



Interreg
Alpine Space



DuALPlus

European Regional Development Fund



Photo: WIGE Montafon

LEARNING FOR LIFE

HOLISTIC TRAINING CONCEPT FOR APPRENTICES

● AUTHOR

Markus Gamon, BiGe telesiSLK, on behalf of Regional Development Vorarlberg eGen

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TABLE OF CONTENTS

SUMMARY	3
INTRODUCTION	3
BACKGROUND	4
GOALS	4
DESCRIPTION OF THE PROGRAM	5
REQUIREMENTS	5
CONTENT AND STRUCTURE.....	5
MODULE 1 TIME AND GOAL MANAGEMENT: "NOW WE'RE OFF!"	6
MODULE 2 LEARNING: "LEARNING TO LEARN PROPERLY"	6
MODULE 3 SOLVING PROBLEMS: "THROUGH HOLISTIC THINKING AND ACTING"	6
MODULE 4 MATHEMATICS: "BASIC MATHEMATICS FOR APPRENTICES"	6
MODULE 5 TWO-DAY INTERACTIVE ECONOMIC PLANNING GAME: "LEARNING BY DOING"	6
IMPLEMENTATION	7
ACTORS	7
CONDITIONS.....	7
INTRODUCTORY PROCESS	7
EVALUATION	7
EVALUATION PROCESS.....	7
PHASE 1: GETTING STARTED	7
PHASE 2: PLANNING AND IMPLEMENTATION	8
PHASE 3: EVALUATION AND PRESENTATION OF RESULTS	8
PHASE 4: START IMPLEMENTATION	8
RESULTS.....	8
QUANTITATIVE RESULTS	9
QUALITATIVE RESULTS	9
FINAL REVIEW	10
OUTLOOK	10

SUMMARY

Under the Motto "Learning for Life" in the Montafon (Vorarlberg, Austria) a holistic and innovative training concept for apprentices has been developed in the course of the project DuALPlus and integrated in the form of a pilot project in spring 2021 into the existing program as a third pillar. In addition to training in the company and in the vocational school, a regional cooperation project of SMEs primarily strengthens the expertise, social and self-competences of young people. In addition to increasing the attractiveness of dual education, the focus is on the personality formation of the participants. With the aim of lifelong learning and on the basis of the Austrian education system, trainees in general as well as each individual can be shown educational and career paths.



1 The training concept "Learning for life" strengthens the personality of apprentices and identifies possible educational pathways. Graphic: Training compass of the Montafon region, tESIS Entwicklungs- und Management GmbH

INTRODUCTION

DuALPlus is an international project that deals with the development of dual training in the Alpine region. In this context, dual training basically means training as a combination of learning in the company and school education and training. In the development of innovative forms of education, the focus is on the form of apprenticeship: the apprenticeship as a starting point for further lifelong dual learning.

Vorarlberg as a partner region in the European project DuALPlus

In Vorarlberg, about one in two young person opts for a qualified apprenticeship. This great popularity is due to the wide range of training courses on offer. The dual training offers young people future prospects and makes a decisive contribution to securing the business location and thus to the high quality of life in Vorarlberg.

In Vorarlberg, the Montafon valley is one of the regional partners in the international

education project DuALPlus. The aims of the project are to

- increase the attractiveness of dual training, especially for small and medium-sized enterprises in the regions;
- introduce innovative forms of education in addition to existing training
- and to communicate and improve the permeability of the education system as a basis for further learning.

The DuALPlus project works in an interdisciplinary way with many different partners who are directly or indirectly related to dual training. For these cooperations, the international network of the project is intensively used to be able to use and implement the latest information and the most innovative development platforms for education and training also at regional level.

BACKGROUND

Professionals are the backbone of our small and medium-sized enterprises, or SMEs for short. The shortage of skilled workers is seen as one of the biggest challenges facing the Austrian economy. Three quarters of companies are already struggling to meet their needs for qualified staff.

Apprenticeships are therefore very important and demand from SMEs is very high and leads to tensions between industry and trade due to low birth rates.

Large companies are trying to attract their needs for young talent through apprentice castings, taster days and their training workshops. Small companies have a much harder time, as the trainer has to take over the training of the apprentice in specialist and social competence in addition to the business activity.

GOALS

Within the framework of DuALPlus, five selected modules of the new forms of education and training have been developed as a pilot project in Montafon and offered to the companies or their apprentices for participation.

