

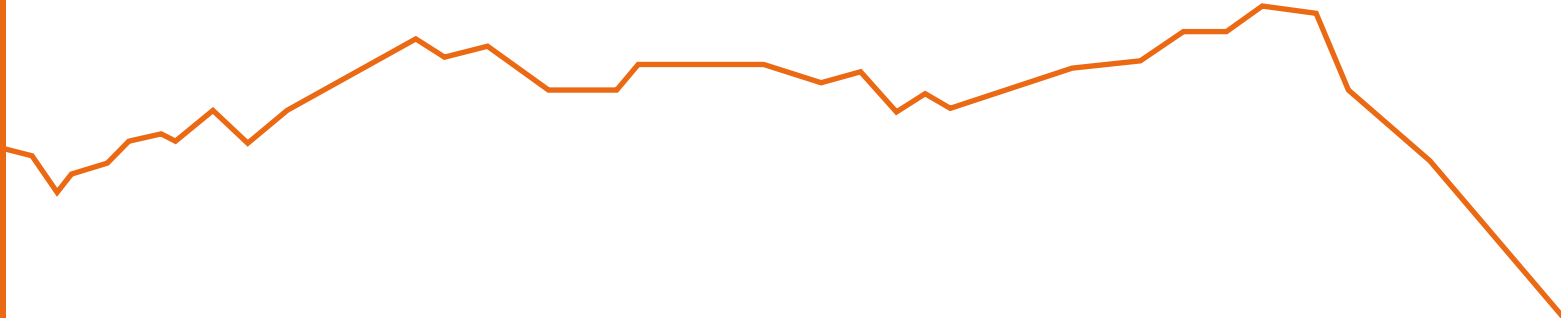
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## **YOUrALPS**

**Mountain-oriented education (MOE)  
implementation approaches & challenges**

**A stakeholders' perspective**





For an  
inspiring  
future in  
the Alps

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# Introduction

**M**ountain-oriented education (MoE) plays a key role to instill in young generation the sensibility and knowledge of Alpine cultural and natural heritage and highlight opportunities for their future. There is a need to raise youth's environmental awareness on what the Alps can offer them also in terms of sustainable social and economic opportunities. MoE is a challenge for the residents of the Alps and needs to be better integrated in the formal education sector. A stronger coordination between formal and non-formal education represents consequently a big potential for the sustainable valorisation of the Alps. YOUrALPS takes up the challenge to increase the sensibility and value of the Alpine heritage especially among youth by better integrating related promising topics and approaches into the educational curricula and teaching practices.

In the context of YOUrALPS, extensive research involving multiple stakeholders has been undertaken in order to orientate future endeavors at the diverse needs of all key actors in MoE. In addition to the results presented in other parts of this comprehensive report which consists of several sub-reports, through further expert elicitation comprising involved practitioners in both formal and non-formal (environmental) education (for sustainable development)/MoE sectors, the perspectives of year long educators are also included (Chapter A). This is completed by a survey addressing responsible stakeholders from NGOs, legacy, protected areas, and other domains, which are the current key decision-makers and actors in the field (Chapter B) in terms of incorporation and execution of activities in the official curricula.

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# Methodology and approach

**F**ormal and non-formal education have to work hand in hand in order to fulfil the requirements of lifelong and life-wide learning as pledged by the United Nations Educational, Scientific and Cultural Organization (UNESCO 2015). But how can these prerequisites for sustainable development be achieved under the predominant circumstances and by optimally respecting the needs of all stakeholders (students, teachers, institutions, legislature, etc.)? To approach possible solutions to that question and in order to identify practicable ways how to better integrate MoE in the formal education system of the five EU Alpine states, the following groups of persons were consulted:

- a)** Involved practitioners in both formal and non-formal education sectors (Chapter A)
- b)** Responsible persons of NGOs, legacy, protected areas, etc. that are main decision-makers in the field (Chapter B)

The results of all taken actions (surveys, interviews) can be regarded as input factors for the development of a so-called Alpine School Model in which all activities and measures of MoE are being bundled, theoretically underpinned and promoted for its future implementation and extension in various learning settings and education systems throughout the Alps.



