**Learning How to Facilitate Learning**

**By George Robotham**

Facilitating learning has been an important part of my professional life, something I have enjoyed a lot, something I have learnt from and something I have worked hard to develop expertise in. This e book critically reflects on my experience facilitating learning and attempts to share lessons I have learnt from my experiences.

I have found facilitating learning has been a very effective way of driving significant OHS change.

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.

Table of Contents

Aim1

**Job 1 - Australian Army2**

**Job 2 - National Safety Council of Australia3**

**Job 3 - Utah Blackwater Mine3**

**Job 4 - Utah Norwich Park Mine3**

**Job 5 - Safety Training Role4**

**Job 6 - Utah Brisbane Office4**

# Adult Learning Principles and Process – Back to Basics 9

Abstract9

Androgogy10

Conclusion24

References25

**Learning programs**

# Evaluation of Learning27

**20 Sure-Fire Ways to Stuff-up a Learning Program28**

Jobs 7,8 & 929

**Supervisor Safety Learning Program29**

Development of an Effective Learning Program30

**Learning needs analysis30**

**Supervisor Skills Development32**

**Lessons from Above33**

**Aim**

My aim with this e book is for others facilitating learning to learn from my mistakes and my learning and experiences.

Learning versus Training

Modern practice is to refer to the processes by which learning is facilitated as learning not training. There are many explanations for this but one that has struck a chord for me is “Training is what others do to us, learning is what we do to ourselves”

The following reflects on some jobs I have had and what I have learnt about facilitating learning.

**Job 1 - Australian Army**

I had my 18th birthday at 1 Recruitment Battalion, Kapooka, Australian Regular Army, a bastard of a place to have a birthday. It amuses me to see people with stars in their eyes talking about competency based training as if it is a new concept; the Australian Army was into competency based training many years ago. Learning at Kapooka was disciplined, instructors were highly motivated and trained and worked hard. Skills were practiced until they became second nature. My belief is that I left Kapooka a skilled and switched on soldier.

Later in my time in the Army I attended instructional techniques courses. We had to prepare lesson plans of a set format for frequent instructional practice. I seem to remember the formula for skills sessions was Explain, Demonstrate, Practice, and Practice until perfect. Learning was very much based on identified needs, practical, applied and hands on.

**Job 2 - National Safety Council of Australia**

My first safety related job was in1973 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. 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 learning. It also emphasised the importance of interactive techniques such as role play, cases studies, practical exercises, group discussions etc. A little bit of humour and instructors with interpersonal skills adaptable to their audience helped.

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.

**Job 3 - Utah Blackwater Mine**

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 induction training, fire / rescue squad training and tool box meeting training. We had a day long safety induction program that contained a lot of talking but not much doing for the participants, their attention often drifted off. I also came to the realisation that people have many things on their mind when they first start in a job and it is not easy to keep them focused on intensive learning. I would say the way to approach induction learning is to give them the essential must knows initially and get them back for more extensive learning a week or 2 later.

Safety meetings often consisted of me showing what I considered a relevant 16 mm. movie, lots of people fell asleep. Fire / rescue squad training was very practical; the participants enjoyed it and learnt a lot through hands on application.

**Job 4 - Utah Norwich Park Mine**

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.

At Norwich Park I developed a comprehensive safety induction program lasting 2 days and put about 600 people through the training over about 2 years. 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)

My analysis of my training at Norwich Park is that I spent too much time on lecture style presentations and not enough on interactive activities.

The dragline Senior Foreman used to insist on me conducting safety meetings with the dragline operators at 6am when they were coming off night shift, keeping them awake was a real challenge!

The local Gas Examiner, Gordon Irwin used to run spectacular L.P.G. safety training that kept everyone on their toes. Russ Tyson, ex N.S.W. Police Rescue Service conducted challenging training for fire / rescue squad members. Hands on and practical and the blokes lapped it up.

Safety meetings were short, sharp affairs with me using overhead projector transparencies to get major points across. These seemed to stimulate considerable positive discussion.

I completed the Graduate Diploma in Occupational Hazard Management at Ballarat University. This was to prove to be a personal and professional turning point and was my first exposure to tertiary learning.

