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# METHODICAL GUIDELINES

for Mountain Education

“Climbing for all” is an Erasmus + co-financed project implemented by the mountaineering associations of the Czech Republic, Slovakia, Italy, Hungary, Slovenia and Croatia, from 2016 to 2018.

Within the framework of the Project, the six partner countries engaged in experience and knowledge sharing on topics of mutual interest including the development of analysis and recommended methodologies in mountain training for the sports and activities of the associations' concern.

This brochure is the product of expert analysis of current methodologies implemented for all segments of Mountain Training in partner countries and aims to provide joint advice and recommendations to trainers and organisers engaged in in knowledge and skill transfer activities. The basis of the methodology was written by HPS mountain leader instructor and author of several mountain training publications, Alan Čaplar.



## Educational programmes

Partner organisations should have educational programmes for a variety of mountain activities. Those programmes contain synopsis of educational themes and learning goals, list of needed equipment, preconditions for entry and exam preconditions, exam criteria and adopted instructor cadre training schemes.



### Program Alpinist

Pogoj za prijavo na izpit:

#### Splošni:

- član PZS,
- registriran pri KA oz. član alpinističnega kolektiva,
- starost 18 let,
- najmanj 3 leta alpinističnega staža,
- najmanj 3 letni obrazec »Prijava na izpit za naziv alpinist«,
- v celoti izpolnjen obrazec »Prijava na izpit za naziv alpinist«,
- izjava kandidata o zdravstvenem stanju,
- potrdilo o opravljenem izpitu za starejšega pripravnika.

#### Posebni:

- Najmanj 30 različnih kopnih (letnih) alpinističnih vzponov v najmanj dveh različnih gorstvih:
  - od tega najmanj 5 vzponov višjih od 500 metrov z oceno IV ali več (kot prvi ali izmenično v navezi),
  - od tega najmanj 5 vzponov z oceno IV ali več (in višjih od 300 metrov oziroma najmanj 6 raztežajev) kot prvi ali izmenično v navezi,
- najmanj 15 različnih zimskih alpinističnih tur (pristopi, smrti, turni smuki, ledni slapovi - vsaj 100 metrov);

Temelem članka 31. Statuta Hrvatskog planinarskog saveza Izvršni odbor HPS-a na sjednici XX. YY. ZZZZ. potvrdjuje

### Program ljetnih alpinističkih škola u HPS-u

Ovim se programom uređuje način školovanja članova u ljetnim alpinističkim školama (1. stupanj alpinističkog školovanja) u alpinističkim jedinicama HPS-a te način procjene znanja i vještina.

#### Članak 1. Svrha programa

#### Članak 2. Terminologija

- naziv škole: ljetna alpinistička škola
- naziv kandidata: kandidat za ljetnu alpinističku školu
- naziv polaznika: polaznik ljetne alpinističke škole
- naziv škole uspješno završenom školom: nastup alpinist pripravnik

#### Članak 3. Ciljevi školovanja

Ciljevi školovanja na ljetnoj alpinističkoj školi su nadgradnja osnovnih planinarskih znanja i vještina te specijalizacija u smjeru alpinizma. Znanja i vještine u programu ljetne alpinističke škole mladim pripravnicima trebaju omogućiti sigurno kretanje zangleđenim planinskim terajinama te sigurno penjanje alpinističkim smjerovima u suhoj sezoni, a u sklopu s etičkim i moralnim načelima, uz bazu o okolisu i čuvanje prirodnih resursa.

#### Članak 4. Organiziranje škole

Vizitice škole je Komisija za alpinizam HPS-a, alpinistički odsjek planinarske udruge članice HPS-a ili neki klub u HPS-u.

Ime (jednu osobu) imenuje organizator. Voda škole treba biti instruktor alpinizma s važećom licencom u alpinističkoj školi s važećom licencom.

