

SAFETY PROCEEDINGS 2010 CONFERENCE CONTENTS

24 - 26 August 2010 Perth Convention Exhibition Centre

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DAY THREE THURSDAY 26 AUGUST

FUTURE SAFETY







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THE GAP BETWEEN PROFESSIONAL COMPETENCIES OF OCCUPATIONAL SAFETY AND HEALTH REPRESENTATIVES IN CHINA AND WESTERN AUSTRALIA

Consider the role and education of OSH Representatives in China in comparison with those in Western Australian. Gain insight into the link between WorkSafe Western Australia and China and how this link can benefit OSH representatives and their effectiveness in China.



The Gap between Professional Competencies of Occupational Safety and Health Representatives in China and Western Australia.

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Abstract

This paper examines the role and education of Occupational Safety and Health Representatives in China in comparison with those in Western Australian. It reports on the link between WorkSafe Western Australia and China and how this link can benefit occupational safety and health representatives and their effectiveness in China.

1. Introduction

In Australia, workplace occupational safety and health is usually managed at 3 levels (fig 1). Level 1 is the workplace managers who are responsible for providing the workplace environment, organisational vision, mission, goals, work policies, work procedures, the finances and employee time for developing a healthy, safe and decent workplace. Level 2 is the Safety Professional. This person has the responsibility for having an up to date technical knowledge on occupational safety and health relevant to the industry, communicating this knowledge and providing relevant occupational safety and health advice to people in the workplace. The third level is the OSH Representative. They work in the front-line of the workplace and are responsible for workplace inspections, reporting any hazards existing in their workplace investigation workplace accidents and working with the Occupational Safety and Health Committee members to improve workplace occupational safety and health.

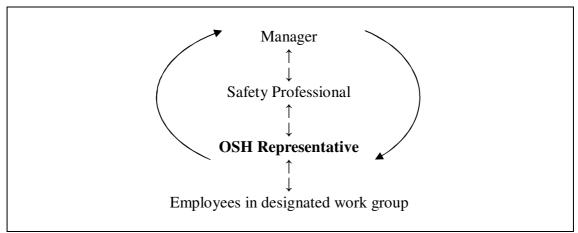


Figure 1. Occupational safety and health communication.

In China the workplace has two types of industries; production and service. In production industries, such as mining and chemical industries there are usually 3 levels of occupational safety and health management. In service provider industries such as government agencies, schools, hospitals, shops etc there is often a lack of

OSH representatives, instead, security guards and department of maintenance employees usually under take the responsibility for safety in the workplace.

The OSH Representatives in China is called Safety Member (An Quan Yuan). Safety Representatives in China represent the employees in their work group on occupational safety and health concerns and opportunities for improving occupational safety and health at their workplace. There is no legally required education to develop specific competencies for these Safety Representatives. In China, Safety Professionals are called Safety Engineers. Safety Engineers are usually the employees who work in the safety management and supervision department of the company. There is not a clear definition in law of the detailed role of the Safety Engineers in China. Some enterprises which have excellent safety performance safety responsibilities documented for set employment positions. Duties include supervising and checking the performance of the safety technology plan in order to comply with government or industry rules, identifying safety hazard at the workplace, collecting and analysing accident data, understanding and implementing safety requirements for the production process, conducting research on safety problems to be solved; organising and providing safety training for employees; establishing administrative systems for safety management and so on. Safety Engineers usually require a Bachelor Degree in Safety Engineering.

Western Australia (WA) has a similar system in place to assist with developing healthy, safe and decent workplaces. In Western Australia the employees who represent all of the employees in their designated work group regarding occupational safety and health matters are called Occupational Safety and Health (OSH) Representatives. As well as having all of the duties prescribed for OSH Representatives, and the employers' duties to their OSH Representatives, the education of OSH Representatives is prescribed in law in the Occupational Safety & Health Regulations 1996 of Western Australia. In larger workplaces OSH Representatives work with Safety Professionals in Australia, while in China Safety Representatives work with Safety Engineers. In Australian law, in contrast to the clearly legislative definition of what an OSH Representative is, the duties of, and education required for an OSH Representatives, there is no definition, specific duties or educational requirements defined for a Safety Professional.

