FINLAV – FINNISH AVALANCHE EDUCATION – FROM SCRATCH TO CURRICULUM

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ABSTRACT: Humak University of Applied Sciences received funding from the European Social Fund for an avalanche education development project. This three-year project (2015-2017) developed avalanche education and improved avalanche awareness in Finland. Within the project, the curriculum and educational structure of FINLAV – Finnish Avalanche Education were created, including educational materials and course progression. FINLAV - Finnish Avalanche Education follows good international practices for avalanche education.

The goal of the project was to improve the avalanche awareness of two main target groups. One of the target groups was professionals and organizations for whom avalanche awareness is part of their work. Examples of organizations and authorities that represent this target group are Lapland Rescue Department, Police, Parks and Wildlife Finland, Finnish Meteorological Institute, volunteer rescue organizations and guiding services. The other target group was winter recreationists in the fells and mountains. Within this target group, special focus was given on free skiers/riders and other backcountry recreationists whose numbers are growing rapidly.

The project was able to appeal to the target groups by offering multiple pilot courses during two winter seasons. The target groups' avalanche awareness increased through these educational events. At the same time, the project was able to test the course curriculum and educational materials and gain feedback for further development work. The project also organized lectures and participated in various free skiing events to promote avalanche awareness. Another important communication channel for disseminating information and raising avalanche awareness were articles and news published in social media.

FINLAV - Finnish Avalanche Education is the most important product of this project. FINLAV - Finnish Avalanche Education consists of a curriculum and course flow chart for both professionals and recreationists, including teaching materials in Finnish. Two examples of the teaching materials are a Check List Card, which is a hand out material for course participants, and a website (www.lumivyory.fi), which is an open learning material package for self-study. The project also organized the first Instructor Training Course with the outcome of 20 new skilled avalanche instructors.

Finally, the project ensured that FINLAV - Finnish Avalanche Education will have continuity after the closure of the project. The Finnish Ski Area Association has taken over the administrative responsibility for the curriculum and course system. A steering committee has been appointed to guide the future work. Humak University of Applied Sciences continues as a member in the steering committee. The project has established strong cooperation with SVELAV - Swedish Avalanche Education and this cooperation will continue.

KEYWORDS: Avalanche education, avalanche awareness, Finland.

1. BACKGROUND

Until now, Finland has not had a training system focusing on avalanche safety. Different courses have been arranged, but systematic training and education system that would focus on current international research-based information and on solid practical experience has been missing. Humak University of Applied Sciences and its adventure education professionals with expertise in avalanche safety noticed the need for systematic training and education and took the challenge.

The project, Developing Avalanche Education and Increasing Avalanche Awareness, was carried out in 2015-2017. The project was administered by Humak University of Applied Sciences, and was financed by the Centre for Economic Development, Transport and Environment in North Ostrobothnia in Finland and European Social Fund. There were

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several partners supporting the project, including, e.g. Lapland Rescue Department, Parks and Wildlife Finland, Finnish Meteorological Institute, Finnish Ski Area Association, Finnish Ski Instructors Association, Multidimensional Tourism Institute, and many other organizations and institutions interested in raising avalanche awareness in Finland.

The project gave birth to a training and education system called FINLAV – Finnish Avalanche Education. It aims to enable high-quality avalanche education in Finland. Project created an avalanche curriculum and instructional materials in the Finnish language. During the project, professionals, whose skills met the criteria were trained as avalanche instructors. FINLAV – Finnish Avalanche Education works actively with SVELAV – Swedish Avalanche Education and FINLAV's basic curriculum is closely comparable with SVELAV's training program.

2. CURRICULUM AND COURSES

FINLAV – Finnish Avalanche Education follows closely the well-established examples of existing international avalanche course formulas.

The general educational and curriculum approach in these course formulas and materials followed, for the most part, the Swedish and Canadian educational outlook. These countries were taken as models, based on justifiable pedagogical preferences, language skills and the previous knowledge of the Swedish and Canadian avalanche education curriculum.

The course system is divided into two streams, one for recreationists and another for professionals. Both target groups are important but volume-vise recreationists, which means mostly freeskiers, are vital. At this stage of the course system development, the main focus was given on the recreational courses.

The core for recreational course flow is an Online Avalanche Awareness platform. This online learning environment can be found on the FINLAV website and can be used as an independent study platform. Similar materials are also available for instructors to create short Avalanche Awareness intro courses or evening lectures. Avalanche Safety Skills 1 course (16 hours) is the first actual course in the educational process. This course is an introductory course, which provides the participants with basic information on how to recognize an avalanche terrain, on which tools to rely on to make sound decisions in the backcountry and on how to recognize the influence of human factors. This course also contains companion rescue practice. The course is carried out in simple terrain (ATES).

