



GLENMORE
LODGE

MOUNTAIN AND CLIMBING INSTRUCTOR (MCI)
TRAINING COURSE NOTES



sportscotland
glenmorelodge
national outdoor training centre

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MCI Training Course Programme

The topic of environmental concerns and issues will be covered on a daily basis making best use of available talking points. The course director will often re-arrange the above programme to take advantage of weather conditions.

| DAY | MORNING / AFTERNOON | EARLY EVE | Ratios Staff: Candidates |
|----------|---|---|--------------------------|
| 1 SAT | <p>COURSE INTRO ASSESSMENT OF RISK AND IT'S APPLICATION</p> <p>This day looks at adventure and risk. How we can develop judgement, safety and awareness across challenging areas of activities. We will use the mountain environment to explore the assessment of risk and it's application.</p> | TALK: The Instructor & the Law. | 2:8 |
| 2 SUN | <p>SINGLE PITCH WORKSHOP</p> <p>Revisiting basic climbing skills such as movement on rock, rope work, belay plate orientation and use, abseiling. This day includes a practical look at using a single pitch venue.</p> | PROBLEM SOLVING & RESCUE SKILLS I – Nuts and bolts | 2:8 |
| 3 MON | <p>SERIES ROPE MULTI-PITCH CLIMBING (West Coast)</p> <p>Based near Glen Coe for three days and staying in comfortable, fully catered, bunkhouse style accommodation. This day will revisit trainees personal climbing ability and techniques on multi-pitch ground up to VS 4c. the emphasis of this day will be on series rope technique and stance management.</p> | SESSION: Short roping uses & limitations | 1:2 |
| 4 TUE | <p>PARALLEL ROPE MULTI PITCH CLIMBING</p> <p>Further consolidation of multi pitch climbing with an emphasis on using parallel rope technique.</p> | | 1:2 |
| 5 WED | <p>MOUNTAIN DAY</p> <p>This day focuses on the care and leadership of a party on scrambling and rocky terrain in both ascent and descent. A major part of the day will be spent on teaching use of short rope technique. Particular emphasis will be placed on developing decision making and judgement calls in this challenging aspect of professional mountaineering.</p> | Return to Lodge | 1:2 |
| 6 THU | <p>THE COACHING PROCESS</p> <p>This day looks at some generic coaching fundamentals and through the familiar activities of navigation and climbing explores how we may improve our students performance.</p> | SESSION: Self Programmed Problem Solving Practice: Climbing Wall | 2:8 |
| 7 FRI | <p>PROBLEM SOLVING & RESCUE SKILLS</p> <p>Developing simple solutions to complex problems. Practical application of improvised rescue techniques in a variety of simulated scenarios on the crag.</p> | Free Evening | 1:2 |
| 8 SAT | <p>TEACHING LEADING</p> <p>A practical exploration of the issues involved in introducing novice climbers to the 'sharp end' of the rope. Includes techniques for looking after both yourself and your students.</p> | SESSION: Self Programmed Teaching Climbing Client Scenarios. | 2:8 |
| 9 SUN | <p>TRAINING AND ASSESSING</p> <p>A practical look at training and assessing a variety of mountaineering skills with an emphasis on mountain navigation.</p> <p>Session: Between Training & Assessment</p> <p>COURSE REVIEW</p> <p>DEBRIEFS</p> | | 2:8 |

Assessment of Risk and It's Application

'Only when the outcome is unknown, and therefore in doubt, can it truly be called adventure.'

The Nature of Risk

Adventure in the outdoors can be found in many forms - from the elite rock climber pushing it out on an E10 to the nervous beginner experiencing their first abseil. These two examples, albeit very different, are linked in the sense that both participants consider risk to be part of their activity. Arguably what truly separates them is how the two individuals perceive and manage the risk inherent in their chosen activity.

On one hand the elite climber will have carefully prepared themselves for the challenge ahead through training, rehearsing the moves, checking out gear placements and ensuring they are mentally prepared, before committing to the route. In effect they feel that they have as much control over the outcome as they can have. On the other hand our novice abseiler will in all likelihood perceive their abseil experience to be very risky even although the safety mechanisms in place (safety rope, bomber anchors etc), mean that the actual risk is very close to zero.

What both individuals will have done is their own risk assessment by identifying what hazards they are facing, the probability of the hazard occurring and the outcome if it was all to go wrong. The main difference in our two scenarios above is that the elite climber will be making decisions based on real knowledge and skills whilst our novice abseiler with no real knowledge about climbing equipment or situations will be making their assessment based on what they perceive to be the things that can go wrong - not a good place to be if their knowledge of climbing is based on Hollywood films such as 'Cliffhanger' with the breaking harness buckle!

So in our two examples both individuals face objective dangers in that real hazards are present but these hazards are managed - our elite climber with their careful preparation and our novice abseiler's first abseil by their instructor ensuring good choice of site, careful rigging of the abseil and safe supervision. Where they differ is how they perceive the level of risk. Our elite climber will know that their route is potentially dangerous but will be very confident of success based on how they have managed the risk - their thorough preparation etc - that the chance or probability of them falling off the route is very low. On the other hand our novice abseiler with no other experience to judge their first abseil experience against might very well perceive their abseil experience to be very dangerous when in fact it's being managed in as safe a manner as is reasonably possible.

So both individuals face a level of objective risk but their perception, or how they perceive the risk (known as subjective risk), is very different. In effect both have done a risk assessment of their forthcoming experience but have reached very different conclusions based on their experience, skill etc.

OBJECTIVE RISK is where real hazards are present and good management is required to reduce the probability of an incident.

SUBJECTIVE RISK is how participants in the activity perceive the probability of something bad happening.

This risk assessment process is one all of us as mountaineers and climbers will be familiar with. Who has not found themselves at the crux of a climb scanning the moves ahead and quickly working out the challenge ahead and matching their abilities to it, the probability of not managing the moves, the outcome if you can't make the moves (hazards here might be poor gear, distance above gear, consequences of fall etc), then working out how to reduce the chances of the worst case happening?

This risk assessment process can be summarised as follows:

LEVEL OF RISK = HAZARDS + OUTCOME + PROBABILITY OF EVENT OCCURRING

The above model is one that most, if not all, outdoor participants will use on an ongoing basis.

As such it is often referred to as a DYNAMIC RISK ASSESSMENT PROCESS – where the outdoor participant is continually reviewing the level of risk and adapting their behaviour accordingly i.e. what skill set they use, how they approach the challenge etc. In effect they are making decisions about how to manage the risk on an on-going situational basis.

This decision making has several components to it and these components do depend on the skill set and experience of the individual. These components are outlined below:

Skill based

- Well-learned routines that are implemented with little conscious thought.

Rule based

- Implemented when the skill based behaviours are insufficient.
- Patterns, which help us consciously do the right thing. By example; “if the water is up to this rock, we do not go into this gorge. We go instead, to the other site.”

Knowledge based

- Comes into effect when we face a novel situation.
- We must assess the situation and form a plan.

(Source: Iain Stewart-Patterson, Uni College of the Cariboo)

In an MCI context the majority of decisions we will make will be ‘**Skill Based**’ and ‘**Knowledge Based**’.

Assessment of Risk

So given that we as outdoor participants carry out risk assessments as part and parcel of our every day activity on the hill or crag where does the formal risk assessment process come in?

The main driver for this formal risk assessment came about when the Adventure Activities Licensing Act came into force in April 1996.

The AAL Act is currently sponsored by the Department for Work and Pensions. Adventure activities licensing is delivered jointly by the Adventure Activities Licensing Authority (a role undertaken by the Health and Safety Executive since 1 April 2007) and the Adventure Activities Licensing Service, which is under contract to the Health and Safety Executive to deliver licensing day to day on their behalf.

The main idea behind Adventure Activities licensing *“is to provide assurances to the public about the safety of those activity providers who have been granted a licence. In this way it is expected that young people will be able to continue to enjoy exciting and stimulating activities outdoors without being exposed to avoidable risks of death or disabling injury.*

A licence indicates that the provider has been inspected by the Adventure Activities Licensing Service on behalf of the Adventure Activities Licensing Authority, with particular attention being paid to their safety management systems with young people, and has been able to demonstrate compliance with nationally accepted standards of good practice in the delivery of adventure activities to young people, with due regard to the benefits and risks of the activity.'

The MLT National Guidelines (first published in 1995) used established HSE principles as their base. One of the principles that HSE introduced was the idea of a formal risk assessment process.

It should be noted that this risk assessment process comes under the framework of operational guidance and is not intended, nor should it, replace the ongoing dynamic risk assessment used by outdoor participants.

It should be borne in mind that carrying out a formal risk assessment is a legal obligation for an employer to protect people from real harm and suffering. Popular misconception is that we should be eliminating all risk but in reality the law does not expect you to eliminate all risk, but you are required to protect people as far as is 'reasonably practicable'.

Page 22 of the MLT National Guidelines has a matrix in which there are three main roles. They are:

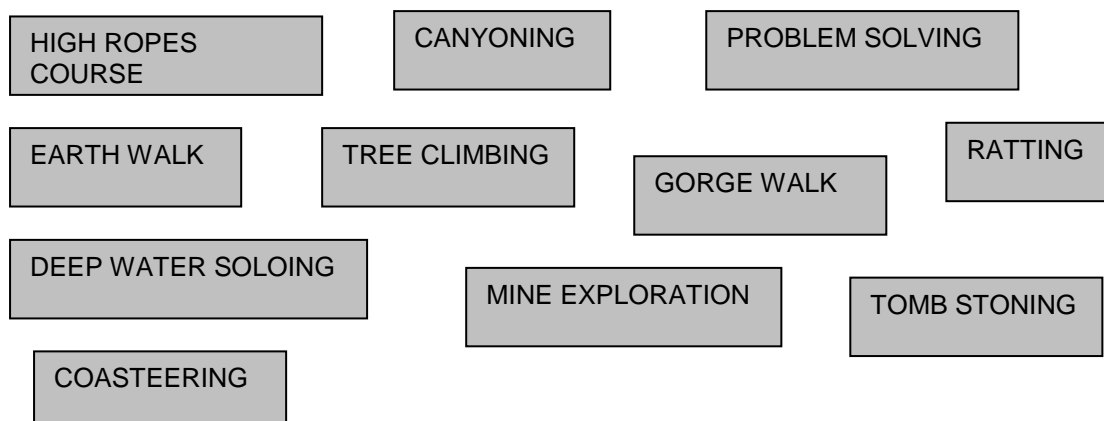
Technical Expert: The individual with overall expertise responsible for designing programmes and activity sessions and for making decisions on the suitability of activity venues, staff qualifications and staff/participant ratios.

Group Leader: A technically competent individual able to take charge of a group without direct supervision.

Assistant Leader: An individual who is in addition to the Group Leader and who is not essential to the safe management of the group. Assistant leaders must always work alongside Group Leaders under their direct supervision.

You may be asked to fulfill the role of Technical Expert in drawing up guidance and risk assessments in appropriate areas of operation e.g. multi-pitch rock climbing.

Combined water and rock activities and other 'irregular' activities potentially come under the remit of the MCI/WMCI. However there are potentially limitations to this remit. Some of these irregular activities are highlighted below:



As you can see many of them involve dealing with water or underground environments. Whether you as an MCI are appropriately 'qualified' to advise on such activities is best determined from first principles by considering the requirements of a particular venue. It may be more appropriate for the Technical Advisor to hold a Cave Instructor Certificate (CIC), or one of the BCU sea kayaking, surfing or white water rescue awards, Swift-water Rescue Technician, Surfing awards or other rescue experience and/or qualifications. The choice will depend on the characteristics of the venue and the very specialised expertise of the individual.

In either event the Technical Advisor(s) should be able to offer useful, constructive advice on the activity including, amongst other things, staff competence, operating procedures, equipment, ratios, use of assistants, etc. If you are multi-disciplined and qualified then you bring your skills and experience from these other activities to authenticate the advice you can give.

*It is vital that you have a good understanding of where YOUR expertise lays. Managing risk requires many vital decisions to be made. **Good judgement** in making these decisions is dependant on **experience** within the activity.*

Useful Information

Activity Licensing Scheme (includes links to HS for risk assessment process)

<http://www.hse.gov.uk/aala/guidance/index.htm>

Link to guidance on combined water and rock activities

<http://www.hse.gov.uk/aala/guidance/606-combined-water-rock-activities.htm>

MLT Award schemes

<http://www.mltuk.org/awards.php>

MLT National Guidelines

http://www.mltuk.org/downloads/National%20Guidelines%202009%20internet_colour%20compressed.pdf

HSE Five Steps to Risk Assessment

<http://www.hse.gov.uk/risk/faq.htm#differences>

Collection of Health and Safety info aimed at teachers managing outdoor experiences with young people.

<http://www.ltsotland.org.uk/outdoorlearning/healthandsafety/managingrisk.asp>

NOTES

Climbing As A Professional

'Look good, feel good and climb well.'

The Mountaineering and Climbing Instructor is a professional qualification that requires individuals to have experience and skills in climbing and mountaineering; good people skills and good judgement in a variety of hazardous situations. The MCI is not only a qualification, it is a role that you take on. You will need to think about how you are perceived by other people, not just by climbing friends but also paying students and the public.

So how do you be the real deal? Well it comes from how you look (first impressions), how you operate on the hill to how you answer questions or deal with situations. Turning up at a local crag to run a climbing session wearing your old beaten up kit and using hardware that Edmund Hillary would recognise is not how the modern day MCI operates. A modern MCI represents the sport of climbing today and not yesteryear.

This does not mean being trendy, but just up to date with good practice and climbing/mountaineering trends.

'To keep bad habits out of your teaching – you must first remove them from your recreational climbing'

An active MCI is supportive, questioning, pro active, dynamic, empathetic, resourceful, knowledgeable and skilful. So stay current with modern developments and do not separate work from play too far; it's all mountaineering and climbing.