# Chapter A:

## Survey among involved practitioners in both formal and non-formal education

In May and June 2018, in total 18 telephone interviews with previously identified, very active practitioners involved in the field of Mountain-oriented education (MoE), both in formal and non-formal areas, were conducted. The interviews were either conducted in German (7) or in English (11) language and lasted between little less than 25 minutes to more than 50 minutes in some cases. The interview partners were given the possibility to have a look on the interview guide in advance when they were first contacted for securing the appointments.

The objective of these expert interviews is to examine how the implementation of activities related with MoE in the different formal education systems of the participating Alpine states is or potentially could be

realised according to the interview partners. Thus, the research question of this task is: **How do concrete activities/measures of mountain-oriented education (MoE) look like and which challenges one could be confronted with during implementation?**

According to the definition of Mieg & Brunner (2001), an expert is a person with years of experience having specific knowledge and skills in a defined area. The national partners for Mountain-oriented education (MoE) have nominated at least five very engaged educators in their country, of which five German, six Slovenian, three French, and each two Austrian and Italian actually participated.

Analogously as has been carried out for the young beneficiaries questionnaire in sub-report I of this comprehensive

report, these guide questions were decoded into ten sub-questions, of which the following are presumed to be the most relevant for answering the research question outlined on the right:

- 1. How can various topics be conveyed interdisciplinarily at best?**
- 2. What is the main brake shoe for the expansion of MoE? Which problems do you face during everyday teaching?**

This case-by-case analysis encloses by definition subjective perspectives and perceptions of the respective interviewee and therefore cannot serve as basis for general statements. Still these semi-structured interviews allow for deeper insights into educators' approaches towards the implementa-

tion of MoE activities and practices as well as daily teaching challenges, and thus are invaluable for the conception of adequate learning environments in the sense of ESD/MoE in consideration of existing problems within the legal frame discussed in sub-report II of this comprehensive report. The length of single text passages was chosen that the meaning of a single text passage remains comprehensible when considered isolated (Kuckartz 2014) and range between single words to whole paragraphs. If one passage comprised several possible codings, then the passage was allocated to each code. Following the methodology of grounded theory, the result of the first analysis step is a list of codes. These are subsequently subsumed to concepts. According to Strauss & Corbin (1999), a (final) category means a classification of concept

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*Some non-formal educators regard specialised classes in school as outdated, representatives of formal education stress improvements already been made in order to implement interdisciplinary elements in school*



## 1

An answer to the question, how various topics (related with MoE) can be conveyed interdisciplinarily at best, was given by 17 of the 18 interview partners, one refused to answer. The depicted statements represent the range of given answers to that question and were allocated to categories, which were created in situ.

# Approaches to interdisciplinary teaching

„Every semester has a title, e.g. climate change - all subjects need to do activities related with that topic“

(Formal Italian expert)

## Institutional requirements

On the institutional side, a strong emphasis is put by some interviewees on system flexibility, but also flexibility of involved decision makers in order to facilitate interdisciplinary teaching. Whereas against this backdrop some non-formal educators regard specialised classes in school as outdated, representatives of formal education stress improvements already been made in order to implement interdisciplinary elements in school in accordance with the premises of ESD/MoE. One interview partner also takes the view that (life-long) training of teachers is a prerequisite for the implementation of true interdisciplinary teaching in class.

“Flexibility as institution is crucial“

(Formal Italian expert)

## System inherent possibilities

According to one expert, a system change should only be secondary, the focus should be on seizing the opportunities and freedoms already inherent in the school systems of each Alpine country. In this regard, mandatory learning objectives and topics as defined in the curricula should be arranged in a way that, e.g., the consequences of human actions such as mobility or nutrition, on the environment or social standards are addressed, and, if possible, alternative approaches are developed by the students.

