily on these people being satisfied customers.

The saying that “The customer is always right” is often wrong in my experience. Customers often have only a superficial understanding of their needs and frequently confuse wants with needs. A core skill of any consultant is to help customers define their needs and scope the work they want you to do for them. If you do not do this you can do what they think they want done and you run the risk of getting the blame when it does not get the desired results.

The following tips are given on customer service-

* People always remember the person who served them better than the product
* Remember your example will affect others
* Remember people’s names
* Be visible
* Go the extra mile for a good customer
* Never try to win an argument with a customer
* Ask for regular feedback
* What you do speaks louder than what you say
* Always answer the phone personally
* Keep promises
* Listen to your customers
* Be helpful even when there is no immediate profit
* Always throw in something extra free

**Developing trust**

Having worked in industrially volatile environments I have seen trust breakdown between management and workers. Sometimes it has been for no real reasons and people were working on perceptions. Without trust it is impossible to have an efficient operation.

Introducing OHS change inevitably upsets the established order in organizations and forces people to question their existing role in the organization. Often people will be asked to do something that is different from the norm and to do that which they do not agree with. Persons introducing and leading OHS change must ensure they are trusted by those they are seeking to join them in the OHS change journey. Appropriate self-disclosure is an excellent technique for building relationships.

If people do not trust those leading safety change there will never be wholehearted adoption of the leaders approach. People may agree to the leaders face but do little to advance the leaders ideas, innovative ways to sabotage the leader quite often occur in a climate of minimum trust.

Trust is essential for a relationship to grow and develop. In order to build a relationship you must learn to create a climate of trust that reduces your own and the other person’s fears of betrayal and rejection and promotes the hope of acceptance, support and confirmation. There is a risk involved in trusting.

In order to build a relationship, two people must build mutual trust. This is done during a commitment period in which they risk themselves either by disclosing more and more of their thoughts, feelings and reactions to immediate situations and to each other, or by expressing acceptance, support and cooperativeness toward each other. If, when disclosing they do not get the acceptance they need, they may back off from the relationship. If they are accepted, they will continue to risk self-disclosure and continue to develop the relationship. As both people continue to trust and be self-disclosing, the relationship continues to grow. (Refer to People Skills by Bolton, this is suggested as a must read for those involved in OHS Change)

**Group-Think**

There is no doubt the most significant OHS change the author has driven has been when he was leading OHS project teams or a member of such a well led team. Working in teams practising good team building principles can develop enormous synergy to crash through barriers to driving effective safety change.

A caution to working in teams is the area of group-think. The author has not seen group-think in action all that often but when he has seen it in action it has a devastating effect.

Identifying group-think-

* Group members stereotype non-members and label them as enemies or outsiders not worth negotiating with or worrying about
* People hesitate to air any discomfort, doubts or uncertainties they feel about the group decisions or policies, so that consensus seems unanimous
* Reluctant to shatter complacency group members do not bring information or evidence that does not conform to the groups expectations and stereotypes to the groups attention
* The group discusses only a few alternatives and reaches a decision quickly concentrating only on good points
* The group feels invulnerable leading to excessive optimism and risk taking
* The group ignores or rationalises warnings or signs that it is operating under false assumptions, making poor decisions or developing poor strategy
* There is strong pressure on group members to conform to group norms

Preventing group-think-

* Train team members in group-think
* Get a diverse team together
* Treat conflict as an essential part of a solid outcome
* Let the group know there are no dumb ideas or questions
* Allow time for decisions as a team
* Bring in a devil’s advocate
* Bring in a specialist
* Do not surround yourself with yes men.

**Note**

Be aware of group-think appearing in your teams and knock it on the head as soon as it starts to appear. If group-think becomes entrenched the situation will piss a lot of people off and be very difficult to recover

From *The Penguin Team Leaders Toolkit* by K. Cole

**Marketing safety**

Make no bones about it; safety is a product that has to be marketed in ways similar to the ways the products your organisation produces are marketed. A good OHS section on your organisations web site will help. It is best to treat everybody you interact with as customers whether they be internal or external.

**Marketing goals**

* Increased activity through creating an interest in my products
* Increased awareness of OHS though visits to the web site
* Get more repeat customers
* Raise safety professional profile
* Launch new products
* Increase client recommendations
* Improve relationships with customers
* Be a credible source of best practice information on Safety for employees

**Marketing tips**

* Have a Unique Selling Proposition
* Say thank you to customers
* Always give something of value free
* Give customers What’s In It For Me from their perspective
* Give them an offer they cannot refuse
* Show the customer how the product will benefit them
* Keep in contact with old customers much easier to sell to than getting new customers
* Have a call to action
* Always treat the customer like a King or Queen-If you do not your competitors will
* People buy benefits but want to know features
* Word of mouth from satisfied customers is the best advertising, if they are happy they may tell one person, if they are not they will tell 20
* Send regular e-mail updates
* Ask for referrals and put on web site, reward customers for referrals
* Have a regular newsletter to clients and make available through subscription on the web site
* Promotional flyer, biros, note pads, stubby coolers, business cards to hand out at activities
* Consider cost / benefits of setting up promotional booth at safety conferences ,quite expensive but a lot of exposure to safety decision makers, have a trade show discount, big bottle of scotch for prize for putting business card in the bucket, need booth advertising, TV, video & computer
* Enter awards in my industry, lots of free publicity if I win
* Publish papers / speak at conferences
* Put standard learning packages on web site and promote
* Get competitor intelligence
* Need to develop a time frame for implementation

**Leadership**

Leadership is the often forgotten key to excellence in most facets of business and life. Formal and informal leaders in business need to be trained in Safety Leadership.

### Leadership quotes

You can only lead others where you yourself are willing to go.

Nothing is as potent as the silent influence of a good example.

The best leader is the one who has enough sense to pick good people to do the job and self-restraint to keep from meddling with them while they do it.

What is important as a leader is not what happens when you are there but what happens when you are NOT there.

The very essence of leadership is that you have to have a vision. It has to be a vision you articulate clearly and forcefully on every occasion.

Leaders must behave the way they wish their followers would behave.

Every now and then leaders should look back to see if anyone is following.

A leader takes people where they want to go, a great leader takes people where they ought to be.

The first basic ingredient of leadership is a guiding vision. The leader has a clear idea of what he wants to do professionally and personally and the strength to persist in the face of setbacks, even failures.

As a leader you set the tone for your entire team. If you have a positive attitude, your team will achieve much more.

A sense of humour is part of the art of leadership, of getting along with people and getting things done.

Make heroes out of the employees who personify what you want to be seen in the organisation.

You do not know what you can get away with until you try.

Lead, follow or get out of the way.

If you are truly a leader, you will help others to not just see themselves as they are, but also what they can become.

A real leader faces the music even when he does not like the tune-*Anon*.

A good leader inspires people to have confidence in the leader; a great leader inspires people to have confidence in themselves-*Eleanor Roosevelt*

It is the nature of man to rise to greatness if greatness is expected of him-*John Steinbeck*

Successful leaders see the opportunity in every difficulty rather than the difficulty in every opportunity-*Reed Markham*

The day soldiers stop bringing you their problems is the day you have stopped leading them. They have either lost confidence that you can help them or have concluded you do not care. Either case is a failure of leadership-*Colin Powell*

A leader’s role is to raise people’s aspirations for what they can become and release their energies so they will try to get there-*David R Gergen*

If you obey all the rules, you will miss all the fun-*Katherine Hepburn*

Hell, there are no rules here; we are trying to accomplish something-*Thomas A Edison*

The supreme quality of leadership is unquestionably integrity-*Dwight D Eisenhower*

A good objective of leadership is to help those that are doing poorly do well and to help those that are doing well to do even better. –*Jim Rohn*

For further information put “Leadership Quotes” into Google. Laurie Lawrence’s web site is particularly good. Refer also to the paper on “Safety Leadership” on ohschange.com.au

### Military leaders on leadership

Many people agree that to attain the pinnacle of leadership, a person must be humble. It seems obvious that someone who is arrogant, self-important and condescending can never be a good leader. Neither can someone who does not want to lead-reluctant leaders are never good leaders.

Former Australian Army Chief Peter Cosgrove once said “We want our leaders to be fair dinkum, as much among us as above us”

Sir Edward, Weary Dunlop developed his empathetic approach to leadership in the Japanese POW camps during World War 2.He identified 11 desirable aspects of leadership-

Ability to communicate

Courage

Decisiveness

Initiative

Integrity

Judgement

Knowledge

Loyalty

Motivation

Responsibility

Selflessness

Dunlop said “The leaders is servant to all, able to show a disarming humility without the loss of authority”

*From The Penguin Team Leaders Toolkit by K.Cole*

### OHS Leadership

Having survived a number of years in industry the author is acutely aware that leadership of an organisation can make or break the organisation. The importance of leadership is vastly underrated in Australian industry; leadership is the forgotten key to excellence in business. Leaders send out messages, often subtly, about what they value and expect.