By example:

An MCI has the ability to turn up to any quality crag in the country and deliver a day appropriate to their student's individual needs and aspirations. The student's experience will be that of learning skills they need, whilst enjoying some quality routes. We must be able to distinguish between what the student thinks they need and what we know they need. In addition students must feel they have some ownership over their learning experience. So we don't do it to them, but rather shape it with their input.

List 3 ways you may improve your own performance

1.

2.

3.

Multi Pitch Climbing with Clients

Instructing and coaching clients on multi pitch climbs presents the instructor with a variety of considerations and challenges. To adequately address these factors we need to ensure that our approach to working on multi-pitch terrain allows us to address the needs of our clients, whilst allowing efficient and safe upward progression.

Our starting point to operating effectively with two clients is addressing:

“What to do” – finding out where they are at in their current climbing performance and experience and identifying and agreeing with your clients appropriate outcomes for the day.

Then:

“How to do it “ – choice of climb appropriate to our clients aims and abilities; what rope type and system (single Vs half; parallel Vs Series); belay method (Direct belay Vs Semi-direct); how to rig the stance and so on all appropriate to the agreed outcomes.

By following the above process we should find that our multi-pitch climbing sessions reflect what is appropriate to our client’s needs and less of the “I do it this way cos I always do it this way” approach.

The key thing is know why you are going to a certain venue and what you are going to do with your clients there. If in doubt go back to first principles and ask yourself the following questions:

- ✓ *What am I instructing here?*
- ✓ *Is it appropriate to my clients needs at this moment?*
- ✓ *What is the outcome going to be?*

Choosing A Route

Instructing on a multi-pitch route takes some degree of planning. Choosing a route appropriate to your clients ability is essential. The instructor can eliminate most problems that may happen by choosing the right route. Routes that climb a plumb line will be much easier to manage with novice clients.

The ideal route will have other constraints attached. Environmental factors such as weather or recent rock fall, access problems, inappropriate belays or time constraints. It is a key skill of the instructor to juggle all these factors quickly and provide a quality day for their clients.

What Rope System is Appropriate?

As well as deciding what rope type we are going to use, we also have to decide on what rope system is appropriate – series, parallel or two clients on one rope.

Deciding on which rope system to use really comes down to deciding on what the outcomes or aims are for your session. So although the instructor may have one set of desired outcomes for the day, there may be other outcomes which might be more pitch dependant. Thus I tend to think of a session as not just the whole day, but as individual pitches on a climb. In the course of a day, or even the climb, the instructor will continually appraise these outcomes as conditions, abilities etc dictate. Bottom line - Be flexible.

We can pretty much break down the type of work we do on multi-pitch climbs into three main areas, each with their own unique considerations. In reality there is blurring between the different areas as even when guiding two clients up a route you can still be coaching them e.g. at the stances, as you leave the stance and as they approach the stance (sometimes referred to as 'teaching zones').

Teaching

Novices/intermediate climbers who aim to progress. Emphasis on "instruction" with a need to act as a role model for the sport and for the systems used to reflect common practice.

Coaching

Peers/advanced level climbers who want to lead and/or get up harder routes.

Guiding

Climbers who are being given an experience. This may be because there are other aims to the day, or the emphasis is on getting up a climb. The rope/belay systems used need not reflect the way anyone else does it.

So focusing on what the overall aims for the session are influences our choice of rope/belay systems used. Whatever we choose to do methods used should meet the following criteria:-

- Be safe
- Reflect aims of session

This whole process can, and should be reviewed throughout the climb. By using each pitch as a 'session' you can then decide what is, and what isn't appropriate for your clients. This helps avoid the

classic starting with series rope system and “come hell or high water that is what I will use cos it's easy” approach.

For example you have two clients who have aspirations to lead multi-pitch climbs. They tell you they have led a lot of single pitch climbs, and both have their own rack etc. You start with a 'warm-up' multi-pitch climb which is technically a bit easier than what they both say they are leading at and you decide to start of in series as you can have them both going through 'lead climber' behaviours. After several pitches, things have been moving slow. Time is not on your side, so you decide to ratchet up the pace. You change over to parallel so you can bring both your clients up simultaneously, and make up some time. This scenario is very much simplified, but I hope it serves to illustrate that we can change around our rope systems 'mid stream' if we feel it is appropriate

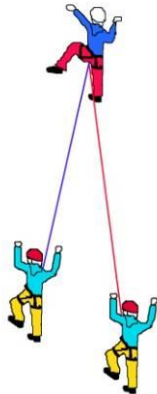
How can you identify your clients' background experience, ability and aims both theoretically and practically?

Rope Techniques

There are several techniques associated with multi-pitch Instruction. The two main types are referred to as **Parallel** and **Series**. These are not mutually exclusive. They can be mixed and matched to great affect by an experienced instructor.

Parallel (“en fleche” or arrow)

Parallel often gets mixed up with double rope systems. They are different. Double is when we have two ropes and one second, and parallel is when we have two ropes and two seconds. Parallel can be used for many purposes. Many instructors use it for guiding two (or more) clients up a route at the same time. When using parallel rope it might help to think of the ropes as railtracks i.e. they must always run parallel along the required route.



Pros

- Flexible in that both can climb if desired (fast), or one at a time
- Allows second client to be tied off, if moving one at a time, thus protecting them should they inadvertently dismantle the belay
- Instructor can be at the ‘point’, or switch to series (with themselves as middle person)
- Stronger client can help weaker by presence
- Leader can abseil full rope length, or any distance between, without bringing up client

Cons

- Rope tends to become tangled
- ‘Struggling’ client can get caught up in other rope, if moving one at a time
- Can be heavy work for the leader dragging two full ropes behind

Choice of Equipment

- Ropes:
 - Ensure ropes are different colours
 - Use as lightweight ropes as possible to reduce drag
- Belay Device:
 - Pick a suitable belay device for the correct diameter ropes
 - Use a suitable krab the breaking krab for use with guide plate style belay devices: Large krabs with round cross-sections will give slick belaying whilst an asymmetric cross-section (or T section) will make it easier to ‘pump’ slack through the plate.
- Extenders:
 - Ensure an adequate supply of 4’ extenders.
 - Also a good selection of medium extenders
- Krabs and Slings:
 - Have a good selection of free snap and screw gates plus a couple of 240cm slings and some 120cm slings.

| LIST THE AMOUNT OF GEAR YOU FOUND USEFUL FOR PARALLEL ROPING | |
|--|--|
| Number of extenders | |
| Number of spare screwgates | |
| Number of spare snaplinks | |

Managing a pitch using Parallel Rope Technique

This is one issue that comes up when discussing how to manage the ropes when leading a pitch using parallel rope technique with your two clients. Although it is possible to clip both ropes in the same runner you have to think about the “what ifs?”

FACT: Clipping both ropes into a single krab on a runner, whilst reducing rope stretch in the event of a leader fall will increase the loading on that piece of protection (pulley effect – when

A climber falls off the load on the anchor is approx 1.6 times the force the falling climber exerts).

FACT: With both ropes clipped into a single krab on a runner there is the danger that the moving loaded rope will damage the other non-moving rope. Although whether it would cause a rope failure is debatable - at best you could have some friction damage to the outer sheath.

From a more practical point clipping both ropes into the same piece ensures when using parallel rope technique that tangles and crossed ropes are certain. This can lead to other problems for both you and your clients on the pitch. Far better to avoid or reduce the chance of such tangles occurring.

When using parallel ropes avoiding tangles and rope twists can become a major pre-occupation for the leader. It need not be though. A couple of simple techniques and you can reduce the likelihood of major rope twists occurring:

- Parallel rope technique is not double rope technique. Don't confuse them. Think of parallel rope technique as like a railway track i.e. both lines always run parallel. This way you avoid your clients taking pendulums if they fall off, or managing to climb under/over the other rope.
- Organise and clip the ropes in such a way that they run separate
- Take care at the stance to avoid crossing ropes especially if using an auto-block belay plate.

The following sequence of images outlines some of the commonly used methods for clipping ropes to runners when using parallel rope technique. It's not exhaustive and the key point to keep in mind is that what method you use will always be dependant on the situation.



Image 1

Clipping two quick draws into one runner.

Pros: Keeps ropes running separately.

If done well can help prevent clients becoming tangled in ropes.

Useful especially when there is a change of direction in the pitch.

Also useful to do as last runner before stance to ensure ropes are running parallel – helps stance management.

Cons: Uses up quick draws.

If not done well increases chance of clients becoming tangled in rope.

Potentially high impact force on runner in the event of a fall and instructor belayed on both ropes.

Comment: You don't have to use this method on every runner. Save it for the times when you **MUST** ensure ropes are kept parallel.



Image 2

Clipping one quick draw to another quick draw then into same runner.

Pros: Keeps ropes running separately.

If done well can help prevent clients becoming tangled in ropes.

Useful especially when there is a change of direction in the pitch.

Also useful to do as last runner before stance to ensure ropes are running parallel – helps stance management.

Cons: Uses up quick draws.

Potentially high impact force on runner in the event of a fall and instructor belayed on both ropes.

If not done well increases chance of clients becoming tangled in rope.

Slim chance of inside krab fouling/jamming inside rope

Comment: You don't have to use this method on every runner. Save it for the times when you MUST ensure ropes are kept parallel.



Image 3

Clipping both ropes into one quick draws into one runner.

Pros: Very quick to do.

Uses up minimal gear.

Also useful to do as last runner before stance to ensure ropes are running parallel, although take care clipping ropes into quick draw to ensure they run parallel – helps stance management.

Cons: More likely for clients to cross ropes or become tangled up.

Potentially high impact force on runner in the event of a fall and instructor belayed on both ropes.

Possibility of rope damage in the event of fall with live rope running over other rope.

Comment: Use this method with caution due to risk of rope damage and increased chance of clients crossing/tangling ropes.



Image 4

Using knotted sling with krabs. Similar in concept to Image 1 and 2 above.

Pros: Keeps ropes running separately.

If done well can help prevent clients becoming tangled in ropes.

Useful especially when there is a change of direction in the pitch.

Also useful to do as last runner before stance to ensure ropes are running parallel – helps stance management.

Cons: Awkward to do on the lead as requires you to knot rope (using overhand).

Potentially high impact force on runner in the event of a fall and instructor belayed on both ropes.

If not done well increases chance of clients becoming tangled in rope.



Image 5

Using sling with krabs. Similar in concept to Image 1 and 2 and 4 above.

Pros: Keeps ropes running separately.

If done well can help prevent clients becoming tangled in ropes.

Useful especially when there is a change of direction in the pitch.

Also useful to do as last runner before stance to ensure ropes are running parallel – helps stance management.

Cons: Awkward to do on the lead as requires you to knot rope (using overhand).

Potentially high impact force on runner in the event of a fall and instructor belayed on both ropes.

If not done well increases chance of clients becoming tangled in rope.

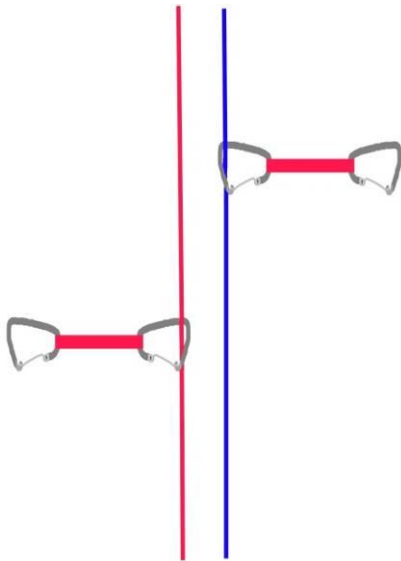


Image 6

Clipping one rope into one runner – as you would do when leading using double ropes.

Pros: Keeps ropes running separately.

Easy to help prevent clients becoming tangled in ropes.

Does not use a lot of gear for each runner.

Cons: Easy to start think double ropes and forget to protect second when route changes direction – risk of pendulum.

Comment: Best used when route is taking a very straight line i.e. no radical changes of direction.

NOTES

Series

The advantage of series is that it provides the clients with a more realistic picture of what climbing for themselves is like. It is the ideal technique to use before teaching leading as most of the necessary skills can be gained whilst using the “in series” method. For instance the students can experience all of the following:

- Belaying a leader from below and belaying second from above.
- Constructing belays.
- Stance management.
- Rope management.
- The feel of rope drag.
- Clipping gear by taking the rope from below, as a leader.



Pros

Allows the first student to adopt ‘lead’ climber behaviours e.g. clipping rope through runners behind.

Attention can be devoted to one student at a time

Instructor can step out of the ‘point’ allowing the students to adopt a standard two person rope (instructor can solo/self line placing runners etc as appropriate)

Ropes easier for instructors to sort

Cons

Can be very slow (moving one at a time)

Tiresome and lonely for last student

This method is a lot slower than parallel roping and needs to be undertaken efficiently by the instructor. Below are a few handy hints to help:

Risk of last student falling full length of rope should they inadvertently be unclipped by the second

- Think about the order of the clients on the ropes. Perhaps changing them round on the route so they acquire different skills – **see teaching leading section for detailed breakdown of how to do this.**
- Try to prevent the instructor’s rope from getting in the way of the belayer so that the clients can see the bigger picture of climbing as a pair.
- Use two different colour ropes.
- Use every opportunity to get the clients belaying each other.
- Take advantage of ledges where the instructor’s belay can be out of the way and the client can build their own belay.
- Try to get into a position where you can see the client belaying.
- Give a clear picture of stance management with no rope tangles.

Two Clients on One Rope

There is one other rope system that is worth mentioning here.

Two clients on one rope is more commonly used on easier, less technical climbing terrain e.g. on harder scrambles such as Curved Ridge and perhaps occurs more in the context of when you are short roping and decide to move to pitching for a harder climbing section. We will cover the mechanics of this technique in more detail during the mountain day.

It's main advantage is the rope work is very much simplified but it does pose the challenge of dealing with two clients moving at the same time on the rope. This comes to the fore when both reach the stance and you are looking to clip them in. You'll find one client is on the stance whilst the other is still on the climb.



