

Risk Management Seminars

Preston Cline – Adventure Management System

ACA/ORC

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Disclaimer

The following notes were taken by David Petherick during the Risk Management Forums presented by Preston Cline – they represent David's interpretation of what was being said at those sessions. They will obviously make more sense to those who attended the sessions but hopefully they provide some food for thought for others.

Background

Preston B. Cline is the Founder and President of Adventure Management. He began his career in the late 1980's leading 60-day remote wilderness trips with adjudicated youth out of New Jersey.

Preston has a Bachelors of Environmental Science from Rutgers University, with a minor in Professional Youth Work, as well as a Masters of Education from the Harvard University Graduate School of Education, where he completed formal research in the etymology and evolution of risk within the Risk and Prevention Program. It was this research that earned him an invitation to write the definition of risk for the Greenwood Educational Dictionary.

Preston is the author of numerous articles on operational risk management as well as two books Adventure Management Systems®: Organizational Crisis Response and upcoming Adventure Management Systems®: The Risk Management Workbook (06/06).

Preston continues to lecture and publish frequently on the subject of Risk and Risk Management, and has been interviewed by Outside Magazine, Psychology Today and the Harvard Gazette.

Adventure Management System

1. Risk Management Oversight – *“Someday someone is going to ask ‘Why?’ What will be your answer?”*
2. Client Relations – *“It is easier to accuse a stranger of wrongdoing than a friend.”*

3. Program Management Oversight – *“Complex systems never work. They break, atrophy or are never used.”*
4. Human Resource Management – *“When it comes to the service industry, your instructors ARE your service.”*
5. Staff Training – *“When training staff: ambiguity is bad, consistency is good and modeling is everything.”*
6. Operation & Logistics – *“When it comes to defending your position, ‘we couldn’t afford to make the repairs’ never works.”*
7. Crisis Response – *“While incidents are conceived in the field, they are born in the office.”*

For more information see www.adventuremanagement.com

Definitions

Operational Risk Management – decision making skills of program staff and participants, training participants to react to uncertainty, internal controls.

Institutional Risk Management – insurance, litigation, standards, training manuals, policies, legislation, equipment checks, external controls.

Safe (salvus) – free and secure from danger, harm, injury & risk.

BUT People participate in outdoor programs to engage with risk. Risk is used as an educational tool.

Risk is mostly defined as potential for loss. This definition is not helpful for outdoor programs. In outdoor education/recreation we take young people outdoors because of the potential gains as well as the potential losses. There is a synergy between the potential for loss and for gain that creates the important educational moments in the outdoors.

Risk - In educational terms risk is human interaction with uncertainty.

The risk paradox – we cannot run programs using risk as an educational tool which are also free from risk.

We need to manage both institutional and operational risk. Institutional risk can be managed through standards and accreditation. Operational risk is managed by focusing on the people involved, our staff and participants. Because almost all accidents are caused by human error we need to focus more on the people involved and strengthening their decision making processes. Human error relates to operational risk management (whilst equipment failure relates to institutional risk management).

We need to move from compliance to vigilance - from institutional to operational risk management.

Risk – all risk is perceived. Actual risks are in fact hazards.

1. Risk Management Oversight - The most important question to be able to answer is **why?** Why are we running our programs? What is our mission?

(Amma Griffiths made a presentation at the ACA conference which included research about effect sizes for psychological and adventure-based interventions which suggested that a program with a mission and purpose is twice as effective as being in the classroom – but being in a program with no clear mission or purpose is only half as effective as being in the classroom. For more information see link <http://www.auscamps.asn.au/conf07/>)

Instead of asking whether an activity is safe we should be asking does this activity support our mission. Clearly part of our mission is to not hurt any of the participants and by asking the question this way we are focusing on the important question of why we are involved in the activities we undertake?

Rather than focusing on being safe we need to ask does this program focus on delivering effective outcomes. Safety issues are of course a part of the answer to this question – but not the sole focus.

In modern times the pace of change is increasing exponentially and it is becoming more and more critical to skill our young people to cope with change and uncertainty. It is not enough to be strong in maths, literacy, science and history – our young people need the skills to cope in a time of constant and rapid change and uncertainty. Camps and outdoor recreation provide tools for our young people to react with uncertainty. This is an important way we should be marketing our camps and outdoor experiences.

The question we want our staff to answer is not “Is it safe?” It is “Does this activity best support our outcomes?” – the focus shifts to outcomes and our mission.

2. Client Relations - Perception is important however and it is critical that we communicate risk with our stakeholders in a positive and effective way. It is critical that we are upfront with participants and their families about the risks that are involved in our programs and the benefits that we are seeking.

When a parent asks whether we can keep their son/daughter safe what they are really asking is will we care for their child as well as they do? This invites a discussion about safety and risk. It is important to develop a relationship with parents and other stakeholders.