Motto: "Learning for life"

The innovative training and further education programme focuses on the further

Direct benefits of innovative education and training systems for SMEs

In this context, innovative forms of education and training are developed which, in addition to direct training in the company itself and attending vocational school, can also be implemented as a third pillar in the sense of innovative holistic training. This is done not only in large companies, as is usually the case up to now, but also in small companies, especially in regional cooperations.

This increases the attractiveness for dual training also in small and medium-sized enterprises and the trainees are supported directly and on possible further individual training and further education steps on their way to their final apprenticeship examination.

development of the participants' expertise, social and self-competence as a third pillar, in addition to working in the company and attending vocational school.

The main aim is for young people to be given state-of-the-art tools to successfully meet their current and future challenges. "Learning for life" is the motto for every participant.

DESCRIPTION OF THE PROGRAM

REQUIREMENTS

In order to best meet the respective needs of the participants, the modules are generally carried out in small groups of mostly six people in systemically based day seminars.

Six apprentices and six students from the Montafon Polytechnic School took part in the pilot project in Montafon. The pilot project was part of the DuALPlus project and therefore free of charge for the apprentices of the participating companies.

For the selection of participants, the companies were informed in writing about the offer. Of the participating apprentices, four were male and two were female. There are three apprentices in the first year, two in the second year and one in the third year.

CONTENT AND STRUCTURE

The five modules of the pilot project in Montafon build on each other systemically and are part of a larger 18-day training series (see overview), which is carried out in the period

of three until four years during the apprenticeship of young people as a third pillar alongside work and vocational school.

The entire program is based on a systemcybernetic approach and is several times certified and awarded in scientific-strategic as well as practical-operational terms. In addition to the training series, the overall programme includes other elements such as project organisation, target group-oriented information, for example through parents' evenings, public relations or holistic projects such as nature experience days.

The five modules were selected for the pilot project because the first three seminars lay the basis for self-competence, the mathematics seminar is considered to be the biggest problem subject of students and provides expertise as the basis for the STEM strategy in Montafon and because the economic planning game presents economic knowledge in a communicative form to strengthen social competence.

The figure shows the point of personality-oriented education and training from the entire programme as a third pillar. The five modules developed and offered in the pilot project

2 Education and training system (3rd pillar) of the WIGE Montafon

No.	Contents	Cat. Competence	No. Pers.	No. Days
1	Time and goal management	Self-competence	6	1,00
2	Learning to learn	Self-competence	6	1,00
3	Communication	Self-competence	6	1,00
4	Holistic thinking and acting	Self-competence	6	1,00
5	Mental training	Self-competence	6	1,00
6	Fundamentals of mathematics	Subject Competence	6	1,00
7	Applied mathematics I	Subject Competence	6	1,00
8	Applied mathematics II	Subject Competence	6	1,00
9	Business arithmetic I	Functional competence	6	1,00
10	Business calculus II	Functional competence	6	1,00
11	Business management game	Technical, social, personal competences	9-12	2,00
12	Applied project management	Social competence	10-20	4,00
13	Job rotation	Social competence	10-50	2,00
Total days in the apprenticeship period				18,00

formed the compact start in spring 2021 as part of the DuALPlus project.

MODULE 1 TIME AND GOAL MANAGEMENT: "NOW WE'RE OFF!"

The participants recognize that the management of time and goal is one of the most important success factors for effective and efficient action – both professional and private. Your own responsibility, general principles, defined tasks and applicable tools are the first module's responsibilities.

MODULE 2 LEARNING: "LEARNING TO LEARN PROPERLY"

The module shows what learning really is and how it works according to the latest findings from education and brain research. Modern and innovative ways of individual learning are presented in order to learn faster, more thoroughly and, above all, more sustainably.

MODULE 3 SOLVING PROBLEMS: "THROUGH HOLISTIC THINKING AND ACTING"

A first overview of the building blocks of systems and possible correlations as factors of action are presented. Recognizing complexity is the basis for taking situations and challenges holistically in order to act purposefully and successfully.

MODULE 4 MATHEMATICS: "BASIC MATHEMATICS FOR APPRENTICES"

Mathematics is the subject that causes problems for many students in our education system. It is essential for the successful application of defined STEM strategies in the respective regions. Mathematics is presented in this module from a systemic perspective. The module provides an overview of the field of mathematics, so that the participants can correctly classify, evaluate and possibly expand their current state of knowledge.