**Job 5 - Safety Training Role**

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

**Job 6 - Utah Brisbane Office**

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

The following outlines BHP Coal’s approach to supervisor and manager safety learning at that time.

|  |  |  |
| --- | --- | --- |
| **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
* Supervisors 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 (eg. audiometric testing, noise testing, dust testing and control, control of radiation hazards, RSI, back care )
* Supervisors 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 (eg. auditing, fault-tree analysis, Hazop, safety communications, job safety analysis)
* Analysis of the effectiveness of the sites current safety approach

In addition people involved in preparing safe working procedures attended 4 hours practical training on job safety analysis.

I was heavily involved in the facilitation of the above learning and quickly came to the realization that less talking by me and more activity by the participants was the way to go.

Towards the end of my time with BHP Coal they 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. Company X had 7 open-cut mines, 1 underground mine, 2 ports, 2 coal quality laboratories and 5 town offices, with a workforce of approximately 5,500.

The following are the steps that were taken as best I can remember it.

1. A Learning Manager was appointed with a reputation for challenging the status quo and practical outcomes.
2. Existing learning programs were examined and costed, many millions were being spent and it became obvious much of this money was wasted.
3. An exhaustive learning needs analysis was carried out. One of the 7 open-cut mines was chosen for this and for about 6 months operated at half capacity due to an intense focus on learning needs analysis. This worked formed the basis for the introduction of competency-based learning in the Australian mining industry.
4. 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.
5. 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.
6. 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. In the safety area there were 10 modules that gained National recognition towards a certificate IV in Occupational Health & Safety. 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.
7. I completed some of the learning techniques modules and because a thorough approach was used in their development, was able to get exemptions from 2 of my subjects on the Bachelor of Education (Adult & Workplace Education) at Q.U.T.
8. 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.
9. A matrix of mandatory and recommended learning for all levels of employees was developed. For example at some locations completion of a certificate IV in Occupational Health & Safety was made mandatory for all supervisors and managers.
10. The performance appraisal process put a high emphasis on learning with the result that individual learning plans were developed for all employees.
11. The organisation truly became a “Learning organisation” and a high value was put on learning.
12. A communications plan was developed to communicate processes to employees. Various available media were used to communicate learning change.
13. Development of the learning materials involved many project teams and a philosophy that “When initiating change, People support what they create” was used.
14. Assessors of the self-paced learning modules completed learning and set about assessing learners
15. I was never privy to the cost of this work but I am told there were massive sayings because people were not traipsing off to classroom sessions of dubious quality all over the countryside and the learning was really targeted to needs. 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 company X Learning Manager went on to develop a very successful International Learning consultancy business based on the company X approach. An indicator of his success that he pointed to was gaining the contract to develop the complete learning system for Company Y, an American company with 350,000 employees.

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

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. The important role of critical reflection in adult learning was explained. The importance of learning by doing, avoiding lecture style presentations and making training highly interactive was evident.

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. 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.

I used to come home after night lectures so revved up I could not get to sleep, the efforts of Brain Delahaye and Merv. Wilkinson were truly inspirational.

At the end of the course I poured through my notes and attempted to summarise what I had learnt on the course, the paper which follows with some recent additions is that summary. I sent the paper into the course coordinator who commented that in his 20 years in education this was the first time a student submitted a paper without being asked.

# ADULT LEARNING PRINCIPLES AND PROCESS - BACK TO BASICS

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**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.*

**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.

**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:

1. Is this information valid when I compare it with experiences I've had in the past?
2. 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:

1. 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.
2. 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, the need for self-esteem or social affiliation with others, and expectations from l

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.