Ujla alpinističke zadatke:

- usne uplate, predavanja, vježbu i ispit
- učače, pomoćne instruktore i ispitivače
- vrne poslove: upis polaznika, potpis osiguranja i dr.
- u isplate
- u
- u
- u

• diplomu HPS-a  
• te ga Komisiji za alpinizam HPS-a

#### Članak 5. Minimalni plan

učače teorijska predavanja i vježbe na terenu.

## Announcements

Entities organising an education event should have an appointed formal and responsible leader. The education event should be advertised well before the planning dates and the advertisement should contain the following information:

- Organiser details
- Name of leader
- Contact details
- Detailed information on how to apply
- Eligibility information
- Exam preconditions
- Expenditure for the trainee
- List of must have and recommended equipment
- Detailed course plan
- Federation membership application details
- Insurance details
- Recommended literature and other sources of information
- Entry criteria in case of more applications vs. acceptance

## Course leader

The course leader responsibilities may be different from course to course but in principle it is expected that he or she is the focal point for:

- Announcements
- Application dynamics and process
- Logistical management of educators
- Duty and timeframe management of educator work
- Creation of the dynamic plan
- Budget and list management
- Participant Q&A
- Reporting to organiser
- Other logistical work



## **Educators (trainers, instructors, experts, etc.)**

Quality educators are necessary for a successful implementation of a training course. It is preferable to have available as many educators as possible during the course. This is important not only for the implementation of the training programme and for safety reasons but also to ensure trainees have available experienced people to talk to even outside the actual training hours. This does not only have an educational effect but also helps for newcomers to bond and also experience better the socio cultural aspect of mountaineering as a whole. It is not recommended to have separation of educators from trainees in any situation applicable. Joint dinners, sharing of sleeping quarters, etc. are recommended. However, it has to be ensured that educators do not transfer skills and knowledge in these off duty hours that is different than the official programme.

## **Course equipment**

If we want that the participants have sufficient practice with gear we will ensure availability of own but also course gear. However, all gear, especially gear relevant for safety, must be checked by instructors before any training session.

## **Other course materials**

It is useful and opportune for course leader to ensure availability of other relevant materials such as pens and paper, presentational gear, presentation printouts, etc.



## Organisational challenges

### Trainees

Educators should be familiar with all course conditions, especially those related to preconditions, eligibility and exam system. It is very likely that a lot of trainees' questions and misunderstandings would be found in that area of interest and all course organisers and educators should have unison understanding of this processes.

All trainees must have insurance and federation membership regulated before the start of the course.

Personal trainee gear must be checked for functionality and must be according to required standards.

### Educators

Must have clear joint understanding of the outcome of the course and their specific roles and responsibilities. This is an important challenge for the course leader as often specific educators might be of a high level of experience but might miss the key messages needed for the particular course or subject.

It has been observed that sometimes course leaders might tend to slip in a more democratic decision making mode when dealing with organisational matters with educators. Off course, consulting experienced colleagues is always a good step, however, to avoid misunderstandings and sending of confusion messages to the trainees, the ultimate decision and responsibility stands with the course leader and educators should comply.

One educator fits all does not exist! Educators should be aware of their strengths and experiences and be able to communicate to the course leader which segments of the course they are expert in and in which their competencies are personal but not pedagogical.



## Relations with trainees, Q&A

### **Should presentations be shared with trainees after the lecture?**

Trainees often ask for copies of presentations for own study needs. Often authors are OK with that and often they are not. Sometimes those presentations are then later used for further developments but out of the control of the educated author. For this reason, it is recommended that federations create uniform thematic presentations and not distribute them to trainees. Trainees should be directed towards books that develop themes better than PPT presentations or course organisers might consider creation of federation approved scripts for further trainee distribution with clear messaging that more technical elements should be practiced with an instructor.

### **Taking and publishing photos**

It is recommended to ensure trainees understand that photos taken during official courses are for personal use only and should not be published, unless specifically indicated by course leader. This is mostly applicable for photos taken during exercise of more technical nature in which systemic mistakes might be part of the learning process but when observed as singular photos might create confusion with outside viewers.