Livermore(*in Carter, Ulrich & Goldsmith, p46*) observes “The best system or model in the world is not going to do your organisation a bit of good unless you have a top down commitment to making it work. Once mid-level management and low level employees see top executives leading the way, most of them will begin to support the initiative as well.”

The most important quality people look for and admire in a leader is personal credibility. Credibility is the foundation of leadership. If we do not believe in the messenger we will not believe the message. Leadership is about influencing people to follow, management is about maintaining systems and processes

Four critical characteristics of effective leaders (*Private communication*)

1. Courage (make hard decisions, stick to them)
2. Loyalty (Upwards and downwards, without hesitation)
3. Integrity (In little as well as large things, be above reproach)
4. Knowledge (Know your people, know their fears, dreams & strengths, know your mission)

**Quotable quote**

“The people are fashioned according to the example of their king and edicts are less powerful than the life (example) of the king”

*Claudian, c. 365, Egyptian epic poet*

Are You A Good Safety Leader?

Managers, supervisors, OHS personnel and informal leaders all have a responsibility to lead the OHS function. Leadership is the often forgotten key to excellence in many spheres of life.

Safety leaders need to be asking themselves the following questions-

1. Do I visibly demonstrate commitment and focus on safety?
2. Do I set the safety example?
3. Do I create high safety expectations?
4. Do I use high values and detailed standards of performance?
5. Do I listen to and involve the workforce?
6. Do I do what I say I will do?
7. Do I value safety goals?
8. Do I make employees feel they are part of something important and satisfying?
9. Do I reinforce, reward and celebrate success?
10. Do I ensure everyone is held accountable for safety performance?

Why is safety leadership important?

Safety leadership defines the purpose, goals, vision, mission and objectives of the safety management system. It further sets the direction for safety, lays down the expectations and guides implementation. It is a vital component of strategic and operational management plans. Leaders must manage by walking around and often be seen in the workplace.

Leadership Perspectives

Having survived a number of years in industry I am acutely aware that leadership of an organisation can make or break the organisation. The importance of leadership is vastly underrated in Australian industry; Leadership is the often forgotten key to excellence in all aspects of business and life. Unfortunately it is sometimes the refuge of scoundrels.

Excellent health and safety leadership is the most important thing in maintaining an excellent health and safety management system. Having researched general and health and safety leadership extensively I am of the view we should be doing more to integrate general leadership principles into health and safety.

Health and safety leadership is a line management function and an integral part of management accountability. It requires a solid understanding of core skills, competencies, planning and execution. Senior leaders must personally drive the health and safety culture. All leaders must clearly communicate expectations, model and reinforce required health and safety behaviours and demonstrate a strong link between their health and safety leadership and career opportunities. Training, on the job learning, coaching, mentoring and projects or secondments to share health and safety knowledge are means of developing the required leadership (Adapted from Rio Tinto)

The Best Safety Leader I Have Worked With

For about a year I worked with a General Manager Operations, John, who could best be described as a humble but focused leader who had an overriding commitment to safety. John accepted the role of Safety Champion. John would turn up at operating sites in the middle of the night to see how safety was being managed. He would jump on a haul truck and go with the operator while the truck was loaded, John would question the operators about safety and tell them that he expected safety to be their top priority. He would walk through the workshop and observe how work was being performed. He would then gather everybody together and give them feedback about safety and tell them what he expected.

He used to give the workers his mobile number and tell them to call him anytime if a safety issue was not solved to their satisfaction. This did not happen often but there was some big action when it did. The approach by John was not always appreciated by the business unit supervisors and managers as he often knew more about how safety was managed at their site than they did, they were kept on their toes.

John had a very simple approach to safety audits; he chose ten things his wide experience told him had been known to cause fatalities and the associated prevention methods. He audited to see if the required preventative actions were in place. At the audit closing meeting he reported on the status of the items and said he expected the required actions to be in place by the time he came back in six months. All this was said in a soft, slow, Southern drawl but the managers and supervisors knew their jobs were on the line.

John let his subordinates know he expected nothing less than 100% commitment to safety; those who did not comply were encouraged to lift their game. Word quickly got around about his safety expectations, single handed he raised the profile of safety in the organisation. Unfortunately after John left there was no one to carry on his work at the same level.

### How to be a safety leader

The author is grateful to Dave Cowley of HP Hood LLC, Chelsea, MA 02150 (October 2000) for sharing the company tip card.

**Five tips on how to be a Safety Leader**

1. Walk the Talk-Visibly demonstrate safety by your actions, practice what you preach, wear proper protective equipment, employees look to you for example
2. Give Recognition-When you see an employee doing a job safely praise them for it, reward safety every chance you get
3. Report All Incidents-Report all incidents no matter how slight, emphasise it is vital to be on the look-out for near-misses, minor mishaps and close calls instead of waiting for an actual injury to occur
4. Follow-Up-If a safety concern has been raised, always perform follow-up and provide feed-back to the employee
5. Ask Questions-Are employees using equipment that has been inspected (hand tools, forklifts, motor vehicles etc.)

### References

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Claudian, 365, Egyptian epic poet, exact source unknown

Private Communication-Jan, 2007, D.Sayers, D.Sayers & Associates, Canada, Re Canada’s Ex-Chief of Defence Staff, General Dextraze, J.A.

**Note**

For further detail on this topic refer to the Safety Leadership paper under OHS articles on ohschange.com.au

### Leadership in safety-Ethics

I do not want to comment on the moral issues but it is fair to say the Monica business got American President, Bill Clinton, a lot of bad press. While I am not a student of American politics I am told Bill Clinton was poised to be recorded in American history as one of the greatest leaders of that country. Some say that despite the massive adverse publicity his leadership skills were such that a lot of people still believed in him.

The sporting world in Australia has no shortage of leaders who have been found lacking in the ethics area. Footballers are a problem, issues frequently occur in Australian Rules and Rugby League, less commonly in soccer and rarely in Rugby Union(Being an ex-Rugby Union player I know we are generally made of sterner stuff)

The Australian business landscape is littered with otherwise highly effective leaders who have failed through ethics issues.

Credibility is the foundation of leadership. You must do the right thing and be seen to do the right thing if you want to prosper as a leader. If you do the wrong thing you will be found out eventually and your credibility will be destroyed.

To be an effective leader people must trust you.

Introducing OHS change inevitably upsets the established order in organizations and forces people to question their existing role in the organization. Often people will be asked to do something that is different from the norm and to do that which they do not agree with. Persons introducing and leading OHS change must ensure they are trusted by those they are seeking to join them in the OHS change journey.

### Leadership in safety-Trust

If people do not trust those leading safety change there will never be wholehearted adoption of the leaders approach .People may agree to the leaders face but do little to advance the leaders ideas, innovative ways to sabotage the leader quite often occur in a climate of minimum trust.

One organisation I worked for had a number of mechanical workshops where we trained employees in the job safety analysis technique and got them involved in preparing safe working procedures

Everything went well at these locations and we had an improved level of safety. In one workshop it was decided to get a consultant mechanical tradesman to prepare the safe working procedures with little involvement of the workers. The result was a mess. Besides from the important lack of local knowledge the workers had developed a lack of trust in the process and thought it was a management plot to devalue their work and allow the introduction of less skilled workers to do the work traditionally done by tradesmen. This sabotaged the real safety improvements we were chasing. All in all an industrial relations disaster caused by faulty process and a lack of trust

“*Trust is essential for a relationship to grow and develop. In order to build a relationship you must learn to create a climate of trust that reduces your own and the other person’s fears of betrayal and rejection and promotes the hope of acceptance, support and confirmation. There is a risk involved in trusting.*

*In order to build a relationship, two people must build mutual trust. This is done during a commitment period in which they risk themselves either by disclosing more and more of their thoughts, feelings and reactions to immediate situations and to each other, or by expressing acceptance, support and cooperativeness toward each other. If, when disclosing they do not get the acceptance they need, they may back off from the relationship. If they are accepted, they will continue to risk self-disclosure and continue to develop the relationship. As both people continue to trust and be self-disclosing, the relationship continues to grow*”

The above is taken from Johnson D.W. “*Reaching Out*” (1990). This text is recommended reading for those leading safety change.