2. The role of Safety Representatives in China and competencies required

In China, the role of Safety Representatives mainly includes the supervision and inspection on the implementation of safety measures; the rectification towards to all possible unsafe factors; statistical analysis on the accidents and putting forward the suggestions about improving safety management. They are assistants in safety training for employees and must understand the production process at all times. There are not detailed requirement about the competencies or education required for Occupational Safety Representatives in China. The occupational safety education that they receive is the same as is provided for all employees under the Production and Business Operation Entity Safety Training Regulation.

3. The role of Occupational Safety and Health Representatives in Western Australia and competencies required

Under the OSH Act 1984 of WA Safety & Health Representative means a Safety & Health Representative elected under Part IV Division 1. Under Section 31 (1) (a) an employee who works at the workplace who is elected by fellow workers to represent

them on occupational safety & health matters related to their work is called and Occupational Safety and Health Representative. As Table 1 shows the duties of OSH Representatives in WA are clearly defined in legislation.

Table 1. Duties of Occupational Safety and Health Representatives.

Section of OSH Act 1984 WA	Duties	
S 33 (1) (a)	To conduct a workplace inspection up to every 30 days.	
(b)	Immediately, in the event of an accident, a dangerous occurrence,	
	or risk of imminent and serious injury to, or imminent and serious	
	harm to the health of, any person, to carry out appropriate	
	investigation in respect of the matter.	
(c)	Keep up to date with OSH information supplied by the employer in	
	accordance with the Act & liaise as necessary with the Department	
	& other government & private bodies.	
(d)	Report to the employer any hazard or potential hazard to which any	
	person is, or might be, exposed at the workplace that comes to his	
	or her notice.	
(e)	Where there is a safety and health committee for the workplace, to	
	refer to it any matters that he or she thinks should be considered by	
	the committee.	
(f)	To consult and cooperate with his or her employer on all matters	
	relating to the safety or health of persons in the workplace.	
(g)	Liaise with the employees regarding matters concerning the safety	
	or health of persons in the workplace	
33 (2)	An OSH Representative for a workplace has such powers as are	
	necessary for the carrying out of the safety and health	
	representative's functions and when requested to do so by an	
	inspector, may accompany an inspector while the inspector is	
	carrying out, at the workplace, any of the inspector's functions	
	under this Act.	
24 (1)	Where an issue relating to OSH arises at a workplace the employer,	
	in accordance with relevant procedures, attempt to resolve the issue	
	with the OSH Representative, the safety & health committee or the	
71 A C (1)	employees, whichever is specified in the relevant procedure.	
51AC (1)	A Qualified Representative can issue their employer with an	
	Improvement Notice if their employer is not meeting the	
	requirements of the OSH Act 1984 of WA and the OSH	
	Representative has undertaken consultation with the employer	
	about the matters or activity to which the Improvement Notice will relate. The employer then has to comply with the Improvement	
	Notice recommendations within the time specified by the OSH	
	Representative. This Improvement Notice is displayed in the	
	workplace until the employer has made the recommended safety	
	improvement.	
	improvement.	

In section 33(3) of the OSH Act 1984 of WA a safety and health representative incurs no civil liability arising from his or her performance of, or his or her failure to perform, any function of a safety and health representative under this Act.

4. Government required occupational safety education in China

From the 1st of March, 2006, under the Production and Business Operation Entity Safety Training Regulation in China all employees, including Safety Production Managers, Safety Representatives, Special Operation Staff and other Professionals are required to have occupational safety education. Each production company and business operation is responsible for organising and providing their own occupational safety training to cover hazard identification, risk assessment and risk control for their work processes and workplace. Without passing their company's safety training program employees are not allowed to perform any work at or for the company.