Pros

Simplified rope work

Fast to use – both clients climb at the same time

Stronger client can support weaker student

Cons

Only suitable on straightforward, easy ground

Clients have to be briefed to climb at compatible speeds

NOTES

Stance management

Whatever rope technique you are using you will at some point have to stop, find a stance, set-up a belay and bring up your clients. This section outline some basic principles to guide you along this process.

Stance management is the general term used to describe the organisation of clients on a stance, on multi-pitch routes. This organisation includes elements such as correct belay plate orientation, rigging of anchors; placement of clients on stance relative to a variety of factors e.g. hazards, belaying etc, organisation of ropes, and appropriate client/student briefings.

It is perhaps the most difficult part of working on multi-pitch routes to 'get right', as efficient solutions tend to involve not just using the right technique(s), but adapting the relevant techniques to the type of stance you are using.

Many problems can be avoided if you work forward from first principles i.e. what are you trying to achieve with your people in that session, (for session you could read pitch, as teaching aims can change whilst on a route, perhaps because you have misjudged your clients abilities, you are running out of time etc). Such an approach will tend to narrow down your options to a manageable range.

The main **principles** involved in stance management are:

Aims

- Safety of clients
- Efficient changeover at belays
- Reflect the aims of the session

Basic Points

- Stance can accommodate clients
- If appropriate is in visual contact of students on 'hard' pitch
- Is safe, i.e. good anchors, no danger of falling rock/leader on clients
- Is organised such that the leader can move off with the minimum of fuss and disruption

Making it efficient

- Leader and clients stacked in climbing order (e.g. leader at top/outside. First client in middle; second client at bottom/inside)
- Clients clipped in without crossing ropes
- Leader on stance with their back facing the side they will move off from for next pitch
- Sort ropes out so leaders rope on top of stack (back coiled)
- Outside of stance clear (e.g. no stashed gear or human runners!)

Your choice of stances can make or break the multi pitch experience. At times you will have to be more creative than just following guidebook pitches. Three people at a stance require a

fair amount of room, so big is beautiful. Ideally it is advantageous to be able to see your clients climbing, particularly from the point of offering feedback and especially as they move through the crux.

This will not always be possible though, and when embarking on climbs where you will not have visual contact you'll need to be proactive in educating your clients about what is going to happen.

What top tips do you have for organising your stance?

Belay Methods

Potentially there are four ways of belaying your seconds.

All have their pros and cons and some are more commonly used than others.

Arguably the two most common ways used would be direct belay using Guide Plate and semi direct belay using belay plate. What method used would primarily be influenced by teaching aims and rope systems used.

It's worth being aware of the other options as it is not unknown for instructors to drop their belay plate...

When using series rope technique you would just be dealing with one rope at a time. All the images show how you would deal with two ropes i.e. when using parallel rope technique.

INDIRECT BELAY USING WAIST/BODY BELAY



Leader tied into belay using rope

Waist belay using both ropes

Note: it is important to have the braking side on the same side as your attachment point to the anchor.

Pros

Avoids full impact force on the belay in the event of a fall. (Use of rope and dynamic belay increases dynamic element in system).

Can be quick to arrange.

Cons

Difficult to bring two clients/students up at same time if moving at different speeds. If one student weights the rope it is impossible to take in/pay out the other rope.

Instructor is in the system necessitating a potentially complicated escape if required.

SEMI DIRECT USING BELAY PLATE



Leader tied into belay using rope

Belay plate clipped into rope loop on harness

Pros

Can be easier to give a tight rope in extremis, or hoist

Avoids full impact force on the belay in the event of a fall. (Use of rope, and dynamic belay increases dynamic element in system).

Cons

Difficult to bring two clients/students up at same time if moving at different speeds. If one student weights the rope it may be difficult/impossible to take in/pay out the other rope through the plate. Instructor is in the system necessitating a potentially complicated escape if required

DIRECT BELAY USING ITALIAN HITCH



NOTE: Requires 'bomb proof' anchors
 Clipped to attachment point on main belay

Pros

Less strain on belayer
 Leader not in the system

Cons

Difficult to provide tight rope in extremis
 Hard work pulling in ropes whilst bringing up seconds.

NOTE: *One of the issues with using the two Italian Hitches was if one Italian Hitch was loaded it could be pulled flat against the other Hitch causing them both to jam. A method to avoid this happening uses a spacer krab as shown in the image left.*

'MAGIC' STYLE AUTO LOCKING BELAY PLATE (e.g. ATC Guide, Petzl Reverso; New Alp 'Magic Plate' etc)



NOTE: Requires 'bomb' proof anchors.
 Clipped to attachment point on main belay

Pros

Less strain on belayer
 Leader not in the system
 Fast method of bringing up second(s)
 Two students can be brought up independently, simultaneously. (Rope automatically locks if loaded but allows independent operation of other rope)
 Tight rope can be given

Cons

Not common climbing practice
 Can be difficult to lower student(s) quickly if loaded (one-way clutch).
 Requires 'bomb proof'

NOTE: Image illustrates New Alp Magic Plate being used the first 'plaquette'.

Releasing a 'Guide Plate' under load

One of the downsides of using a Guide Plate is it can be challenging to lower your client(s) down should they have trouble getting up the pitch, want a rest on a ledge etc.

Depending on what type of plate you are using there are several ways of doing this:

'Old School' Type devices such as Plaquette, GiGi etc



If you are using one of the 'old school' type devices such as the New Alp Plaquette or the GiGi to lower one of the seconds (assuming a weighted rope) you can do the 'pump' action as shown above – remember you need to use a krab that has a square or T section back bar to make this effective, and the rope has to be fully weighted. Ideal if all you have to do is allow a small amount of slack into the system.



Another option is shown in the image to the left.

Clip a sling to the 'breaking krab' as shown.

Clip this through the anchor as shown, then either clip it to yourself or stand in it. This releases the 'breaking krab' and allows you to lower.

Pros: Quick to do

Cons: this method is either on or off i.e. get this wrong and you can drop the second. It requires careful practice to get right.



A more fool proof albeit slightly slower method is shown above. Looking at the images from left to right this is how you do it:

Step 1 Attach a French Prussik to ropes and clip back to main anchor point.

Step 2 Take the breaking side of ropes and put them into an Italian Hitch. Pump the back bar, slowly releasing the load onto the prussic.

Step 3 When the load is on the prussic you can remove the plaquette, release the prussic and lower using the Italian Hitch. Simple.

Try releasing your Guide Plate under load and lowering two clients. What top tips do you come up with to make the process efficient?

Using ATC Guide, Reverso 3 etc



The image on the left shows, as per Petzl's instructions, how to lower using the Reverso 3 (this is similar to the process with the ATC Guide).

Note: *image does not show the instructor having a very tight grip of the breaking rope!*

You jam a karabiner into the small hole at the front of the device and pull up and back.

This releases the locking karabiner and allows you to smoothly lower the second.

One of the things to bear in mind with this method is that it can still be a bit binary i.e. off or on.

CAUTION!!! Care should be taken to ensure that you have a good hold of the lowering rope because when that load comes onto the breaking rope it will do so suddenly.

Both the ATC Guide and the Reverso 3 work in a similar way. The image on the left shows this method using a Reverso 3 but will work with the ATC Guide.

Step 1: run the breaking rope through the anchor as shown - this allows a more controlled breaking force to be exerted on the breaking rope.

Note: *I've changed the way the plate faces.*

Step 2: You then release the device as described above. This gives a smoother lower.



Summary

'Guide plates' do make the whole process of bringing up two seconds simultaneously. Yet the methods that were used previously, such as using belay plates and body belays still have a place in any Instructor's technical repertoire. Technical considerations aside, we still have to make appropriate judgements about the nature of the climb we are undertaking with our clients and whether it is appropriate for them.

Mountain Day

Short Roping Introduction

A mountain day for an MCI makes demands on their all round ability as a mountaineer. To safely manage students on typical mountainous terrain the MCI will draw on their environmental knowledge and awareness, navigation, route finding, technical and leadership skills. Making sound judgements regarding the many orthodox and unorthodox situations encountered in the course of such a day are the keystones of MCI work. Nowhere is this more apparent than when managing students over serious terrain. Yet this area of expertise is not solely confined to the mountain environment. This mountaineering background is the foundation on which the MCI's ability to cope with the irregular terrain so often found in gorge scrambles and sea level traverses is based

The techniques and skills used in short roping build on the basics covered at ML under the title confidence roping (See MLTUK MI Guidance Notes pg 25 for a detailed description of definitions).

There are several main differences between short roping and confidence roping. They are:-

Planned use of the rope

Two people may be on the rope

A slip could have serious consequences for the whole team

When To Short Rope?

This is the crux of the whole technique. Wrongly applied short roping can at best lead to frustration on your students part, as they are roped on terrain they could happily deal with, and at worse kill you all in the event of a slip.

To make a judgement as to whether short roping is a viable option, the MCI has to make a continuous assessment of the situation based on the following variables:

Students experience and ability (can they cope with the situation mentally and technically?)

Your experience and ability (can you cope with the situation mentally and technically?)

Terrain (is the ground slippery/loose/firm?)

Weather conditions (is it blowing a gale/calm/raining/snowing?)

Fall line (can you keep directly above your students?)

This then comes down to three key questions:-

Is a slip likely? Are the consequences of a slip serious? Can you hold a slip?

Setting Up The Short Rope System

The basic technical elements of the short rope system consist of the following:-

| | |
|---------------------------------|---|
| Taking coils around body | Tying them off Vs spare rope in ruc sac tied off to harness |
| Attaching students | Spacing (this is related to the angle and nature of the terrain you are on) Use of by-pass knot; attaching students with krab Vs tied on |
| Hand reservoir | Locked off coils Vs unlocked Vs fixed length |
| Stance | Tight rope throughout system (N.B. when needed) combined with shock absorbing stance - (i.e. dynamic, bent arm shock absorber etc.) |
| Communication | Must be clear, precise and directive. In extremis more like left/right/stop/go/freeze |

Movement Principles

Maintaining flow and the appropriate degree of safety requires the instructor to anticipate the terrain ahead in order to employ the appropriate technique.

An important point to consider is you and your group's speed of movement over the whole day and link this with the degree of protection you provide - very safe or safe enough. Many will say that speed is safety. Whilst this can be argued for in terms of bigger routes and shorter days, it must always be justified with the full implications of a slip being considered. The concept of efficiency is a better way to look at it. In that you are as efficient as can be with all your route finding, rope work, personal movement and student care, then your team will be able to move at a comfortable pace throughout the day, and still be off the hill in good time.

A good series of questions to ask yourself as you travel are

What am I doing? Why am I doing it? Is it still appropriate? YES/NO

If you cannot justify the second answer or you say 'NO' to the last question it is time to change how you are managing the situation.

NOTES

| Techniques for ascent | |
|------------------------------|---|
| Moving together | Whole party moves with a well managed rope. |
| Ledging | Terrain lends itself to short steps, from one ledge to another ledge, which the instructor ascends first bringing students up with a swift appropriate belay. |
| Pitching | Generally steeper terrain that lends itself to instructor running out rope to suitable stance. Students are then brought up on an appropriate belay. |

| Techniques for descent | |
|-------------------------------|---|
| Moving together | Whole party moves with a well managed rope |
| Lowering students | Instructor lowers students to an identified area. For steeper lowers a 'Y' hang technique may be used for students. Instructor then climbs down or abseils. |

Appropriate belay methods (in order from safe enough to very safe):

Strong braced stance, taking rope in through both hands.

Strong braced stance with a shoulder belay.

Seated position with a waist belay.

Natural spike or block as an anchor with rope running around block.

Italian hitch direct belay from a single gear placement.

Italian hitch direct belay from two equalised gear placements.

Conventional climbing belay system e.g. MCI tied into anchors using belay plate.

| LIST 3 CHALLENGES FROM YOUR MOUNTAIN DAY | |
|---|--|
| 1 | |
| 2 | |
| 3 | |

NOTES

MCI Coaching

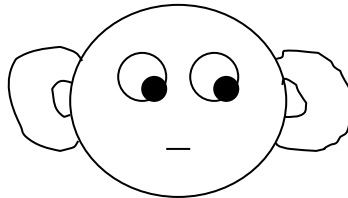
Instructor Vs Coach

What is the difference between coaching and instructing? If you buy a new TV, you get an instruction manual and not a coaching manual. If you are told to do something in a learning context then you might perceive it as an instruction. If a situation is created where you find out how to do something yourself, you might perceive that as coaching.

Telling a student how to do something often gives a short term fix. For a learner to retain knowledge and skill over a long period it is better to allow them to explore and discover things for themselves. We should not dwell to long on the definitions of words. Coaching is about the learner and helping them develop. So it follows that a good instructor is often a good coach and a good coach often needs good instructing skills.

“Coaching is unlocking someone’s potential”

The image below is a pictorial of what a good instructor should look like! Observing, listening, analysing and giving feedback only when necessary.



To be an informed and up to date instructor in coaching practices, the following headings along with sub-headings would be part of your everyday working life. All have their place, some are more common than others, all have a value. Few are to be ignored.

1. Observation & Analysis

T – Technical (placing protection and rope management)

T – Tactical (route choice / style of climbing)

P – Physiological (endurance / finger strength)

P – Psychological (head space / in the zone)

Holistic – Observing the big picture (Navigation)

Deductive – Identifying a certain problem that has a small number of probable causes (walking on a bearing)

Analytical – Observation that relies on identifying flags and markers

(not dropping the knee enough when making an eqyptian)

2. Structure of Practice

Variability of practice – trying to vary what is being practised.

(bouldering blind fold / routes in big boots / bottom rope set ups at different venues)

Distributed practice – this is practicing / improving a skill when an opportunity arrives.

(Walking on a bearing when the cloud drops / pacing on uneven terrain)

Massed practice – This is a session completely focused on a single objective.

