



# PROJECT WEEK REPORT

5th project week | 9 – 11 February 2021  
bit schulungcenter, Graz, Austria (ONLINE)

**bit** schulungcenter  
member of **bit** group

## ABSTRACT

Because of the changes in working life, Vocational Education and Training must be able to meet these changes and requirements for education.

A learning environment where learners can study with alignment to their individual progress and needs must be provided.

This is best achieved within a blended learning setting, however, this requires a suitable supportive and granular learning management system and well trained educators.

## QUALITY CATEGORY

- Guidance
- Learning
- Examination

## QMS4VET Consortium

The partners within the QMS4VET project are:

- Aventus ([www.ventus.nl](http://www.ventus.nl))
- ATEC ([www.atec.pt](http://www.atec.pt))
- BBS Syke EUROPASCHULE ([www.bbs-syke.de](http://www.bbs-syke.de))
- bit Schulungcenter ([www.bitschulungcenter.at](http://www.bitschulungcenter.at))
- West Lothian College ([www.west-lothian.ac.uk](http://www.west-lothian.ac.uk))
- Kainuun ammattiopisto ([www.kao.fi](http://www.kao.fi))

## INTRODUCTION

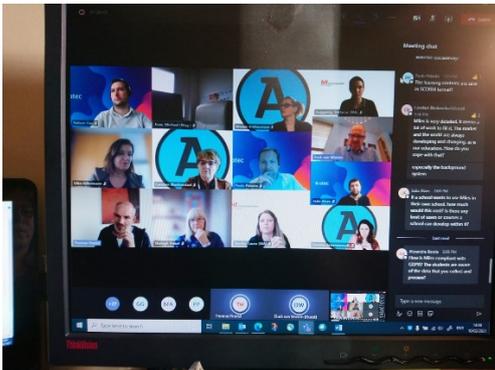
**bit** (= best in training) **schulungszentrum** is a subsidiary of the bit group founded in 1986 and currently employs more than 280 experienced trainers in five Austrian states, with the headquarter in Graz. At the interface between politics, the economy and the job market, we are creating new ways and means of treading them.

Currently we deal with the digitization of learning, blended learning and competence-oriented learning and develop suitable content for digital forms of learning. In this way, we are creating new opportunities for knowledge transfer for a wide range of target groups and promoting the use of education in regional and decentralized structures. Using new media, we challenge traditional teaching methods and compare them with inverted and flipped classroom concepts. Our emphases and goals are always to ensure high quality and to boost innovation in different educational concepts to face the challenges of Industry 4.0 and the related educational issues.

Currently in **bit schulungszentrum** there are 2.000 to 3.500 participants per day and annually between 8.000 and 12.000 participants within labour market related courses (e.g. German Language course, Application assistance, New (digital) Skills, Sales training with sales accounting, cash register systems and online trading).

During the 5<sup>th</sup> QMS4VET project week, **bit schulungszentrum** put together a team of staff members and former students to introduce the Project Week Digital Learning Program.

For more information about the QMS4VET project and other project week reports see [www.ventus.nl/qms4vet](http://www.ventus.nl/qms4vet)

	
	<h2 style="text-align: center;">2. Digitalize Learning: From Analysis to Strategy to Implementation</h2>

## OBJECTIVES

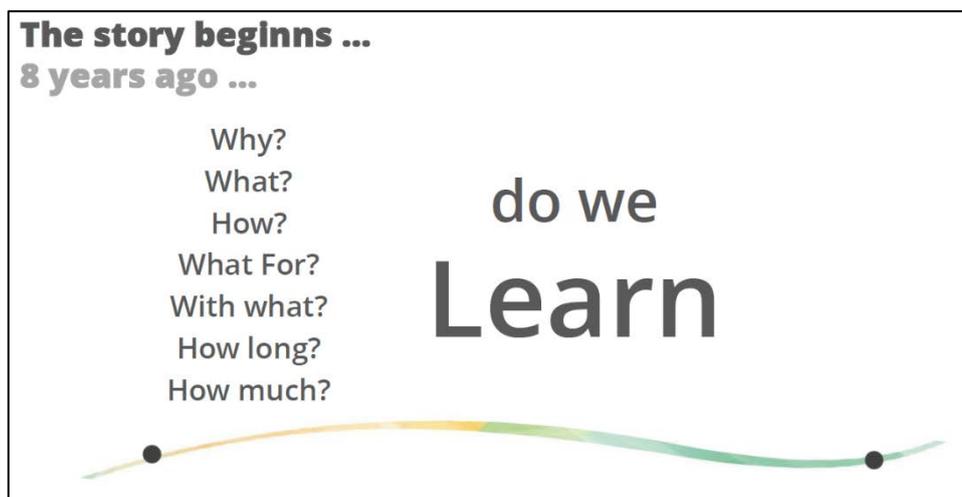
The following objectives were set for sharing best practices with respect to **bit schulungszentrum's** Blended Learning System:

In order to enrich Blended Learning programs, **bit schulungszentrum** ensures:

1. Development of individuality, self-efficacy and self-responsibility
2. Time and place independent learning;
3. Filling of knowledge gaps;
4. Easy guidance through the learning process for students;
5. Easier to follow/guide the students through the learning process;
6. Educational success/course completion;
7. Support of students in finding a job.

## METHODOLOGY

8 years ago, **bit schulungszentrum** developed a new vision to answer the following questions:



And blended learning came up as the solution to complete their vision. The criteria set for a successful program were: Participant Satisfaction, Educational Success/Completion, Job Placement rate and Individual project success factors.

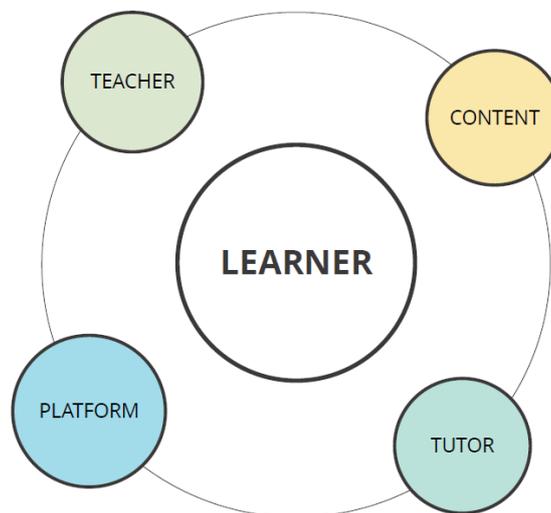
The requirements for the digital learning program were set as:

**Project Profile: eLP**

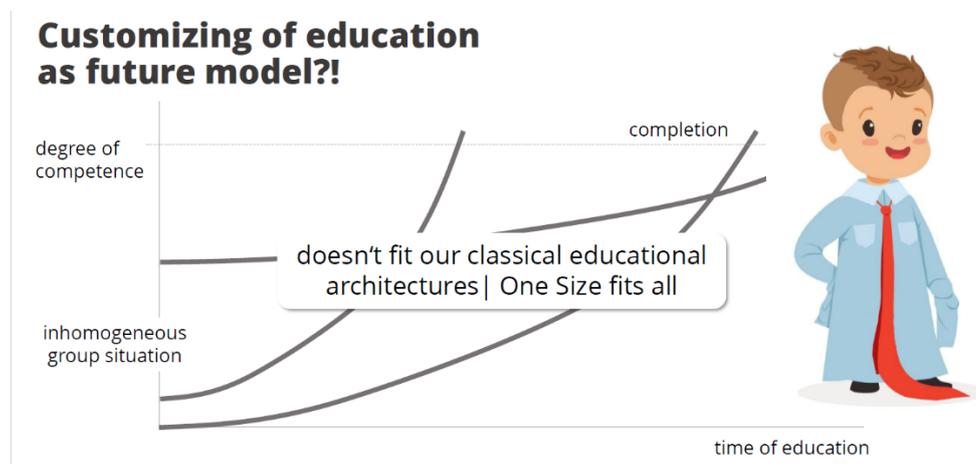
- since 15 years
- blended Learning setting
- Free choice from portfolio
- 11 OR 12 weeks | individual learning time
- Expert Tutoring Online
- 1 or. 2 learning in presence with guidance coach
- 1500 participants per year



The Learning concept for the project is “The learner is the guide”, which means the learner is at the centre of the learning process.