## Whole-institution approach

Moreover, partnerships, networks and different forms of educational cooperations are regarded as effective means how to strengthen interdisciplinary teaching. While some educators think that inviting external experts to school is sufficient to ensure an interdisciplinary character of the activity, most practitioners consider exchange or team teaching with external experts from various fields only interdisciplinary if the cooperation goes beyond one-time events. These constant or deepened collaboration can be located on the same level within either formal and informal education, but also on different levels within one domain. The following list entails the range of possible partnerships specified by the interviewees:

- Formal education – formal education on same level
- Formal education – formal education on different level
- Formal education – regional politics
- Formal education – civil society
- Formal education – non-formal education (representatives)

An extension to the classic invitation of external experts represent approaches with a strong emphasis on parents, municipal administration on the one hand (non-formal side), but also strengthening the theoretical foundations of educational measures by consulting teacher training colleges in the planning, implementation and evaluation of different activities. In some cases, such high level cooperations meet or even exceed the standard requirements of a so-called ‘whole-institution-approach’ as stipulated in the Global Action Program of the UNESCO (see United Nations Educational, Scientific and Cultural Organization 2014).

## Multidisciplinarity

A popular opinion is that interdisciplinary teaching can be boosted through enhancing multidisciplinarity either with regard to deliberate choice of method(s) for one theme, application of a tool or dealing with a topic in various subjects, or, that teachers alien to one subject can also hold classes in that respective subject. The statement of one interview partner can be assessed similarly – she said that interdisciplinarity can be enhanced best through a so-called interdisciplinary dialogue, where arts, fantasy and other forms of presentation are integrated in order to approach the same topic from different angles.

## Project work & excursions

Many respondents think that any kind of project work, whether it be in the form of excursions, or in-class projects on a topic, incorporates per se interdisciplinary elements and is therefore invaluable for students to develop competencies in this regard. Covering a topic theoretically is one thing, but trying out something practically and learning by experience is far more valuable. Regardless of the scope of one activity, reference to reality in every lesson supports both finding the right questions and possible answers to emerging issues of any kind.

“Through real problems – different perspectives are not enough“

(Formal Slovenian expert)



## 2

# Challenges & shortcomings of realisation and implementation of MoE in formal education

## “Teachers!! Teachers are afraid of field work and lack of knowledge”

(Non-Formal Slovenian expert)