(group tying in and belaying session at a climbing wall / crag)

Stages of practice

Chaining – the building up of an action out of its component parts. (building a belay using anchor points both in and out of reach, using clove hitches to attach rope to anchors)

Whole – part – whole – the whole skill is attempted at the outset. If any individual part is causing a problem, it is identified and worked on in isolation before being re-integrated into the whole again. (practising the clove hitch in isolation)

Shaping – the gradual refinement of the entire action through facilitation. (learner successfully building a belay with instructor overseeing and prompting when necessary)

3. Teaching Styles

Command – here the coach / instructor controls every aspect of the session and makes all the relevant decisions.

Practice – the student is given freedom to do what they want and where.

Reciprocal – two students working together and coaching or giving feedback to one another.

Self check – here the learner is responsible for evaluating their own performance.

Inclusion – the learner can decide the level of difficulty they want to work at.

Guided Discovery ‘convergent style’ – the coaches questioning guides the student to a goal or discovery.

‘Divergent style’ – the opposite too above, the answers could be varied and unexpected.

Learner Design – here the student decides the task and the coach becomes a facilitator.

Self teaching – speaks for itself, by this stage the student will be a practiced learner.

4. Learning Styles

People learn in different ways. It worth noting that a person's preferred learning style may change with the environment or the type of task being practised through learned experience i.e. it may be situational rather than a fixed style.

Visual – a demonstration of a movement.

Auditory – an explanation of the task.

Kinaesthetic – a description of how it should feel.

Activist – hands on, wanting instant gratification!

Reflector – will stand back and observe others before attempting the task.

Theorist – will prefer a logical step by step approach and want all the information.

Pragmatist – likes to solve problems and get on with the job.

5. Stages of Learning

Cognitive – the usual stage for beginners. A lot of time is spent thinking and building a mental model, they may have awkward and jerky movements.

Associative – this is the practice and mastering of a skill. The learner will gain more understanding of the skill and be able to absorb more complex feedback. This stage can last days even years.

Autonomous – at this stage skills are performed without any conscious control or thought. Students can detect and correct their own errors.

6. Goal Setting

Goals can be long and short term, the motivation to achieve a goal will be either intrinsic or extrinsic.

Smarter – they should express a clear, simple objective.

Measurable – it should be clear when they've been reached.

Achievable – within the time and resources available.

Realistic – within the capabilities of the individual.

Time-phased – divided into a sequence of shorter steps.

Exciting – it should be fun getting there.

Recorded – as a reminder of what was decided.

7. Feedback

Intrinsic feedback – is the information that automatically results from performing an action, sound, smell, feel, getting to the top!

Extrinsic feedback – is information which is sourced through talking to the instructor, video feedback, peer feedback, not getting to the top!

One model of Coach / Instructor provided feedback (Source: BASI Manual) the **PAT** Principal.

Pause – once the student has completed an action, pause for a moment to give enough time for them to review their own performance.

Ask – first ask the student about their own performance to help focus their attention on their own intrinsic feedback.

Tell – only after the student has reviewed their own intrinsic feedback should the coach provide any additional feedback.

Specific – statements should clearly identify part of the performance in question ('nice hand change on the crux').

Positive – statements should highlight either the positive or give positive guidance ('try and watch your feet when placing them').

Relevant – statements should relate clearly to the task set. ('I like the colour of your climbing rope').

The above coaching terminology is completely generic and used across a broad spectrum of sports, from threading the perfect fig of eight knot to a world cup winning goal keeper.

NOTES

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NOTES

Coaching The Movement Of Climbing

When we remove all the clutter from climbing, what is left? You, the rock, sticky shoes and perhaps a chalk bag. Stripped back to its foundation there is not much to climbing, and at the heart of this foundation is **movement**.

Our ability, as instructors, to develop an individual's movement can considerably enhance the climbing future of that individual.

Foundations Of Movement

The fundamentals of movement are co-ordination and technique. In climbing we would define good technique as efficient technique.

'When a climber executes a movement, the motion causes a particular sequence of nerve impulses, unique to that specific movement, to occur in the brain. When the climber repeats the movement several times (whether in reality or through accurate mental imagery), the repetition of that pattern of nerve impulses ingrains the movement in memory and causes it to be stored as a motor engram, also known as engrams.'

(Performance rock climbing. Goddard/Neuman.)

Why does it feel harder when we are trying a new technique? Why do we fall back into our old style or technique? When on a crux move of a route do you trust your strength, and power on through, or do you use good footwork and float through?

It feels hard to practice or use a new technique because you have yet to build up the engrams. When you are trying something new you may find yourself pumping out, getting anxious, difficulty in looking ahead etc. This is because your brain has to work at something new, so it struggles to keep up with the other things that you are asking it to do. With a technique that is well practised all the engrams are in place so the brain has room and time to work out the other things that you are asking it to do.

The more time you spend on practicing different techniques the larger the reservoir of engrams you will have. No climber has become good at on-sighting routes without developing a broad repertoire of moves. It is a fact that the average age of successful on-sight climbers is high compared with that of top athletes in other sports.

Foundations For Technique

As instructors we need to introduce students to the techniques of climbing. They will already have some strength, power and endurance. Therefore, we will have a good starting point for our coaching, in that they have some ability to begin with.

It is important that our students are learning a technique when feeling fresh, in a safe environment where they feel relaxed. The instructor should be observant that good technique is used throughout practice. If the student cannot maintain good technique for whatever reason, then inappropriate engrams may be re-enforced.

'Only perfect practice makes perfect'

As our students progress in their technical expertise then so will their strength and so will their range of possible movements the body can make. During the practice of a technique, challenge the student

to adapt the technique in different situations. By example, don't just teach a mantle self at one site, take the same technique to other challenging sites.

'Variability for adaptability'

As students become fatigued we must ensure that quality of movement remains. Once they start to get ragged, then it's time to move on.

Putting Technique Training Into Practice

As a climbing coach we need to come up with ideas, games or exercises that will help us put all the above into some kind of workable session or session's. Climbing walls and friendly bouldering venues are the ideal arena for the repeated practice required to gain good technique. Obviously climbing outside on the real stuff is where it is at, but it can be difficult to work on technique when there are other distractions like placing gear, loose rock or the mental pressure that someone else just flashed the same route. Setting a student up to try and practice a different technique when making the crux move on the hardest climb they have done is not going to give you or the student the desired results. Below are some idea's that may work for students in an indoor or bouldering environment.

Weight off / assisted moves

This is a great technique to use when the coach is encouraging a student to try something more physically challenging. For example if a student is trying a boulder problem move on a overhanging wall, but does not have the strength required for the move then the coach can (after asking for the students consent) push a hand into the students back or shoulders and take some of their weight. This helps the student make the move but with less loading on their fingers and arms. Alternatively if a student is struggling to trust their feet on a slab problem (after asking the students consent) the coach can hold and support their foot whilst they make the move. The above all helps in programming positive engrams.

Stick game

The person with the stick can be either the coach or another student. The longer the stick the higher a student can boulder. There are several ways of how you can run this. One is to point at which handhold you want the student to use so they can make their own adjustments to their footwork. Two is to point at which foothold you want the student to use and so the student can decide what they want to do with their hands. With some careful planning the person with the stick can put the student through various climbing moves, with an advantage being that you can get the student doing the same move several times over e.g. laybacking, edging etc.

Slow motion

Asking the student to climb in slow motion can give a lot of information to the student and also to the coach. Is the student able to contain control, balance and fluency. Climbing in slow motion will also give the student some kinaesthetic feedback, thus encouraging them to feel and follow what their body is doing.

Blindfold

As with the stick game this requires the coach working with one student at a time or having your students working in pairs. As the coach you will need to give clear communication to where you want your student to move e.g. move your left foot across to nine o'clock, reach up with your right hand to noon etc. As with climbing in slow motion, climbing blindfold encourages kinaesthetic learning as the student is totally reliant on their touch, feel, balance etc. Climbing blindfold can also help with a students spatial awareness, they will soon be able to judge distances and be able to place their feet on a previous handhold with continued ease.

Static cling and Dynamic motion

Static is making each move in balance, and progressing with focused points of contact for both hands and feet. It often involves moving through a sequence with a steady approach. This style of climbing may encourage more locking off. Dynamic involves more dynamic styles of climbing i.e. climbing very fluently and flowing between moves. Dynamic could even be taken as far as 'dynoing'. It is good to let students compare and contrast between these two very different styles of climbing.

Psychological Awareness

If you ask anyone involved with climbing what holds them back from pushing the grade, a large percentage will talk about the 'head game'. Over the last several years many top climbers and coaches have been making people more aware of mental training for climbing. Being held back by your climbing because of your head is definitely not a new thing. In the past many people thought that it was only the top performers in our sport who needed to train their mind as well as their body, but as coaches we have found that it starts as soon as or if not before the student touches rock.

As coaches we will often find ourselves using techniques to control students anxiety levels. This can be anything from offering them techniques to help control their arousal levels to helping them improve their self confidence, encourage positive thinking and helping identify realistic goals. By way of example: if we ask our student who is on the lead to 'relax', do they know how to relax? In today's society few people have the ability to truly relax, and by this I mean to become totally aware of their body and control their anxiety. So if you are going to use the word 'relax' then you have to teach them what it means, and it follows that you have to know what it means! It is often useful in stressful situations to have a single point of focus, and for many people this is their breathing. Having controlled the anxiety you can then turn you focus to various parts of your body, ask is it stressed or relaxed? If it is stressed can I relax it? Through this and other techniques you can help students understand what it is to relax.

| TOP TIPS FOR COACHING CLIMBING OR IMPROVING MY OWN CLIMBING | |
|---|--|
| 1 | |
| 2 | |
| 3 | |
| 4 | |

Teaching Navigation

Introduction

Navigation is a basic skill for mountaineers. Instructors will find themselves teaching at all levels from introducing basic concepts to coaching poor visibility skills. Many other leaders involved with youth organisations also find themselves introducing the basic skills. There are many good books on mountain navigation available to the mountaineer but there is little information within the hill walking fraternity on how to teach others the fundamental skills. From the model of the step system (see table) the further up the ladder one goes the more the emphasis is on practice and personal confidence with 1:50,000 or 1:25,000 OS map. You will get there quicker however if the teaching has been progressive, laid down a sound foundation and been fun.

“Perhaps as many as 30% of accidents in the hills are related to poor navigation and navigation decisions.”

Many of the people involved in these incidents will say they have at some time been taught to navigate. Why then are errors so common? Lacks of concentration, not having a sound strategy when lost, or not applying the basic skills are the usual reason. Frequently it comes down to what and how people have been taught.

The whole emphasis should be that navigation is **easy, a basic life skill and fun to learn**. A student I once had said they had never been able to navigate because their teacher introduced it as “a difficult subject to learn” from that moment the shutters were down.

“Navigation is probably 35% map reading, 15% compass work and 50% confidence in the other two.”

Teaching Kids

Young people below the age of around 10 often have difficulty in grasping the concepts of scale, representational distance and how a 3 dimensional object like a hill can be shown in 2 dimensions. But from a little younger they are capable of using a compass needle or easy ground features to keep the map set (usually a simple orienteering type of map). Having set the map they can follow simple line feature routes by setting and thumbing the map. Beyond the age of 12 or so all the other techniques and concepts can be developed fairly quickly. It is therefore important to teach at a relevant level and make it fun. Trying to teach something beyond the students’ level of ability will frustrate both the learner and the teacher.

Getting the Scale Right

One of the big stumbling blocks, for the novice navigator, can be the 1: 50,000 scale map, because to learn almost any of the techniques requires travelling a great distance. For many people the scale is difficult to relate to because it is so big, they can see lots of things close by around them but the map doesn’t show these things.

Today people want and seem to expect quick results and rewards for their efforts, using an orienteering scale around 1:10,000 will have things like boulders, ditches small copses etc marked. This gives confidence and makes it easier to set targets and see results for tutor and learner. Don’t be put off by the symbols on an orienteering map, remember to a novice it is all new, the great joy for them is seeing things on the ground and seeing them on their map.

When should the compass be introduced?

There is strong evidence to suggest that introducing the compass at the same time as a map aids the speed of learning. This is probably because it instils some key notions, such as: the map is not easily read unless it is set, there is also an unquestioning trust in the compass at a young age. In the initial stages however compass work is just a case of using the red end of

the needle to set the map quickly and nothing else. Do not get into discussions with novices about anything else to do with the compass, it confuses rather than enlightens.

Map Setting, The Fundamental Key To Navigation

Map setting is the fundamental key to sound navigation. If this is done in the environment of a wood on an orienteering map it is a non-threatening environment and you have the ability to take lots of twists and turns on a group map walk, feedback is almost instantaneous and there are repeated opportunities to have another go or practice. The skill is quickly grasped.

The following stepped system is developed from an orienteering model. When working with beginners the idea would be to work through level by level. The tutor essentially has 3 variables to play with to develop these skills systematically. Map Scale, Environment (these two are linked a little) and thirdly Group, Paired or Independent navigation exercises.