The blended learning solution of bit **schulungscenter** is a customizing model, focused on individual learning paths, where “one size doesn’t fit all”:



### Customizing/Individualizing training means:

- Everyone can start the training anytime.
- Each training course is different to the others. (or Each training course is unique to the learner)
- Every educational contract looks different.
- Everyone learns only what is missing.

### Technological System

MILES is a learning system based on didactic principles. Fine learning objectives can be considered as synapses of the system. These are “coded” (tagged) with a level of competence and a level of learning objectives. Directly and indirectly, learners interact with these fine learning objectives. The granular structure results in a vast density of data points that can be used to guide the learning process.

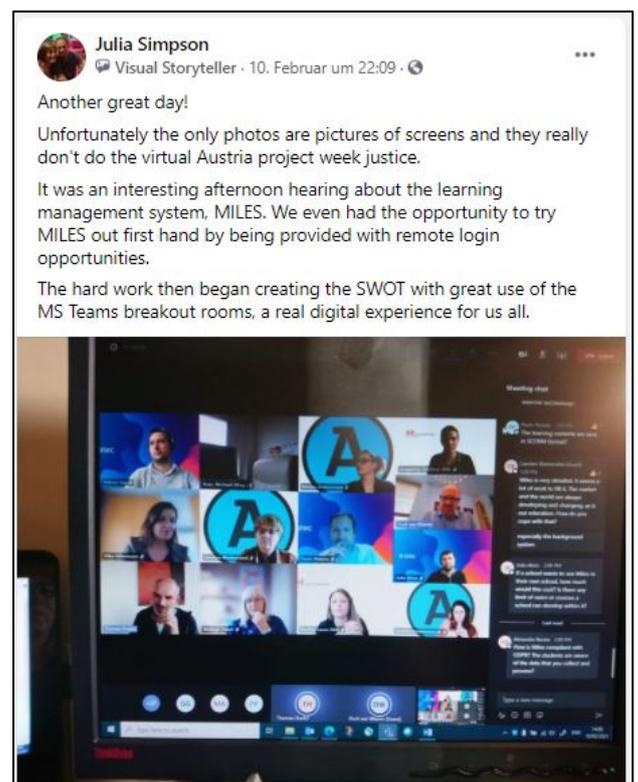
### Key resources for the project:

- Unemployment public services provide students for the program
- MILES System (virtual learning environment)
- Sales Assistance, Office Administration and Accounting curricula
- Governmental certification of the courses
- Budget or funding

### Obstacles:

In the beginning the time spent at the training centre was considered insufficient and it was important to find a perfect mix.

A huge investment in technology and content development had to be made.



## SWOT ANALYSIS

The following analyses the Strengths, Weaknesses, Opportunities and Threats (SWOT) of bit schulungszentrum's case study (the offering and organisation of individual study paths).

Strengths	Weaknesses
<ul style="list-style-type: none"> <li>• Flexibility/customized learning content for the students</li> <li>• Individual timetable and start and finish dates for the learner, tailored to individual's personal circumstances, and each student is supported on his/her level of competence/individual approach</li> <li>• Ensures a sustainable supply of potential skilled employees for recruitment requirements</li> <li>• Support on completion to get in a workplace/easy access to a job</li> <li>• Top quality on-line tutoring</li> <li>• Ratio of students to trainers is good (1/12)</li> <li>• MILES is very user friendly for students and tutors, cloud based and responsive system (any device)</li> <li>• Students have easy access to Tutors</li> <li>• Programmes are organized in learning outcomes (using Blooms' Taxonomy)</li> <li>• High success rate</li> <li>• Flexibility of course content ensures the learner is always in the centre, including adjusting exercises when evidence shows learners lack of understand/easy to change contents and exercises</li> <li>• Teacher (tutor) takes the role of a guide and study partner</li> <li>• Enhances students' competences making students more employable</li> <li>• Students are more aware of their own competences and learning process / students can see their learning progress</li> <li>• Students can be more motivated by using digital learning</li> <li>• Promotes self-efficacy, self-responsibility and individuality</li> <li>• Works well in COVID time</li> <li>• Deep granularity in detail of contents allows start levels for each student to be accurately set</li> </ul>	<ul style="list-style-type: none"> <li>• This style of learning programme is not widely recognised for vocational subjects, meaning low take up of places</li> <li>• People could take advantage of the system to 'fast track' to a qualification. Real experience takes time to acquire and can't be learned quickly</li> <li>• Lot of time and money needed for planning and development of programme content</li> <li>• Staff must be adaptable and flexible in their approach and may need persuasion to change</li> <li>• Dependent on access to technology and access to Wi-Fi for students</li> <li>• Labour contracts outline work times and content ownership and staff may get queries from students outwith their work time which would cause delays in answering, impacting negatively on student experience</li> <li>• Success rates might drop as group size increases</li> <li>• Programmes lead to a qualification rather than employment</li> <li>• Students with certain learning difficulties may not be supported by this learning environment</li> <li>• Need for extensive training programme to attract flexible new tutors/teachers</li> <li>• Training needed to use MILES platform</li> <li>• Files not available in SCORM format</li> <li>• Required allocation of tutors/trainers/teachers for 12 hour of availability towards students could be too expensive</li> </ul>

<ul style="list-style-type: none"> <li>• Coaching approach rather than teaching</li> <li>• Fast track to qualifications for students</li> </ul>	
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Individual solutions for people with different backgrounds</li> <li>• Market for people with different learning styles</li> <li>• Possibility of obtaining public funds</li> <li>• Extendable to other educational levels</li> <li>• The market for this type of learning is not yet saturated</li> <li>• Collaboration with publishers to turn content into school books</li> <li>• Selling software license nationally and internationally to provide MILES to external organisations as an internal training platform</li> <li>• Cooperation with public organizations e.g. Voluntary Labour Corps which is organizing various forms of combatting unemployment and social pathology to refer their service users as potential students</li> <li>• Promote blended learning to VET schools</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Resistance of tutors/learners/funders (employment service) due to changing contracts/offers from labour market service</li> <li>• As this setting is different, trainers/teachers could be overloaded because of teaching in a different way; lack of skills + motivation/mindset</li> <li>• Possible lack of investment for teacher/trainer development</li> <li>• Compared to open source systems (like Moodle) which are developed and updated every year, “cheaper” - MILES = huge investment</li> <li>• Format of files: SCORM = international shareable standard; MILES would have to specially develop this content</li> <li>• Without internet and a device the whole system won't work: poorest in society will not be able to join if they do not have devices/internet at home</li> <li>• Less or no flexibility within a structured setting (VET schools/schools, colleges) would make blended learning difficult; timetables are needed there</li> <li>• Competition from other blended learning companies/institutions</li> <li>• New competitors/technologies/concepts could make the programme less attractive</li> <li>• Younger students may not be supported and covered by national regulations and funding</li> <li>• Some legal content needs to be continuously updated</li> </ul>

## How to deal with the Weaknesses and Threats and to reduce these appropriately

### Course Content:

The development of course content is very time-consuming and requires extra preparation for the online setting. A good selection of authors is therefore indispensable to ensure quality. At the same time, a product analysis should be carried out in advance to evaluate which courses should be offered in the blended learning setting and then continuously expand the portfolio. This avoids too much one-time effort and creates continuous development and up-to-date information.

