

Study module

East Skaftafell County Upper Secondary School in
Skaftafell





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in Europe's Northern
Periphery for a sustainable
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European Union
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Summary: In this project a group of people at the age 16 – 20 from East Skaftafell County Upper Secondary School (FAS) went together to Skaftafell which is a part of Vatnajökull national park in Iceland. There they spend two and half days learning rock climbing, ice climbing, as well as gaining knowledge about geology and geography of the area.

Need project and themes: This study model is a part of the NEED project, that is Northern Environmental Education Development program. This is collaboration between Iceland, Finland, Ireland and Norway. In this program are five main themes and they are

1. Elements of geology
2. Landscape
3. Natural hazards
4. Geological materials in society and their sustainable use
5. Climate change

This particular study model can be categorized as two of them and they are elements of geology and landscape

Level: 16 -20 year old

Objectives: To understand the behavior of glaciers and learn about geology and geography of their microenvironment, how to use the nature in sustainable way related to nature based and adventure tourism.

Curriculum links: Learning to move and travel on glacier, as well as safety precautions such as choosing the right way. Introduce the work in this field

and what kind of education is required to work as glacier guide. Learn to recognize types of rock, where it is safe to climb and the knowledge is given how these types of rock are formed.

Time required: 1 - 1, 5 hours before trip to Skaftafell national park. 2,5 days in Skaftafell. ½ - 1 hour after visit.

Materials needed in Skaftafell: headlight, harness, rope, axe, crampons, proper outdoor clothing, sleeping bag and food.

Activities / tasks in the learning process:

Before leaving

1. Explain to the participants how the trip will be
2. Participants as a group decide things such as what to cook and who should do what
3. Discussion what the students expect from this trip.
4. Look at a map of the area and see where the group will go

First day in Skaftafell:

1. Instructors meet the group
2. Basic knots taught
3. Discussions about how and why teamwork is important
4. Equipment testing

Second day in Skaftafell

1. Instructors meet the group and go through the plan of the day
2. Group goes to rock climbing area at Hnappavellir

3. Instructors explain types of rocks and which are suitable for climbing
4. Everyone climb and try the equipment
5. Lesson is given in map reading and how to use a compass
6. Group tries the map and the compass outside

Day three in Skaftafell

1. Instructors meet the group and go through the plan of the day
2. Lesson is given in walking on glacier on crampons and the technique which is necessary to use on glacier
3. What to be careful about on glacier and how to choose a safe path
4. Walk on glacier, looking for good crevices
5. Risk assessment
6. Crevices rescue
7. Knowledge given about maelstrom
8. Ice climbing technique taught

After trip

1. Discussions

Valuation after the first trip

This trip was piloted in November 2009. After that trip it is easy to see what could have been done differently to make it more effective. In the beginning it would have been good to have better maps of this area to teach the students about curve lines and other things in map reading. Questionnaire for each and every student would have been a good idea. The group answered questions together which is fine considering the teamwork that we want to see. It would have been good idea to give them something to read about geology of the area, but it is also good to use trip like this to increase interest on geology and geography but these things are strongly related to activities like ice and rock climbing. Trip like this is built on known methods in experiential learning. Developing work is now in progress at FAS in making a new course of study. That course of study is mountain guiding, to teach that kind of curriculum, trips and vocational teaching is necessary. There for this trip was useful for us (FAS) in many ways and will be good experience for us in our work. In the second trip (November 2010) some changes were made, less time will be spent on the glacier and instead there will be teaching in map reading and working with a compass. More teaching in reading the environment and what kind of surroundings you should expect according to the maps you have.

Before trip to Skaftafell

The plan of the trip is introduced and discussed so everyone knows what to expect. Together the group makes decisions about certain things, like what do cook and what they need to bring with them. The group looks at maps of Iceland to see where they are going and what glaciers we will be climbing on. The group talks about what they expect from this trip, what they think that they will learn and if they think they will be challenged in this trip in any way.

First day in Skaftafell

The instructors meet the group and start teaching the basic knots and give information about the environment, such as how the weather is and what can be expected when people travel on glacier, how the glaciers move and what is to avoid there. Reasons for urgency of teamwork are introduced. Everyone gets harness and learns how to put it on and the basic things about the equipment. After the lesson the next day is prepared and the group goes to sleep.

Second day in Skaftafell

The day starts early and instructors go through the plan of the day, look if everyone has the equipment they should have. First place to go to is Hnappavellir rocks, Iceland's best rock climbing area. Basic knowledge is given about the climbing technique. What kind of rocks it is safe to climb in and why some are safe and some not. When everyone has tried the equipment and felt safe using it, the group went back to the base. The rest of the day was used to learn map reading and how to use compass. This lesson was in two parts first inside and in the evening the group went outside in the dark and the rain to use the knowledge that was given before. This day was long and wet but everyone enjoyed it and learned a lot.

Third day in Skaftafell

Starts early like the other one, the lesson starts on basic knowledge how to put the crampons on and what to be aware of related to it. How to walk on glacier on crampons is far from being common sense and needs to be taught. Instructors help the group to get the technique and when that is done it is possible to go walking further into the glacier. On the way knowledge is given about the glacier, how it



moves and how it is possible to see where the glacier was in the past, how the mountain can give us ideas how it was, why we can find maelstrom on the glacier and how dangerous they can be. This day will be used to teach crevice rescue and basic knowledge about how to get people up if they fall into crevice. More than one way is to this, it depends on how the fallen climber is after the fall, is he injured or not. The weather has also a great deal of influence on this work. Instructors teach the group all the ways and gives knowledge about how the crevices can close and how the glacier moves. One of the things which are important when traveling on a glacier is risk assessment and the group is taught how to choose the best and the safest way on the glacier. Because the glacier changes frequently it is important to be aware of the risk that goes with this type of traveling. In the end of this day the group finds a good place for ice climbing and at that place the instructors teach the basic in ice climbing

This work takes all day and the group goes down from glacier at 16:00 everyone packs there things and drive home.



After the Trip

The group meets and discusses what they learned and if this course fulfilled their expectations. Questions asked like were there any challenges in this trip and if there were, when and how. The group agreed that they all learned something new. Some of them participated in the first trip, they all learned new things in this one and specially related to the map reading part.

Valuation

This trip was really good and everything went well, the group was hard working and enjoyed the trip. They wanted more ice climbing but after the first trip I

felt that they needed more of other hard skills than the climbing. So with this change I think that the trip delivered more to the students. It would be nice to have the opportunity to stay longer and learn more. I believe that trip like this can be very educational and that it is easier for students to learn about these things outside and in practice than from books only. There is always something that we can do better, I am really satisfied with this trip and I believe that the group agrees with me.

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