The only constant in the safety business is change. Australia has significant safety challenges and we must change to improve. Change is difficult at the best of times, if people do not trust the safety change leaders there is very little chance of success.

From my study of Management of Organisational Change I have adopted the motto “When initiating change, Remember, People support what they create” My simple advice is be open & honest with everybody (Australians can smell a bull-dust artist a mile away), involve your people, get your people talking, get your people doing things, show you are interested in, care about and are responsive to their opinions, if you do this most of your trust problems will disappear.

## Learning

**ADULT LEARNING PRINCIPLES AND PROCESS - BACK TO BASICS**

**George Robotham- Dip Trg & Assess. Sys. , Dip. Frontline Mgt., B. Ed. (Adult and Workplace Ed.), Grad. Cert Management of Organisational Change, Grad. Dip. Occupational Hazard Management, C.F.S.I.A., R.S.P. (Aust.), M.A.S.S.E., M.A.H.R.I., M.A.I.T.D., J.P. (Qual.), Australian Defence Medal**

**ABSTRACT**

*One of the activities we all do in business is "training" others. It is my contention that modern adult learning principles are not practiced frequently or well in general "training" in industry and in consequence the learning experience is not as successful as it could be. This paper explores the characteristics of the adult learner and provides a number of learning principles that must be practiced to maximise learning. The role of critical reflection is explored and it is explained why the traditional lecture is to be avoided. For learning to be effective opportunities for critical reflection must be given via an activity, group discussion, case study, practical exercise etc.*

*Models of action learning and experiential learning are presented and it is explained why these 2 learning approaches are particularly appropriate for adults.*

*"Learn a little well" is a motto that must be practiced, in industry the alternate approach is often adopted where trainers only have an audience for a limited time and endeavour to stuff as much into the learners as they can in the time allocated.*

*The workplace can be a "robust and transferable" environment for learning; the benefits of using the workplace in learning are explored.*

*The paper will be presented as an interactive discussion that aims to put the learning principles spoken about into practice.*

**1 INTRODUCTION**

The teaching of adults (androgogy) has many differences to the teaching of children and other young people (pedagogy).

Adults have considerable life experience to bring to the training room and are more likely to question training input that does not accord with their life experience.

This brings considerable challenges but also considerable satisfaction to the facilitator.

**2 ANDROGOGY**

Critical reflection is an important element in androgogy and this happens most naturally when the content of a class invites involvement, when students are encouraged to respond to the material by drawing in a disciplined way from their life experiences. For students creative reflection and criticism depend on seeing themselves as central to their learning, a feat accomplished not by a teacher saying that something is "student-centred" but through the experience of being at the centre. Reflection helps move learners to greater complexity and sophistication in their understanding of any material presented.

Tough (1979) has demonstrated that mature learners frequently prefer to be in charge of their own learning with only minimal direction from an instructor, facilitator or resource. This has prompted a change in the role of the instructor from that of content giver to learning manager, facilitator and resource locator. The traditional role of instructors was to impart knowledge to receptive learners; nowadays the instructor facilitates and manages the learning process itself. (Heimstra, 11)Therefore the instructor or trainer works to assist individuals in taking responsibility for their learning.

The following is a selection of theoretical concepts relevant to facilitation of adult learning.

What the adult learning theory means to the learning facilitator.

1. **Minimise the use of lecture style presentations.**

There is room for the content expert to explain the theory but this should be minimised.

For the learning to have meaning activities should be organised to allow participants to discover the concepts for themselves (not always an easy thing to do). Discussions, case studies, practical exercises, role plays are preferred. These are usually more effective learning methods than the lecture but they take a longer period of time. Activities must be as close to real life as possible and a content expert must be on hand should participants feel the need for his/her input.

Some theoretical input is given and the opportunity for critical reflection (via an activity or discussion) is important.

Assessment is regarded as an opportunity to revise concepts as well as evaluation.

The focus must be on the learner not the facilitator.

Learning objectives must be stated for each session and a participative process put in place to achieve these objectives.

Learning must relate to learners prior experience and knowledge.

Avoid the impression that the facilitator is the all-knowing "expert"; rather he/she is an organiser and facilitator of a participative supportive learning environment.

Far too often training activities are devised by trainers or managers who are removed from the workplace environment of trainees. The content represents what the trainer or manager thinks is what is required, often this approach misses the mark. Major efforts must be made to consult with the work force on their perceived training needs. The SKILLS, KNOWLEDGE and ATTITUDES (OR ABILITIES) to perform tasks must be examined to gain insight into deficiencies; in some cases when gaps between current competencies and desired competencies are revealed, training will be an appropriate remedy.

Explain "What's in it for me" early in the session and elicit participant’s expectations of the training in initial stages.

Learning must be appropriate for what is necessary for people to do the job.

Have frequent breaks and don't overload participants with theory.

You might like to keep the following phrases in your mind.

* + Learning is what you do to yourself.
  + Training is what others do to you.
  + Learn a little - well.

1. **Interactive Learning Strategies**

For adults interactive rather than passive learning strategies are preferred.

It has been suggested that we retain:

10 percent of what we read;

20 percent of what we hear;

30 percent of what we see;

50 percent of what we hear and see;

70 percent of what we say;

90 percent of what we say and do.

Saying and doing are certainly important for retention and later application.

Interactive strategies provide advantages to both student and teacher, compared with other methods:

They suit most learning styles.

Interactive strategies help us achieve a wide range of objectives.

Most students enjoy learning or consolidating knowledge by taking part in such activities. They enjoy the variety.

1. **Smith and Delahaye Learning Principles**

In their excellent text *How To Be An Effective Trainer* (Smith and Delahaye. (1983, 9-23) refer to certain learning principles.

Whole or part learning Divide the learning into manageable segments and work from the known to the unknown.

Spaced Learning

Learning that is spaced at reasonable levels is usually superior to massed or crammed learning if you want long term retention.

Active Learning

If trainees are actively involved in the learning process (instead of listening passively), they will learn more effectively and become self-motivated. Active learning is often described as "learning by doing".

Feedback

Give the trainees feedback on progress early and regularly and also obtain feedback on how you are progressing as a trainer.

Overlearning

Stated simply, overlearning means learning until one has perfect recall - and then learning it some more. In other words, forgetting is significantly reduced by frequently attempting to recall learned material.

Reinforcement

Learning that is rewarded is much more likely to be retained.

Primacy and Recency

Given any sequence of facts, trainees will tend to remember what they heard first and last. What they heard in the middle they often forget. Therefore, emphasise and reinforce facts that are in the middle.

Meaningful Material

When presented with new information, we unconsciously ask two questions:

Is this information valid when I compare it with experiences I've had in the past?

Will this information be useful to me in the immediate future?

The implication of these questions means that one must move from the known to the unknown and ensure information is readily usable by participants.

Multiple-Sense Learning

Always use sight and hearing but do not neglect the other senses.

Transfer of Learning

The amount of learning that trainees transfer from the training room to the workplace depends, mainly, on two variables:

The degree of similarity between what was learned in the training program (and this includes how it was presented) and what occurs at the workplace.

How easily the trainees can integrate into the work environment the skills or knowledge gained in the training program.

The presence of these two variables stresses the importance of referring continually to the workplace when looking for ideas on how to present information or skills and when designing activities and tests for the training session.

1. **Retention and Transfer of Learning**

In order for learning to occur successfully, the adult learner must (Morgan, Holmes and Bundy, 1976):

Be motivated to learn.

Establish an attentional set.

Be in a state of developmental readiness to learn.

Be in an environment conducive to learning.

Adults are best motivated to learn when that which is to be learned relates or is meaningful to their needs, goals, habits, values, and self-concept. The adult's willingness to participate in learning depends upon such factors as: perception of the value of learning, acceptance of what and how to learn, need for self-esteem or social affiliation with others, and expectations from life.

Teachers of adult learners can facilitate the retention and transfer of learning by such activities as the following:-

Encouraging the learner to search for relationships between what is currently being learned and past learning.

Providing reviews in which the learner encounters previously learned material within new activities.

Providing well-distributed practice in problem solving.

Relating materials learned in instruction to the abilities, needs and interests of the learner.

Stressing generalisations, but making certain that the learner understands the meaning and factual basis for each generalisation thought.

Scheduling frequent tests or in other ways creating a "set" to remember.

Inducing low stress by arranging for success or anticipation of successful experiences in learning.

1. **Lawler’s Principles of Adult Education (Lawler 1991)**
2. Adult education requires a physical and social climate of respect.
3. A collaborative mode of learning is central to adult education.
4. Adult education includes and builds on the experience of the participant.
5. Adult education fosters critical reflective thinking.
6. Problem posing and problem solving are fundamental aspects of adult education.
7. Learning for action is valued in adult education.
8. Adult education is best facilitated in a participative environment.
9. Adult education empowers the participant.