- Blink is a book by Malcolm Gladwell that looks at malpractice suits in the US and why they occur. Gladwell shows that doctors in the US who spend 3 extra minutes with their patients (17 minutes instead of 14 minutes) before a surgical procedure are 90% less likely to be sued if something goes wrong – because they have taken the time to develop a relationship with their patients and it is harder to sue someone you know.

Yes/No junctures are an important part of the process – that is, building in multiple opportunities for either you or the participant to consider their participation and to make a conscious yes/no decision. Including marketing material, initial contact, information exchange, and the actual activity briefing before commencing the activity – build in opportunities for the client and you to make an informed decision to proceed or not.

Building relationships make it more likely that participants will disclose critical information that may prevent an incident – health information (physical & mental). It also is a factor in how family respond in the event of an incident. If they felt that they had given informed consent for an activity, that they had been made aware of the potential risks involved, they are much more likely to be more understanding. It may be the difference between an endowment & a law suit.

3. Program Management Oversight - Information management is very important – we are very good at collecting information but we are not very good at analyzing it. We need to ensure our systems are not overly complex – “complex systems never work”. When working with human based systems, make the systems as simple as possible – because they are more likely to work.

4. Human Resource Management - Monash University are currently considered by the adventure activity sector in the US as world leaders when it comes to human factor research in relation to the service industry. (ACA will make contact with Monash to explore a relationship – their research is focused on traffic, emergency management & the outdoor sector).

Human Factors research - shows that everybody makes mistakes, NASA spent \$20m establishing this – so we need to create a culture that encourages staff and participants to talk about and learn from their mistakes and we need to build systems that are tolerant to errors.

Research shows that adolescent males (12-23) are 1.6 times more likely to be injured than adolescent females.

5. Staff Training - We know that our staff are going to make errors - so how can we decrease the likelihood that those errors lead to a serious incident or crisis.

If we want to focus on how to prevent incidents then we need to focus on the staff at the coal face & participants.

Error curve (errors over time) – we generally make a lot of errors when we are learning something new – these diminish over time – this is followed by a period of a low number of errors because staff have become competent - but after a time there is generally a second hump/spike in the error rate due to complacency. This suggests that we need to focus on complacency at least as much as compliance in our programs – we need to be vigilant.

Simulations: Pre-mortem – have staff undertake some activities and then sit them down & ask them where is this activity going to go bad? What are the possible problems that might arise from the activities we do? Force them to anticipate the problems – rather than spoon feed them a pre-conceived scenario.

We need to create a culture that enables people to give and receive feedback in a positive and supportive environment.

6. Operations & Logistics – accreditation and standards focus on this area. We need to ensure we have the appropriate amount of focus in this area – but not at the expense of focusing on human factors – complacency.

7. Crisis Response - one of the things we need to do is to develop a more positive relationship with our stakeholders. We need to ensure we are going to respond in a thoughtful, caring and positive way should an incident occur.

Risk management culture is also important – does the organisation have a strong culture around risk management and supporting & training staff around risk management?

Community management – building good relationships & good will within the community and with stakeholders is an important factor – simulations are a good way to do this as they can involve media, emergency services and community stakeholders.

It is very important to plan & prepare for serious incidents rather than responding to them in an ad hoc way. It is often how we respond to incidents that will determine how other stakeholders (eg: parents) respond.

Simulations are a great way to learn about how we respond to crisis and to ensure we respond better if and when a real crisis occurs.

Focusing on staff & participants – Human Factors

Given that we know that our staff are going to make errors - the focus needs to be on the reduction and management of errors.

Error curve (errors over time) – we generally make a lot of errors when we are learning something new – these diminish over time – this is followed by a period of a low number of errors because staff have become competent - but after a time there is generally a second hump/spike in the error rate due to complacency. This suggests that we need to focus on complacency at least as much as compliance in our programs – we need to be vigilant. Simulations are one way to work with experienced staff to manage complacency.

We need to find ways to build risk management into our curriculum/programs so that the participants take responsibility for their own and others risk management.

Grant Davidson (NZ) suggests that incidents are either error free (act of God) or are caused by instructor judgment error (* see Grant's work on root cause analysis – from NOEA & ORIC Conferences for some interesting data. Summary on VOEA site). Mostly they are caused by instructor judgment error.

Grant has suggested that our product is the experience and we need to get students to take responsibility for the experience.

For example with flying fox harnesses how do we make the participants take more responsibility for putting the harnesses on correctly – maybe as a problem solving approach – here are the harnesses work out how to put them on. Maybe those that put them on correctly get to go first. Maybe their buddy is the first person to check that it is on correctly. It is about building the harnessing into the experience.

Situational awareness – x3 (perception, comprehension, anticipation). If we become task saturated then our ability to make good decisions is impacted significantly.

Pre-cognitive vs Cognitive

Pre-cognitive is the flight, fight, freeze response and is generally the cause of most poor decisions. These responses are based on fear and anger.

We need to train our staff to make better pre-cognitive decision making and to be able to re-engage the cognitive part of their brain to make better decisions.