In an ideal world you might start map setting with a simple group activity in the garden moving to group or pairs on an orienteering map etc. until they can do it independently on a 1:50,000. Small steps and progressions between the 3 variables primarily to build confidence as you work your way through teaching the skills. Going up the hill with a 1:50,000 is an intimidating environment on a scale that is difficult to comprehend. Be systematic but inventive with your coaching and make it fun.

| | |
|----------------|---|
| Level 1 | <ul style="list-style-type: none"> • Introduce the concepts of map symbols, scales & map setting, through making your own classroom map. Map Orientation the most fundamental concept of map reading. • <i>Thumbing</i> – keeping a close watch on your progress, following a simple line feature route (Map walk) on a large scale map e.g. 1:10,000, a street map, home made map or orienteering map. |
| Level 2 | <ul style="list-style-type: none"> • Basic distance judgement, identifying and using simple <i>catching features</i>. • Ticking off features beside the line feature generally improving map reading skills. • Introduction of the compass needle for setting the map with a compass. Starting relocation skills - resetting the map with and without the compass and starting to process information to help locate position. |
| Level 3 | <ul style="list-style-type: none"> • Introduction of contours for major ground shapes. • Introduction of pacing and timing. • Introduction of bearings – on the ground mainly used for confirmation of route at junctions and then cutting corners short distances. • Relocation strategies using the compass on line features. Introduction to the 1:50,000 map. |
| Level 4 | <ul style="list-style-type: none"> • Recognising more detailed contour features, knolls and re-entrants on a 1:50,000 - Grid references. • Techniques - <i>aiming off</i>, <i>attack points</i> for route planning. • Taking bearings cross country. Relocation skills - slope aspect (resections / back bearings). |
| Level 5 | <ul style="list-style-type: none"> • Navigating with landform features only. • Techniques - <i>boxing or dog legs</i> around obstacles. Selecting the right mix of skills for the economic and efficient success of a leg or relocation. |

List some navigation games that could work on the hill:

Teaching Leading

Introduction

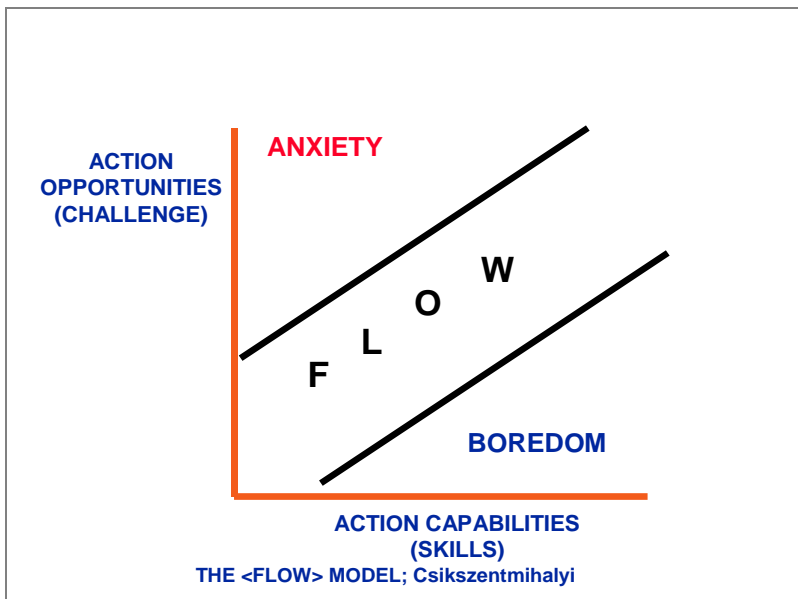
Teaching lead rock climbing to students is arguably one of the most demanding situations you may face as a MCI. Not only are you working with novice climbers in a potentially serious climbing environment, but you may well have to contend with limited technical expertise regarding using key safety techniques such as placing protection, belaying etc.

As instructors of rock climbing we face a real dilemma. We have students in a lead climbing situation. By definition lead climbing involves the (potential) risk of falling. If there is no risk of falling, it is not lead climbing. So to teach lead climbing we have to expose our students to the risk of falling.

The challenge for you as an MCI involves a balancing act between teaching students lead climbing skills in a 'real' situation and the probability and consequences of them falling.

What we are aiming to do is balance the student's actual level of climbing skill with the level of climbing adventure we set for them. Mismatch this challenge and we risk our students feeling bored stiff, or becoming stiffs (Fig 1). Get it right and they embark on a challenging and exhilarating learning experience.

Fig 1 The <FLOW> Model: From Csikszentmihalyi.



This climbing experience can take place on single pitch climbs, on land by the roadside, or remotely on a wind swept mountain crag, on mountain or roadside multi-pitch climbs or by the sea and at a variety of standards and rock types. All pose their own unique challenges regarding managing the situation. This series of notes outline some of the main considerations with regard to teaching lead climbing.

PREPARATION

There are three main areas we, as Instructors, have to address before we tie people onto the sharp end of a rope. They are:-

- Student preparation
- Students leading
- Ensuring Instructor and student safety

STUDENT PREPARATION

Before our students take the sharp end we have to put several building blocks in place. The diagram below (Fig 2) outlines these blocks.

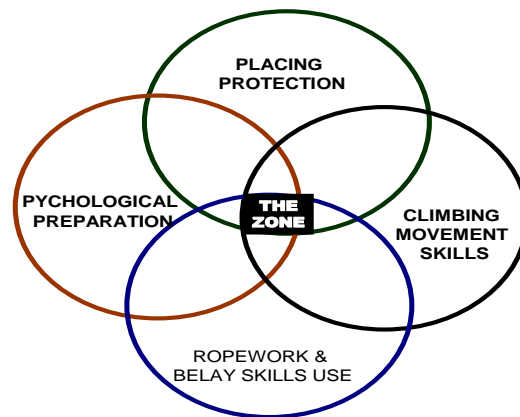


Fig 2. STUDENT PREPARATION

The diagram illustrates that for our students to operate in 'The Zone' (i.e. lead climb with a reasonable degree of independence) then we have to ensure that our students have a practical and working knowledge of the four key skills areas.

If there is a lack in any of the key skill areas, then the onus would be on the Instructor to appropriately manage the situation (Some skill deficiencies are easier managed than others though e.g. a lack of skill in placing protection may mean we preplace gear, or closely supervise the student placing gear. A lack of proficiency in belay skills does pose the question, "Should that student be belaying their partner in a lead situation?").

So what is involved in these 'building blocks'?

CLIMBING

Good climbing movement and technique on appropriate rock types

Experience of having climbed that type of rock before

ROPEWORK AND BELAY SKILLS

- Tying into harness using belay plate - protect leader (holding falls, lowering)
- protect second (holding falls, lowering)
- Tying into single point anchors - in reach
- out of reach
- Tying into multi-point anchors - in reach
- out of reach
- Combination of above

PLACING PROTECTION

Placing protection

- wires
- hexes
- Friends

Extending runners and clipping rope

PSYCHOLOGICAL PREPARATION

This area, arguably underpins the whole lead climbing experience.

Does the student want to lead?

Do they understand the inherent risk of lead climbing?

Can they cope with the mental strain of being at the 'sharp end'?

Do they have coping strategies to deal with the stress of lead climbing?

“CHECK IT OUT NOW”

We have outlined the four main building blocks. Before we set people loose, we should still create situations where these skills can be observed in practice. Never make assumptions of people's abilities to perform these skills, or blindly trust student's self appraisals. Check them out...

How do you do this?

There are several options, all or some of which can be used:-

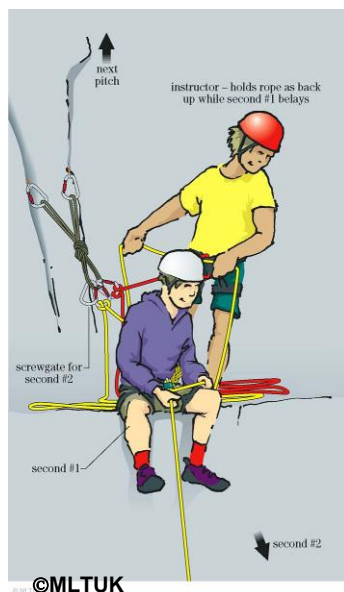
- Ask the right questions, see the answers backed up 'on the hill'
- Use of bottom rope session (covers lowering, holding 'small' falls. Also good for specific coaching in climbing technique)
- Weight drop machine (good for simulating lead climber falls, if you have one..)
- Technique specific sessions on gear and rope skills

STUDENTS LEADING

'Making it safe'

Teaching leading is a complex business. As we have seen a diverse variety of techniques and skills need to be put into place. Our aim is to operate in 'The Zone'. As we have seen if there is any lack of proficiency in any of the skills then we would have to manage the situation appropriately.

Student Safety Skills



Perhaps the single most important skill is our student's ability to belay, both a second and the leader, and in the worst case hold a lead fall.

It is worth noting that if a novice lead climber takes a fall it is generally an unexpected and sudden event e.g. a foot slips, a hold breaks etc. Even if the instructor is in a position where they could make the student safe they will not have the time to do so before the student is falling. Therefore the ability of the other student to belay is of vital importance – you cannot tail the braking rope as shown in the illustration when they are below you, and you are up above checking out gear placements etc.

If this ability is lacking then it begs the question "Should we have a situation where our students are leading and belaying each other?"

ENSURING INSTRUCTOR & STUDENT SAFETY

LOOKING AFTER YOURSELF

There will come a stage your when students will be taking the sharp end of the rope. You need to be in position close to your student to check out runner placements, coach, reassure, encourage and in-extremis avert a fall. How do you do this?

You have two options: you can solo or self line.

SOLOING

| Pros | Cons |
|---|--|
| Requires no specialist ascending kit | High risk for instructor (being 'cheese wired', falling rock, students etc.) |
| Quick to do | Can take time to sort out rescue for student (See note*) |
| You can be at student's side coaching as they climb | |

Note* - *It would be an idea to carry a short length of rope (9mm or above) in a 'throw bag', and a light rack of protection and slings. This will allow you to set up a belay and provide a top rope should your student get into difficulty. The rope can also be used as a 'moving' runner.*

SELF LINING

| Pros | Cons |
|---|---|
| Maximum safety for instructor | Can be time consuming |
| Can be used on all terrain | Requires good anchors to abseil down from |
| Easy to facilitate students rescue | |
| You can be at student's side coaching as they climb | |



Example of Self Lining

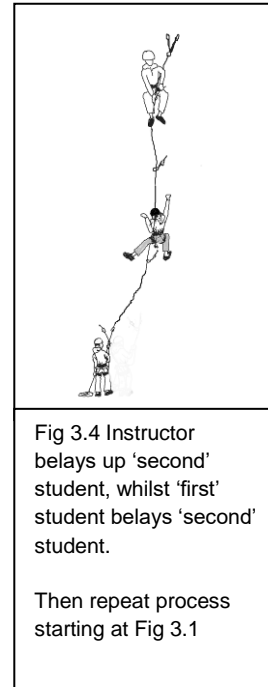
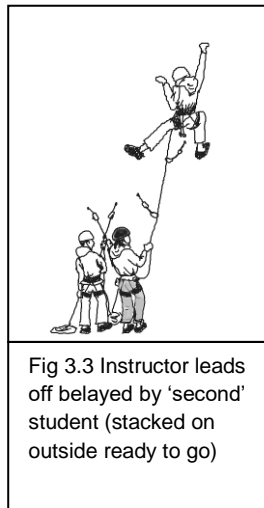
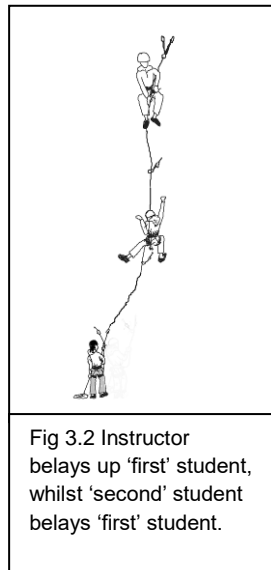
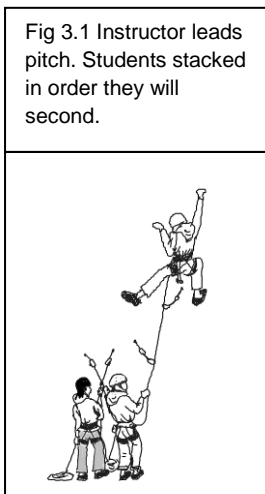
TEACHING LEADING ON MULTI-PITCH CLIMBS

The principles behind teaching leading on multi pitch are exactly the same.

In the above situation we can phase in multi-pitch lead climbing behaviours with a high level of student safety by having them climb in series (See Fig 3). The advantage of this is that the middle student is imitating lead climber behaviours, albeit on a top rope. You can also have the students swap leads. This does require a high degree of slick rope organisation on the instructor's part to operate effectively, and is also time consuming. However, it is 'safe' for the student 'seconding'.

With this method of teaching (as with parallel) you have 'coaching zones' – parts of the climb where you have good visual and audio communications with your team. This would be at the start of the pitch including before you leave the stance; as your second comes into view as they second the pitch; and when they arrive on the stance with you. What series does is give you more opportunities to 1:1 coach/operate within these zones. Another reason why series is a good teaching 'tool'.

Fig 3 Phasing in multi-pitch lead climbing behaviours using Series Rope technique



When moving into teaching leading soloing may be an option for the instructor if the ground and situation allow (see pros and Cons of this above). If this is not appropriate then the instructor will have to lead the pitch (belayed by students), then fix their rope and abseil down. Now the self-lining rope is in place. Directional runners can be used to ensure the rope follows the line of the climb N.B. care must be taken to ensure that although the rope is close to the line of the climb it does not interfere with the student's ascent.

SUMMARY

Lead climbing in summer is an inherently risky activity. To teach students leading is an inherently risky activity. What it boils down to is your ability to make sound decisions about your student's abilities and the ground that you are expecting them to climb on. Then to be proactive in your management of the situation, whilst ensuring your own safety.

Teaching leading requires that the instructor is in close contact with the student leading. You have to be certain that you are comfortable enough on that terrain to devote your time to

looking after your students. If not then it's time for a change of plan. Your personal safety is intrinsically linked to that of your students.