In *The Keys to Adult Learning Theory and Practical Strategies* Lawler offers practical advice on utilising these adult learning principles and is well-worth a read.

1. **Action Learning**

There is a large body of research literature that suggests that action learning is particularly appropriate for adults.

Learning may be defined (Mezirow 1991,1) as the process of making a new or revised interpretation of the meaning of an experience which guides subsequent understanding, appreciation and action. Critical reflection involves a critique of the pre-suppositions on which our beliefs have been built.

Marsick (1991, 23-45) speaks about action learning (Project work on real-life problems and reflection where participants draw out the lessons learned from their project work.)

There are three key components of the action/learning facilitation process: action, reflection and the building of one’s own theories (Marsick 1991, 32-33). The action component is developed in two ways " through appropriate experience provided by the project work and through an action oriented approach to the way in which people learn from experience.

For action learning to be effective (Marsick 1991, 44) a climate must be fostered that allows participants to examine beliefs, practices and norms. The facilitator must make sure learners look at problems from many perspectives, challenge one another, ask stupid questions, draw contrasts, probe connections and try out new behaviours.

The video "An Introduction to Action Learning" The National Staff Development Committee (1995) outlines the benefits and process of action learning.

The following equation is referred to:

L = P + Q where L = Learning

P = Programmed knowledge balanced with

Q = Questioning insight

1. **Experiential Learning**

This has some similarities to action learning and once again is thought to be particularly relevant to adult learners.

Boud, Cohen and Walker (1993, 8-16) have developed five propositions which will help the adult educator to develop effective experiential learning.

Experience is the foundation and stimulus for learning.

Learners actively construct their experience.

Learning is a holistic experience.

Learning is socially and culturally constructed.

Learning is influenced by the socio-emotional context in which it occurs.

Kolb and Fry (1975, 33) have developed an experiential learning model.



*Figure 1 : Experiential Learning Model, Kolb and Fry (1975, 33)*

Experiential learning is based on three assumptions (Johnson 1990, 20). People learn best when they are personally involved in the learning experience; knowledge has to be discovered if it is to mean anything or make a difference in behaviour and commitment to learning is highest when people are free to act their own learning goals and actively pursue them within a given framework.

The process of experiential learning is shown below. (Johnson 1990, 20) The learner reflects on their concrete experiences and examines their meaning in order to formulate a set of concepts or principles. The sequence is concrete personal experiences followed by:-

Observation and reflection and examination of one's experiences and this leads to the formulation of abstract concepts and generalisations which leads to hypotheses to be tested in future action.



*Figure 2 : Experiential Learning Cycle (Johnson 1990, 20)*

1. **Tips for adult & workplace trainers**

Strategies for learning (Excellence in Training)

Build skills- Break tasks into several steps, Spend a few minutes giving personal help,

Provide opportunities for participants to show what they can do, Involve participants in a meaningful manner, Direct participants to specific help & support.

Build respect / confidence-Use positive reinforcement, Show participants respect, Make time to really listen to participants, Never get participants to do things outside of their capacity, Provide opportunities for participants to tell others what they are interested in, Use names.

Natural prime retention time

First seen or heard is best remembered, last seen or heard is next best remembered, the middle is hardest to remember and needs to be highlighted to increase retention. Always have a strong opening and conclusion and incorporate activities in the middle.

Learning styles

Some people are visual learners (pictures, written words, diagrams etc.), some are auditory learners (hearing the written word) and some are kinaesthetic learners (involvement, action, discussion etc.).You should attempt to use all 3 modes when communicating with people, this will increase their motivation.

You should try to establish the learner’s preferred learning style, not over use your own preferred learning style, give the opportunities for learners to use their preferred learning style and develop methods that reinforce each learning style.

Session design for success

1. A Anticipatory step

Some activity that focuses attention of all, builds readiness to continue, builds in some small success for the participants and may link to previous work or the topic of the session.

1. The objective

Tell the participants what you will be doing, why you are doing it and what their job will be.

1. Development

This provides new learning built onto previous knowledge.

Wherever possible participants should see an example of a finished product.

1. Checking for understanding

Trainers check for understanding to ensure success for learners and assess if remediation is required.

1. Guided practice to unguided practice

On-site coaching is effective and should align with what their job will be.

1. Summary / conclusion

Focus back on key concepts and link to the next session.

Considerations for quality learning

Effective learning is an ongoing process not one-off events. Learning does not have to be structured, of then an informal chat with a content from within your own organization will be beneficial. Active involvement and support from the supervisor is essential. Regular learning accompanied by self-analysis, constructive criticism and stimulation by leadership to improve is required. Systematically identify internal needs and resources before seeking outside assistance. Assess learners competencies and use these to assist their and others learning. Involve the learner in the evaluation of the learning program. Modelling behaviour of successful work mates is a good avenue to explore for learning. Short & long term evaluation of learning programs is essential.

In his text “How to create and deliver a dynamic presentation” Doug Malouf makes the following points

The 10 major mistakes speakers make

1. Failing to speak to time-set a time limit, stick to it, be ruthless with self
2. The material is not suited to the audience-research 3 people, what do they know, what would they like to know
3. Information overload-limit the information, bit size pieces, leave something out
4. The material is too technical-do not use jargon, know your audience, pitch it to their level
5. Poor preparation-you’re on before you are on, trust no-one, check everything
6. Failure to practice speech-practice to an imaginary audience
7. Distracting visuals/ verbals / vocals
8. Inappropriate pace-vary your speed
9. Lack of eye contact-maintain
10. Lack of enthusiasm

Malouf talks of the “Apple-Tree Approach” to developing a lesson-plan for a speech or talk. Have a look at his text and give it a try.

5 golden rules of handouts (Malouf)

1. Must be simple
2. Must be directly related to the purpose of your presentation
3. Must have high visual impact
4. Must not distract the participants
5. Must be the same colour

5 golden rules of humour (Malouf)

1. You must think it is funny
2. Must not bruise egos
3. Should be on you
4. Should be timed
5. Should be tested

7 ground rules for participation (Malouf)

1. No risk
2. Must be clear
3. Must be able to do the task
4. Must be easy & fun
5. Must undo what you do
6. Must set time
7. No role play

Laurie Kelly of Mindworks, a Brisbane-based company specializing in training trainers gave the following practical tips to trainers during a course this author attended

* Change state every 10 minutes-Get up & stretch, move camp, go & get, otherwise have participants move
* To gain an understanding of a group’s existing knowledge-ring some a few days before-hand, discuss a topical question in groups, traffic lights(cards, green agree, yellow undecided, red disagree),sit down, stand up, show of hands
* Relaxation-at least 8 glasses of water a day, cross legs, cross hands twist hands to chest, relax for a minute, eyes closed-join fingers place on chest for a minute
* Time keeping for breaks-get groups to appoint a time keeper
* Use music at beginning, breaks switch off to focus on task.
* Ask to visualise a quiet place where you would like to be as a change of pace half way through the day
* List things you had to do to get here
* List things you could be doing instead of being here, put them in an envelope at the back of the room and pick up when you leave.
* Have a box of chocolate frogs for helpers
* When asking for input in a circle use cards to nominate instead of going around in turn
* Pre-reading-At night read the manual and prepare 5 questions for the group
* Appreciative enquiry-Find out what worked well and build on it.
* Evaluation What am I pleased with? What have I still got to do?
* Put borders around chart using different colours ,use heaps of colours on charts, place charts around room & use to revise or after lunch have an ideas so far session
* Do not write on white-board yourself, ties you up and you lose eye contact with the group, nominate person with birthday in August
* Philosopher’s walk-At end of day go in pairs and discuss the learning’s from the day that are displayed on the charts around the wall.
* Use shiny paper not butchers paper, butchers paper draws ink out of pens.
* Have a table-What I know, What I want to know, What I have learnt-helps to engage learners in a topic
* Round Robin (alternate to brain storming)-List ideas/responses on a sheet, ask groups to designate 3-4 top ideas, groups feedback responses to facilitator and whiteboard-affirms, participation, piggy backs new ideas, ownership
* List plus, minus, interesting on a sheet
* Effective instructors of adults are those who help learners become more self-sustaining, more intellectually curious and more capable of learning by themselves (Heimstra,37)
* Apps (1981-145-6) says the excellent instructors follow nine instructional principles
* Learn to know your students
* Use the students experiences as class content
* Where possible tie theory to practice
* Provided a climate conducive to learning
* Offer a variety of formats
* Offer a variety of techniques
* Provide students feedback on their progress
* Help students acquire other resources
* Be available to students for out-of-class contacts

1. **Artistry in Training**

In her text “Artistry in Training” Stephanie Burns makes a number of points about training skills. Burns text is short on practical tips for trainers but gives an excellent overview of the nature of effective training and the role of the trainer.