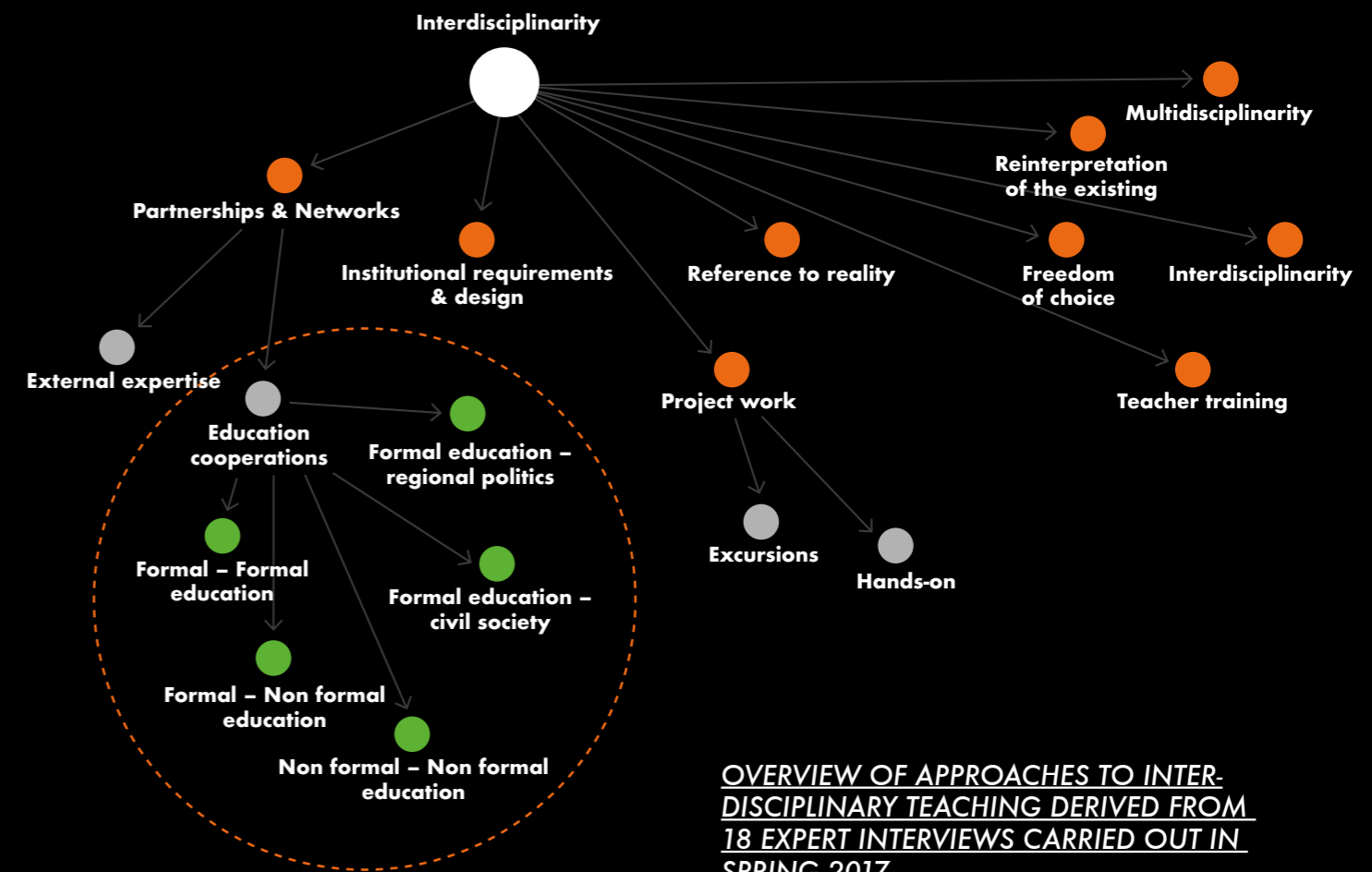
When the interview partners were asked which are the main challenges in connection with the realisation of concrete educational measures on the one hand, and the implementation of elements in compliance with the stipulations of Mountain-oriented education (MoE) in the official curricula on the other hand, the two most frequently mentioned shortcomings are workload of teachers in combination with a lack of curricular freedom, and funding.

On the part of protagonists – students and educators – of any educational activity, a lack of interest, basic physical constitution, as well as a certain degree of alienation from nature among students is pointed out by some interview partners as considerable

impediments when realising education programmes outdoors. With regard to educators, a deficit of outdoor education skills, fears of accidents, and, on a different level, fear of insufficiency in terms of knowledge about nature, and a lack of exchange and adequate preparation with external experts is held accountable for the sometimes unsatisfactory implementation of well intended educational activities. Moreover, interdisciplinary or multidisciplinary teaching in an outdoor setting is regarded as a very complex matter, and therefore has to be particularly trained and cultivated among future and already fully trained educators as it has to be target group oriented, interesting, and, with coverage of multiple perspectives, among many other things.

“Rangers are obliged to make environmental education by law, but a lot of them are not capable of doing so because their lack of skills”

(Non-Formal French expert)



OVERVIEW OF APPROACHES TO INTERDISCIPLINARY TEACHING DERIVED FROM 18 EXPERT INTERVIEWS CARRIED OUT IN SPRING 2017

# Chapter B:

## Survey among stakeholders

Analysis of the open-ended questions 10, 12 and 13 of the online survey revealed the following findings:

Since of interest is a case-by-case basis rather than finding explanation patterns, the first part of the questionnaire is targeted towards the stakeholder's institutional background, level of engagement in certain fields, target groups, thematic focus and formats of activities. The second block contains mainly open questions which aim towards a more in-depth look on the stakeholders' activities, identification of deficits in the field of MoE as well as suggestions for a (more) successful promotion and implementation of MoE in the Alps. It ends up with general information about the planned so-called Infodays throughout the year 2018 and helps assessing both the general interest and preferred topics covered at those events. Not all answers are included in the following analysis as

only two questions are relevant for answering the research questions as mentioned in the introduction (box 3 of the graphic on the right side).