LIST SOME KEY ELEMENTS FROM THE REVIEW OF TEACHING LEADING

| | |
|---|--|
| 1 | |
| 2 | |
| 3 | |

NOTES

Rescue & Problem Solving

Prevention is better than cure, so be pro-active and ensure you do the following:

- **Good rope management.**
- **Good management of second or seconds.**
- **Good construction and management of stance.**

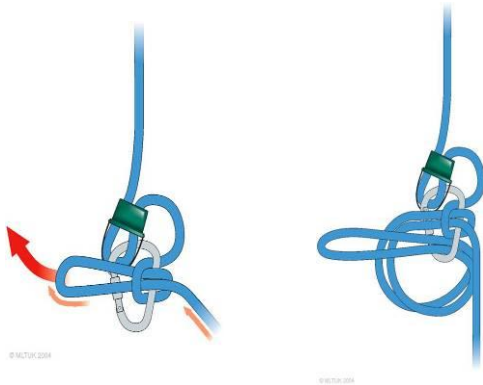
But if incidents occur, then follow some basic guidelines:

- **Always look for the easiest option.**
- **Escape down in preference to hoisting.**
- **Always back up prusiks.**
- **Keep your options open for as long as possible.**
- **Use releasable systems where possible, so steps can be reversed**

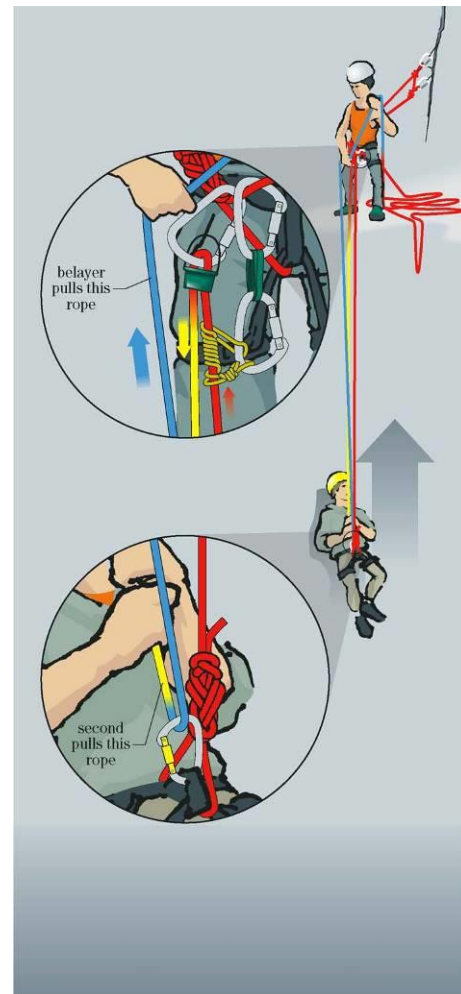
(Ref: Rock climbing, Essential Skills & Techniques, Libby Peter)

Nuts & Bolts

Tying off the plate

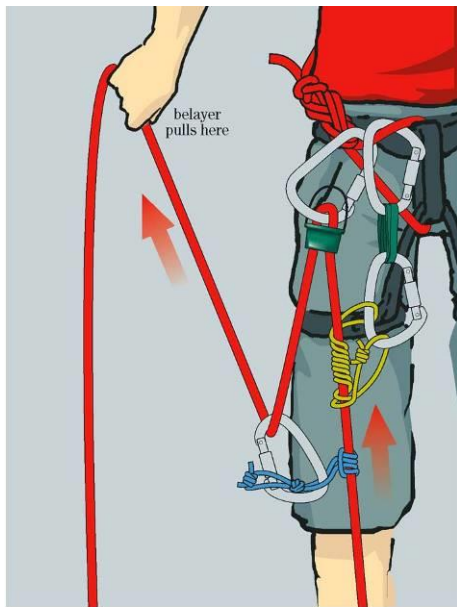


Assisted hoist

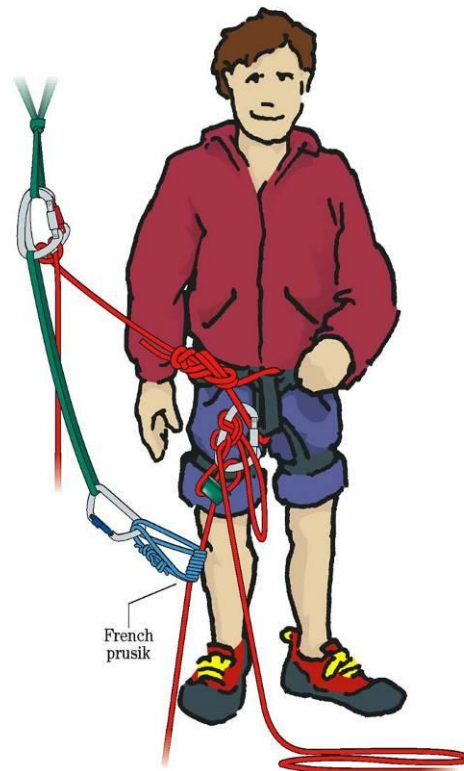


Ensure that you are slick with these techniques when the rope is loaded.

Unassisted Hoist



Escaping the System



The skill in solving rescue problems is not the ability to perform some basic techniques, but knowing when and how to adapt techniques for each unique scenario. This comes with experience and experience means **practice**.

When practicing rescue problems ensure that you work towards a general approach that will work for a variety of problems. Do not just practice set scenarios and set solutions, mix it up and challenge yourself. Remember to use a **back up rope** or keep the scenario **near the ground** - we do!

Some scenarios to practice:

Abseil:

- Bypass a knot
- Abseil with a second
- A pick up from another rope
- No figure of eight or belay plate
- Stacked abseil: Student jams abseil device and you are at bottom of rope.

Problems with second:

- Climb 'pasta' runner
- Fallen into space
- Unable to make move
- Unconscious
- Pulled muscle so can not climb
- Releasing full body weight on a 'plaquette' style belay device
- Lowering past a knot

Problems with leader:

- Fallen into space
- Injured
- Unconscious
- Unable to make move

Suspension Trauma

Suspension Trauma (Orthostatic Intolerance) is effectively blood pooling in the legs of a suspended person.

Symptoms 5 to 10 mins

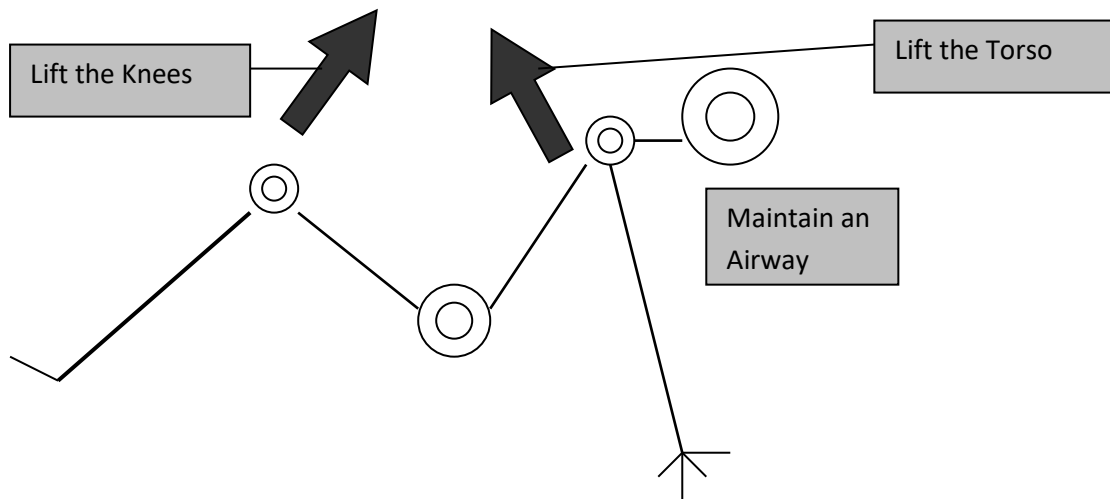
Increased pulse and breathing, sweating, some dizziness and anxiety

Unconscious 8 to 20 mins

Death occurs 5 to 20 mins from unconsciousness

The above timings from symptoms to death are based on somebody being held in a vertical position, unlikely in a climbing harness (consider a full body harness). However the timings are useful when evaluating a response to a worst-case scenario.

When managing a suspended unconscious casualty:



LIST THE SCENARIOS YOU DID AT TRAINING

| |
|--|
| |
|--|

LIST SOME TOP TIPS FROM THE DAY

| |
|--|
| |
| |
| |

Responsibilities Of The Outdoor Professional

In common with many aspects of outdoor reality, avoidance of extreme risk is preferable to dealing with its unpleasant consequences should it all go wrong. This short paper attempts to provide an overview of existing law. **You are recommended to seek the services of a suitably qualified person should you require proper legal advice.** The outdoor industry has been involved in several incidents, some of which have involved the loss of life over the past years. These incidents have established 'test cases' and set precedents for interpretation of the variety of legal issues.

Note: There are some differences between Scots Law and English Law.

Your responsibilities as an outdoor professional can be broadly divided into three main areas:-

1. Philosophical
2. Moral
3. Legal

Philosophical

To provide a memorable mountain experience appropriate to the aims of the participants. To achieve this aim, the individual uses their:-

- ⊕ Personal experience
- ⊕ Interpersonal skills
- ⊕ Belief that outdoor experiences have meaning and worth to the individuals involved
- ⊕ Understanding of how adventure experiences work and the impact they have on participants

Moral

To ensure the Physical and Psychological well being of the participants (this also falls within legal responsibilities) To achieve this aim, the individual:-

- ⊕ Uses their abilities as an instructor/leader to safely manage situations in the outdoors
- ⊕ Strives to use the outdoors in a manner that is environmentally sustainable
- ⊕ Operates within the remit of their relevant reward(s)
- ⊕ Follows any professional/Governing Bodies agreed Codes of Practice*

**In the mountaineering (this word used in a very general context) world our main references are the National Guidelines produced by the MLTUK and the AMI Code of Professional Conduct. For an EML to work professionally there is a legal imperative for them to be a member of BAEML (for their carnet & insurance) and abide by their code of professional conduct.*

Legal

The legal position of those who work with clients in outdoor settings has been brought into sharp focus lately by the Lyme Bay tragedy in 1993, and several mountaineering accidents in the last few years. Those who have responsibilities in this area, either professionally or voluntarily, have become increasingly concerned about their liability to their clients.

It should be borne in mind that in this country anyone can set themselves up in the business of taking people into the mountains (The exception being if your activities fall within the scope of AALA, see below)

This is not the case in other countries of Europe (which do vary) where appropriate qualification is necessary prior to being permitted to take groups into the hills. The next section sets out the current legal situation. (e.g. France has very strict laws relating to this whilst Spain has a similar approach to the UK).

At some stage or another in our work we will be operating within the confines of some aspect of legislation. There are two main areas that can affect us:-

1. **Criminal Offence covered by Criminal Law**
When acting within the limitations of the Health and Safety at Work Acts (when in breach)
2. **Common Law Offence (Scotland)**
Where a Duty of Care exists (and damage is evident)

Health & Safety At Work Act

The act provides a legislative framework to promote, stimulate and encourage high standards of health & safety at work. All 'persons at work' whether employers, employees, or self-employed, are covered. It not only protects people at work, but also the health & safety of the general public who may be affected by work activities ("reasonable care").

1974 Health & Safety At Work Act

The main points which affect are: Employers (of five or more people) have specific duties to employees which include planning, organising, controlling, monitoring and reviewing all aspects of H&S at work. This includes safety information and training.

The Management Of Health & Safety At Work Regulations 1992

This imposes a duty upon all employers "...to make a Risk Assessment of the risks to employees and others affected by the undertaking". This should focus on risks liable to arise out of the work/activity.

Personal Protective Equipment At Work Regulations 1992

This covers the selection, provision and maintenance of personal safety equipment. This includes life jackets, climbing equipment (hardware & software) and helmets. PPE purchased post-July 1995 is covered by this legislation (look for CE mark).

The Adventure Activities Licensing Regulations 1996 (Aala)

These took effect as from April 1996. The aim of the licensing scheme is "to give assurance that good safety management practice is being followed so that young people can continue to have opportunities to experience exciting and stimulating activities outdoors while not being exposed to avoidable risks of death and disabling injury".

Requirements are drawn from existing health & safety legislation. The scheme is aimed at "anyone who provides in return for payment, adventure activities within the scheme to young people under 18". It does not cover activities offered by voluntary associations to its members.

EU Package Directive

Came into force in June 1990 as a consumer protection measure and was incorporated into UK law in December 1992. It defines the responsibilities of tourism operators in relation to "packages" which they sell or promote. A package being defined as a pre-arranged combination of two or more of the following, offered at an inclusive price and covering a period of at least 24 hours or overnight accommodation:

- ⊕ Transport
- ⊕ Accommodation
- ⊕ Other tourist services which account for a significant proportion of the package e.g. hillwalking

Note: For further details refer to "Making the Directive work for you" published by the Scottish Tourist Board

Mini Bus Laws (PSV)

This whole situation is currently under review (as at October 1996). Current view from the Department of Transport is anyone providing transport for hire and reward requires a PSV.

Organisations such as charities, trusts, non-profit making bodies are exempt. There are changes in the pipeline regarding driving licenses which may change this position. Best bet is contact the Department of Transport.

Liability

There are two issues here. When does one become liable for other people and their property and what does that liability comprise of?

Anyone participating in sport runs the risk of injury, and the problem facing the lawyers when a participant is injured is to decide which injuries must be accepted as 'occupational hazards' and which should be the subject of claim for financial compensation from the person responsible. The person involved may be either a fellow participant or the organiser of the activity. A person injured whilst taking part in sport may seek financial compensation at civil law if that person can show that somebody has been negligent and that it was their negligence which caused the injury.

To establish negligence the following elements must exist:-

- ⊕ A duty of care must be owed
- ⊕ There must be a breach of that duty of care
- ⊕ Actual damage must have resulted from breach of the duty of care

Duty Of Care

This exists as follows:-

- ⊕ A contractual arrangement is in force
- ⊕ An adult accepting responsibility, by consent or action, for a Minor
- ⊕ For all teachers during the provision of supervised educational activities

The law on this matter is not precise and any ruling would be subject to:-

- ⊕ Age of the persons concerned (where children are involved a stricter duty of care is imposed)
- ⊕ Expertise of the persons concerned or other relevant characteristics
- ⊕ The degree of risk/danger
- ⊕ The risks of the injury occurring and the cost of taking precautions
- ⊕ The foreseeability of the particular accident occurring
- ⊕ Suitability of Activity, Location, Equipment, Premises and Qualification of the Provider.