The 3 qualities of professional trainers (Burns)

A broad range and flexibility of behaviours-what can convincingly be done in the communication context.

A heightened sensitivity to, and awareness of, the effects of the trainer’s behaviours on the individual learner’s experience.

The cohesive organisation of subject material-in other words, the ability to organise material so that when it is expressed verbally, it makes sense and is relevant.

The 6 stages of training design (Burns)

Define outcomes

What will the student know, be able to do or feel as a result of having attended the training?

How will we know if the student has achieved that set of outcomes?

Defining outcomes let students know what to expect and decide if it is relevant to them.

Determine the starting level

The trainer needs some means of assessing current skills, knowledge and abilities so they can pitch the start of the training at the correct level. Too low a level will bore, too high a level will confuse.

Identify the content consists of

Identifying the content

Clustering the content by main topic

Making a decision regarding depth or breadth

Sequence the clusters consists of

Sequence the content by main topic-post-its on the wall help here

Sequence the content between topics

This discovers if the sequence flows logically from one piece of content to the next.

Choose the method of delivery

* There are many methods of delivery. Here are a few
* Lectures
* Games
* Videos
* Computer simulations
* Interactive facilitation
* Group processes
* Role-plays
* Assignments
* Stories
* Case studies
* Analysing scenarios
* Simulations
* Demonstrations
* Question and answer sessions
* Brainstorming exercises
* Modelling
* Visual / audio-visual media

**J. The Importance of Preparation**

A wise man once said “Prior Preparation Prevents P-ss Poor Performance”

We need to ask questions such as these (Minton,1997,46)

WHO

Who am I going to teach?

What age are they?

What is their background?

Why are they here?

What do they need to learn?

Why do they need to learn it?

What do they know now?

What can they do already?

What are they expecting from me?

WHAT

What are they going to learn?

What do they have to do to learn that?

What do they need to do in order to learn that?

What are they going to learn with?

What do I have to do to provide that?

What do I have to do to help them learn?

WHERE

Where are they going to learn?

Where am I going to teach?

What kind of difficulties are they likely to find there?

What equipment can we use?

How do I get a hold of it, set it up and use it?

What organization and preparation must I do?

WHEN

How much time have I got?

What time of day will it happen?

How often will we meet?

What might be the effects of time of day and frequency?

HOW

Where are they starting from?

Where should I start?

How are they going to learn?

How much am I going to teach?

What pace of learning?

How will we agree our learning goals?

How will I get them working and committed?

Do they want to learn what I am teaching?

How do I engage them in the learning?

What learning problems are likely?

How can I make it easy to learn?

How do I know what and how much they are learning?

How do I get feedback?

How do I use feedback?

How should I adapt what I do to what they need?

**Learning in the Workplace**

Billett (2001) “Learning in the workplace-Strategies for effective practice” is recommended as a “must-read” for those responsible for facilitating learning in the workplace. Many workers are not prepared for work through vocational education programmes, instead they learnt their vocational practice through working. Traditional educators point out many disadvantages to workplace learning without considering the many problems with a traditional class-room education. One of the distinguishing features of workplace learning is that, unlike class-room learning, it is directly relevant to the work being performed

Billett presents 5 key premises for pedagogy in the workplace

1. Learning is taken as something that occurs as part of everyday thinking and acting.
2. Rather than being premised on the instructional and curriculum practices of educational institutions, a workplace curriculum needs to be founded on the contributions and circumstances afforded by workplace environments
3. It is inadequate to believe that learning simply by “just doing it” will suffice
4. Workplaces are contested terrain and the divisions between various groups may influence workplace learning
5. The worth of the development of vocational knowledge by educational institutions is recognized as complementary to workplace learning.

In Billett (1993, 1) it is argued that informal learning settings such as workplaces provide an optimal place for the acquisition of robust and transferable vocational skills. The training that is conducted is in the workplace using situations as close as practicable to those encountered in the workplace. The process used models the most traditional forms of learning - the notion of an expert novice relationship (Billett 1993,2). The approach used utilises activity theory originally proposed by Vygotsky who claimed that knowledge is socially and culturally constructed. Central to Vygotsky's view is that the relations between the learner and the teacher/expert is socially constructed. Consequently, the quality of the relationship will determine what type of knowledge the novice has access to and is allowed to learn (Billett 1993,3).

Billett (1993,4) maintains the authenticity of learning activities is a determining quality of learning experiences.

Research carried out by Billett (1993,5) in the Queensland Coal Mining Industry revealed a preference for learning by doing on behalf of respondents. The respondents also believed that the expertise for learning was already on site. The following quote from Billett (1993,10) appears relevant.

"The engagement of learners in authentic activities in natural settings, guided by experts with reference to other learners and by allowing the learner to experience both the process and the product of their activities have the potential to make the workplace a powerful learning experience."

Billett (1992,4) indicates the skill development activities and assessment should only be conducted by those who have and are seen to have a strong base of skills in a specific area (a content expert). It is also postulated that activities should closely reflect the activities that are used as part of everyday practice in the workplace (authentic activities). This emphasises the role of natural settings and authentic activities and reflects the research of Glaser (1984), Glaser and Bassok (1989), Collins Brown and Newman (1989), Collins and Duguid (1989), Gott (1989) and Raizer (1991). Billett (1992,5) speculates that a learning process that gives responsibility for the learning to the learner, engages them in dialogue with more expert workers, asks them to problem-solve real situations and then provide an analysis of their approach is appropriate. Billett (1992,6) says that learning tasks must be realistic, challenging but ultimately achievable.

**CONCLUSION**

Learning for adults can be significantly enhanced by applying adult learning principles and processes to the learning environment. Much "training" of adults in industry does not apply adult learning principles and processes and consequently is less effective than many believe it is. For a fuller discussion on the subject of safety training please refer to the paper "Safety Training-How to Make It Work" by this author.



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### OHS Learning

Facilitating OHS learning is a very important part of an OHS professional’s role but unfortunately many do not have high levels of skills in this area. The Cert. IV T.A.E. is the standard people are judged by. The reality is that this course has a number of limitations and only represents a learner’s permit.

For the learning to have meaning activities should be organised to allow participants to discover the concepts for themselves (not always an easy thing to do). Discussions, case studies, practical exercises, role plays are preferred. These are usually more effective learning methods than the lecture but they take a longer period of time.

For adults interactive rather than passive learning strategies are preferred.

It has been suggested that we retain:

10 percent of what we read;

20 percent of what we hear;

30 percent of what we see;

50 percent of what we hear and see;

70 percent of what we say;

90 percent of what we say and do.

Saying and doing are certainly important for retention and later application.

For further information refer to *Adult learning principles and process* on ohschange.com.au

**Discussion Paper-Learning and Development Needs of OHS Personnel- Something To Think About**

Introduction

The topic of learning and development needs of OHS personnel is at the forefront of many OHS people’s minds. OHS people must be life- long learners and a tertiary OHS qualification is recommended, often learning from non-OHS disciplines is of value.

As soon as we stop growing, learning, and thinking, our brains and our mental states start to deteriorate and to die. When we learn something, our hearts and minds grow accordingly. Staying involved, being a part of something, having new experiences, and forming new insights, no matter your age, keeps your mind fresh and allows you to further develop. Learning from our mistakes so as to not make them again is a great way to learn and to develop further as well. (Gavin Waugh)

Why read this paper? What will I learn? What is in it for me?

The discussion paper starts with my personal OHS and OHS aligned learning journey, you may wish to miss this part but I thought it important to give some background. I discuss what OHS people do, explore some of the current safety learning for OHS people, suggest ways of enhancing the current OHS Body Of Knowledge, explore the relevance of non-OHS learning to OHS and look to the future to a certain extent. The final section *General advice for the learning of OHS people* is designed to suggest some options to think about for your personal learning in OHS and OHS aligned areas.

My aim with this discussion paper is to promote discussion, enhance current learning and encourage readers to think and plan more about their own learning. The initial draft was reviewed by a number of OHS people and revised according to comment received. My thanks to those that contributed.