* 1. Experience is the foundation and stimulus for learning.
  2. Learners actively construct their experience.
  3. Learning is a holistic experience.
  4. Learning is socially and culturally constructed.
  5. 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, and 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. 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 the 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 event. Learning does not have to be structured; often an informal chat with 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 the end of day go in pairs and discuss the learning’s from the day that are displayed on the charts around the w
* 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

1. Learn to know your students
2. Use the students experiences as class content
3. Where possible tie theory to practice
4. Provided a climate conducive to learning
5. Offer a variety of formats
6. Offer a variety of techniques
7. Provide students feedback on their progress
8. Help students acquire other resources
9. Be available to students for out-of-class contacts
10. **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)

1. A broad range and flexibility of behaviours-what can convincingly be done in the communication context.
2. A heightened sensitivity to, and awareness of, the effects of the trainer’s behaviours on the individual learner’s experience.
3. 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

### 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 are 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.



## REFERENCES

Apps, J., 1981, The adult learner on campus, Chicago, Follett

Billett, S. 1993, School of Adult and Vocational Education, Faculty of Education, Griffith University, Brisbane.

Billett, S. 1992, *BHP Australia Coal, a report of research into preferred modes of skill development for BHP Australia Coal's personnel and mine-sites*, School of Adult and Vocational Education, Griffith University, Brisbane.

Billett, S., 2001, Learning in the workplace-Strategies for effective practice, Allen & Unwin, N.S.W.

Boud, C., Cohen, R. & Walker, P. 1993, *Using Experience for Learning,* The Society for Research into Higher Education, Open University Press, Buckingham.

Burns, S, 1996, Artistry in Training, Woodslane Press, N.S.W.

Collins, A., Brown, J.S. & Newman, S.L, 1989, “Cognitive Apprenticeship - Teaching the crafts of reading, writing and mathematics" in Resnick, L, B, (Editor), *Knowledge Learning and Instruction : Essays in Honour of Robert Glaser*, Erlbeam & Associates, New York.

Excellence in Training, a course by Qld. Education Department for Utah Development Company, Brisbane, 1990

Glaser, R 1984, "Education and Thinking - The Role of Knowledge” American *Psychologist*, 9(2), 93 - 104.

Glaser, R. and Bassok, M. 1989, "Learning Theory and the Study of Instruction", *Annual Review of Psychology* 40, 631-6.

Gott, S.P. "Apprenticeship Instruction for Real World Tasks: the co-ordination of procedures mental models and strategies" in Rallboph, E. F. (Editor), 1989 *Review of Research in Education*, American Educational Research Association, Washington DC.

Hiemstra, R., Sisco, B., Individualising Instruction, Josey-Bass, Oxford

Johnson, D. W. 1990, *Reaching Out*, Prentice Hall, New Jersey.

Kelly, L., 2003, Maximise your training impact, Mindworks Australia, Samford, Qld.

Kolb, D. and Fry, R 1975, *Towards an Applied Theory of Experimental Learning*

Lawler, P.A. 1991, “The Keys to Adult Learning Theory and Practical Strategies", *Research for Better Schools (RBS*) Philadelphia, PA: p.61-63.

Malouf, D., 1992, How to create and deliver dynamic presentations, Simon & Schuster, Australia

Mezirow, J. 1981, "A Critical Theory of Adult Learning and Education", *Adult Education*, 32(1), 3-24.

Marsick, V. J. "Action Learning and Reflection in the Workplace", Mezirow J et al (1991) *Fostering Critical Reflection in Adulthood*, Josey-Bass, Oxford.

Minton, D., Teaching skills in further and adult education, City & Guilds, Macmillan, London

Raiser, S. A. 1991, *Learning and Work - The Research Base* O.E.C.D

Smith B.J. & Delahaye B.L (1983) “*How to Be an Effective Trainer*”, 2 ND edition, Wiley Professional Development Programs

The National Staff Development Committee, 1995, *An Introduction to Action Learning*, Melbourne.

# Evaluation of Learning

According to Kirkpatrick (1967) training evaluations can take on four forms which are reviewed as a series of steps or levels

1. Reaction
2. Knowledge gained or skills acquired
3. Behaviour change
4. Results

Reaction

Typically when seeking reaction to a training session participants are asked to complete a "course-review form" at the conclusion of each session of the course. Typical questions to complete may include:

* What was the most useful session on the course?
* What was the least useful session on the course?
* Was the venue appropriate?
* How could the course be improved?

