Minerals Industry Safety and Health Centre
The University of Queensland

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Communication and Training for Informal Risk Assessment

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(MISHC)

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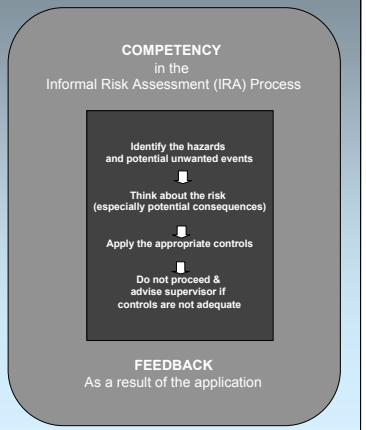
What is informal risk assessment?

- Individuals
- Mental/informal
- On the job



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Informal risk assessments (IRA)

- Why use IRA process?
  - ✓To make good decisions about working safely

- **Changed conditions**
  - Equipment
  - Work environment
  - People
  - Procedures
- **Hazards**
  - Introduced
  - Changed
- **Location of people**
  - Involved in the task
  - Others

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Quality of informal risk assessments (IRA)

- Design of IRA process
- Effective training & leadership
- What can go wrong & how to manage the risks
- Availability of current and timely safety information

Quality of IRA (cont)

- Safety culture
- Lessons learned
- Knowledge management system

Site communication

- Communication profile
- Differences in communication preferences
- Potential barriers posed by mining environment
- Feedback process

Communication profile - personal

	SUG	NSUG	SOC	NSOC
Predominant age group	35-44	25-34	35-44 & 45-54	45-54
Experience	> 5 YRS	>2 <5 YRS	> 5YRS	> 5YRS
Language barriers	7%	1%	0%	1%
Physical barriers (hearing/ sight)	15%	7%	4%	16%
Literacy problems	11%	8%	2%	13%

SOC = Supervisors at Open cut/surface operations
SUG = Supervisors at Underground operations
NSOC = Non-Supervisors at Open cut/surface operations
NSUG = Non-Supervisors at Underground operations

Communication profile - work changes

	SUG	NSUG	SOC	NSOC
Predominant work area	Production (74%)	Production (44%)	Production (30%) Maintenance (30%)	Production (62%)
Changes in work location each shift?	√	√ =ρ	ρ	√
Same group of people each shift?	√	√	√	√
Same tasks each shift?	√	√	√ =ρ	ρ
Same equipment each shift?	√	√	√	ρ

SOC = Supervisors at Open cut/surface operations
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Communication profile - electronic communication skills

	SUG	NSUG	SOC	NSOC
Email skills	√	√	√	ρ
Basic MS Word skills	√	√	√	ρ
Access to email at work	√	ρ	√	ρ

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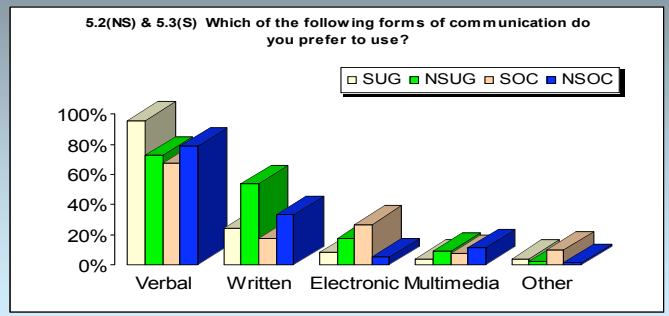
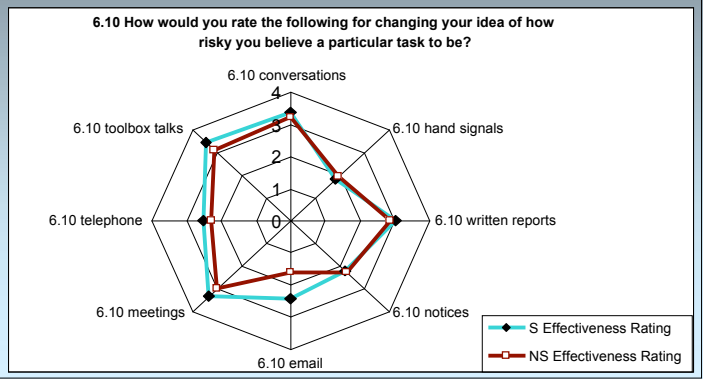
Communication preferences



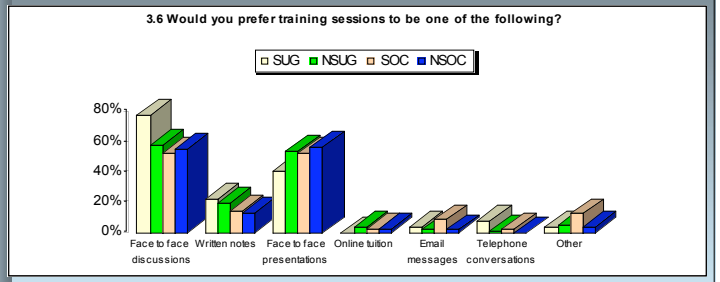
Effectiveness of mechanisms

- Conversations/discussions ***** (NS)
- Meetings/toolbox talks ***** (S)
- Written reports **** (NSUG)
- Muster room notices *
- Email * (NS) ** (S)
- Hand signals, 2-way radio