Quotable Quote

"A health & safety problem can be described by statistics but cannot be understood by statistics. It can only be understood by knowing and feeling the pain, anguish, and depression and shattered hopes of the victim and of wives, husbands, parents, children, grandparents and friends, and the hope, struggle and triumph of recovery and rehabilitation in a world often unsympathetic, ignorant, unfriendly and unsupportive, only those with close experience of life altering personal damage have this understanding" 

I make no apologies for the fact that I challenge the accepted wisdom in some of what follows!

George’s Major Learning Background

As a young and relatively inexperienced mine Safety Adviser I attended the Ballarat Graduate Diploma in Occupational Hazard Management. A number of thought leaders in OHS were my lecturers and I networked with fellow students, a number of whom were senior OHS people in major Australian business.

The late Dr Eric Wigglesworth opened my eyes to the history and various perceptions of safety, Derek Viner outlined Systems Safety, I learnt about Common Law, had a very valuable look at Human Factors Engineering, came close to understanding Safety Statistics, did some good work on electrical safety and noise and vibration and was fascinated by sociology applied to safety.

Besides from the technical stuff I learnt how to research and prepare an academic paper, be more questioning in my approach and probably the most important thing was I learnt was that there was a whole network of information available that I previously did not know existed (Of course this was before the internet) I also learnt the Victorian habit of drinking red wine. There was often significant learning happening as course members networked after hours. As a reasonably arrogant young bloke, who thought he was God’s gift to safety and knew it all, it do me no harm to learn from older, wiser and more experienced people (Some of the names I remember are Neville Betts, Glyn Williams, Laurie Mason, Roy Hegney) Ballarat was very advanced for its era and attendance was a life changing experience for me in many ways.

After the Ballarat course I made a conscious decision not to do an OHS Masters and decided to study in fields allied to OHS. A cynic with a Doctorate told me the problem with Masters and Doctorates is you end up knowing a hell of a lot about not very much. I must say I recognise there is more to it than that.

The trouble with many academics is that they don't teach such important things such as how to think critically, build argument, structure argument and how to engage others in thinking.  BTW, this is what a good Masters or PhD should do (Dr Robert Long)

As I have always enjoyed facilitating learning and see it as an important part of OHS change, I completed a Bachelor of Education (Adult & Workplace Education) at Q.U.T. The university practised the learning style they were trying to teach us, no boring lectures. There were 4 Field Experience units where we had to gain placements with companies and carry out a range of learning tasks. There was an amount of facilitating learning with peer review. Very interactive and hands on.

Some of the specifics I learnt were the use of models to facilitate skills and theory learning, various group approaches to learning, facilitating problem solving groups, various learning styles various people have, action and experiential learning and avoiding the use of lecture style presentations. I was introduced to and practiced force-field analysis which is a great tool to use in safety.

My conclusions at the end of this course were that a lot of my past training efforts were not all that successful and a Cert IV in training only scratched to surface of what was required for effective learning. My paper Adult Learning Principles And Process under Learning Articles on ohschange.com.au is largely a theory dump of what I thought was the more significant theory on my university course. Attendance was a life changing experience for me in many ways.

As I regard OHS as essentially about management of organisational change I completed a Graduate Certificate in Management of Organisational Change at Charles Sturt University. A complete theoretical overload with very little practice. I seemed to spend a lot of time reading papers from managers and ex-managers of American companies that had undergone organisational change, a number of these blokes later ended up in fraud and ethics investigations. I found this interesting as the focus of some of the papers was often about telling us how good and incredibly clever the author was.

I learnt even the best planned and executed change management initiatives will often not realise their potential. If you do not involve the people to be effected by the change process, there is very little chance it will work. I picked up my motto from this course “When initiating change-Remember people support what they create” When I look at the effort I put into this course I do not believe I got equivalent learning.

What OHS people do

Passion, life skills and compassion are prerequisites for the OHS person. Depending on the role and level, OHS people may be called upon to carry out some of the following duties-

* Facilitating learning, facilitating problem solving groups and learning needs analysis.
* Developing, coordinating, implementing and evaluating OHS Management Systems and associated operational and strategic OHS Management Plans.
* Leading OHS project teams / Development of focussed, succinct OHS policy and procedure.
* Incident investigation, report writing, researching OHS issues, compensation and rehabilitation management.
* Interpreting, giving advice on, facilitating learning and checking compliance with safety legislation.
* Managing human resource issues, E.A.P. and counselling issues.
* Carrying out audits and inspections / acting in a customer service role.
* Supervising other OHS staff, safety committees and safety reps.
* Managing downwards, sidewards and downwards.
* Incorporating OHS into quality systems, risk management, in particular risk assessment.
* Prioritising, planning and organising work.
* Facilitating communications and interpersonal issues, using computers, managing contractor safety and giving advice in relation to personal protective equipment and chemical management.
* Basic industrial hygiene.
* Audiometric testing and giving advice on noise and vibration issues.
* Coaching and mentoring others, benchmarking and influencing the culture.
* Developing safety leadership management plans and influencing leaders on safety leadership.
* Marketing the OHS message.
* Developing safe working procedures.
* Acting as the corporate OHS conscience.
* Safety data analysis and reporting.

Some of the above can be learnt through formal study, some through short courses, some through practical experience, some by reading good sources of information, some through networking with peers, some through a combination of the foregoing. All will be enhanced through practical experience and critical reflection on that experience (What went well, what opportunities for improvement were presented) Coaching / mentoring by an expert can be a powerful way of learning.

Focus on Class 1 personal damage

Focus on Class 1 personal damage and use this in considerations of analysis. Class 1 damage is that which permanently alters the future of the individual. Minor injuries are not a good predictor of more serious personal damage. Taxonomies (collections of like) of your industry personal damage occurrences provide better guidance than enterprise experience.

OHS Body of Knowledge

A major challenge is the development of a robust OHS Body of Knowledge, the Safety Institute of Australia is to be commended for beginning this development. My view is much more work is required. My critical reflection on practice tells me education authorities are not doing a sufficiently focused job on OHS education because they do not have a robust OHS Body of Knowledge to guide learning facilitation.

Suggested requirements to define the core body of OHS knowledge

* Extensive focussed and succinct communication.
* Involvement and equal input of all stakeholders. Stakeholders would include State & Federal Government, business, unions, S.I.A. members, non S.I.A. safety people, other relevant professional organisations and universities and other OHS education providers.
* Regular updates on progress and response to queries.
* An equal emphasis on practice as well as theory.
* The body of knowledge must be informed by the permanently life altering personal damage occurrence (“Accident “ ) phenomenon.
* A learning needs analysis to help define the body of knowledge must be part of the process.
* An analysis of the skill requirements of an effective OHS professional must be part of the process.
* Thorough research processes to define the body of knowledge must be part of the process.
* Change management and project management processes must be applied, an experienced project manager is applicable to lead the project.

Doing this properly is a very big job and no doubt a pragmatic approach would be required.

Theoretical issues

I must admit to a certain level of cynicism about an amount of the theoretical approaches I see in OHS. When I find the bloke who said that a theory is only as good as its practical implementation, I will buy him a beer. Having said this I have to add I love a good academic paper that helps me improve practically.

Whilst I know it will not be the view of everybody I believe a tertiary education should be mandatory for OHS people, having said this, I have doubts about how well universities prepare graduates for the practical reality of working in OHS.

Practical OHS management and OHS learning skills are vital in an OHS professional. These can be enhanced by focused formal learning that has direct practical application. Some of the formal learning does not have a practical orientation and we sometimes see long winded, boring academic papers that have little useful relevance to the real world. The term succinct is often not evident.

OHS Learning

If I was developing an education program for OHS professionals I would boost the OHS technical skills component with learning on leadership, learning, organisational change, communications skills, interpersonal skills, project management, quality management, basic human resource management and basic marketing.

The traditional approaches to OHS are fine provided the useless buggers we have working for us do the right thing! I would suggest the biggest challenge in OHS is to influence people in the OHS mix to ensure the Person, Machine and Environment essential factors in personal damage occurrences are identified and managed.

The adult educators say critical reflection is an important component of adult learning, the opportunity to apply theoretical learning in an authentic environment and figure out what works and what does not work is part of this. Some university based learning does not make allowance for a thorough approach to critical reflection. More people are realising the workplace can be a robust and transferable environment for learning.

Looking to the future

Given the fact that the people are the most important part of the OHS mix, my view is that the OHS professional must have a good understanding of psychology and sociology so they can harness human capital effectively. OHS is all about change management, expertise in this area will serve you well. Major efforts in communication, participation and involvement are usually necessary. One of the things you must develop is leadership skills. Leadership is the often forgotten key to excellence in all aspects of life. Developing excellent presentation skills will also be very important.