In total 29 of the stakeholders who have filled in the survey were included in the analysis. Key stakeholders were nominated and briefed by project partners of each participating country and selected on the basis of criteria such as dedication and commitment in the field of MoE. Additionally, some project observers and pilot schools can also be found among those who participated. The sample is scattered throughout all countries of the Alpine Space (except Liechtenstein and Monaco) as follows: 13 from France, seven from Slovenia, five from Italy, two from Germany, and each one from Austria and Switzerland.

### OUTLINE OF THE ELEMENTS OF THE STAKEHOLDER QUESTIONNAIRE

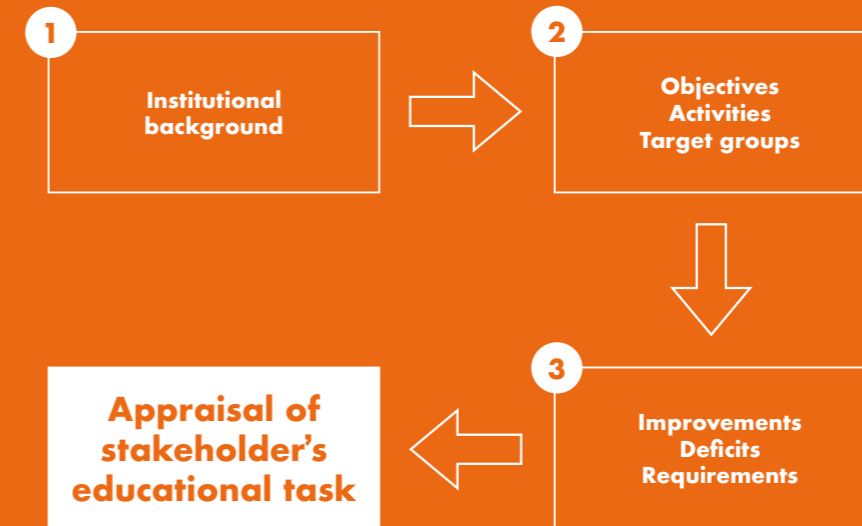
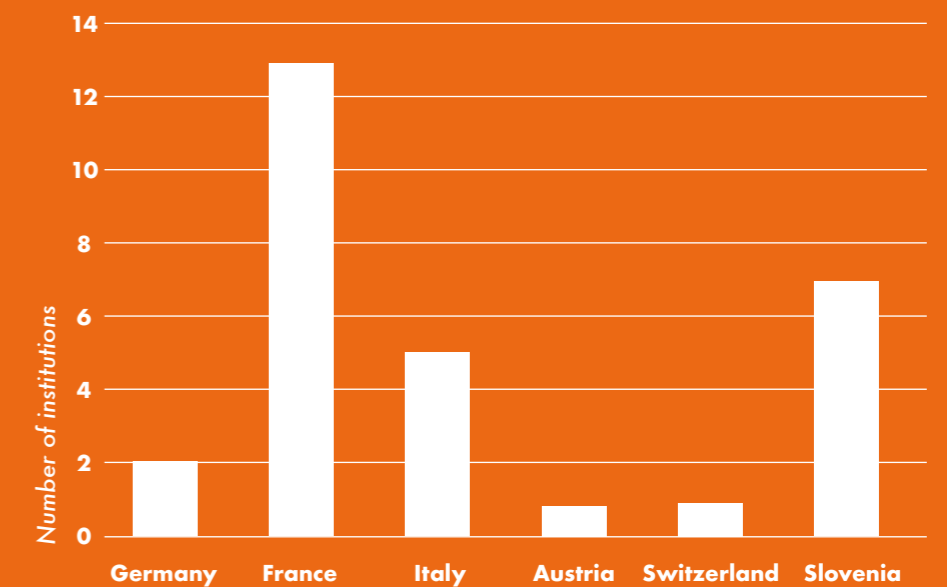