### Learning Management System (MILES):

The development of such a system is cost-intensive, therefore collaboration with software development companies is recommended, where existing programs are used and adapted to the needs of the organizations. Continuous development is necessary in today's digital world - this must be considered before implementing such a system.

In order to be able to use the system effectively, it is necessary to first analyse the circumstances of the participants to determine whether they also fulfil the technological requirements for the implementation of the course: Laptop, Internet access, etc.

For the correct use of the platform as well as the tools, training is necessary from both the trainers/tutors and the students.

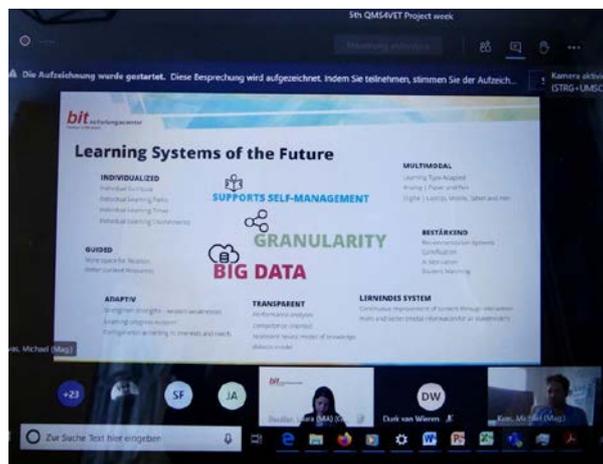
### Trainer/Tutor:

As teaching in a blended learning setting is different, good training for the trainers is needed not only in the learning materials and the LMS, but also in the possibilities, opportunities and challenges of this teaching methodology - further development and constant support are absolutely necessary. Possible development of own trainer working groups, which can work on problems independently with each other, is advantageous.

Since a blended learning system is available 24/7, the hours during which the trainer/tutor is available should be determined in advance by the organization and the availability should also be clearly communicated to the participants. At the same time, constant communication between the trainer and the organization is needed to monitor and support motivation as well as any challenges.

### Students:

The learner has the opportunity to work on learning material independently due to the individual approach. To ensure that students do not take advantage of the individual system, trainers should regularly check the students' learning progress on the LMS.



## RECOMMENDATION FOR STEP BY STEP IMPLEMENTATION

The following recommendations can be used when implementation of all or parts of the bit schulungszentrum **Blended learning system** is considered.

### Financial aspect

1. Ensure there are sufficient funds for implementation.
2. Make sure that you have an economic market for your programme.
3. The programme should be actively marketed through external stakeholders and across social media to reach as wide an audience as possible to maximise uptake.

### Organisational aspect

1. Evaluate in which courses a blended learning setting is needed and suitable. Define the right blend, percentage offline and online.
2. Clarify who is responsible for the content creation.
3. Consider how to include the practical element in blended learning when a profession has this as a requirement.
4. Ensure that you have both theoretical and practical exams to enrich the qualification and prepare the student for the workplace.
5. Collaborate with other schools to develop content. Build a win-win situation with companies to better meet their needs in writing content that can be used also for companies' employees (up-skilling and re-skilling)
6. Ensure that you have access to technical expertise required to implement and maintain programme.
7. Make sure that you have a compatible learning platform for students to access the programme.
8. Ensure that you have an electronic portfolio for students to upload assignments and other course material.
9. Ensure that you have feedback mechanisms in place so that students, staff and external organisations can support continuous improvement.
10. Maintain contact with regional employment and education public services to guarantee final certification of students and best employability opportunities.

### Teachers aspect

1. Ensure commitment from teaching staff to adopt this learning approach.
2. Define working contract and rules for teachers and possibly adapt them to the blended learning setting.
3. Conduct a skills gap analysis of teaching staff and organise training of distance and blended learning for the staff. If the blended learning course goals include additional elements such as social skills as well as practical and theoretical knowledge, then the teachers need to have special training in that field.
4. Ensure time is available for teaching staff to guide and support students in a digital environment.

## Students or Learners aspect

1. Develop support and social forums for students to embed a group culture and sense of belonging.
2. Ensure that all students have devices and Internet connections to access the course content – equity for all.
3. Consider how students with accessibility needs for example dyslexia can access the course.
4. Develop induction manual for students to provide programme information.
5. Offer step-up programmes to improve digital and language skills for students.



## EVALUATION

After analysing the **blended learning system** of bit schulungszentrum the following conclusions can be drawn:

### Advantages:

The blended learning setting is consistent with the EQR (European Qualifications Framework) with a strong focus on a personalised study path and fully flexible adaptation to personal life in order to develop the skills for the profession the learner is studying.

The student is in control of their whole life-long learning journey, being able to progress at a pace that meets the individual needs so that the student becomes a more active learner. By adopting a cloud based and easy-to-use platform such as LMS MILES, the educators as well as the learners have the flexibility to control all learning process anytime and anywhere (web, phones, tablets), which creates an enrichment of the learning process.

Additionally, the educator can see the learner's progress in real time via the Learning Management System (LMS) MILES and therefore can adjust the learner's path with guidance and mentoring.

#### **Disadvantages:**

As the blended learning system presented is closely connected to the Austrian labour market service as well as the Austrian legislation, it is sensitive to any governmental or legal changes which are out of the organizational control.

It is not possible to deliver the blended learning course without an adequate and up to date LMS in place to enable effective course delivery, monitoring of student's progress, guidance and tutoring.

The course is not equitable for all as there is a need to have devices, internet access and additional learning needs e.g. dyslexia also need to be addressed.

Where the content is constantly changing and evolving there is a cost and time implication for this and this is also a consideration regarding the requirement to manually amend individual progress into the online LMS when they fast track through a course.

Due to the requirements of the blended learning approach including, for example, IT-skills or practical knowledge, a knowledge-base is required both from learners and educators in advance of commencing study or teaching.

#### **Tips for implementation:**

The Austrian approach is closely based on the Austrian labour market service and governmental restrictions, therefore an organization wanting to implement the blended learning setting needs to analyse the (inter)national legislation and basic principles of the respective work environment.

Within the organization it is critical to identify and address skill-gaps (course content creation, delivering blended learning, commitment of educators) in advance of implementation.

To ensure that the implementation of the blended learning system is successful, there must be understanding and knowledge around educational delivery within the organisation. This will ensure that materials and resources are created which can guide an individual learner through their learning path.