As I get older my critical reflection on practice tells me communications skills and interpersonal skills are just as important as technical skills. There is not much point having a great message if you cannot get it across, if you have great technical skills but cannot get along with people you will not succeed.

I completed a few psychology subjects as part of formal study and found them fascinating and very useful. As an OHS person I have come to the conclusion that all this safety stuff would work well if only we were not working with the unreliable buggers we are, i.e. the fallible human being. The biggest challenge in any profession is dealing with the people issues.

Looking to the future I see the time when OHS people should have a basic understanding of how psychological theory relates to safety and an ability to use psychological techniques in safety. Dr Robert Long has written valuable material on this topic.

Sometimes skills from other disciplines can be applied successfully to OHS, one such skill set is marketing. I have attended some marketing training and see some advantages for OHS. Marketing is putting the right product in the right place, at the right time, at the right price. You have to create a product people want.

General advice for the learning of OHS people

It is incredibly stupid and arrogant to think a tertiary OHS qualification will give you all the skills and knowledge you need, some would get upset if I suggested it was merely a learner’s permit. In my experience the most dangerous OHS person is the new graduate who thinks they know it all and with their perceived self-importance proceed to alienate all and sundry but particularly the frontline workers.

* Develop an empathy, good communication and trust with front line workers, you will learn a lot from them.
* Spend much more time in the field than the office. Get to understand the work done, the safety issues and the perspectives. Force yourself to do an inspection of all field areas at least once a week. Be visible, the communication will flow and you will learn.
* Hold your work out for peer review, sometimes you will not like the feedback you get, that is the price you have to pay to learn.
* When you have a report send out a draft for comment first, you must meet the needs of your customers.
* If you do not know, ask around fellow safety people, often they will pull out all stops to help you.
* Leading and / or being a member of safety project team usually ends up with significant learning and often is a great way to drive major safety change.
* You have to resolve to be a life-long learner, often learning in fields allied to your major discipline will increase your effectiveness in your major discipline. Never stop learning.
* Develop skills in critical thinking and managing systematically
* Be a sponge and soak up all the knowledge and experience you can. Never be scared to ask for advice and experience, never stop learning. Look beyond what others see and learn to understand the ‘why’ and ‘how’.
* Finding yourself a mentor will be of real value and constantly discuss issues with your peers.
* Deliberately ask for the hard jobs. Putting yourself out of your comfort zone is a great way to learn and do not be afraid to fail. Failure is a great way to learn.
* Start your learning at the level you can handle. Simple principles can be easily learnt, you don’t need to be an academic.
* Do not take yourself too seriously and celebrate success.
* Get some experience in high risk environments.
* Evaluate for yourself the value in joining an appropriate OHS professional organisation. Properly organised you can learn and contribute.
* Join some of the LinkedIn OHS forums, networking with peers can be a great way to learn.
* Personally I think maintaining a reflective journal is a good way to learn.
* Safety is in everything we do and say. Read widely and look for safety management and skill in everything you read. The local library will have many management books that are useful in safety.
* Undertake a formal OHS qualification, even if it is only a Cert IV. Your employers are looking for formal qualification.
* Get a tertiary OHS qualification, ensure you check out any courses you are interested in with past or present learners. Distance education has advantages for some but there may not end up being much interaction with fellow learners. My advice is to choose a course that includes workplace tasks.
* Assess if there is tertiary learning in non-safety disciplines that can aid your safety journey.
* Attend Cert IV T.A.E. Despite the fact this qualification is only a learner’s permit it is what many employers want. I find it disappointing this qualification has become the de-facto standard by which facilitation of learning competency is judged.
* Attend short course learning on leadership, organisational change, communications skills, interpersonal skills, project management, quality management, basic human resource management, critical thinking and basic marketing.
* A project I have set for myself is to learn how psychology principles can be applied in safety, you may wish to do a similar thing.

Conclusion

Effective management of OHS requires you to be a life- long learner in the OHS discipline and OHS aligned disciplines. When it comes to your learning remember the 7 P rule-Prior Preparation and Planning Prevent P—s Poor Performance.

George Robotham Safety (“Failure is not an option”)-George Robotham, Certificate IV T.A.E., Diploma in Workplace Training & Assessment Systems, Diploma in Frontline Management, Bachelor of Education (Adult & Workplace Education), (Queensland University of Technology), Graduate Certificate in Management of Organisational Change, (Charles Sturt University), Graduate Diploma of Occupational Hazard Management), (Ballarat University),Currently completed one third of a Masters of Business Leadership, Accredited Workplace Health & Safety Officer (Queensland),Justice of the Peace (Queensland), Australian Defence Medal, Brisbane, Australia, [fgrobotham@gmail.com,](mailto:fgrobotham@gmail.com,) www ohschange.com.au, 07-38021516, 0421860574

### Implementation of a learning management system

In the early 1990’s XYZ mining company revolutionised their approach to learning. I was heavily involved in this work in my role as Senior Safety Adviser in the Brisbane-based corporate OHS department.

1. Existing learning programs were examined and costed, many millions were being spent and it became obvious much of this money was wasted.
2. An exhaustive learning needs analysis was carried out. This worked formed the basis for the introduction of competency-based learning in the Australian mining industry.
3. Doctor Stephen Billett of Griffith University was engaged to research preferred and effective modes of delivering learning. Not surprisingly learning by doing coached by a content expert was favoured. A lot of people saw classroom learning as largely a waste of time. Carrying out authentic tasks in the workplace was seen as important.
4. External trainers and internal trainers, of which I was one, had to attend a week course with a unit that specialised in advanced learning techniques from the Qld. Department of Education. This emphasised interactive techniques and Action and Experiential learning.
5. Consultants were engaged to prepare self-paced, competency-based modules in many areas. The modules were given to learners and they were assigned a content expert to refer to as needed. Some modules articulated to a National certificate IV . My role was to do the T.N.A., write modules, liaise with the consultants writing the modules, assess learners, coach learners and where necessary facilitate the modules.
6. A system was introduced whereby the supervisor had to engage with the learners to develop an action plan to implement the lessons learnt from a learning experience.
7. A matrix of mandatory and recommended learning for all levels of employees was developed.
8. The performance appraisal process put a high emphasis on learning with the result that individual learning plans were developed for all employees.
9. The organisation truly became a “Learning organisation” and a high value was put on learning.
10. A communications plan was developed to communicate learning processes to employees. Various available media were used to communicate learning change.
11. Development of the learning materials involved many project teams and a philosophy that “When initiating change, People support what they create” was used.
12. Assessors of the self-paced learning modules completed learning and set about assessing learners
13. was summed up for me when I was sitting in a mine manager’s office that overlooked the coal stockpile and the mine manager said” There was a time when I had evidence the bulldozer operators did not always know what they are doing and the machines were not always well maintained, since this new training I no longer have these concerns”

The precursors to success were the very thorough learning needs analysis and the establishment of the preferred and most effective means of learning.

### The use of Power-Point presentations

There are 4 very common mistakes with the use of Power-Point presentations.

1. Stuffing far too much material on the presentation; the need to constantly display the company logo is particularly inappropriate in my view.
2. Font size too small for those at the back of the room to read it - particular problem with an older audience
3. An over-reliance on the technology; you should be prepared for a power failure or for some other reason an inability to use the technology.
4. Too many presentations - many presenters foster “Death by Power-Point” (too many or over reliance on them)

**Tips for preparing presentations**

* Keep them simple and visually strong
* Use keywords not sentences or phrases
* Bring it alive with colour and clip-art
* Make sure it says exactly what you mean
* Big font
* Use a sequence of presentations to build to a point you are making
* Use strong colours for font, black, dark blue, dark purple etc.
* Dark blue, dark green, dark red contrasted with a strong yellow background can be visually appealing.
* Some people get annoyed if you read to them what they can easily read for themselves on the screen
* Slow down your pace to allow sufficient time for your audience to read what is on the screen
* Always check your presentation can be read from the back of the room
* Incorporate as much multi-media into the presentation as possible, it is relatively easy to incorporate video into power-point
* The wise learning facilitator uses a wide range of learning methodologies

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### Tool box meetings

* Regular, short, sharp, tool-box meetings can be an excellent means of getting the safety message to employees and resolving safety problems.
* The following advice is given for the conduct of these meetings-
* Find a quiet area free of distractions
* Use open-ended questions to promote involvement, positively reinforce responses to questions and comments
* Remember the 7P rule-Prior Preparation and Planning Prevents P—s Poor Performance
* A bit of humour does not go astray
* Research your topic and generally be organised
* Audience interaction is always a good idea
* Avoid lecture style presentations wherever possible
* When you cannot answer questions raised find out and provide feedback to the group
* Have a set agenda and publish minutes, including to relevant noticeboards. The minutes record discussion and outline agreed actions
* Topics can include a review of incidents, observations on practice, safety alerts, legislative updates and safety initiatives
* A guest speaker or relevant audio-visual presentation can add variety
* Having a set time every month has advantages
* The OHS professional can be a guest presenter and source of relevant material
* The meetings can be general safety training, an explanation of a new safety initiative, a review of existing work procedures or a general safety motivation tool
* Duration is generally 15-30 minutes
* Thoughts are varied on whether the meeting should be strictly about safety, my view is that safety should be the dominant content
* Be wary of people “saving up” their safety concerns until the tool-box meeting. Encourage prompt reporting of all safety concerns
* Have an attendance sheet where participants sign off
* Thank people for their participation

For further information refer to the paper *Tool-box meetings* on ohschange.com.au

### The use of humour

Humour can be used effectively in formal and informal presentations and in general interaction in business and non-business life.

