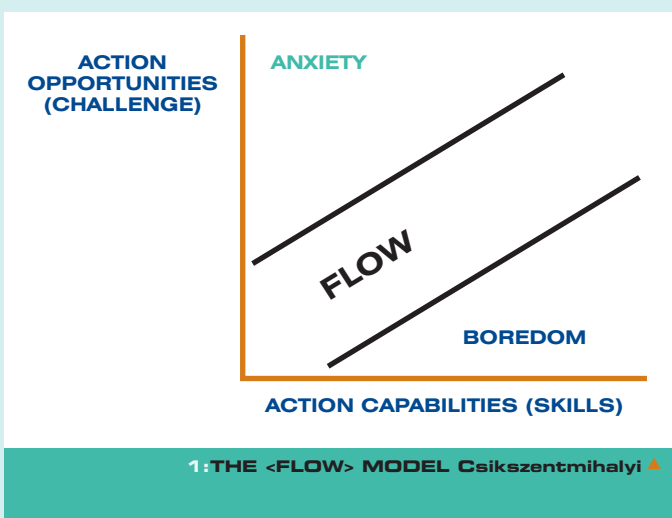




TEACHING LEADING ON TRAD CLIMBS

Words & Photos **George McEwan** AMI Technical Officer

Teaching lead rock climbing to students is arguably one of the most demanding situations we face as mountaineering and climbing instructors. 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. This short article will highlight some of the main considerations that instructors will have to take account when teaching lead rock climbing.



As instructors of lead 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. Of course we could have students on a top rope such that there is no risk of them taking a leader fall – but surely one of the main factors for a lead climber to manage is the potential of taking a fall, and managing not just the potential physical consequences of a fall, but also the psychological threat of falling?

The challenge for us as instructors involves a balancing act between teaching students lead climbing skills in a 'real situation and the probability and consequences of them falling – and the impact such a fall would have on their future desire to lead climb.

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 (Figure 1). Get it right and they embark on a challenging and exhilarating learning experience.

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 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 (Figure 2) outlines these blocks.

The diagram illustrates that, for our students to operate in 'The Zone' (ie. lead climb competently and confidently), we have to ensure they have a practical and working knowledge of the four key skills areas.

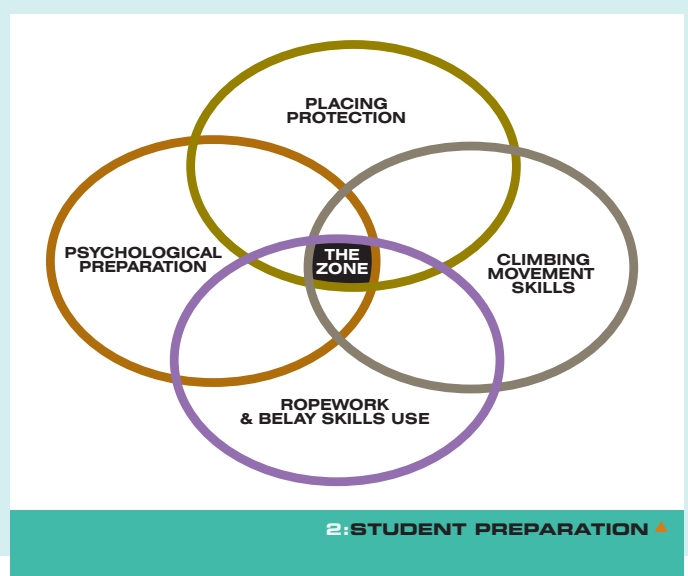
If there were a lack in any of the key skill areas, the onus would be on the instructor to appropriately manage the situation (Some skill deficiencies are easier managed than others though eg. a lack of skill in placing protection may mean we preplace gear, or closely supervise the student placing gear. 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 movement skills

Rock climbing is all about, well climbing rock. I would be looking for students to be first and foremost to be competent in their personal movement on rock, after all that is what they need to be first and foremost – competent rock climbers. If they are good on rock then the likelihood of falling becomes far less. I'm not suggesting your students should be cruising E1, but that they are comfortable moving on rock at a suitable and appropriate grade.

So students need to be able to demonstrate good climbing movement and technique on appropriate rock types, plus have experience of having climbed that type of rock before. To reach this point requires effective coaching in movement skills long before we start to introduce the more technical aspects of lead climbing. eg. protection and ropework.



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. eg. 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?'

All the other skills we can manage by appropriate supervision and choice of climbing terrain.



Ropework and belay skills

Students also need to be able to do the following ropework and belay techniques:-

- 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

Of the above techniques, the key one is that BOTH students must be able to safely operate a belay plate, including holding leader falls. I'll discuss the reasoning behind this more fully later in this article.