MODULE 5 TWO-DAY INTERACTIVE ECONOMIC PLANNING GAME: "LEARNING BY DOING"

Planning games are models with which complex relationships can be represented in a simple form. With this didactic, action-oriented method, which simulates processes and conflicting goals, the participants gain sustainable experiences in a short time (learning by doing).

In a simulated market environment, "economy in three companies in several financial years" is played interactively. According to the motto of the Indian folk wisdom: Tell me – and I will forget it. Show it to me – and I'll remember. Let me do it – and I'll keep it!

IMPLEMENTATION

The following actors developed and implemented the pilot activity.

ACTORS

Actors of the pilot project are:

- 6 apprentices of member companies of the Montafon Economic Community
- 6 students of the Montafon Polytechnic School (participation in the economic planning game)
- the core team DuALPlus Montafon:
 - Elke Martin (Youth Coordinator Stand Montafon)
 - Christian Zver (Managing Director WIGE Montafon)
 - Martin Plöger (Director Polytechnic School Montafon)
- the speaker pilot projects:
 - Markus Gamon (Regio-V; telesis Entwicklungs- und Management GmbH)

The five seminar blocks were led by Markus Gamon as speaker in the Montafon. He has been awarded the Austrian State Prize for Consulting and the Constantinus Award for

his work on innovations in dual education and training systems.

CONDITIONS

The pilot project was advertised in the companies of the Montafon Economic Community. The six apprentices participating in the pilot project were exempted for a period of six working days.

Six students from the Montafon Polytechnic School were added to the game.

INTRODUCTORY PROCESS

The five modules were implemented in the period May to June 2021. The seminar days took place in three units of two days each:

- unit 1, 31st May to 1st June: time and goal management, learning to learn properly
- unit 2 28 to 29 June: economic planning game
- unit 3 5 to 6 July: basic mathematics and solving problems.

EVALUATION

EVALUATION PROCESS

Evaluation means a systematic examination and evaluation of an object on the basis of empirical, i.e. experience-based information, with the intention of ensuring and developing its quality and usefulness. The "subject" of evaluation in this case is the implementation of the pilot project at its current stage of development. In principle, the evaluation takes place in a systematic form, which can be divided into four consecutive phases.

PHASE 1: GETTING STARTED

Good preparation creates a solid basis. The aim is to find a suitable starting point, to clarify framework conditions and objectives and to make fundamental decisions on which the concrete planning and implementation of the evaluation is based.

The beginning is crucial: how something starts and who is involved in it influences the outcome of a process to a high degree. It is therefore important to 'pick up' those affected and those involved. Even if preparations have already been made, for example by the school management or the quality

team, or some choices are specified: in any case, it is advisable to start an evaluation together, for example with a meeting or a kick-off workshop in which all interested parties and participants participate.

PHASE 2: PLANNING AND IMPLEMENTATION

As soon as it is clear which questions are to be answered with the evaluation and who has to be taken into account, methodological planning will be carried out. The best responsibility is a smaller group, for example an evaluation team, which is entrusted with the planning and implementation. The evaluation team now selects appropriate investigation methods and puts together appropriate survey tools.

The planning of the individual survey and evaluation steps is part of the overall planning of the evaluation project. It has proved its worth to pay attention to good information during the surveys themselves: this creates motivation and transparency and contributes to the quality of data. In the interests of efficiency, a systematic accompanying documentation has to be created: it saves laborious and time-consuming rework.

PHASE 3: EVALUATION AND PRESENTATION OF RESULTS

At the beginning of the data analysis, it makes sense to get an overview and to critically question the data base once again ("source critique", data check). The raw data is then evaluated and processed in a form that enables further work. This is, for example, the statistical analysis of survey data or a first systematic summary of qualitative findings. The results are easily comprehensible, clearly arranged and tailored to the addressee. The next step is to validate, interpret and evaluate the analysis results – preferably with a larger circle of stakeholders in a validation workshop / evaluation conference. While the (communicative) validation and interpretation still revolve around the data (Are they plausible? What do they tell us?), the assessment and conclusion is concerned with taking a position:

- Where do we stand?
- How satisfied are we?
- Where is the need for action?