* Avoid humour that focuses on religion, politics, race, class, sex, age, physical appearance. To use any of these will run the risk of upsetting someone. I hear you asking what the hell else is there that I can use. The only safe butt of your humour is yourself!
* Introduce the humour in the general flow of your conversation.
* For a major presentation rehearse and listen to yourself on a tape recorder.
* Like many things in life humour follows the 7 P rule-Prior Preparation and Planning Prevents Piss-Poor Performance.
* Try to use humour that relates to things others see as an annoyance.
* Quotations from famous people are often sources of humour, you can search these on the internet, Laurie Lawrence’s web-site has a lot of quotations.
* Stretching the truth is forgivable.

If you are a presenter who uses effective humour, presents well and has a relevant message you will be invited back.

For more information Google the topic and look at the paper *The use of humour* on ohschange.com.au

### Safety Induction

At one start-up operation I developed a comprehensive safety induction program lasting 2 days and put about 300 people through the training over about a year. I used to feel very proud that they left the training very switched on about safety. The reality was within a few days of hitting the workplace they realised that my safety world I had spoken about was not reality, the safety culture of the organisation did not support my training. The very clear message is anyone seeking to introduce learning programs must do learning needs analysis first (refer to the paper *Safety Training Needs Analysis* on my web-site ohschange.com.au)

The big question is how long do you spend on induction training? I have not got a good answer but suggest it is different for permanent employees and contractors. In these days of standardised industry induction programs a lot of people will have received a substantial safety needle prior to arriving on your site. The contractors go from site to site and sit through inductions at many sites. The last thing you need for these contractors is a protracted induction program that covers unnecessary old ground. For these people site specific arrangements may be enough.

Avoid lecture style presentations where possible and use interactive approaches (Refer to the paper *Adult Learning Principles and Process* on ohschange.com.au). You have to appreciate you may not have a very positive audience particularly with contractors.

At the end of the day nothing beats learning needs analysis.

One experienced OHS professional expressed the view that inductions for contractors should not last more than a few hours and be a way for organisations to be able to take action against breaches / non-compliance. You cannot discipline people unless there is very clear evidence they know the rules.

## Human Resources

### Job interviews

**Major tip**

Recruitment & selection uses “**Past behaviour predicts future behaviour**” The idea is to give plenty of examples of where in the past you have **successfully done the sort of things that you will be required to do in the new job**. Say what you did, how you did it and what the results were.

**The interview**

An important tip for interviews is to project an image that you are highly interested in the job and that you are generally high energy in your approach.

Government jobs usually stick to questions based on the selection criteria. Generally I would go to the interview with 2 examples of how I had successfully implemented the things in each of the selection criteria.

Prior to an important job interview you should have a mock interview with friends.

It is a good idea to think about what some of the questions you are likely to be asked are and have a prepared answer in your head.

Towards the end of the interview you may be asked if you have any questions, have some prepared questions and do not take this lightly as it is an important part of the interview.

Arrive in plenty of time to get yourself organised.

Leave home in time to allow for a flat tyre or the bus being late.

Always make an effort to appear clean & smart.

If you smoke lay off the fags at least 30 minutes before the interview and / or use a breath freshener. If it is a no smoking site they may wonder how you will survive all day without a smoke.

It is a really good idea not to turn up for interview drunk (saw it happen once) or otherwise smelling of grog. Some interviewers, particularly women, have an acute sense of smell.

Speak professionally, do not swear or use slang.

Listen carefully to the questions being asked and make sure your replies do not go off on tangents.

If possible try to bring along a number of good examples of your previous work.

Always ask for confirmation of verbal arrangements with a letter or e-mail.

There will be times the interview does not “click” as far as communications and interpersonal issues go, there could be lots of reasons for this that have nothing to do with your abilities.

Get specific instructions on how to find the place where the interview will be conducted, advice on parking may be appropriate.

Try to find out the names and positions of those who will interview you, helps you to pitch your responses at the right level.

A security blanket for many employers is experience in their industry. If you do not have experience in their industry put a bit of work showing how experience in your industry is relevant to theirs.

The person who will make or break a job for you will be your supervisor. He or she will probably be an interviewer, make sure you are happy with their communications and interpersonal skills.

A lot of employers realise that an interview, in isolation, may not give a good result and will ask you for a demonstration of your skills.

Employers will be impressed by enthusiasm, you cannot possibly know everything they will want you to know but if you demonstrate a keenness to learn that is a lot of the battle.

Like many things in life getting a job follows the 7 P rule (Prior Preparation and Planning Prevents Piss Poor Performance)

Once you have the interview it is always a good idea to ring and thank them for the interview, confirms your interest in the job, allows clarification of things unsure about and gives you a chance to expand on things you forgot to say at the interview.

A good general rule in life and particularly with job interviews is to avoid discussion on sex, religion and politics. If you do not know your audience discussion on these topics can be disastrous.

Sometimes people will say something controversial to see how you react.

For further information refer to *Job interviews* on ohschange.com.au

**The resume**

**Major tip**

Recruitment & selection uses “**Past behaviour predicts future behaviour**” The idea is to give plenty of examples of where in the past you have **successfully done the sort of things that you will be required to do in the new job**. Say what you did, how you did it and what the results were.

***Very important***

When you see a job advertised analyse the ad to identify the required competencies and write down a dot point list. In your response talk about your experience with those competencies, preferably with concrete examples. Even if not specifically asked for, always include something on your communications and interpersonal skills and your ability to work in a team.

**Writing a resume**

The first thing you have to do is identify your skills relevant to the type of employment you desire.

* Give specific numbers and figures for your achievements. Show results.
* Insert your personal details and contact information.
* Put in your career objective, do not be too specific or you will limit your chances of getting the job that does not fit the bill exactly.
* If you think it is appropriate put in an overview of your employment highlighting your major strengths and major achievements.
* Briefly list the jobs you have had.
* List your qualifications / affiliations.
* List your skills-These may be technical skills relevant to the sort of jobs you want to apply for, written communications skills, oral communications skills, computer skills, leadership skills, put a lot of work into describing your interpersonal skills as employers see this as very important.
* List all the jobs you have had in the last 10 years describing in some detail what you did and very importantly what your achievements were.
* Carefully analyse the requirements of any position you apply for and tailor your resume to this.
* As a general rule I would keep the resume to 3 or 4 pages for people who have been in the workforce for a number of years, do not make the job of reading it too hard for the potential employer.
* Very important-Get someone to proof read what you have written.

The good books say you must tailor your resume to each job you apply for. Good job ads will specify what qualities the employer is looking for in applicants, in other words the selection criteria. With detailed selection criteria you should prepare a covering letter or response to selection criteria and say, with examples from your past work, how you meet the criteria. In these circumstances you may be able to get by with a generalised resume (still pays to go through the resume and make sure it meets the general criteria)

For further information see *Resumes* on ohschange.com.au

## Conclusion

The above represents some of my learning with safety and safety aligned methods. I hope there has been some learning in it for you.

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George Robotham, Safety-Cert. IV T.A.E. Dip. Training & Assessment Systems, Diploma in Frontline Management, Bachelor of Education (Adult & Workplace Education), (Queensland University of Technology), Graduate Certificate in Management of Organisational Change, (Charles Sturt University), Graduate Diploma of Occupational Hazard Management), (Ballarat University), Accredited Workplace Health & Safety Officer (Queensland),Justice of the Peace (Queensland), Australian Defence Medal, Brisbane, Australia, [fgrobotham@gmail.com,](mailto:fgrobotham@gmail.com,) www.ohschange.com.au,07-38021516, 0421860574