The WRMC asks its speakers to distill their workshops into simple actionable steps that the participant can take home and use in their programs. These are those action steps from speakers at the 2007 WRMC in Banff.

**Deb Ajango:** Using Case Studies to Improve Safety Education

1. Identify teaching points you’d like to make (i.e., what aspect of safety education are you trying to address?)
2. Identify sources for finding case studies (examples listed below):
   - River Safety Reports (1982-85: 1986-88), Sea Kayaker Deep Trouble (by Broze and Gronseth)
   - Snow: Snowy Torrents (book), [http://www.avalanche.org](http://www.avalanche.org)
   - Climbing: Accidents in North American Mountaineering (The American Alpine Club)
   - *Lessons Learned II: Using Case Studies History to Improve Safety Education* (Ajango)
3. Identify a methodology for presenting the material (examples listed below):
   - Compare and contrast. Choose two case studies. Using a risk management template, compare and contrast how each organization’s risk management plan might have contributed to the incident (e.g., staff selection and training, pre-trip actions, student preparation, emergency action plan, etc.).
   - Decision-making and instructor judgment. As is done in the Outward instructor workshop. Do not offer an analysis in hindsight; instead, provide a bit of information and ask the audience to assess if and where hazards and/or errors might exist. Continue to add information, making sure that the audience focuses on “how accidents happen,” not on judging actions of the case study participants.
   - Court trial. Have half of the audience defend an organization or trip leaders’ action, have the second half serve as prosecution; have both sides decide who witness would be; have both sides anticipate the opposite side’s strategy; have a jury determine whether or not there was negligence, based on the elements of negligence and the presentation of material.
   - Accident investigation. Have the audience identify primary as well as contributory causes of an incident. That is, identify what actions/inactions had a direct effect on the incident (instructor error, environmental hazards, etc.) and identify what effect secondary factors (course preparation, risk management planning, etc.) had on the incident. Have the audience come up with recommendations for the program.

**Rick Braschler:** Camp and Staff Prevention, Claims, Administration and Loss Control

**#1 Proper Reporting**

- Define three levels of reporting to better enable your organization to deal with various issues.
  - a) Incident without injury or fault- minor, has potential for injury. Simple report form
  - b) Incident with minor injury/illness- Incident report form plus witness reports
  - c) Incident of a serious nature-medical and/or fault- Incident report form, plus witness
#2 Incident Investigation
- Outline your current method of incident investigation that defines the following:
  a) The supervision of activities during incident, i.e. adequate training of personnel overseeing activity where incident occurred
  b) Method of communicating program guidelines to participants and/or supervisors. i.e. Orientation, signage, etc.

#3 Record Retention
- Determine within your organization where records are kept, what records are to be kept, and how long you will retain these records.

**Rick Curtis**: Risk Assessment and Safety Model

- For each program activity brainstorm a list of Hazard Factors in each of the three major categories (Environment, Equipment, People)
- For each program activity brainstorm a list of Safety Factors in each of the three major categories (Environment, Equipment, People) designed to mitigate against Hazard Factors
- Balance the Hazard Factors against the Safety Factors and determine the range of Risk Levels you will be operating in. Based on your program, decide whether the Risk Level is acceptable or not.

**James Garrett/Bob Box/Jimmy Madeja** Outward Bound® USA Instructor Judgment Training

“*What is the meaning of RISK, this well worn and often abused term? Here is the simple definition: Risk is the potential to lose something of value to us. What we need to remember is that our MOTIVATION FOR RISK is to GAIN something of value - good health, self-confidence, recognition, spiritual growth, money, friends, relationships, career move, whatever it might be. But in short, it comes out to a life worth living.*”

Risk is at the very center of the wilderness experience. We lead our participants through natural—and social—environments in which we encounter inherently risky situations.

Once out in the field on a course, trip leaders must make frequent decisions as they encounter the spectrum of risks an expedition provides, and all without benefit of the resources – the help of the personnel back at the base; they are quite literally on their own; they are the on-the-scene risk managers.

**Take-Home #1**: Make clear to your field staff that they are the primary risk managers for all of your filed operations, and clarify for them what that responsibility means – to your participants and their families; to your organization and all of its staff members, its supporters, and its other stakeholders; and to the whole wilderness education industry.

**Take-Home #2**: As they encounter the various risks and challenges of the trip, leaders must use the best of judgment to make the wisest decisions to deal effectively with the situations they face. So, ensure that you find the right balance in your hiring practices and in your staff trainings between technical knowledge/hard skills and judgment/soft skills. Judgment and decision-making skills can and must be taught and/or reviewed annually as part of your organizations risk analysis.
management program.

**Take-Home #3:** Some people claim that good judgment can only be developed through extensive personal experience. Good judgment certainly can be gained through experience, but it can also be enhanced through training activities in which participants are encouraged to analyze and debate the significant details of actual incidents and accidents, then draw conclusions about the lessons to be derived from each case. Or, as former First Lady Eleanor Roosevelt put it: “Learn from the mistakes of others; there isn't enough time to make them all yourself.”

Your organization can use accident and incident reports from its own files, or rely on sources such as Accidents in North American Mountaineering, Lessons Learned I and II (Deb Ajango), and articles in popular journals such as Sea Kayaker and Outside, to find relevant “case studies” for your trainings.