Cognitive is the thinking, reasoning process.

This relates to the study of **heuristics** and **cognitive dissonance**.

Cognitive dissonance relates to the mental model we have in our brain for certain events that we have built up over time and through repetition. If something changes unexpectedly or is different from what we expected – this can create cognitive dissonance – we have some difficulty fitting the changed circumstance into our mental model of that particular activity.

Mental model – we have a mental model of how things are supposed to be. Within this mental model we develop certain habits (**heuristics**). For example we have a mental model of the interior of our car and we insert the key into the ignition and start the car from habit (heuristics) – this doesn't happen when we get into a strange car because we have no mental model of that car.

We need to consider how we get people to be better at making cognitive decisions. One way to do this is through simulations – getting practice at making decisions cognitively.

Getting people to take personal responsibility for outcomes is critical. The alternative is that people simply go with the flow and may be afraid of failing and therefore simply avoid taking responsibility by not getting involved.

Old way/new way – came from the military and the study of training tank drivers. The research showed that it took 2500 hours to train expert tank drivers to drive a new model tank and only 1500 hours to train novices to expertly drive the same tank. Because the experienced tank drivers had to first unlearn the habits they had formed in learning to drive the old model tank. It is one of the reasons the airforce don't want to recruit people who already have a pilots license – they prefer novices.

Humans are very good at **pattern recognition** – so if we train people to respond using, for example simulations, then we are effectively training their pattern recognition.

Experience is only the best teacher if it comes with reflection and opportunities to reflect.

Question is how do we help staff to make better pre-cognitive decisions?
Simulations – get them to go through simulated events over & over so that they develop the skills to make the correct pre-cognitive decisions in the event of an incident.

Important things to consider in being able to deal with errors:

- Being able to give and receive feedback
- Resilience
- Creating a culture of questioning
- Opportunities for reflection

- Simulations – opportunities to experience activities and incidents

Physiological factors - are important considerations for our staff and participants and have a critical impact on decision making – have they got enough water, food & sleep.

F – Fatigue

O – O²

C – Chemical imbalance

S – Seizures

P – Pressure

T – Temperature

Fatigue – sleep deprivation is a significant factor in many accidents. Research suggests that being awake for 18 hours produces an effect equivalent to having a blood alcohol level of .05. A lot of good research on fatigue being done in Australia. Sleep deprivation increases the risk of car accident. 6-7 hours sleep per night, rather than 8 hours, doubles the likelihood of having a car accident.

Oxygen – an issue if working at height or depth.

Chemical Imbalance – sugar imbalances in particular are problematic. Can lead to inability to manage conflict

Seizures – important to know if staff or participants may have seizures.

Pressure – blood pressure (bleeding out), dehydration. Dehydration has a significant impact on our ability to process information and therefore make good decisions. It effects our situational awareness. Being dehydrated can make us irritable and combative. Perception, comprehension & anticipation are poorer. Even at low levels of dehydration (eg: 2% below optimum) decision making is effected significantly as is the ability to manage conflict. So being thirsty (dehydrated) and tired is similar to being drunk and angry.

Temperature – hypothermia/hyperthermia. Our ability to thermo regulate can be effected by medication such as lithium.

Adding stresses such as these reduce our situational awareness and therefore can contribute to incidents – situational awareness is about perception, comprehension and anticipation.

Often the children who come to our camps are tired, dehydrated, hungry (low blood sugar) and potentially on medication that effects their temperature or creates a chemical imbalance. This can lead to an inability to make reasonable (cognitive) decisions.

Irrational optimism - We know that we are going to make mistakes and yet we often become annoyed when the mistake occurs. We need to create a culture that allows for and encourages staff to take responsibility for and acknowledge their errors and therefore learn from them – rather than a culture of blame which potentially leads to staff covering up mistakes.

Primary, Secondary & Tertiary Incident Management

Need to think about who is going to manage the injured participant (primary), who is going to manage the rest of the site and the other participants (secondary) and who is going to manage any phone calls, media inquiries and other external stakeholders (tertiary). The pre-thinking about how you might respond to critical incidents is very important. This includes what you might say to the media, to families? Who do you need to tell? (school, families) Who are you going to contact for advice or help? (ACA, insurance company, legal advice, counselling for staff or self).

Useful websites

Adventure Management System (US)

www.adventuremanagement.com

Incident Data Bases

www.incidentdatabase.org/

www.aala.org/lessons_learned.php/articleTypeID=4

Campaign for Adventure (UK) – Risk and Enterprise in Society

www.campaignforadventure.org/

Australian Camps Association - accreditation

www.auscamps.asn.au/accreditation/accreditation.html

Industry Activity Standards

Outdoor Recreation Association – Adventure Activity Standards (AAS)

www.orc.org.au/aas/index.htm

Dept of Education Safety Guidelines

www.education.vic.gov.au/management/schooloperations/edoutdoors/

NOLRS

www.outdoorcouncil.asn.au/nolrs/index.htm