## APPENDICES

1. Agenda and Minutes 5th QMS4VET project week
2. bit schulungszentrum presentations



## Erasmus+ KA2 project QMS4VET

2018-1-NL01-KA202-038886

### MINUTES 5<sup>th</sup> PROJECT WEEK (ONLINE) MEETING

9 – 11 February 2021

#### HOST ORGANISATION

bit Schulungscenter GmbH  
Kärntner Straße 311  
8054 Graz (AT)

### AGENDA TUESDAY 9 February 2020

Time	Item	Preparation/ Presentation	Teams
13.30	Welcome & Introduction Project week overview; Explanation of the day	Durk van Wieren	Plenary
13.45	Introduction of bit schulungscenter	Michael Kvas	Plenary
14.00	Introduction to the Austrian VET System and Context (Labour market)	Newplacement Vienna   Thomas Biller	Plenary
15.00	Coffee break		
15.15	Digitalized learning: from analysis to strategy to implementation	Michael Kvas & Katharina Mathois + Participant	Plenary
16.30	End of the day		

### AGENDA WEDNESDAY 10 February 2020

Time	Item	Preparation/Presentation	Teams
13.30	Welcome; Evaluation of previous day; Explanation of the day	Durk van Wieren	Plenary
13.45	Introduction to the Learning Management System: MILES	Michael Kvas	Plenary
14.30	MILES Hands-on demonstration	Thomas Hötzl	Plenary
15.15	Coffee break	All	
15.30	SWOT-analysis	All	Breakout rooms 1 – 4 <ul style="list-style-type: none"> <li>• Joao: Strengths</li> <li>• Shelagh: Weaknesses</li> </ul>



## Erasmus+ KA2 project QMS4VET

2018-1-NL01-KA202-038886

			<ul style="list-style-type: none"> <li>• Risto: Opportunity's</li> <li>• Laura: Threats</li> </ul>
16.30	End of the day		Plenary

### THURSDAY 11 February 2020

Time	Item	Preparation/Presentation	Teams
13.30	Welcome; Evaluation of previous day; Explanation of the day	Durk van Wieren	Plenary
13:45	Step by step implementation	All	Breakout rooms 1 – 4 <ul style="list-style-type: none"> <li>• Joao: group 1</li> <li>• Shelagh: group 2</li> <li>• Risto: group 3</li> <li>• Laura: group 4</li> </ul>
15.15	Coffee break		
15.30	Digitalisation of results	All	Breakout rooms 1 – 4 <ul style="list-style-type: none"> <li>• Joao: group 1 (introduction, objectives, methodology)</li> <li>• Shelagh: group 2 (SWOT &amp; how to deal with W&amp;T)</li> <li>• Risto: group 3 (recommendations for step by step implementation)</li> <li>• Laura: group 4 (evaluation, incl. advantages, disadvantages &amp; tips)</li> </ul>
16.15	Recap of the week; Evaluation + Goodbye's	Durk van Wieren	Plenary
16.30	End of the project week		



## Erasmus+ KA2 project QMS4VET

2018-1-NL01-KA202-038886

### **PARTICIPANT'S LIST:**

See annex 1

### **MINUTES OF THE MEETING:**

Photos of the meeting and handouts of the used presentations can be found in the QMS4VET Dropbox and MS Teams folders.

### **TUESDAY 9 FEBRUARY 2021**

#### **1. Welcome & Introduction; Project week overview; Explanation of the day.**

Durk welcomed all participants, introduced himself and the QMS4VET project (see also [www.ventus.nl/QMS4VET](http://www.ventus.nl/QMS4VET)). After each participant introduced her/his selves briefly, we took a walk through the agenda for the 3 days.

#### **2. Introduction of bit schulungcenter**

Michael Kvas introduced the bit schulungcenter (see annex 2).

#### **3. Introduction to the Austrian VET System and it's context with the labor market**

Thomas Biller gave us an overview about the Austrian VET system (see annex 3).

#### **4. Digitalized learning: from analysis to strategy to implementation**

Michael Kvas took us through bit's 'digitalized learning methodology and was supported by Elisabeth Bauer (ex. students) and Katharina Mathois (teacher). Participants asked a lot of questions since this was the studied subject and will be evaluated during the next days (see annex 2).

### **WEDNESDAY 10 FEBRUARY 2021**

#### **5. Welcome; Evaluation of previous day; Explanation of the day**

Durk van Wieren welcomed all participants and gave the opportunity to ask questions. Several questions were answered by Michael Kvas. After answering all questions, Durk explained the content of the 2<sup>nd</sup> QMS4VET afternoon.

#### **6. Introduction to the Learning Management System: MILES**

Michael Kvas explained the general outlines of the Miles system (see annex 2).

#### **7. MILES Hands-on demonstration**

Thomas Hötzl gave a demonstration of the Miles system in which he showed the features and possibilities. All participants received the opportunity to try the Miles system themselves. This opportunity will be available for the next few weeks. After the demonstration Thomas answered all questions.



## Erasmus+ KA2 project QMS4VET

2018-1-NL01-KA202-038886

### 8. SWOT-analysis

After the coffee break the participants were divided over 4 sub-groups in which they discussed the Strengths, Weaknesses, Opportunities and Threats (SWOT) of 'bit's blended learning methodology'. Outcomes of this analysis can be found in the Project Week report.

### THURSDAY 11 FEBRUARY 2021

### 9. Welcome; Evaluation of previous day; Explanation of the day

Durk van Wieren welcomed all participants, explained the day and questions about the previous days were answered.

### 10. Step by step implementation

After a short instruction, participants were divided over 4 Breakout rooms where they worked on input for the 'Recommendations for step by step implementation' chapter of the Project week report.

### 11. Digitalisation of results

Participants were divided over new Breakout rooms in which they worked on the different chapters of the Project week report.

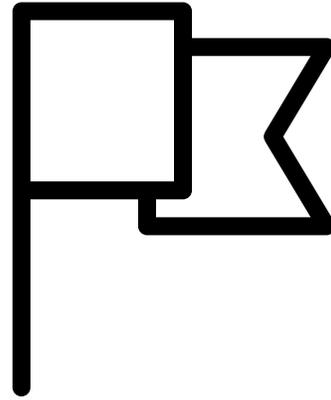
### 12. Recap of the week; Evaluation + Goodbye's

The Breakout rooms were closed at 16:15 hour and all participants met each other again in the plenary meeting. There were no questions to be answered during the last opportunity. Durk van Wieren thanked all participants for their effort and cooperation. It was agreed that all participants will receive the minutes of this project week, the Project week report and will be kept informed about the further outcomes of the QMS4VET project (i.e. the Toolkit). All participants were asked to fill in the online survey which was sent to them by e-mail. Durk van Wieren closed this Project week meeting at 16:30.