Effectiveness of mechanisms

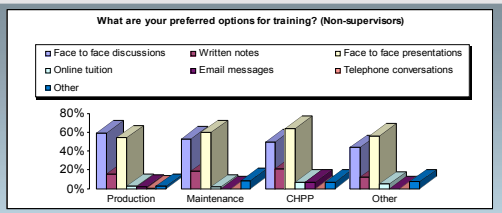


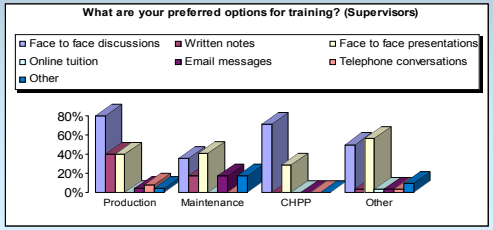
Training preferences



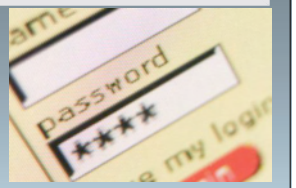
SOC Supervisors at Open cut/surface operations
SUG Supervisors at Underground operations
NSOC Non-Supervisors at Open cut/surface operations
NSUG Non-Supervisors at Underground operations

Training preferences by work area





Communication Barriers

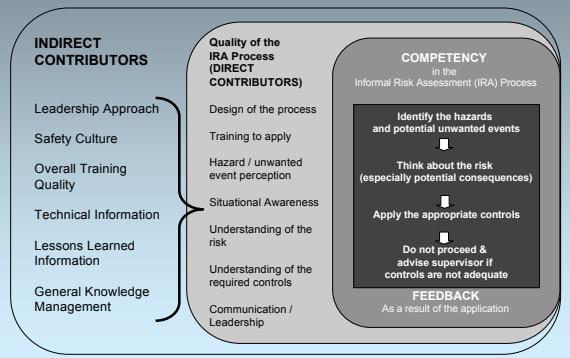


- Complex task loads
- Hot seat changeovers
- 2-way radio black spots
- Limited access to electronic information
- Physical barriers (noise, reduced visibility)
- Work team communication styles
- Communication interfaces
- Selective terminology or jargon

Feedback issues

- Translation of verbal to electronic
- Dissemination of feedback outcomes
- Communication flowchart
- Design of knowledge management system

Communication strategies



Safety culture

- Long term process
- Reinforcement of positive attitudes to safety & use of IRA
- Capture of lessons for others on site to share

- Effect of many new starters
- Early adoption of site safety culture

Lessons Learned

- Experience to support training
  - Incident reports
  - Mentor support
- Relevance to site personnel
  - Toolbox talks, “Comms” meetings, written reports
  - Site personnel involved in incidents or near hits

Leadership

- Roles
  - Frontline supervisors
  - Mentors
  - Champions
- Responsibilities
  - Feedback
  - Dissemination of information
  - Reminders of what can go wrong and why
  - Support for IRA process

Training

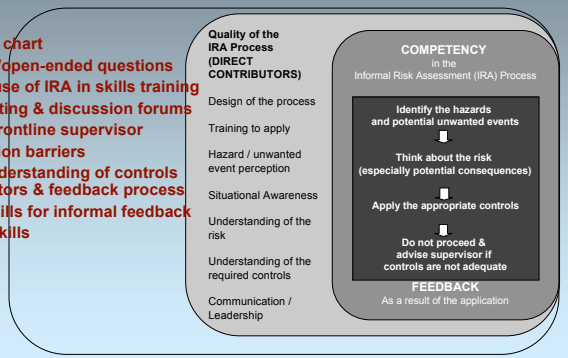
- Hazards, tasks, IRA process
- Design of IRA process
  - Prompts
  - Guide words/questions
  - Incorporated into skills training
- Leadership roles
  - Feedback
  - Reinforce hazard ID
- Training materials/approaches

Knowledge Management

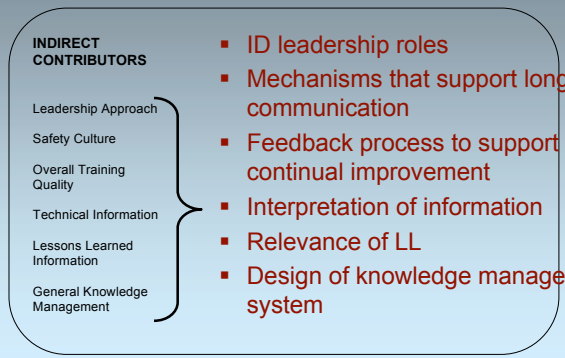
- System design
  - Storage
  - Dissemination
- Training for use
  - Access
  - Document control, intranet

Communication strategies

- Process flow chart
- Guide words/open-ended questions
- Incorporate use of IRA in skills training
- Hazard reporting & discussion forums
- Support for frontline supervisor
- Communication barriers
- Reinforce understanding of controls through mentors & feedback process
- Process & skills for informal feedback
- Leadership skills

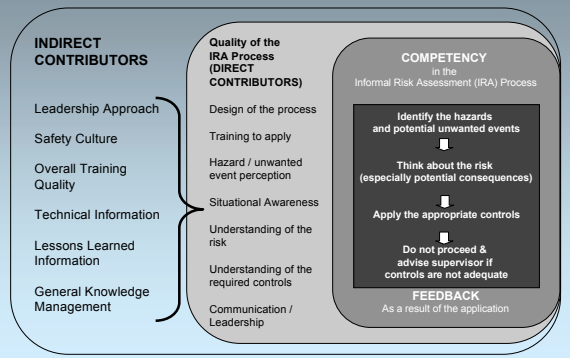


Communication strategies



- ID leadership roles
- Mechanisms that support long term communication
- Feedback process to support continual improvement
- Interpretation of information
- Relevance of LL
- Design of knowledge management system

Communication strategies



Consider

- Communication profile
- Differences in communication preferences
- Potential barriers posed by mining environment
- Feedback process

Thank you

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