FIGURE 24 NATIONAL BACKGROUND OF PARTICIPATING STAKEHOLDERS





# Survey Results

## Need to catch up for MoE (Q 12) Deficits

Some stakeholders locate deficits or a need to catch up for the implementation of educational activities according to Mountain-oriented education (MoE) in all domains – formal, non-formal and informal education, but also in professional/vocational fields such as the construction sector. Regarding formal education, an explicit mention of MoE in learning objectives to be reached or competencies to be developed is pointed out. Interestingly, the majority of those stakeholders from formal education who assume a deficit in terms of establishment of MoE practices and activities do so predominantly in the non-formal sector, and vice versa. Only two schools, a primary school in Slovenia, and a higher educational institution in Italy, locate shortcomings in their own sphere of action.

## Requirements for the roll-out of MoE (Q 13)

### Administrative support

Above all, providing MoE-related activities and measures with sufficient financial means is seen crucial for a further expansion of the concept and associated activities in the Alps. Apart from that, also organisational requirements have to be fulfilled, such as less legal restrictions, general political support concerning e.g. transportation, as well as the existence of an adequate infrastructure in terms of (cheap or free) overnight accommodation possibilities.

### Training and networking

On the part of educators, specific training is regarded as a fundamental prerequisite enrolling MoE on a large scale, while at the same time targeted networking of relevant actors, in order to facilitate information exchange and planning, is considered as a top

priority. These preconditions shall enable the availability of (external) domain experts, a tighter coordination of programs, timetables and curricula, as well as efficient utilisation in times of resource shortages – both in formal and non-formal (environmental) education. It seems that both in France, Italy and Slovenia, a lack of financial support can be detected in both domains, whereas in Germany and Austria, the non-formal sector seems to be effected in particular.

### Promotion

A better promotion of already ongoing activities in order to raise awareness regarding the importance of MoE/ESD/EE contents and activities is key for a further expansion of the concept in the single countries. Addressees of such campaigns are both schools, to which the concept needs to be introduced, but also political decision makers, enterprises and the general public.

A better promotion of already ongoing activities in order to raise awareness regarding the importance of MoE/ESD/EE contents and activities is key for a further expansion of the concept





# Conclusions and recommendations for implementation

## Chapter A: Involved educators

**Institutional requirements:** Support of the school administration on the one hand, but also system flexibility, are deemed necessary for enhancing interdisciplinary teaching.

**System inherent possibilities:** In some countries (especially Austria), the curricula allow for much more freedom with regard to project work, excursions, etc. than most educators think. This liberty has just to be used.

**Multidisciplinarity:** If not geared towards inter-disciplinarity (in a strict scientific sense), then teaching should be at least aligned to multi-disciplinarity according to the opinion of interviewed teachers.

**Whole-institution approach:** In times of shortage of resources, partnerships, networks and cooperations, a joint effort of school authorities, parents, the general public and other actors is mandatory in order to allow MoE develop its unique potential.

## Chapter B: Stakeholders

**Variety of moe stakeholders:** The 29 stakeholders who participated in the survey are scattered throughout all countries of the Alpine Space (except Liechtenstein and Monaco).

**Deficiencies** regarding the further expansion of MoE are indicated in all educational fields, including formal, non-formal and informal education.

**Administrative support:** Lack of financial means, as well as administrative and ideal support, is reported by addressed stakeholders.

**Training and networking:** Specific educator training and the establishment of exchange opportunities among all sorts of actors (general public, public authorities, enterprises, non-formal educators, experts, schools, school boards etc.) is vital for the efficient use of existing resources

**Promotion:** MoE can only be rolled out on large scale if awareness raising happens on various levels – schools, decision makers, NGOs, and, the general public.

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