# *VET in Austria*

*„Education may be expansive, ignorance costs even more“*

Thomas Biller  
bit schulungcenter



*Getting VET!*

Maria  
Theresia  
1774:  
A Vision  
becomes  
true



# Mandatory Schooling for boys and girls for 6 years available in 12 local languages





# The Academy of Economics (1857)

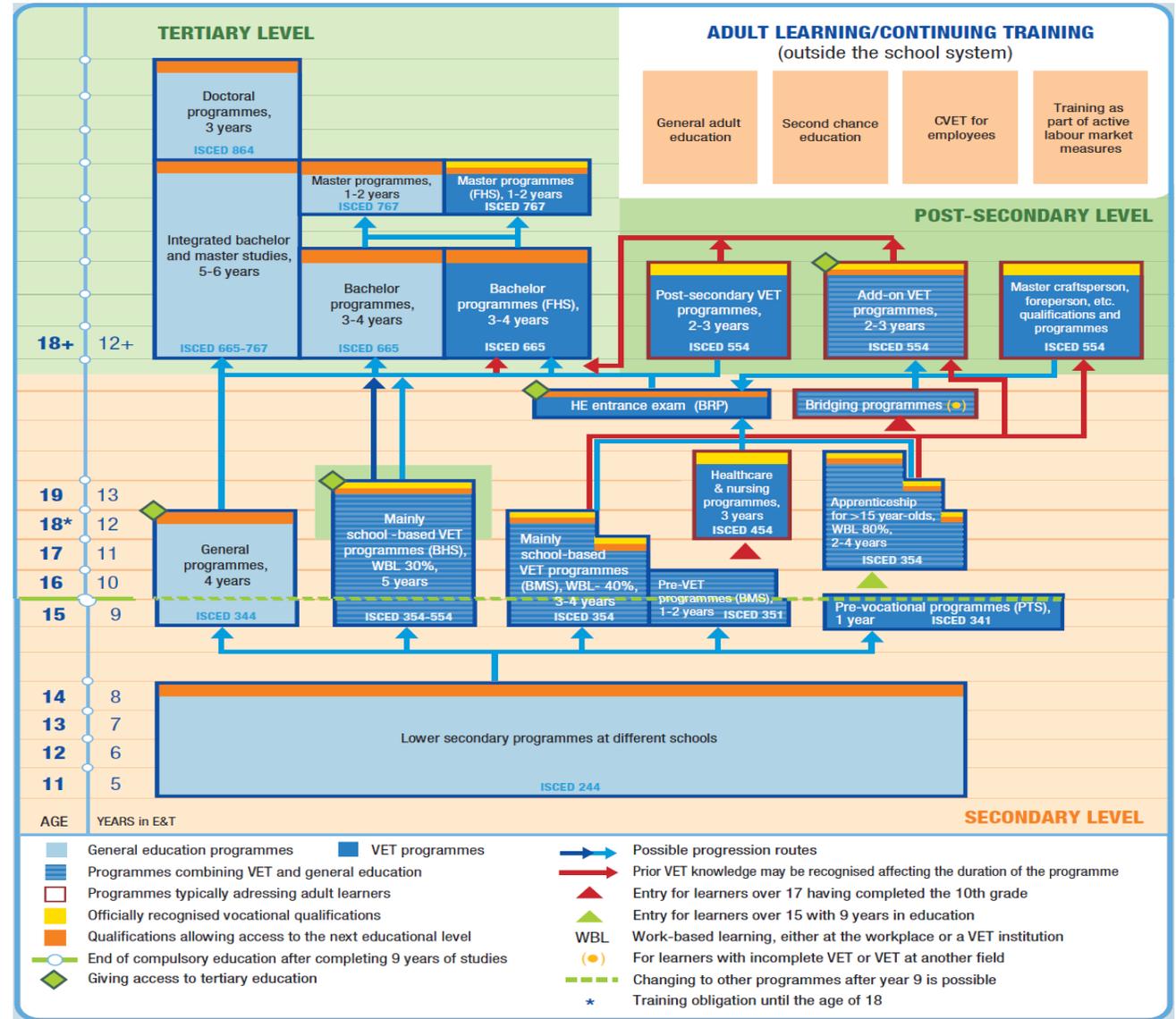




# College for Occupation in Service Industries Management

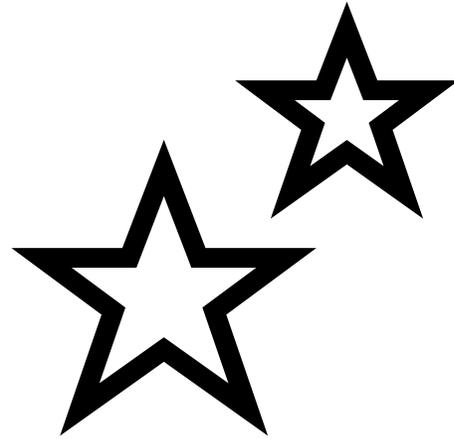
*Why  
VET?*

Taking the chance to change before the change steals your chances...



Being connected...

Networking with Ex- Colleagues

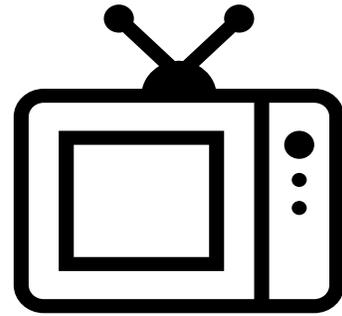


Being accepted...

Feedbacks on practices and  
direct employee placements

T h e r e ' s  
a h o l e  
i n m y  
s i d e w a l k  
q u o t e s

**PORTIA NELSON**



# VET in Austria...

[\(film\)](#)

QMS4VET

# **5th Project Week**

# **bit schulungcenter**

# Agenda 1

*TUESDAY 9 February 2020*

Time	Item	Preparation/Presentation
13.30	Welcome & Introduction Project week overview; Explanation of the day	Durk van Wieren
13.45	Introduction of bit schulungscenter	Michael Kvas
14.00	Introduction to the Austrian VET System and Context (Labour market)	Newplacement Vienna   Thomas Biller
15.00	Coffee break	
15.15	Digitalized learning: from analysis to strategy to implementation	Michael Kvas & Katharina Mathois + Participant
16.30	End of the day	

# Agenda 2

WEDNESDAY 10 February 2020

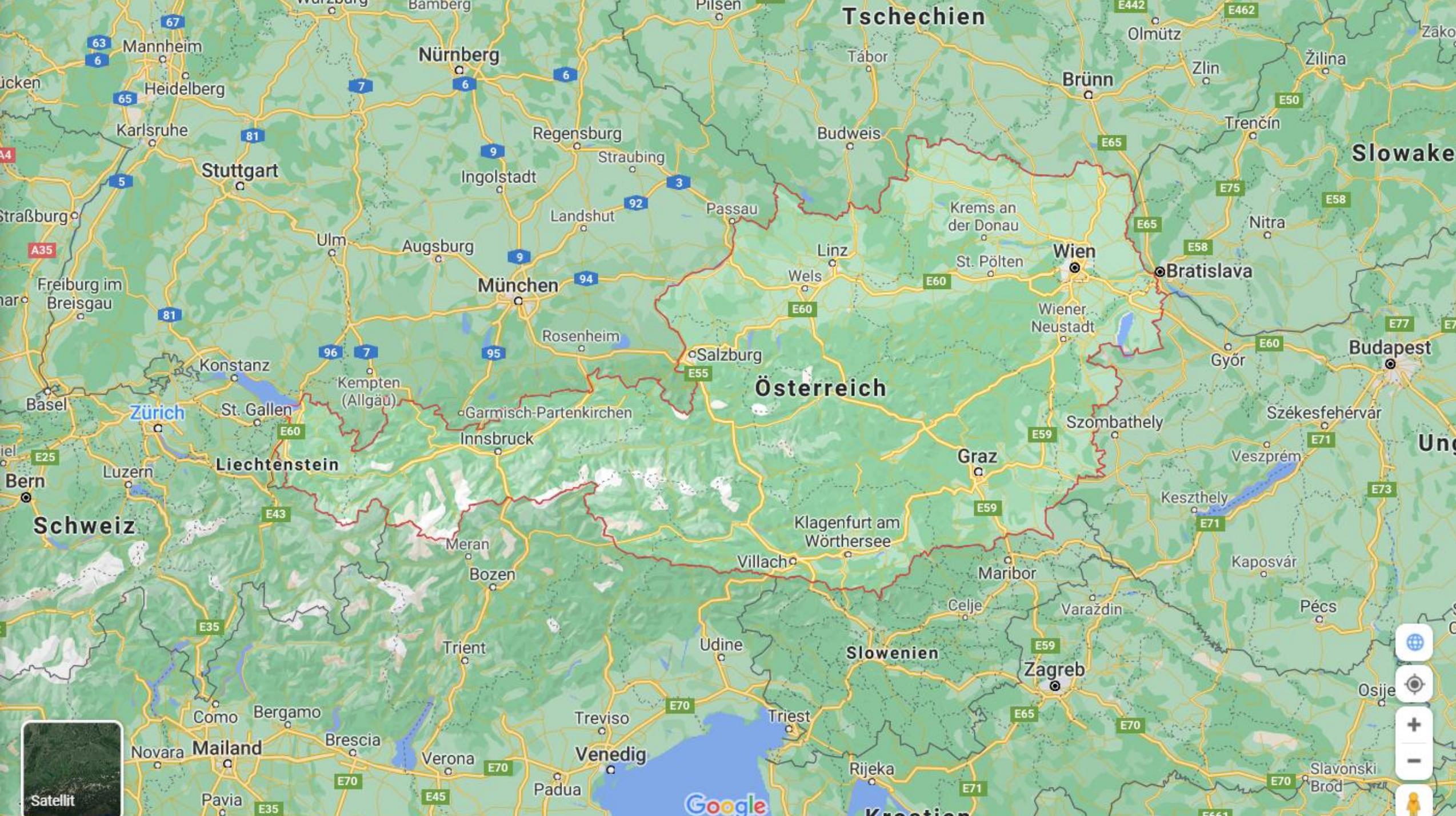
Time	Item	Preparation/Presentation
13.30	Welcome; Evaluation of previous day; Explanation of the day	Durk van Wieren
13.45	Introduction to the Learning Management System: MILES	Michael Kvas
14.00	MILES Hands-on demonstration	Thomas Hötzl
15.15	Coffee break	All
15.30	SWOT-analysis	All
16.30	End of the day	