The Production and Business Operation Entity Safety Training Regulation is enforced by the State Administration of Work Safety (SAWS). This government agency provides business enterprises with a guide for National Occupational Safety Training requirements. It is a requirement of SAWS that all workplace Managers and Safety Professionals must be trained in occupational safety to ensure that they have the knowledge and capacity to manage occupational safety for their enterprise.

In China, under the National Production Safety Guidelines, Policies, Safety Laws, Regulations, Rules and Standards the basic knowledge required to be included in the training program for production safety for Safety Professionals are required to undertake occupational safety education that includes the following:

- National production safety guidelines, policies, relevant safety laws, regulations, rules and standards.
- Knowledge in Safety production management, safety production technology for their industry and occupational health.
- Recording incident and death reports and statistics and investigation.
- Management of occupational hazards.
- Writing and establishment of emergency preparation plans.
- Emergency management.
- Correct disposal of waste products.
- Advanced safety production management experience in China and overseas. Typical accident and emergency rescue case study analysis (SAWS, 2006).

Pre-employment occupational safety education for all **employees** who wish to work in a factory or a mine includes the following.

- Safety production situations and a basic knowledge of production safety for their workplace.
- Rules and regulations concerning production safety and labour discipline at their workplace.
- Employees' rights and obligations for safe production.
- Incident case studies (SAWS, 2006).

For employees who wish to work in a dangerous industry (the coal mining industry, all other mining industries, fire work production companies and chemical production companies) additional training in accident emergency rescue, accident emergency drill and preventive measures, etc. is required.

Additional training in divisional level should include:

- Work environment and risk factors
- Possible occupational injury, diseases and death related to the specific job
- Safety duty, operation skill and compulsory standards
- Emergency rescuer, self-rescue, emergency discharge and management
- Use and maintenance of safety facilities and PPE
- Safety production condition in the division and related regulation
- Measure for accident prevention and occupational hazards
- Case studies (SAWS, 2006).

Additional safety training at work area specific level should include:

- Station safety (workplace) operation rules.
- Between station job cooperation in safety and occupational hygiene.
- Case studies (SAWS, 2006).

Training time requirements.

The first occupational safety training course for managers, safety professionals and all employees is required to be not less than 32 hours. Subsequent annual occupational safety training must be 12 or more hours a year. A Certificate is provided when the attendees pass their Occupational Safety knowledge exam that is given at the end of each occupational safety course.

For dangerous industries that include the coal mining industry, all other mining industries, fire work production companies and chemical production companies all new employees must have at least 72 hours of occupational safety training with annual refresher training each year of at least 20 hours. All of this training must be in accordance with the educational requirements of SAWS (for all industries except mining) or the State Administration of Mine WorkSafe (for people who work in the mining industry in China). For the dangerous industries the occupational safety training provider must be accredited by SAWS. A Certificate is provided by the accredited Training Organisation when the attendees at their occupational safety course pass their Occupational Safety knowledge exam for their industry. (SAWS, 2006)

5. Legally required education for Occupational Safety and Health Representatives in Western Australia.

The legally required education for Occupational Safety and health Representatives is a five day course of 40 hours duration. Under duties in section 51AC(1) of the OSH Act 1984 of WA refers to "Qualified Representative". A Qualified Representative is an OSH Representative who has attended the legally required (OSH Regulations 1996 WA s 2.2) Introductory OSH Representatives' course. The 5 day Introductory OSH Representatives course for Western Australian OSH Representatives to achieve the status of a Qualified Representative includes the following training.

Table 2. WA OSH Representatives Competencies Development.