Note: All the above are issues that are addressed in codes of practice. Adhering to a code of practice will not necessarily absolve a person from liability but not adhering to them may be evidence that reasonable care was not taken.

“In Loco Parentis”

Applies to all those who provide services for unaccompanied children under 16 years of age.

- ⊕ The Duty of Care may not be “disclaimed”
- ⊕ Teachers in attendance will retain the Duty of Care, except during specialist activities for which they are not qualified. (Provided this responsibility has not been delegated to the supplier)
- ⊕ A Duty of Care applies to any individual adult who knowingly accepts the responsibility for a minor. The judgement of failure to exercise such care is: “What is Reasonable”.

Defence

How can liability be avoided:-

- ⊕ A claim that the particular accident was unforeseeable
- ⊕ Contributory Negligence
- ⊕ The Defence of Volenti

Contributory Negligence

This defence, or partial defence takes into account that the participant suffered injury partly due to his fault and partly due to the fault of another. It relates to the amount payable in damages by taking into account what share of responsibility is who's. Anyone pleading this defence must prove that the participant was negligent and that this negligence contributed to the injuries suffered.

“Volenti Non Fit Injuria”

(No harm done to he who consents)

This applies where:-

- ⊕ Injured party is over 18 years of age
- ⊕ The injured party has consented to taking part
- ⊕ Is sufficiently experienced to appreciate the risk

Note: Volenti as a Defence may not be used where evidence of deliberate intent or negligence is evident.

Criminal Prosecution

Outdoor leaders should also be aware that criminal liability may arise following some incidents and particularly where death occurs as this may result in a charge of manslaughter. The crime of manslaughter will not be the same in every country. **Crimes are dealt with in the country where they occur and persons responsible may be extradited from this country to be tried in another country.**

Who Is Responsible When Liability Does Arise?

If a court decides that there has been negligence the question then arises – “Who pays?”

- ⊕ The individual actually responsible will be liable
- ⊕ The individual's employer

The person who was actually responsible will always be liable, but through the principle of vicarious liability that person's employer can be sued and and be liable to pay any damages awarded. This is because they are more likely to be able to pay the full amount than the employee, and they will also have to be insured against the public liability of their employees.

It is important in outdoor activities when asked to work for a person or organisation that it is made clear exactly what the type of contract is between the two parties. This is due to the differing rights and responsibilities between the two types of contract:-

- ⊕ Between an employer and an employee (contract of service)
- ⊕ Between an employer and an independent contractor (which is contract to provide a service)

The law has evolved tests to decide which category a contract falls in. These are similar to the criteria the Tax man uses to decide whether you are employed or self employed, and centre on such considerations as the amount of control exercised over the person concerned, who pays the wages and how, the importance of that person's work to the employer's business etc. Where legal problems arise this will fall to the court to determine according to the circumstances.

Exclusion (Disclaimers) Of Liability

If you are covered by the HSE Act you cannot disclaim your statutory responsibilities. It is not possible to exclude liability either as a term of a contract relating to participation in hazardous sports or by the display of notices excluding liability (subject to the Unfair Contract Terms Act 1977).

This act provides that liability can no longer be excluded or restricted for negligence arising in a 'business' context resulting in death or personal injury. You can include exclusion clauses in contracts in relation to loss or damage to property (subject to a test of 'reasonableness' introduced by the Unfair Contract Terms Act 1977).

Any attempt to exclude liability must be brought to the notice of the participants either before participation, or, where any contract is involved before the contract is completed.

Insurance

There are two aspects of insurance: compensating a victim for injuries suffered or damage sustained to property; and covering anyone who may have to pay compensation following a successful claim against them for negligence.

All providers and suppliers (irrespective of financial reward) should make a clear statement to all clients as to the insurance provision and level of cover. Participants must also be advised as to the personal accident cover required, or limitation of cover where provided.

There are two main types of insurance for a provider/leader to be aware of:

Public Liability Cover

For suppliers/providers in business. Provides protection against third party (including participants) claims against you for accidental bodily injury and loss or damage to material property. Strongly recommended. (For IML's this is compulsory and cover is an intrinsic part of membership of BAIML: AMI (see separate article which covers the specific arrangements for AMI Members) offers special rate insurance through Perkins Slade as do MLTA).

Employers Liability Cover

This is a statutory obligation covered under the HSE. This covers legal liability for damages and legal costs arising out of death or bodily injury caused to employees in the course of their employment with the insured.

Personal Cover

It would be prudent to advise your clients to the limitation of cover that is provided and to recommend (or arrange) their own personal insurance cover (appropriate to the activity) to cover them for a personal accident, loss/damage to personal property and Third Party liability.

The BMC offers a very easy to manage scheme for providers to run for their clients. The attached BMC handout highlights some specifics regarding this type of insurance. When working abroad in some countries it would be advisable (if not compulsory) to have your own medical and rescue insurance.

Conclusion

Accidents do happen.

BMC Participation Statement

The BMC recognises that climbing and mountaineering are activities with a danger of personal injury or death. Participants in these activities should be aware of and accept these risks and be responsible for their own actions and involvement.

Avoidance is far better. So by exercising your:

- ⊕ Judgement
- ⊕ Technical skills
- ⊕ Interpersonal skills

You seek to manage the dangers and risks, providing a safe, positive and enjoyable learning experience for your clients.

I hope that this brief outline of the 'legal' side of working in the outdoors does not put you off. Recent test cases have demonstrated that providing we do the above and are not negligent the law is on our side.

To sum up, the main points to be aware of are:

- ⊕ Be trained to a level appropriate to the activity you are involved in
- ⊕ Have current experience of the activity you are delivering
- ⊕ Ensure that you are adequately insured
- ⊕ If self employed check out the variety of legal responsibilities, and their implications before starting trading
- ⊕ Join your professional association (if you have one)
- ⊕ Operate to appropriate Codes of Practice etc.

Daily Mail, Friday, December 22, 1995

Instructor is cleared over rockface plunge

Daily Mail Reporter

A CLIMBING instructor was not to blame for a fall in which a pupil suffered serious injuries, a judge ruled yesterday

The High Court in London had heard that David Cuthbertson, of Colington Mains Road, Edinburgh, was Peter Pope's instructor on a climbing expedition to Back Bowden Doors in Northumbria over the Easter weekend in 1990.

Mr Cuthbertson, a member of the Association of Mountain Guides, had allowed Mr Pope, a 53-year-old businessman of Molesey, Surrey, to lead a party of climbers up one of the easier grades.

But Mr Pope slipped while trying to negotiate an overhang, fell on to a ledge below, rolled off it and crashed 22ft to the ground, fracturing his spine and left wrist.

Mr Pope claimed that Mr Cuthbertson had failed to instruct him properly in the placing of protective equipment, which gave way beneath him as he fell, and to properly supervise the climb.

He also alleged that he only hit the ground because Mr Cuthbertson had let out too much slack —

Judge tells injured pupil: 'You knew the risks you were taking'

or in some other way failed to control the rope properly.

However, the judge, Diana Cotton, Q.C., dismissed all the negligence claims against Mr Cuthbertson, saying: 'If you are going to engage in rock climbing you must acknowledge and accept the risks you take and not expect to offload your responsibility on others.'

'I believe Mr Pope thought that, having paid for a guide, he was entitled to have his safety guaranteed. Since he fell and was injured the guide must have been at fault.'

'To engage in what even he regarded as a high-risk sport in that frame of mind was foolish.'

The judge said she 'totally rejected' Mr Pope's evidence that he was a novice climber and said he had at least 30 days climbing experience before the accident.

She added: 'This accident

happened because the protection which I find Mr Pope had placed underneath the overhang did not hold.'

The judge dismissed all negligence claims against Mr Cuthbertson, saying there had been no failure by him either to instruct or supervise Mr Pope.

She added: 'Mr Cuthbertson is not only a top-grade climber but is also a fully-qualified guide and, moreover, one whom Mr Pope had, up to this point, been satisfied with.'

'From the moment Mr Pope got to hospital he was determined that the fall was Mr Cuthbertson's fault and that he should be compensated.'

'In my view Mr Pope's determination to pin the blame on Mr Cuthbertson from almost the moment that he fell has resulted in quite a considerable distortion



David Cuthbertson

of his recollection of events. There is no doubt that for all the advances that have been made in modern equipment, rock climbing has always been and remains a high-risk sport.

'I find that Mr Pope was at all times fully aware that accidents do happen in climbing.'

The judge dismissed Mr Pope's case — which means he will get no compensation for his injuries.

He was ordered to pay Mr Cuthbertson's legal costs but, as he was legally aided, the costs order is unlikely to be enforced.

THE NATIONAL ASSOCIATION FOR OUTDOOR EDUCATION

WHAT IS PUBLIC LIABILITY INSURANCE?

What Is It?

A public liability insurance is designed to provide protection against third party (including participants) claims made against you for accidental bodily injury and loss or damage to material property arising from your business/profession as a result of your negligence.

What is Negligence?

Negligence has been defined as " the omission to do something which a reasonable man would do, or doing something which a prudent and reasonable man would not do".

In order to sustain an action in negligence a third party must show that the you owe him a duty of care. Whether such a duty exists is a matter of law. The "neighbour principle " is often used which briefly says that you must take reasonable care to avoid acts or omissions which you can reasonably foresee would be likely to injure your neighbour. Your neighbour would appear to be persons who are so closely affected by your act that you ought reasonably to have them in mind when directing the acts or omissions called into question.

It is important here to note that when Children are involved your duty of care is extended as the law believes that children do not have the ability to foresee danger and therefore you are expected to foresee for them. The same would apply to Special Needs cases also.

What if I Chose Not To Insure?

If you are found to be in breach of your duty of care and that negligence does indeed attach then the Plaintiff is entitled to compensation, usually in the form of damages.

Damages consist of:-

- * pain and suffering
- * loss of amenities
- * future loss of earnings
- * loss of earning capacity
- * additional future expenditure

Without the protection of an insurance policy, you become personally liable and therefore your personal assets can be taken into account in assessing the level of damages to be paid to the Plaintiff.

Claims made against you do not always result in negligence being proven as the onus of proof currently, is on the Plaintiff. However the costs of defending and investigating can be colossal. Can you afford to carry these costs?

WHERE CAN I OBTAIN THIS TYPE OF INSURANCE?

As part of your membership with NAOE there are a number of Insurance Covers available to you at very competitive premiums. These are arranged through MacDonald Daines (Insurance Brokers) Ltd and full details can be obtained by contacting NAOE Tel: 01768 865113

THIS FACHSHEET IS FOR INFORMATION PURPOSES ONLY

MacDONALD DAINES
(INSURANCE BROKERS) LTD

NOTES

Acknowledgements (Legal Issues)

George McEwan, Senior Instructor, Glenmore Lodge
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 Glyn Mitchell, Programme Manager, YMCA Lakeside
 National Guidelines (Advice on Safety & Good Practice etc.) – MLTUK
 The Legal Liability of Outdoor Leaders & Providers, Adventure Education Factsheet
 Health & Safety at Work etc Act, The Act Outlined – HSC
 Personal Protective Equipment & CE Marking Explained – ABMEM
 Making the directive work for you (complying with the EU travel directive) – Scottish Tourist Board

Acknowledgements

- Assorted Glenmore Lodge instructors for content.
- Content compiled by Shaun Roberts and George McEwan
- MLTUK for kind permission to reproduce images from Rock Climbing Essential Skills and Techniques.

Recommended Reading

| | |
|---|----------------------------------|
| Rock Climbing Essential Skills & Techniques | Libby Peter (MLTUK publications) |
| The Mountain Skills Handbook | Pete Hill & Stuart Johnston |
| The Handbook of Climbing | Allen Fyffe & Iain Peter |
| Performance Rock Climbing | Dale Goddard & Udo Neumann |
| Acquiring Skill in Sport (<i>in depth</i>) | Bob Sharp |
| The Successful Coach (<i>simple fundamentals</i>) | Sports Coach UK (www.1st4sport) |
| Sports Injury <i>prevention & first aid</i> | Sports Coach UK (www.1st4sport) |

Useful website addresses

Access

- www.glenmorelodge.org.uk (a good source for local access info)
- www.snh.org.uk
- www.outdooraccess-scotland.com

National Governing Bodies

- www.mltuk.org (The mountain leader training uk)
- www.mountaineering-scotland.org.uk (McofS website)
- www.thebmc.co.uk

Weather Forecasts

- www.met-office.gov.uk
- [www.the very useful uk weather page .co.uk](http://www.theveryusefulukweatherpage.co.uk) (excellent synoptic charts)
- www.mwis.co.uk (very good mountain forecast)

Coaching in Climbing Info

- <http://onlineclimbingcoach.blogspot.com/>
- <http://www.climber.co.uk/categories/articlebrowse.asp?topic=6>

Coaching Info

- www.1st4sport.com

Useful Sites

- www.aala.org.uk (Adventure activities licensing authority)
- www.outdoor-learning.org.uk (Useful outdoor ed info)

Trainee MCIs, Trainee WMCI's and Insurance

This article was put together by Tony Halliwell who has been instrumental in setting up the insurance deals with Perkins Slade for AMI.

SUMMARY

If you're a trainee MCI or trainee WMCI, resident in the UK and affiliated to the BMC or MS (AMI members are) and you are practising for assessment with friends/mock clients where there is no payment whatsoever involved (including payment in kind) then the third party civil liability cover we get from the BMC/MS will cover you for that. You don't need to buy professional cover for this volunteer situation.

The professional cover (i.e. when working for a fee) provided by AMI allows members to work within the remit of qualifications held. Trainee MCIs are covered to work on ML and (if they hold the quals) WML and RCI terrain, but not covered by this to work on scrambling/multi-pitch/sea-cliff terrain. Trainee WMCI's who hold the AMI insurance policy can obtain a top-up policy to allow them to work, for a fee, on WMCI terrain provided that this is under the direction of a qualified mentor. AMI promotes qualified instruction/qualified instructors and provides assistance to trainees to help them gain qualifications, but if any trainee (MCI or WMCI) is working for a fee beyond the remit of qualifications held, without a mentor who is willing to take responsibility for their actions, or without insurance, they are breaking AMI's Code of Professional Conduct.