Avalanche Safety Skills 2 course (32 hours) is an advanced course that focuses more on trip planning and advanced decision making. Participants are taught how to plan and carry out a safe backcountry day. This course provides participants with tools for risk management also in challenging or complex terrain (ATES), if conditions permit. Companion rescue skills are tested on this course.

While the main target group with FINLAV are recreationists, there is a need for avalanche safety training for professionals, as well. Professionals can use Online Avalanche Awareness platform as an introduction to the topic. The rescue course is a one-day course focusing on rescue specific topics on an introductory level. This course type suits well for rescue professionals and rescue volunteers. In the future, this course type will need further development but, for now, it serves its purpose well in Finland. This course can be combined to the other courses or given separately.

PRO 1 course (24 hours) is an introductory course targeted for people who need avalanche skills at their work, i.e. ski patrollers, ski instructors and nature guides. The core contents are similar to Avalanche Safety Skills 1 but the pedagogical focus is on working safety. This course covers, for instance, work safety regulations and companion rescue tests.

PRO 2 (60 hours) is equivalent to SVELAV Pro 2 course taught in the Finnish language. This course has many similarities to the Canadian Avalanche Association's Avalanche Operations Level 1 course. Pro 2 course deepens the participants' snow and avalanche knowledge and gives tools for gathering and sharing relevant information about snowpack and weather. This course ends with several exams to ensure the participants' knowledge, skills and professional competence.

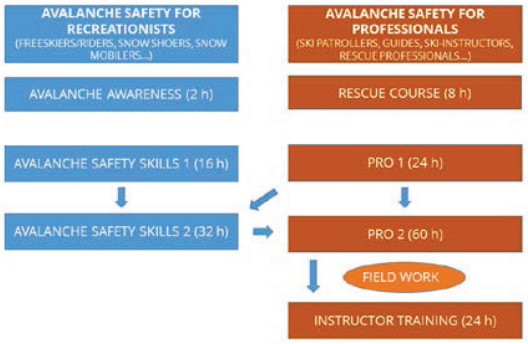

Figure 1: FINLAV Course system

3. INSTRUCTOR TRAINING

Before the development project started, Finland had already a few active avalanche instructors, who had gained their training status from Sweden or other countries, as well as a few mountain guides with avalanche course instruction background. The development project arranged the first FINLAV avalanche instructor pilot training for qualified professionals who already had previous avalanche course instruction experience. This pilot course produced 20 FINLAV avalanche instructors for the spring season 2018. During the first season, these instructors gave several avalanche awareness intro lectures and formal courses with the total of approximately 420 participants.

The main purpose of the instructor training is to give the instructor candidates pedagogical tools to run successful courses. The requirements for instructors include adequate formal professional avalanche training, which means a minimum of 7-day professional course, for example SVELAV Pro 2 or CAA Avalanche Operations Level 1. The requirements also include personal professional experience in the backcountry and with groups, which assures an adequate level of expertise and knowledge. The requirements for the instructor's skill increase according to the course level and type.

FINLAV gives current instructors teaching materials and course manuals, which they utilize when teaching the courses. The manual helps the instructor to stick to the lesson plan, which gives the framework for the topics in terms of time and depth. This ensures high and uniform quality of the courses for participants.

Current instructors are also required to update their knowledge of the curriculum and course system at least every second year in a training seminar given by FINLAV. Instructors are also required to teach courses on a regular basis to ensure staying active. FINLAV will arrange new instructor training courses every second year and instructor seminars every year.

4. MATERIALS IN FINNISH LANGUAGE

During the development project, avalanche course learning and teaching materials were created in the Finnish language. The development project highlighted the importance of learning avalanche safety skills in the participants' own language.

One important outcome of the project is the FINLAV Online Avalanche Awareness platform. This online learning platform enables independent studying and serves also as a pre course material or as a refresher.

Another important outcome of the project is a FINLAV Check List Card, which is a hand-out material for course participants. The Check List Card is a simple pocket size card, which covers topics for planning and performing a trip in the backcountry. It is not a decision making tool (i.e. Avaluator) but rather a helpful list of topics to go through before and during a skiing trip. The Check List Card also serves as a teaching tool on Avalanche Safety Skills courses and gives structure for instruction.

Figure 2: FINLAV Check List Card –example page

5. IN THE FUTURE

The main goal for the project was to ensure that FINLAV – Finnish Avalanche Education will have continuity after the closure of the development project. The Finnish Ski Area Association has taken over the administrative responsibility for the curriculum work and course system. A steering committee has been appointed to guide the future work. Humak University of Applied Sciences continues as a member in the steering committee with the responsibility of upholding the training system, training the avalanche instructors and updating the learning and teaching materials. FINLAV – Finnish Avalanche Education has established strong cooperation with SVELAV – Swedish Avalanche Education and this cooperation will continue.

Figure 3: Project poster.

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