These questions seek out reaction to the course but do not measure learning or effectiveness; somewhat cynically some experienced trainers refer to these courses review forms as "happiness sheets"

Knowledge gained or skills acquired

With this method of evaluation questions are asked to test the transfer of knowledge to the course participant eg.

* Describe the 4 methods of X
* Explain how to Z
* Give me the formula for W

Alternately skills may be tested eg.

* Show me how to tie a bowline
* Demonstrate how to change the grinding wheel on that angle grinder

Behaviour Change

Behaviour change is very important to measure but measuring it can prove difficult. Asking the course participant how his / her behaviour has changed after they have had sufficient time to put the course learning’s into practice can be a valuable approach. Interviewing supervisors and peers about the participants change in behaviour since the training can also be worthwhile.

Results

Measuring the results of training in economic terms can be very difficult. Return on investment for training is what managers are seeking. Establishing control groups who have not been trained and comparing their performance with experimental groups who have been trained is the desired approach.

Common practice in industry is to measure the reaction but this can have little relationship to the degree of actual learning. The effect of training is greatly affected by other workplace factors both in the training and post training environment.

**20 Sure-Fire Ways to Stuff-up a Learning Program**

“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 design, facilitation and evaluation of effective learning programs are very complex. There is much more to it than getting a bunch of people together and talking to them.

How to stuff-up a learning program-

* Do not develop learning objectives to guide design
* Do not use multiple sense learning
* Do not make sessions interactive
* Do not have supervisors reinforce the expectation lessons learnt are valued and will be put in practice .Do not have a plan to put the lessons learn into practice, after training projects are a good idea.
* Do not follow up with learners
* Foster “Death by Power-Point”
* Do not use Action and Experiential learning models
* Do not foster critical reflection
* Do not allow learners to play with the concepts
* Do not use humour to reinforce your messages
* Put the focus on the facilitator instead of the learner
* Stuff the learner full of information
* Do not use the advantages of SAY & DO
* Be academic rather than practical
* Make learning hard work instead of fun
* Do not have consequences for inappropriate behaviours
* Do not treat learners with respect
* Do not give regular meaningful feedback
* Do not reward good performance
* Do not use Learning Needs Analysis to guide program design

**Job 7 - Main Roads department**

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. Safety learning was poorly developed.

I developed and piloted a risk assessment course with the latest methods. This was the first time I went through a formal process of piloting learning I had developed and it proved very worthwhile. When it got to the supervisors they rejected it because they preferred a superseded method they had been trained in previously. I was satisfied the learning was technically sound but I ran up against resistance to change.

**Job 8 - Ergon Energy**

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. The thing that became obvious to me was that some OHS people advising on OHS learning do not have robust knowledge on what makes for effective learning.

**Job 9 - OHS Change**

I started my own safety consultancy company in 2002 and have had good and bad experiences. I have developed, facilitated and evaluated a number of learning programs, ensuring high levels of interaction has been the key to success.

One program is probably worth mentioning.

**Supervisor Safety Learning Program**

I have been working on the development of a safety learning program for supervisors.

**Proposal**

After being approached about the project I submitted a proposal that had the following major steps-

1. George to gain an understanding of the current safety management system.
2. Conduct a learning needs analysis with a representative cross section of potential participants.
3. Develop a learning response to needs. I was conscious the supervisors are practical, hands on people and the learning program has to be applicable to the audience. I proposed using Action and Experiential learning models which means minimum of theory, lack of lecture style presentations, minimum of power points and maximum interaction. I recommended use of guided group discussions so the participants develop solutions to problems themselves.
4. Pilot the first learning program and modify as appropriate for subsequent programs.
5. Conduct subsequent learning programs-Duration as necessary.
6. It is essential to develop a follow up process for after the learning program, as a minimum the participant and his / her supervisor must develop a plan for implementation of the lessons from the learning program, completion of an individual or group project needs consideration.
7. Evaluate the effectiveness of the project and identify lessons to be learnt.

**Development of the learning program**

I spoke to about 70 supervisors to do learning needs analysis

As part of the learning needs analysis the supervisors identified a number of safety issues that were not being handled well, as well as issues they wanted to be trained in.