### **No alcohol**

Socialising among mountaineers is a common occurrence and in principle recommended. However, during the course of the training session and lectures, a zero alcohol principle must be implemented.

### **Dealing with incidents**

During the course of education, especially on longer activities, group or individual problems might occur. It is recommended that course leader reacts to this immediately to avoid escalation. Group meetings are a useful tool for resolution of issues.



## Socialising

When implementing an educational scheme it is opportune to remember trainees do not want a sterile ex cathedra approach but are also keen to experience the socio cultural aspect of mountaineering as well as experience the nature. Thus, it is not the educators' goal to fill the hours or bombard trainees with unnecessary or too advanced knowledge but induct them in the theme in a friendly and personal manner. Boundaries and ethical rules are useful and need to be impressed on the trainees but the method how to do it should not be one of authority but rather one of ensuring trainees adopt them as natural.



## Lectures

When preparing lectures educators should consider the level of pre knowledge of trainees and consider how they would react if switching places. If a lecture is boring and too academic trainees will lose interest. It is recommended that the lecturer:

- Is well prepared through adequate literature and programmes
- Is timely in lecture delivery and ensures lectures do not surpass allotted time
- Is aware of the ultimate goal of the thematic subject (some examples in continuation)
- Ensures two way communication with trainees but manages it well to avoid missing the key points or even to stray away from the subject.
- Has a printout of the presentation in case of lack of electricity
- Concentrates on key messages of the theme. Those most important knowledge you wish trainees need to remember.



## **Skill training - Educating through practical exercises**

Different training schemes in partner federations consist of a wide variety of hiking and climbing skills. Training schemes rarely provide enough time for practical exercises thus managing them correctly is of utmost importance. When considering field work the educators need to concentrate on effects that they wish to achieve by providing demonstration and guidance but also ensuring achievement of independent trainee skills, all in controlled environments.

## **Analysis**

Analysis should be the crown of all field activities. This is a fora in which to discuss issues and mistakes but also the place in which to give positive feedback where deserved. Trainees often name analysis as moments in which they learned the most and reached full understanding of a particular system or concept. Analysis should be well controlled by course leader but also ensure participations of all.



## **Training going wrong - Unexpected situations**

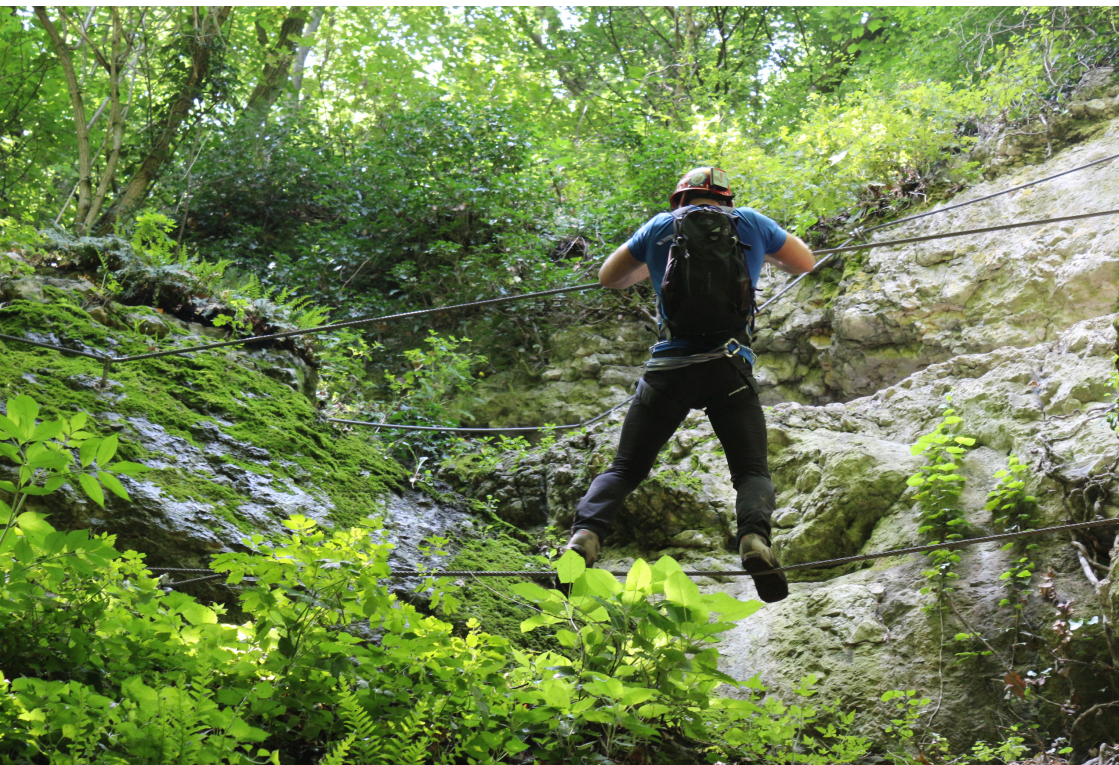
Sometimes trainees will make unexpected mistakes or solve a problem unexpectedly fast. During the activity the educator must decide whether to stop the activity or let it unfold until the end. The primary factor in making that decision should be participant safety. As a rule, if safety is not compromised it is better to let the activity unfold and correct mistakes during analysis for everybody to hear.