**Reb Gregg:** Fundamental Legal Issues

1) Analyze and eliminate from your program the activities, places and people that present risks you cannot manage with confidence.

2) Examine the descriptions of your activities and risks in your promotional and other materials. If there is a reasonable possibility of something happening that will surprise your clients, enlarge your descriptions to include that thing (or those things).

3) Have your Participant Agreement reviewed by competent counsel to determine that you have covered adequately the following: a description of activities and risks of your program; an assumption of the risks; a release of you and your organization from claims, including for negligence; an indemnification of you and your organization against claims of third persons arising from the client’s participation; and a provision that fixes the place of and the law applied to any suit brought against you or your organization.

**Jeff Jackson:** Public Private Partnerships

1. Clarify your organization’s culture, values and risk tolerance in a concrete, written statement that can be shared with partners. Force them to do the same.

2. Take the time to understand and see your partner’s culture in action (i.e. how they interact with their own clients or participants) by accompanying trips or joining a training course.

3. Successful partnerships are based on personal relationships; however that does not negate the need for clear expectations, measurable outcomes, and long term planning.

**Drew Leemon:** Crisis Management

1. Decide what constitutes a crisis/emergency.

2. Inventory your resources and ability to respond.

3. Assign responsibilities and know who the backup is.


**Rob Lucas:** Delivering Outdoor Programs With Increasing Media And Legislation Pressure.

1. Take one of your common safety operating procedures and find out what 3 of your managers think this means in practice – is it different from your perception and does it matter?

2. Ask someone on your staff who you have not trained yourself to show you how they would
carry out a risk assessment – is it different from your perception and does it matter?
3. Ask 2 new customers what they think are your responsibilities and what are theirs - is it different from your perception and does it matter?

**Colin Powell:** Utilising the Perception of Risk to Enhance Incident Prevention Strategies

1. A range of social and psychological factors influence the perception of risk and risk taking behaviour. Make use of the extensive research in this field to inform the development of risk management strategies.

2. Involve those who engage with the risk in the development of the risk management strategy. By doing so you are more likely to come up with proposals that are acceptable and owned by participants.

3. Be willing to challenge your assumptions about risk. Talk to people from differing backgrounds, they may be able to provide you with an alternative insight.

**Tod Schimelpfenig and Christopher Barnes:** Using Risk Management Theories

1. Sit down with your management team next week and come up with an example of risk homeostasis in your program.
   - Examples that came up in the workshop include:
     - Cell phones give too much false impression that there is support from the home office
     - Avalanche transceivers can drive us to ski riskier slopes
     - The gri-gri devices foster student belayers to be complacent rather than vigilant

2. Return to the office and with your staff come up with a clear statement of their program’s target for risk. Make sure it is the same between the field staff and the administration and the clients.

3. Use this model intentionally in a decision next week as a simple and quick check of decisions in the field.

4. Sit down with your staff before your next program and identify heuristics commonly used in your program. Are they sound, or flawed decision-making tools?
   - Examples that came up in the workshop include:
     - River crossing heuristics (e.g. "below knee go, above knee stop"
     - Slope angle heuristics for travel in avalanche terrain
     - 30/30 lightning heuristic

5. Share the model your focus group came up with, or identified that you commonly use, at your next staff meeting.
   - Examples highlighted in the session include:
     - "Snow Sense" matrix of weather, snowpack, terrain, and human factors in avalanche terrain.
     - NOLS’ Seamanship Triangle.
     - The Risk Assessment Triangle

6. Talk about your organizational culture and/or system for reporting and learning from near miss incidents? What works? What one thing do I want to improve and how will I go about doing it?
**Ben Scott:** Four Layers of Risk Management

1. Touch base with your program's legal counsel (or choose your program's legal counsel). This will ensure that you already know who to call when you need legal advice, and that they know you.
2. Satisfy yourself that you know exactly where you keep signed releases, participant agreements, etc.
3. Informally identify a few staff members each year/season that you trust for "second opinions" on matters of risk, and consult them regularly.

**Kirk Shimeall:** Surviving a Fatality and Lawsuit

1. Examine my organization’s Critical Incident Response Plan to see if we are sufficiently prepared to weather a serious incident.
2. Make sure that my insurance company fully understands my program, and that we are on the same page in terms of defensive strategies.
3. Prepare a list of resources (peer organizations, CISD/CISM providers, friends and colleagues) that I can turn to should that need arise.

**Liz Tuohy:** Training your Staff to be Risk Managers

1. Ask your management team to come up with three relevant phone scenarios and use them for staff training.
2. Post a copy of your course cancellation policy next to the phones you use to speak to parents.
3. Designate several people in your organization (if you have several people!) as your primary challenging phone callers.

**Jed Williamson:** Independent Travel

1. To enhance participants’ understanding of a system for analyzing when participants are ready and capable of traveling unsupervised.
2. To enhance participants’ understanding of appropriate protocols and strategies for preparing participants for independent travel.
3. To enhance participants’ communication and emergency strategies for unsupervised activities.

**Jay Satz/Laura Herrin:** Post Critical Incident Response

1. Fact finding and fault finding should not be confused
2. The review process is healthy for an organization
3. You are not alone.
4. Do not leave this conference without 5 names of those who can support you in the process