A final written presentation of the results is the basis for the development of school and teaching and serves to ensure results, traceability and dissemination, thus making evaluation results available to others. A sleek and clear written presentation gives an overview of the occasion and the goal, methodological procedure, results and conclusions. It is based on an accompanying documentation of all steps.

PHASE 4: START IMPLEMENTATION

Finally, phase 4 is about making the evaluation results usable. With it, evaluation fits into the quality cycle. Successful evaluations lead to conclusions and further steps in school and teaching development. This requires additional information activities in order to initiate an (intensive) engagement with the evaluation results among stakeholders.

Once objectives and measures have been agreed, it is important to make a commitment through a work programme jointly drawn up and adopted by the teachers: the implementation of the measures is addressed, with clear mandates and, in particular, those responsible.

RESULTS

The evaluation was carried out in four phases according to the defined procedure. This approach was defined primarily for the possible implementation of the overall project. The pilot project was evaluated because it is the basis for a possible introduction of the planned 3rd pillar in the 2021/22 school year. The exact course of the evaluation of the pilot project was agreed in detail during the implementation.

The results of the evaluation process are described in the following 7 points in excerpts:

Motivation to participate

- What motivates companies and young people to participate?
- To what extent are young people motivated?
- What measures could increase motivation?

Expectations for the pilot model

- What are the expectations of the pilot project from the participating companies?
- What are the expectations of the participants themselves?

Aims before the start of the pilot model

- What are the objectives defined before the start of the pilot project?
- How are the defined objectives formulated?

Satisfaction with the pilot model

- What is the satisfaction with the pilot model in a target-actual comparison?

Achieved goals

- Are the objectives achieved sufficient?

Future prospects of the participants

- What are the possibilities for participants to complete the pilot model?

QUANTITATIVE RESULTS

The apprentices who participated in the pilot project evaluated the 5 modules on the basis of a four-level evaluation model (1 = very good, 4 = not so good) with a

value of 1.2

QUALITATIVE RESULTS

Participants' answers to six direct questions:

1. Would you add a topic? If yes, which one?

Basics of mathematics

Holistic systemic problem solving

not enough time - would like to do more in depth,

very informative and interesting

2. What do you think the seminar is useful for?

Problem solving in the private sphere

Time and goal management in everyday life

Future

Training and life

Further education of apprentices

Personality development

3. What was particularly interesting for you?

Time and goal management

The topics were all interesting and important

Balances, solving problems

Mental training

Business game

Everything

The costs of a company

How much you learn

4. What did you like best?

Everything

The group/team work

The lecture

Time and goal management

Business game

Solving problems

Learning to learn

5. Did you learn a lot?

Yes (mentioned 5x)

Yes, setting goals correctly

Preparing a business

6. Suggestions for change?

No (mentioned 2x)

A 2nd trainer maybe

Start the course later

A little longer,...

Other qualitative statements from the participants:

I think it is important to support young people with these courses.

Because you learn things that you don't learn during your apprenticeship (important topics).

Because in these "few" days you can discuss many interesting topics and learn a lot.

Because the boys and apprentices are overburdened with problems in concentration and with the systems (sic) and therefore a 3rd pillar would be good.

Because it is a good balance between school and work.

Because you get a better view of what you are learning.

They were very pleasant people to work with.

The group ranged in age from 16 to 35, which made it possible to see things from different angles.

I would have liked to go into time and goal management a bit more. In my opinion, learning to learn properly could have taken up 3 course days. This is where I got the most out of the course.

FINAL REVIEW

The results of the final analytical review of the pilot project are very positive for the introduction of the third pillar as an overall education and training initiative and provide a useful basis for decision makers for a possible implementation of the innovative training system.

OUTLOOK

The findings are implemented and further developed in a continuous improvement process.

The aim is to implement a cooperative development and education concept for training companies as a third pillar alongside workplace learning and attending vocational schools in autumn 2021, based on the experience of the pilot project at Montafon.

The financing of the third pillar as a holistic innovative education and training project is based on private financing by the SMEs themselves and a public share in the form of subsidies from the Land of Vorarlberg, Chambers of Economics and Labour and municipal grants. A financing model has been developed and is available as a basis for possible implementation.

The institutionalisation of this third pillar will make dual training opportunities in the Montafon more attractive and demonstrate the need for further lifelong learning to young people.

The participants of the holistic development and education concept are shown above all for themselves that each is responsible for their further professional and private development. The education system is open to individual development steps of each individual.



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