# Agenda 3

*THURSDAY 11 February 2020*

Time	Item	Preparation/Presentation
13.30	Welcome; Evaluation of previous day; Explanation of the day	Durk van Wieren
13:45	Step by step implementation and Start of Digitalisation	All
15.15	Coffee break	
15.30	Digitalisation of results	All
16.15	Recap of the week; Goodbye ´s	Durk van Wieren
16.30	End of the project week	

# Welcome in Graz ...



Tschechien

Nürnberg

Stuttgart

München

Österreich

Brünn

Slowakei

Wien

Bratislava

Budapest

Schweiz

Zürich

Liechtenstein

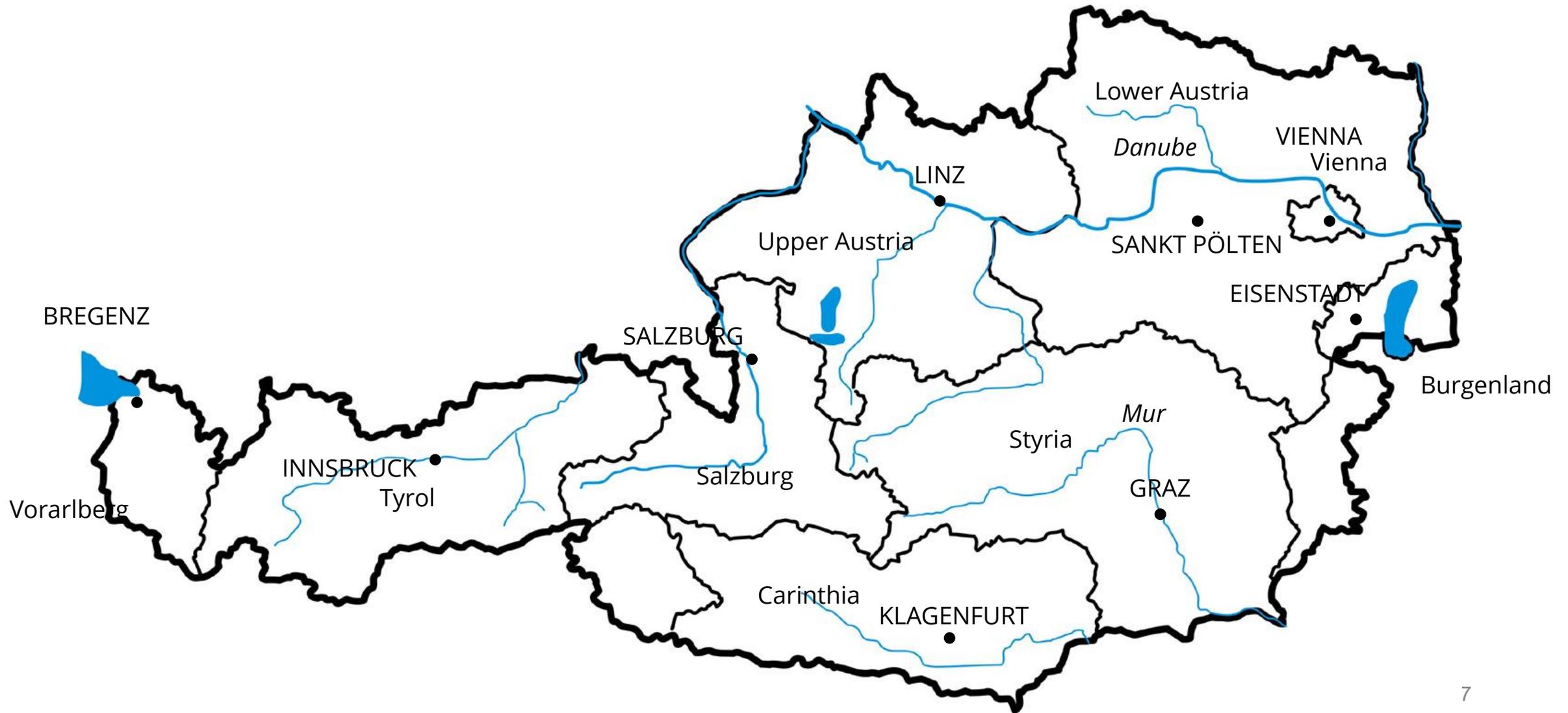
Slowenien

Zagreb

Venedig

Google

Satellit



# Training Places



Headquarter



Geschäftsstellen | Regional Headquarters



Projektstandorte | Project Premises



# Austrian OR German



**Austria:**



**Austria for  
Americans:**



# Trump Praises Austrian “Forest Cities” With Exploding Trees

They [Austrians] live in the forest; they are considered forest cities. But they don't have fires like this.”

earning him the nick-name “Forest Trump.”

*He says in these areas they "have more explosive trees" than California, but don't have the same kind of fire problems."*



Hanna Herbst

@HHumorlos



Skyline von Wien.



4:02 PM · Sep 15, 2020



2K



199



Copy link to Tweet



Patrick Gruska 

@PatrickGruska



Austria has the best trees.

Quelle: [de.m.wikipedia.org/wiki/For\\_Fores...](https://de.m.wikipedia.org/wiki/For_Fores...)