## **Time**

Some activities will take more time than planned. Educators should consider whether investing more time will have an effect or not and based on that decide to stop it and revert to analysis or not.

## **Work ethics during training**

Educators should not take an approach to seek perfection during the training phase of the programme but instead look for safe or unsafe and then during analysis explain the finer points.



## Equipment usage training

When considering equipment usage training the course leader will ensure sufficient time and sufficient educator availability to ensure that the three step methodology is properly implemented. Practical aspects should have more time allocated to it than theory.

### Three step methodology

**Step one.** The educator demonstrates usage of equipment step by step without superfluous explanations and side information. The positioning and posture of the educator must ensure visibility for all trainees and the educator should observe trainee non verbal reactions and adjust speed and steps accordingly. The next moments is a good moment to seek questions and explain finer points. Then the educator repeats the process faster or slower depending on amount of questions asked.

**Step two.** Entrust the task to trainees and let them do it themselves with sufficient educators around to provide guidance. When satisfied go for step three.

**Step three.** Call for trainees to perform the action step by step and be vocal about it i.e. let them explain the process to educators or the group to ensure that trainees have absorbed the activity fully.



## Skill training issues

- Safety is king. The key task of educators in the field is to ensure a safe training environment. Especially in climbing exercises a competent educator must be positioned in a way and in a place where maximum safety coverage must be achieved. Remember helmets! They are a must.
- Unconfident trainee, especially in working with equipment, is a liability that needs to be immediately addressed. In addressing it, the educator must not have an approach of reprimand but a patient pedagogical approach designed to install confidence and ultimately lead to competence of the trainee.
- Trainees with pre course knowledge often tend to offer advice to others or challenge skills and knowledge offered by educators, for the most part benevolently. However, course leader or educator must avert this kind of inputs and shift the conversation back to the established programme but be gentle about it and potentially use the analysis section for such discussions.
- It is observed that educators tend to spend a lot of time on demonstrations and verbal theoretical explanations. Time management is key. A good course leader will ensure that the demonstration vs. practice ratio prefers the practice side of the training.

## Relation to improvisations

During training the topic of improvised equipment or system often becomes subject of discussion. Improvised rope harnesses or similar might prove a good tool for learning details such as knots but educators must stress that improvisations are not basic tools or equipment and serve only in times of utmost need and not as basic equipment or tool.