With tying into anchors, well all that can be managed by the instructor. What I would suggest here is that the ropework techniques we teach people are such that they can use them in as widest range of mountaineering situations as possible. They might be rock climbing this week, but next year could see them winter climbing, and the year after that out in the Alps. So the ropework techniques ideally should be able to cover most situations they will encounter in these environments. That is why I prefer to teach people to use the rope alone, and leave equalising slings to a central point out of the equation for now. My main reasoning behind that, is that multi-point anchors using slings can cause all sorts of problems if you are not skilled at gauging potential load directions, and carry large enough slings to bring everything together.

Placing protection

Placing protection is a key safety skill for leading trad climbs. Lack of skill on the part of your student(s) can be managed by the instructor using a variety of methods, all of which have their own particular pros and cons. eg. all pre-placed gear, key runners placed etc. Students

will, ideally, need to be able to do the following:-

- Placing protection > wires, hexes, Friends
- Extending runners and clipping rope

Psychological preparation

This area, arguably underpins the whole lead climbing experience. Given that lead climbing is a risk activity, we have to ensure our students fully understand the implications, both short and long term, of what is involved in lead climbing and the hazards implicit in it.

I use the following questions as the basis for a discussion with my students as to whether lead climbing is an appropriate option:-

- Does the student want to lead?
- Do they understand the inherent risk of lead climbing?
- Can they cope with the metal strain of being at the 'sharp end'?
- Do they have coping strategies to deal with the stress of lead climbing?

The last two questions I think are the ones most often overlooked. I would say all of us have been scared when sketching our way above gear making moves at our limit. Now I am not suggesting for one minute we have our students do the same, but I think equipping our students with some basic psychological coping strategies early on is a key to them remaining calm, cool and collected whilst on the sharp end.

'Check it out now'

I've 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, we would have to manage the situation appropriately.

Ensuring instructor and student safety Looking after yourself

There will come a stage when students will be taking the sharp end of the rope. You need to be in a position close to your student to check out runner placements, coach, reassure, encourage and in extremis avert a fall – ideally without worrying about your own safety all the time. How do you do this?

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

Soloing

Pros

- Requires no specialist ascending kit
- Quick to do
- You can be at student's side coaching as they climb

Cons

- High risk for instructor (being 'cheese wired', falling rock, students etc.)
- Certain amount of your 'headspace' is devoted to looking after yourself.

- Can take time to sort out rescue for student (See note*)

*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

- Maximum safety for instructor
- Can be used on all terrain
- Easy to facilitate student rescue
- You can be at student's side coaching as they climb

Cons

- Can be time consuming to set-up
- Requires good anchors to abseil down from

There are several ways in which you can self-line – the image in Figure 3 (overleaf) shows just one example.

An assumption commonly made is that you can clip your student into your self-lining rig, thereby averting a fall. I've not got the space in this article to go into this in detail, but several points to be aware of.

The first is, that as I mentioned earlier, (and assuming you have chosen an appropriate climb in relation to your student's ability), if your student is going to fall it will be unannounced, thereby giving you no time to swoop to the rescue and clip them in.

Second is you have to be careful of having your students rope clipped



3: DEMONSTRATION OF SELF LINING ▲
 Photo: Shaun Roberts

into your self-lining rig. A leader fall onto your self-lining rig could have catastrophic consequences. If you must clip your student into your rig, ensure that this effectively gives them a top rope. All you are doing here is giving them security whilst they, or you, place a piece of protection.

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 Figure 4). 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'.

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.

NB. 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. Put novice lead climbers into this situation and you can see that the chances of someone being hurt are pretty good. Safe management of such a situation by the instructor relies on sound decisions about their students' abilities and the ground they are expected to climb on. Continued safe management then involves proactive management of the situation, whilst ensuring the instructor's own safety.

Teaching leading requires that the

instructor be in close contact with the student leading to facilitate their effective coaching. Effective coaching by the instructor in such a situation requires that they are comfortable enough on that terrain to devote their time to looking after their students. If not then it's time for a change of plan – the instructor's personal safety is intrinsically linked to that of their students.

A key element to doing this successfully is ensuring that time is taken in coaching the necessary climbing movement skills and psychological coping strategies. By then dropping a climbing grade or so students should be able to move intuitively on the rock thus able to devote more of their headspace to the techniques of lead climbing, from placing and evaluating protection to lead climbing tactics such as scoping out the climb.

Although there are a great many technical and safety related skills involved in teaching leading it should be borne in mind that they are only a means to an end – effective and individualised coaching of the novice leader, which is in itself a whole other article...

4:1 Instructor leads pitch. Students stacked in order they will ascend.



4:2 Instructor belays up 'first' student, whilst 'second' student belays 'first' student.



4:3 Instructor leads off belayed by 'second' student (stacked on outside ready to go).



4:4 Instructor belays up 'second' student, whilst 'first' student belays 'second' student. Then repeat process starting at 4:1.