5:04 PM · Sep 15, 2020



266



29



Copy link to Tweet



paolo picasso

@paolo\_picasso\_



unser herr bundespräsident



11:14 nachm. · 15. Sep. 2020



72



2



Link zum Tweet kopieren

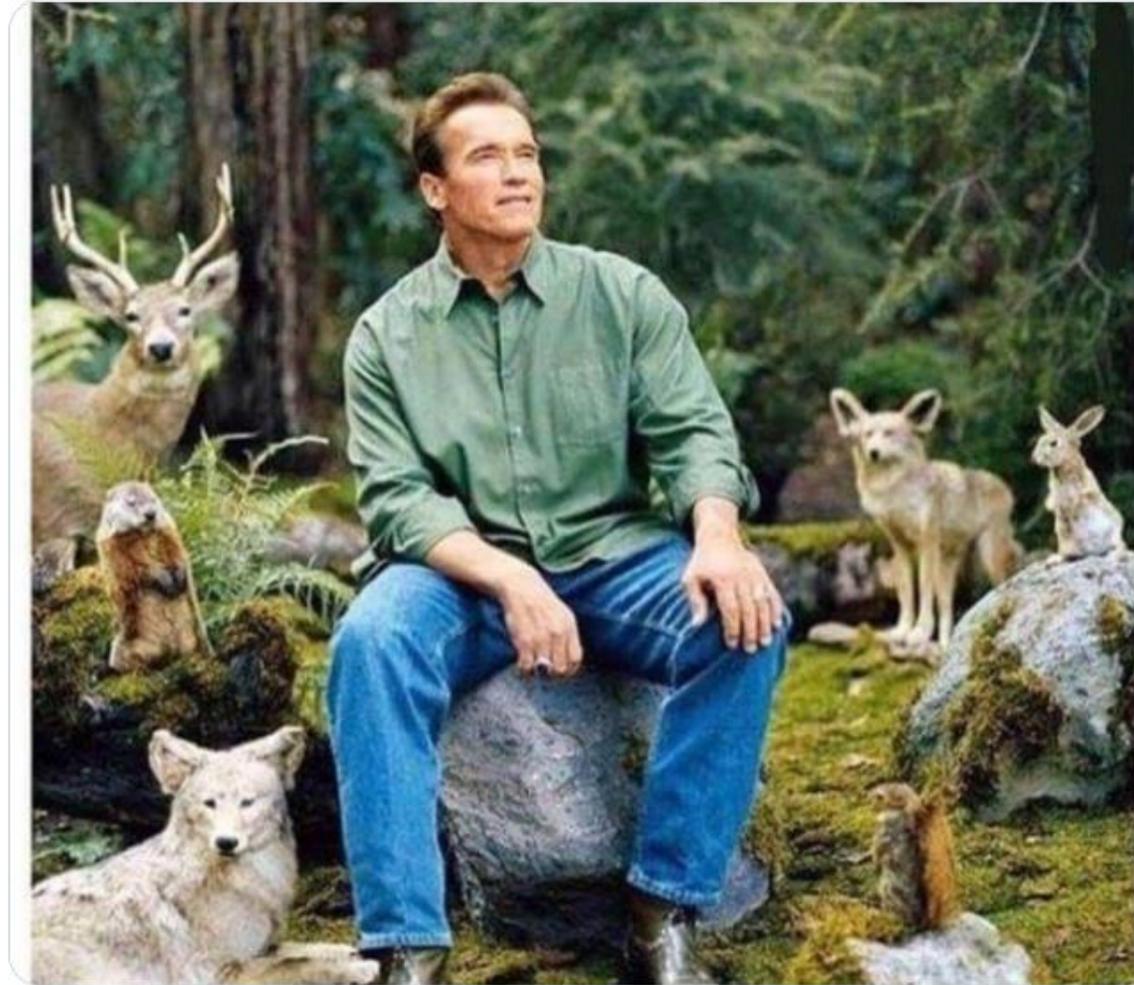


**Sarah Höfler**

@sarah\_hoef



Rare footage of Austrian natives [#ForestCities](#) [#Austria](#)



5:25 PM · Sep 15, 2020



Copy link to Tweet



**dichti**  
@dichterpoet



America First.  
Austria Förster.

4:22 nachm. · 15. Sep. 2020



♡ 6.939    💬 1.118    🔗 Link zum Tweet kopieren

Wahlslogan für die Wienwahl?



**Stefan Hofbauer**  
@AustroCanuck



Make Austria först again!  
[#Austria](#) [#ExplodingTrees](#) [#ExplosiveTrees](#) [#forestcities](#)

7:17 vorm. · 16. Sep. 2020



♡ 21    💬 3    🔗 Link zum Tweet kopieren



**Steernsnupp**  
@Steernsnupp



Smartphone made in Austria

[#forestcities](#)



11:00 nachm. · 15. Sep. 2020



♡ 31    💬 3    🔗 Link zum Tweet kopieren



bit  
Bau & Technik

Salzburg-Land  
Süd  
Südwest  
West  
Klagenfurt

# bit group

CEO: Ewald Eckl

CBDO: Michael Kvas

#####

400 FTAs within the group

600+ Experts-Network

35 Mio. Sales

## bit schulungscenter

Active Labour Market Interventions

Among the 5 biggest partners of AMS

2.000 to 3.500 participants per day

Anually between 8.000 and 12.000 participants

## bit management

Consulting in and for Education

Startup Coaching – peak 3.000 founders p.a.