I drafted a recommended learning program focusing on the issues they said they wanted to be trained in.

I was not particularly happy with my initial recommendations and after thinking about it realised I was not focusing on the big picture and many of the things the supervisors said they wanted to be trained in could be handled routinely outside the context of supervisor learning.

The supervisors are very practical, hands on people and expressed dissatisfaction with a lot of the theoretical training they had received in the past.

When I started thinking about the big picture I realised the supervisors did not understand their safety responsibilities and safety leadership, most of the problems they bought up were about communications and interpersonal issues.

The Group Safety Manager is going to make up a spread sheet with the safety issues the supervisors identified and work out time frames for fixing them.

**Learning needs analysis**

I met with the supervisors in small groups and asked the following questions-

* What are the 3 main safety problems you face?
* Rate management safety leadership on a scale of 1-10
* What safety training do you currently get?
* What is good / bad about the safety training you currently get?
* If you were designing a supervisor safety training course what content would you put in it?

Safety issues identified by the supervisors

Some people are simply the wrong people for the job, physically / mentally-Toilet floors are slippery, strains / sprains (Common comment), hand tool (Very common comment), access to plant and equipment is a constant battle for maintenance people, Maintenance training and practices for lock out are much better organised than production, ergonomics of manual handling is poor, there is an over reliance on p.p.e., the repetitive nature of tasks makes people relax and that is when accidents occur, soft tissue injuries are a problem, R.S.I., burns, slips and falls, forklifts, slipping on ice, people are ignorant of the hazards of their work, climbing when things jam up, manual handling of product, becoming complacent, floors are slippery at some locations and forklifts are stuffed, often short staffed, language problems, unsure of isolation procedures in production, safety people are swamped by paperwork and are not in the workplace enough, bandsaws, managing repeat offenders, effective communications, fitness for work is an issue, a number of groups mentioned problems with a particular piece of equipment.

What learning supervisors thought was necessary

Supervisor responsibilities for safety, including corporate policy and statute law-They say they are unsure of exactly what is expected of them as a supervisor in safety and a few have concerns about being prosecuted.

The want some advice on how they cover their rear end generally and by recording safety issues in their diary.

Workers compensation and rehabilitation-They want to understand the workers compensation and rehabilitation claims process.

They want to know how to better manage the non-English speaker issues.

Use of hot water (Steriliser), forklift safety, lock out procedures (Apparently there is some uncertainty with production staff), use of p.p.e., first-aid and resuscitation, working at heights, emergency evacuation points, -These were all suggested as contents for the supervisor safety course, while these are important I see them as out of the scope of the supervisor safety course and should be covered by other means.

* How to think ahead and prevent accidents.
* Prevention of manual handling injuries.
* Effective communications.
* How to identify hazards.
* Identification of whether people are fit for work.
* Accident investigation.
* How to take ownership and responsibility for the workers.
* How to bridge the gap between supervisor and worker perception on safety.

Views were mixed on whether risk assessment should be included on the supervisor safety course, some saw this as a good idea, some saw it as unnecessary.

**Learning program**

**Supervisor Skills Development, Module 1, Supervisor Safety Responsibilities and Safety Leadership (4 hours)**

Safety responsibilities

How we got to where we are now with the skills development program, emphasis on practice not theory, group discussions, do not expect we have got it 100% right first time but will improve with your feedback, hard to get the timing right with group discussions, Group Safety Manager’s excel spread sheet of issues, George, 5 minutes

Company expectations of supervisors in safety, practical exercise, Company manager, 20 minutes

Statute safety responsibilities, extract from Act and historical lessons, George, 15 minutes

Common law responsibilities, brief discussion of theory, George, 20 minutes

Common law mock court. Half group make out the case for the injured party, other half make the case for the employer, George or company manager to be the judge, 60 minutes

Safety leadership

Safety leadership, brief discussion of theory, George, 20 minutes

Practical exercise-Discuss the characteristics of the best / worst leaders you have worked with, George, 30 minutes

Practical exercise-Discuss the handout on the top 10 things that are essential to safety leadership and how you can practically apply this in the workplace, George, 30 minutes

Practical exercise-Commence the development of your personal plan to improve your safety leadership, George, 30 minutes, Note-This is a task you will be expected to continue after the training and submit to management for approval.