## Skill and knowledge examination

The ultimate goal of Mountain education is not to impose or ensure satisfaction of activity criteria but to ensure knowledge and skill transfer to trainees interested to practice those activities in an organised, safe and responsible manner. The ultimate goal of an exam is to:

- Incite trainees to responsibly prepare for the exam
- Serve as last learning opportunity of finer points (use the exam also as training opportunity, not as disqualification tool)
- Ensure trainees understand well own capacities and also limitations
- Ensure a platform for collegial educator trainee discussions
- Motivate trainees to peruse the Mountain activity and potentially upgrade over time

The final grade of an exam should be a combination of assessment of absorbed skills and knowledge, trainee relation to safety and mountain values and capacity to peruse the activity independently.



## Examples of learning goals and recommended learning goals for all Mountain trainings:

### **Mountaineering, Sport Climbing, Ski Mountaineering**

**Emphasis:** Explain what is Mountaineering and its components (walking, hiking, rock climbing, alpine climbing, etc.), what is Sport climbing (indoor, single pitch, multi pitch, competitive climbing, etc.) and what is Ski Mountaineering. Use Sport Accord and international federation's definitions. Explain the structure of your Federation.

**Goal:** Ensure trainees have a broad organisational and activity specific understanding of Mountain activities, how they relate and how are they specific. Also, provide understanding of training paths within own federation.

### **History of Mountain activities**

**Emphasis:** First ascent of Mt Blanc, Matterhorn tragedy, London Alpine Club, Himalayan expeditions, own federation historical moments.

**Goal:** all trainees should be able to explain in few sentences the history of world Mountain history and own federation history to a bystander.

### **Abseil Knowledge**

**Emphasis:** Explain the importance of abseiling in climbing in general and more specific situations. Why, When and How to abseil. Explain most common and recommended abseiling techniques of abseiling.

**Goal:** Ensure the knowledge and skill base of participants in order for them to easily follow the practical aspects of learning to abseil.

### **Abseil Skills**

**Emphasis:** Recognize abseiling as a fast and efficient way to get down from rock faces, climbing routes etc. Teach that all abseil techniques are based on the friction between rope and the abseil device (even if it is the human body). Learn to utilize one modern and one traditional device to abseil. Emphasize that abseiling is dangerous and highly error intolerant. Learn all possible dangerous situations: failure of the abseil anchor, abseiling off the rope, handling stuck rope, understanding the danger off rope cut over sharp edges etc. Emphasize that more than 50% of the climbing accidents is related to abseiling.

**Goal:** Trainees can abseil off from rock faces in safety. They know all possible dangerous situations and failure sources, and they know how to avoid them.

## **Belaying**

**Emphasis:** on the importance and role of belaying in climbing. Importance of understanding efficiency levels of various types of belaying methods and tools. Explain most common and recommended type of belaying.

**Goal:** Trainees will have a visual and technical principle of belaying absorbed.

## **Belaying chain**

**Emphasis:** the importance of to avoid/minimize the risks of a climber's fall. They learn about the complete belay chain: the anchor, the rope, the runners and the climber. They learn about fall factor, different anchor loads and equipment dynamics in case of a fall. They learn to use belay plates, belay plates in guide mode and one traditional way of belaying using HMS knot. They learn about dangers related to belaying: failure of the anchor, failure of the runners, common mistakes and errors of the belayer. / learned before!

**Goal:** Trainees can belay their partners on lead or on second. They learned the dangers of belaying. They recognize the importance of anchor reliability, proper runner placement and can present solid belay techniques.

## **Technical Gear**

**Emphasis:** textile gear - ropes, sling, Prusik, harness; metal gear - carabines, belaying devices, gear for traditional climbing even for sport climbing all characteristics, usage, norms, maintenance

**Goal:** trainees know gear they are using, what it is made for, maintenance

## **Self-rescue**

**Emphasis:** climb up the rope using Prusik, belaying devices (e.g. GriGri), stabilized position in case of fall, communication with climbing partner, call mountain rescue, stay calm - being prepared for improvisation, rescue package (extra gear in case of need for rescue) self rescue for abseiling as escape i.e. leave behind equipment

**Goal:** know and understand self-rescue systems, know how to use gear you have, remember phone number of mountain rescue, importance of partner communication.





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