DETAIL

There are two basic types of insurance.

The first is general, third party civil liability insurance, which is the kind that the BMC and MS offer to UK-resident mountaineering club members to cover mountaineering activities. (NB. Unfortunately the cover from BMC and MS doesn't include residents of Eire). If you're an individual or affiliated club member, you get this cover in situations where you're not being paid. As soon as you receive any kind of payment at all (including payment in kind such as travel or accommodation expenses – or a thank you gift) **this cover ceases**. (<http://www.thebmc.co.uk/Download.aspx?id=387>)

This insurance is extended to provide cover during logbook (practice) period between training and assessment for individuals who are registered with a UK Home Nation Board for a mountaineering qualification, provided that no payments are made. That includes MCI and WMCI as well as ML, RCI etc.

The long and the short of this is: AMI affiliates its members to the BMC or MS. If you are a UK-resident and an MCI trainee or an WMCI trainee and you are practising for assessment with friends, friends of friends or people you've advertised for to come out with you as mock clients, then, so long as this is completely unpaid, the BMC/MS affiliation provides third party civil liability – (excludes non-UK residents.)

However, PLEASE SEE THE REQUIREMENTS (based on the AMI Code of Professional Conduct which you sign up to when you become an AMI member) about what you need to explain very clearly to those clients about your trainee status.

The second kind of insurance is professional cover which provides us with the protection we need when we are working for a fee.

It's not all that many years ago that AMI did not offer any kind of insurance to trainee MCIs or offer winter climbing insurance to trainee WMCI's.

Historically, what used to happen was that to practise for both MCI and WMCI assessment, because no professional cover was available, trainees could only go out climbing with their mates or friends of friends etc. (unless they were lucky enough to work for a centre which would deploy them as trainees in these activities) This is still an entirely appropriate way of working towards MCI and WMCI and it's what we believe that the vast majority of trainee members do when practising for MCI assessment.

Around 10 years ago, AMI extended its insurance policy to provide cover for trainees when working for a fee within the remit of other mountaineering qualifications. This meant that if you were an MCI trainee you could get cover to make a living from ML and RCI work etc whilst working towards your MCI. In the same way, WMCI trainees could get cover for MCI work for most of the year and Winter ML work in winter, but they couldn't get cover from AMI for paid work on winter climbing.

Around 6 years ago, recognising the difficulty of passing WMCI without having the opportunity to practise directly with clients, AMI sought out a way for WMCI trainees to pay for a "top-up" insurance to be able to work for a fee on winter climbing instruction, PROVIDED that they were being directly mentored by a qualified WMCI or Guide who was in overall charge of and responsible for the activity.

We have frequently been asked if we can make this same facility available to trainee MCIs, but we can't.

Trainee MCIs may think this unfair, but the reality of the situation is this. Trainee WMCI's have passed summer ML, passed winter ML and passed MCI, so they've been assessed on instructing multi-pitch climbing and on leading in a winter environment. The only award that we know that all trainee MCIs will have passed is Summer ML - on which basis we can't provide cover for instructing multi-pitch climbing or scrambling. It may feel galling to trainee MCIs that this cover isn't available, but please bear in mind that it's been this way for all full members who've gone through the qualifications process.

It is the case that there are insurance companies out there who will provide climbing instruction insurance to just about anyone, whether they are qualified or not – and that includes unqualified MCI trainees. The insurance cover is expensive and requires lots of form filling and risk assessments. We can't stop unqualified instructors from obtaining this insurance, but MCI trainees should bear in mind that according to the Code of Professional Conduct that we sign up to when we become AMI members, then if working for a fee on scrambling/multi-pitch/sea-cliff terrain, MCI trainees need to be working under the direction of a mentor (MCI/WMCI/Guide) who is willing to take responsibility for the trainees actions.

In summary, in situations where you have done the training and not yet passed the award, but you're not working professionally (as in, for a fee) then the situation for UK residents is covered by the logbook period arrangements described above. But you still need to make your status totally transparent to whoever you are climbing with. There must be no intimation of qualification to do what you're doing.

If you are working professionally (as in, for a fee) then the Code of Professional Conduct you signed up for states that you need insurance and you need a mentor. If you can't find both of these, don't work for a fee.

1C SUPERVISION OF TRAINEES

Trainees can gain experience in a wide range of managed positions within organisations where the responsibility for their deployment lies with a suitably competent individual. National Guidelines [5.5 Trainees]

A qualified Instructor may supervise trainee instructors in order to allow them to gain quality direct experience prior to being assessed for an award. The Trainee will have undertaken appropriate training for the activities. In such cases the supervising instructor retains full responsibility for the enterprise and will be responsible for assessing the experience of the trainee and for making final decisions concerning the appropriate deployment of the Trainee (e.g. choice of route).

Deployment should take place in a progressive manner which allows, but does not commence with, remote supervision and records of this progression will be kept by the Instructor and the Trainee. If the association's logo is used or displayed, the Instructor will ensure that mentoring begins with direct experience for the Trainee working with a qualified Instructor, before progressive deployment. Mentoring for the Trainee before, during and after working with clients will form an intrinsic part of this process.

Clients must be informed of the exact status of the trainee instructor, including their formal qualifications and level of experience.

6(ii) INSURANCE

The Instructor shall hold suitable insurance for civil liability for professional negligence. If the Instructor does not hold such insurance it must be confirmed that the organisation for which the Instructor is working does hold appropriate insurance. The Instructor shall advise the Client as to the extent of insurance cover held and as to whether the Client should consider obtaining further accident cover.

NB mountaineering council membership cover can be extended to Eire residents if there are sufficient numbers of members in Ireland for AMI to form an MCI-affiliated club. The last time that AMI canvassed opinion on this was around 2003. There was not sufficient interest at that time – but that can change! Talk to your committee.

Self Appraisal

HOW TO COMPLETE THIS SELF APPRAISAL

This self appraisal is designed to be completed either on a daily basis or at the end of course. It covers all the major elements of the MCI syllabus. You will find it useful as a focus for reflecting on your days experiences. Assess yourself from a scale of A - D in the appropriate column. After this, identify the specific areas that are your strong, and weak, points. When you have identified these areas identify a course of action that will maintain, or strengthen these areas.

At the end of the appraisal you will find a section for written comments. At the end of the course, prior to your debrief with the course trainer, please complete the Self Appraisal Summary. During the debrief you will receive specific feedback regarding your appraisal. If you have any questions or concerns regarding any aspect of this form please have a chat with your trainer.

A=Competent B= Can Do C=Need more practice D=It's All New To Me

| ASPECT | A-D | ACTION |
|---|-----|--------|
| SUMMER NAVIGATION | | |
| Developed your navigation since Summer ML assessment. Are more efficient and confident in all conditions. | | |
| Knowledge of a variety of navigation techniques | | |
| Structure, organise & perform teaching sessions covering the essential techniques of summer navigation | | |
| MULTI-PITCH CLIMBING | | |
| Lead VS 4c rock climbs confidently and efficiently | | |
| Parallel rope work | | |
| Series rope work | | |
| Constructing and managing stances | | |
| Correct & appropriate use of belay methods | | |
| CLIMBING TEACHING | | |
| Structure, organise & perform inspirational teaching sessions on summer crags | | |
| Use appropriate rope methods for students effectively & efficiently | | |
| Safeguard yourself (as appropriate) whilst teaching students to lead on single pitch routes. | | |

| A=Competent B= Can Do C=Need more practice D=It's All New To Me | | |
|--|-----|--------|
| ASPECT | A-D | ACTION |
| Safeguard yourself (as appropriate) whilst teaching students to lead on multi-pitch routes. | | |
| IMPROVISED RESCUE | | |
| Good 'nuts and bolts' techniques | | |
| Solve simple problems | | |
| Solve complex (but realistic) problems | | |
| COACHING ROCK CLIMBING | | |
| Structure, organise and perform warm up and stretching sessions | | |
| Teaching basic climbing movement skills (i.e. handholds, feet and body) | | |
| Knowledge of basic training concepts e.g. cardiovascular fitness, strength, endurance, mobility etc. | | |
| Knowledge of basic psychological training concepts e.g. coping with stress, positive attitudes, visualisation etc. | | |
| Structure, organise and perform bouldering session | | |
| Knowledge and treatment of soft tissue injuries | | |
| SHORT ROPE | | |
| Setting up rope with two students for short roping. (coils, spacing, hand coils etc.) | | |
| Holding a slip stance, absorb shock | | |
| Skilled application of short rope technique with student(s), using appropriate judgmental skills on a variety of terrain | | |
| Lowering two students | | |
| KNOWLEDGE AND INTEREST OF THE MOUNTAINS | | |
| Work of the conservation bodies e.g. SNH, JMT, National Parks etc. | | |
| Basic rock types and geology | | |

| A=Competent B= Can Do C=Need more practice D=It's All New To Me | | |
|--|-----|--------|
| ASPECT | A-D | ACTION |
| KNOWLEDGE AND INTEREST OF THE MOUNTAINS cont | | |
| Effects of ice in Mountains | | |
| Mountain plants & animals | | |
| People stories, history and pre-history | | |
| LOG BOOK EXPERIENCE | | |
| Is the log book complete | | |
| Personal climbing experience in three major climbing areas of the UK? | | |
| FIRST AID | | |
| Qualification appropriate to your likely work and type of situations you reasonably expect to encounter? | | |

WHAT IDEAS DO YOU HAVE TO HELP WITH THIS DEVELOPMENT?

TIMESCALE FOR ASSESSMENT (Completed after debrief): _____

TRAINEES SIGNATURE: _____ DATE: _____

TRAINERS SIGNATURE: _____ DATE: _____



AMI – The benefits of membership

The Association of Mountaineering Instructors (AMI) is the representative body for professionally qualified Mountaineering Instructors in the UK and Ireland.

AMI was formed in 1990 to represent the interests of the highly experienced mountaineers who have undergone rigorous training and assessment to qualify under the Mountain Leader Training UK (MLTUK) Mountaineering Instructor Scheme.

All full members of the Association are holders of the Winter Mountaineering and Climbing Instructor (WMCI) or Mountaineering and Climbing Instructor (MCI)

Trainee membership is open to those who have completed their MCI training course. In this way we aim to help and assist those instructors who are at the beginning of their outdoor career by offering support, workshops and access to the AMI civil liability insurance scheme.

AMI is committed to ensuring the continuing high standards of climbing and mountaineering instruction in the future.

REPRESENTATION

AMI has representatives on MLTUK and the home nation Mountain Leader Training boards for England, Scotland, Ireland and Wales, which between them administer the Mountaineering Instructor, ML, WGL, RCI and CWI schemes.

It also has good links with Plas Y Brenin, Glenmore Lodge and Tollymore where MCI and WMCI courses are run. The Committee is happy to represent members' views to these and to other bodies, and aims to keep members informed of relevant matters within the training world.

AMI MAGAZINE

The AMI magazine is distributed quarterly to all members. This magazine has rapidly become an industry leader and contains articles, reviews and letters to keep everyone informed on current affairs and modern practices.

It is also a forum for members to air views and ideas and present articles for discussion and information. AMI strongly encourages members to put forward their ideas and comments for inclusion in the newsletter.

WORKSHOPS PROGRAMME

These events are organised by the Workshop Co-ordinator. They aim to keep members up to date on technical and professional issues, in particular update training and issues which may not have been included in previous training.

They are a great form of CPD and are run throughout the year in summer and winter environments. Members should contact the Workshop Co-ordinator if they have ideas for topics which they would like to be included.

TRADE/RETAIL PARTNERSHIP

Many Manufacturers/Distributors and Retailers offer all AMI members excellent discounts on equipment purchases. The details of these arrangements are distributed to members annually in the Trade/Retail Partnership Guide and in the members area of the website.

REGION GROUPS

AMI members in several areas have formed themselves into regional groups, details of which are given in the newsletter or are available through the Secretary.

Local meetings act as a forum for discussion and for local training events. If a regional group does not exist in your area and you would like to form one contact the Chair for information.

FREELANCE/ MEMBER LISTING

Full Members can include their name in the AMI Freelance Instructors List via the online services in the members area of this site.

In your area of the AMI website it is possible to update current contact details and make links to your own website.

INSURANCE

AMI has negotiated Professional Liability cover through brokers Perkins Slade at a reasonable cost.

Details are available from the AMI Office. This service is available to both Full and Trainee Members.

AMI BADGE AND LOGO

Full Members are entitled to use the logo when advertising activities where they are working within the remit of their qualifications.

The logos are available from the Member Area of the website.

COMMITTEE AND CODE OF PRACTICE

Through the committee the AMI endeavours wherever possible to follow up the professional concerns and grievances of its members.

DEVELOPMENT OFFICER

AMI has a part time Development Officer whose role it is to support AMI, its committee and the members of the Association.

TRAINEE MEMBERS' GROUP/WOMEN'S GROUP

These groups aim to support the needs of member of the groups and encourage their development and active participation in the Association.

PROMOTIONAL MATERIAL

AMI produces a variety of material aimed at promoting the Association and its members. This is changing and developing on a regular basis.

BMC MEMBERSHIP

AMI is a BMC affiliated club which entitles members to buy BMC services such as Reciprocal Rights cards and insurance services, and allows us to be represented on regional committees.

JOINING THE AMI

If you have attended MCI training or passed MCI/WMCI and wish to join the AMI go to www.ami.org.uk and complete a membership form online. Current cost (03.11) trainee member £45, full member £85

PLEASE NOTE: if our qualifications database has no record that you have attended MCI training or passed MCI/WMCI your application for membership will be declined. If you have only recently completed MCI training or assessment please post or email a copy of your training/pass page to the office: AMI, Siabod Cottage, Capel Curig, Conwy LL24 0ES
E enquiries@ami.org.uk