Day	WA education topics	Competencies developed
1	Legal requirements.	Knowledge of legal
	Role of the OSH Representative.	requirements for OSH.
	General duties.	Knowledge of the duties of OSH
	Consultative mechanisms.	Representatives and how to
	WorkSafe WA's role.	perform these duties.
	Inspectors' role.	
	Penalties.	
2	OSH Regulations.	Knowledge of legal
	Australian Standards.	requirements for OSH.
	Codes of Practice.	Knowledge of where to obtain
	Guidance Notes.	OSH information from.
	Material Safety Data Sheets.	Skill in accident & incident
	Sources of OSH information.	investigation & prevention.
	Representatives' role in accident/ incident	Skill in hazard identification,
	investigation & accident prevention.	risk assessment & risk control.
	Hazard identification, risk assessment, risk	
	control.	
3	Hazard identification, risk assessment, risk	Skill in hazard identification,
	control for specific hazards.	risk assessment and risk control.
	Injury measurements.	TISK assessment and TISK control.
	Lead & lag OSH indicators.	
	Designing a workplace hazard	
	identification & risk assessment tool.	
	Conducting a workplace OSH inspection.	
4	Workplace visit to conduct hazard	Skill in hazard identification,
T	identification and risk assessment	risk assessment and risk control.
	inspection.	Skill in writing an OSH
	Conducting a job safety analysis.	inspection report.
	Writing safe work procedures.	Skill in writing safe work
	Writing an OSH inspection report.	procedures.
	Role of unions and management in OSH.	Knowledge of management and
	Trois of unions and management in opti-	unions' role in OSH.
5	Role play exercise in communication &	Effective communication skills
	negotiating OSH issues.	Negotiation skills.
	Resolution of issues.	Team work skills.
	Strategies for successful OSH committee	Meeting participation skills.
	meetings.	

The Western Australian OSH Representatives are given a test before their training and after to evaluate how effective the 5 day course was in developing the desired competencies of knowledge of the legal requirements for occupational safety and health in their workplace, knowledge of their duties, how to perform these duties and knowledge of where to obtain occupational safety and health information from. The competence skills evaluated are:

- Accident and incident investigation and prevention.
- Hazard identification.
- Risk assessment.

- Risk control.
- Writing safe work procedures.
- Writing an occupational safety and health inspection report.
- Effective communication.
- Negotiation.
- Working as an effective team member.
- Meeting participation skills.

It can be seen that the 5 day OSH Representatives course conducted to educate OSH Representatives in Western Australia provides the competencies for these Representative to do their work effectively and to meet legal requirements. On the WorkSafe Western Australia web site (WorkSafe Western Australia, 2010) there is a list of 20 organisations that are accredited to provide this 5 day OSH Representatives training course. Of these organisations 16 are private enterprise, 3 are Technical and Further Education (TAFE) organisations and 1 is a university. There are no Trade Unions or Government Organisations accredited to provide this course.

6. Links between WorkSafe Western Australia and Zhejiang Province in China

For the last 13 years there has been a Sister working relationship between the Zhejiang Province in China and Western Australia. This relationship has been driven in part by the strong commercial interests that industries in the Zhejiang Province in China have in purchasing iron ore from Western Australia, shipping this ore to the Zhejiang Province port called Nimbo, this iron ore being refined in Zhejiang Province steel mills and then used in many industries throughout the Province.

In 1996 Members of the Bureau of WorkSafe Supervision and Administration Government of Zhejiang Province P.R. China visited Edith Cowan University in Western Australia as they were interested in Australian occupational safety and health education. Professor Rod Underwood, the Dean of the School of Health Science at this university, gave a Scholarship to the Bureau of WorkSafe Supervision and Administration Government of Zhejiang Province P.R. China. The Head of this Bureau, Madam Xu Lin, presented this scholarship for the Graduate Certificate in Occupational Safety and Health to Xingang Zhao who was an Inspector at the Bureau of WorkSafe Supervision and Administration. As part of his practical work in this course Xingang spent 2 weeks working at WorkSafe Western Australia under the guidance of WorkSafe Inspectors. Xingang gained much knowledge about occupational safety and health and the activities of WorkSafe Western Australia Inspectors that he took back to China. Since this time employees and Department Heads of the Bureau of WorkSafe Supervision and Administration Government of Zhejiang Province P.R. China and WorkSafe Western Australia have visited each other's country, shared ideas to improve occupational safety and health and to learnt best practice ideas from each other.