Where to from here

Discuss relevant projects, Company manager, 10 minutes

Rationale for this module-Many of the safety issues you mentioned to me during the training needs analysis revolve around communications and interpersonal skills, George, 5 minutes

Communications (1.5 hours)

Practical exercise-Discuss in your groups what the term good communication means to you, George, 20 minutes

Practical exercise-Discuss in your groups the 5 biggest communication problems you have, George, 20 minutes

Practical exercise-Discuss in your groups the communications basic handout and consider how you can apply it in your workplace, George, 20 minutes

Practical exercise-Discuss in your groups the Improving Communications handout and how to improve communications in your workplace, George, 20 minutes

Interpersonal skills (1.5 hours)

Practical exercise-Discuss in your groups what the term good interpersonal skills means to you, George, 15 minutes

Practical exercise-Discuss in your groups the 5 biggest interpersonal problems you have, George, 15 minutes

Practical exercise-Discuss the Interpersonal Skills handout and how to improve interpersonal skills in your workplace, George, 15 minutes

Practical exercise-Discuss the handout 10 ways to improve your interpersonal skills, consider how you can apply this at work, George, 15 minutes

Practice the 3 interpersonal skills in pairs after they have been demonstrated, George plus an assistant to help demonstrate the skill. 30 minutes

Reflective Listening

Appropriate Self-Disclosure

The formula

“When you A, I feel B, because C, and I would like you to do D, because E”

Safety solutions practical exercise (60 minutes)

Suitable unsafe situation to be videoed and participants analyse it.

**Lessons from above**

Learning needs analysis is essential to develop targeted learning-This is not done well in industry generally, without detailed learning needs analysis people develop learning based on gut feel and it often does not meet the needs. You have to put in the hard yards to get it right.

Often things that initially look like they need a learning fix can be better managed by other means.

Practical, hands on people get incredibly pissed off by theoretical learning. You must use Action and Experiential learning models and make the learning as interactive as possible. This takes longer than lecture style presentations but is far more effective.

It is easy to get bogged down in the detail and not focus on the big picture.

Many problems that are perceived at safety problems have their roots in communications and interpersonal issues.

Leadership is the often forgotten key to excellence in many facets of life.

Having designed a learning program it is essential to pilot it to knock the rough edges off.

Group discussions where the learners reflect on issues in their groups and feedback their conclusions to the wider group are a powerful way of learning.

Giving learners projects to complete after the learning will reinforce the learning.

Comment

I have found the process of getting to where we are now quite interesting and challenging. The organisation put in a big effort getting the supervisors to speak with me and they are to be commended for that. No doubt further lessons will be learnt as we progress to implementation of the learning program.

Implementation

I conducted 5, nominal 4 hour duration module 1 programs with an attendance of about 60 personnel. The practical exercises, particularly the mock court went over well and they learnt a fair bit in the process. Due to some internal issues we did not conduct the session on management safety expectations; this will be done in module 2. Between this and my overestimating the time required for the practical exercises the module took a bit over 3 hours rather than 4.The comment was made the small bit of theory was interesting and not overpowering.

The mock court was extremely well received; people participated with enthusiasm, passion and imagination and learnt a lot in the process.

A lesson that was reinforced to me is that it is essential to know your audience and pitch the learning at the right level. I came to the realisation that the learning was pitched at too high a level for some learners and I was expecting too sophisticated a response. Appropriate adjustments will be made for the second module.

Conclusions

I have been facilitating learning for many years and realise I have made many mistakes in that time. The lessons I have learnt in this time include the following-

Learning needs analysis is essential to develop targeted learning-This is not done well in industry generally, without detailed learning needs analysis people develop learning based on gut feel and it often does not meet the needs. You have to put in the hard yards to get it right.

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Giving learners projects to complete after the learning will reinforce the learning.

People have different learning styles; it pays to have variety in how you facilitate learning

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)

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