China, particularly Zhejiang Province, has looked at the Western Australian legal occupational safety and health requirements, especially the way that legislation for occupational safety and health representatives is drafted. Regularly, at least annually, a group of usually 12 representatives or occupational safety inspectors from China have attended occupational safety and health training and management programs in Western Australia that have been conducted by WorkSafe Western Australia.

Representatives from China have been very impressed with the competency based training that WorkSafe Western Australia provide their Inspectors with and have requested to have a similar format of training for their Occupational Safety Inspectors. The Inspectors' training consists of 3 months education on the legal framework and specific hazards for their area of work. For example, if the trainee was going to work as a Construction Safety Inspector this person would learn about preventing falls from heights and other construction related risks of hazards causing harm. This trainee then works with a Peer Mentor for the next 12 months, or works with a Peer Mentor until they are deemed competent. From their visit to WorkSafe Western Australia representatives from China have taken home with them to implement Codes of Conduct, Ethics and details of Professional Standards for Occupational Safety Inspectors.

Representatives from China have been particularly interested on the WorkSafe Western Australian presentations on Safety Education, Policy and visits to Western Australian workplaces to learn about "best occupational safety management practices". When Inspectors from China visit Western Australia WorkSafe Western Australian Inspectors take the Inspectors from China to Western Australian work sites to demonstrate how safety inspections are conducted by WorkSafe Western Australia Inspectors.

There have been visits by Heads of Occupational Safety and Health Government organisations in Zhejiang to Western Australia and reciprocal visits by Heads of Occupational Safety and Health Government organisations from Western Australia to Zhejiang to share ideas and problems related occupational safety and health practices and government concerns. While in China the Australian Representatives usually present papers on occupational safety and health at conferences and seminars to let interested people in China know how occupational safety and health is managed and enforced by Australian government regulators.

The Chinese have learnt about the WorkSafe Western Australia Small Business occupational safety and health support program, the primary school children's occupational safety and health educational program and the high school students' occupational safety and health education and competency assessment program and are implementing these ideas and programs in China.

A Memorandum of Understanding has been signed between WorkSafe Western Australia and the Bureau of WorkSafe Supervision and Administration Government of Zhejiang Province P.R. China for representatives to undertake training and educational opportunities through WorkSafe Western Australia. This includes providing training opportunities for Occupational Safety and Health Representatives in China.

7. The benefits to have OSH representatives in workplace

One of the very good ideas that Xingang Zhao took back to China from Western Australia was to have Occupational Safety and Health Representatives as in most industries in China the employees actually doing the work had no input into occupational safety and health practices at their workplace. The Zhejiang Province in China was the first Province to introduce Occupational Safety Representative and to provide employees in the workplace with the opportunities to suggest improvements in occupational safety and health.

The benefits of having OSH Representatives are that the Representatives know what actually happens in the workplace in relation to work processes and employees' actions. They have daily experience working in their designated workplace that management and safety professionals do not have. OSH Representatives in Western Australia are elected by their peers in their designated work group so usually have peer support in their workplace. Safety Representatives in China usually are appointed by the Manager of the workplace and are mainly active in industries with either chemical or physical hazards exposure. Although some universities and government agents have Safety Members working in key areas such as laboratories, some institutes only have security guards instead of Safety Representatives. There is a need to develop a national level regulation and system for every workplace in China to have first-line Safety Production Representatives and set up competencies requirement for them.

Having work performed safely can improve the profits for the company and the safety and health of employees. Having good occupational safety and health practices promoted by OSH Representatives in the workplace can identify better, safer, healthier ways of performing work that, when shared with industry partners can improve the work processes and profitability for the whole industry.

8. Conclusions

As a developing country, China is experiencing rapid economic development, transformation and modernisation. Developing sound workplace health and safety system at every workplace in China and having clear legal requirements for the competencies for OSH Representatives in China will ensure healthier and safer work environments for every employee and that is the foundation for efficient productivity and profitability of the workplace as well as protecting the most valuable resources, which are the company employees.

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