## europe mpo

Costumized Solutions for Organizations

## MILES Learning

Virtual Learning Experience Platform

## EMG Akademie

Nursing and Health Care School

Appr. 600 participants per year

## Maturaschule

Berufsreifeprüfungsschule

Secondary II final exam

Appr. 400 participants per year

## CPC Austria

Environmental Consulting









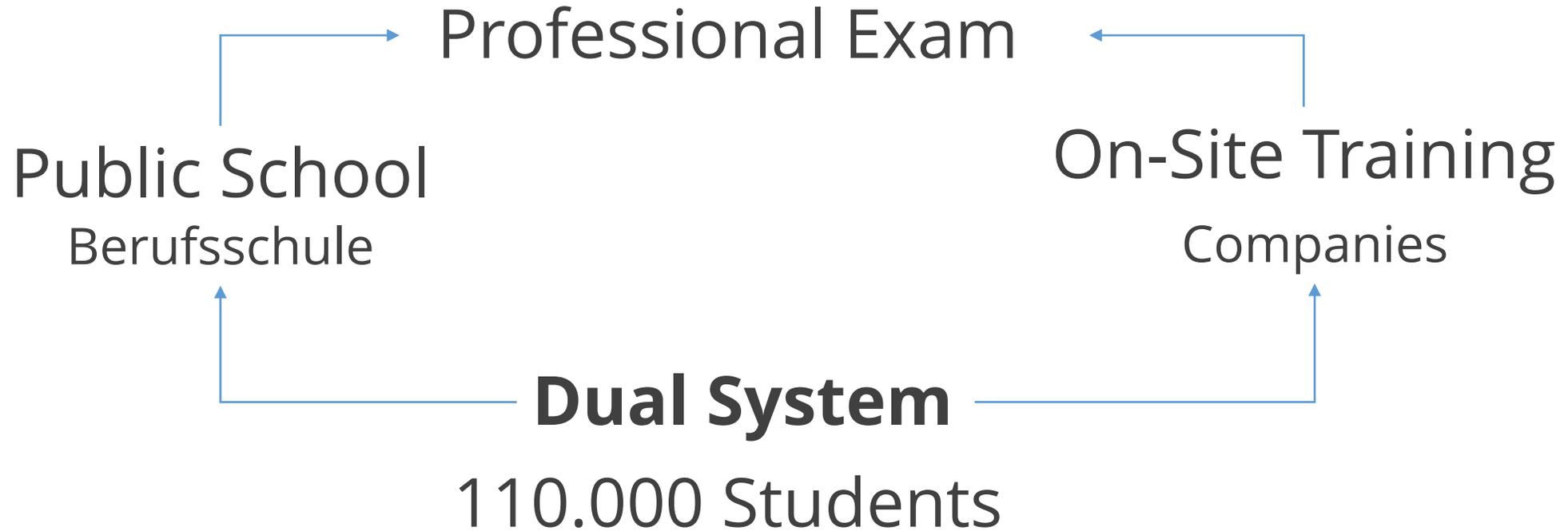




# **1. Introduction to the Austrian VET System and Context (labour market)**

## **2. Digitalize Learning: From Analysis to Strategy to Implementation**

# EQF Level 5 – Qualifications (Lehre | Apprenticeships)



**Secondary II – Grammar**

270.000 Students

3 years | 5 years

**Secondary II – VET Training**

# Still a beginning: blende(n)d zur LAP...

Pilot project for AMS Vienna

\*\*\*\*\*

Apprentices: Sales Assistance,  
Office Administration,  
Accounting

\*\*\*\*\*

24 pax promised |

26 achieved

thereof ca. 50% passed with  
distinction AND 100% success  
rate

YouTube

Suchen



Blende(n)d zur LAP

# *Lighthouse Project blended zur LAP*



<https://youtu.be/H11nyhptnN4>

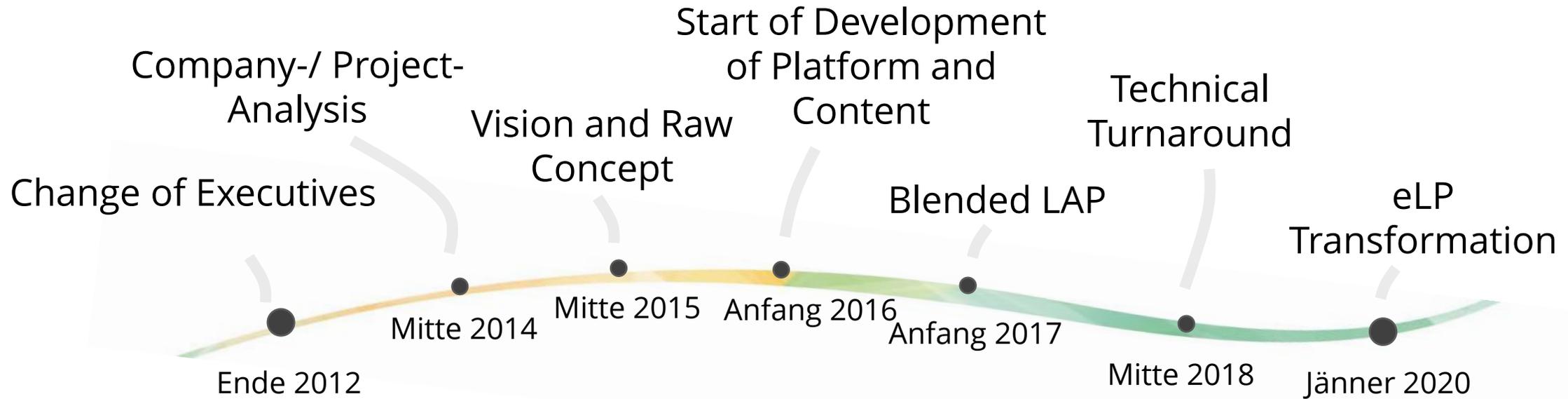
# The story begins ... 8 years ago ...

Why?  
What?  
How?  
What For?  
With what?  
How long?  
How much?

do we  
**Learn**

# The story begins ...

## 8 years ago with many questions ...



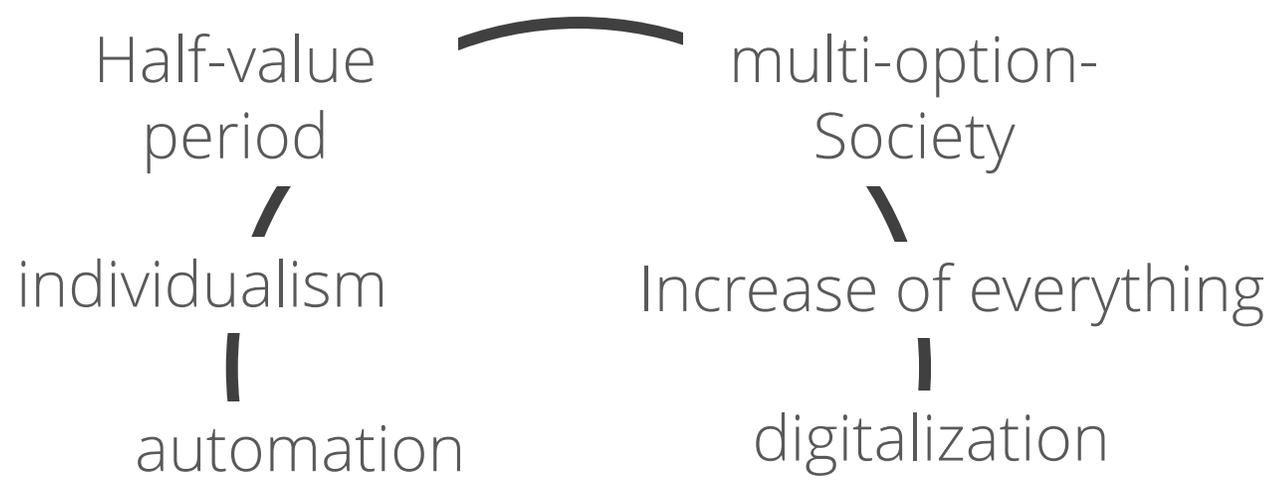
# The story begins ...

## 8 years ago with many questions ...

Why?  
What?  
How?  
What For?  
With what?  
How long?  
How much?

**LEARNING**

If everything gets faster ...  
that means, we need to learn MORE in  
shorter times and MORE OFTEN



Upper Austria

Salzburg

Vienna

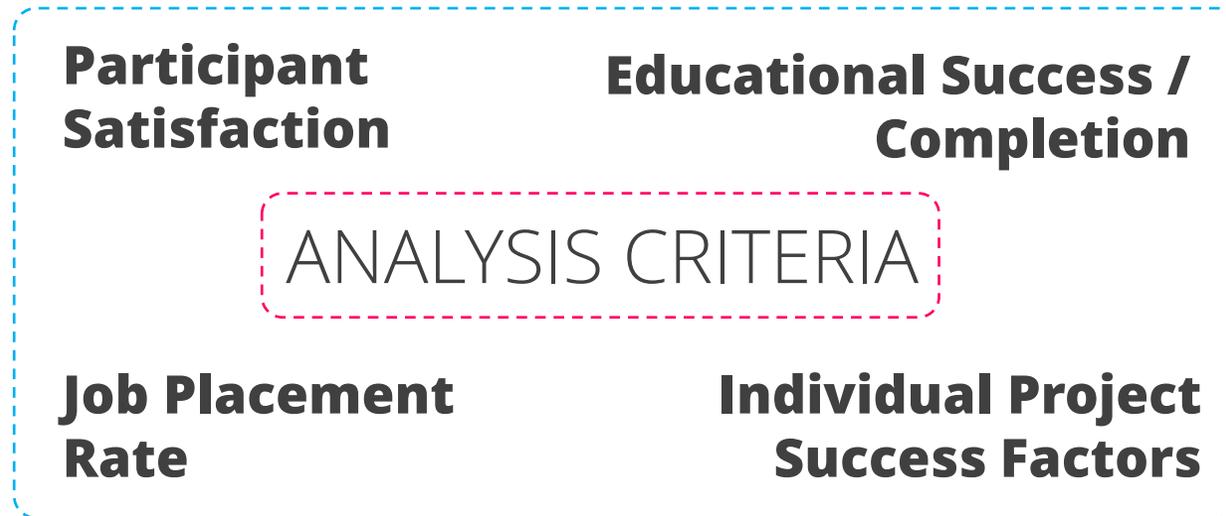
**bit schulungcenter**  
**ANALYSIS**

Accounting 1.2.2006  
Accounting 2.3.2006  
Accounting 3.4.2006  
Accounting 4.5.2006  
Accounting 5.6.2006  
Accounting 6.7.2006  
Accounting 7.8.2006  
Accounting 8.9.2006  
Accounting 9.10.2006  
Accounting 10.11.2006  
Accounting 11.12.2006  
Accounting 12.1.2007  
Accounting 13.2.2007  
Accounting 14.3.2007  
Accounting 15.4.2007  
Accounting 16.5.2007  
Accounting 17.6.2007  
Accounting 18.7.2007  
Accounting 19.8.2007  
Accounting 20.9.2007  
Accounting 21.10.2007  
Accounting 22.11.2007  
Accounting 23.12.2007  
Accounting 24.1.2008  
Accounting 25.2.2008  
Accounting 26.3.2008  
Accounting 27.4.2008  
Accounting 28.5.2008  
Accounting 29.6.2008  
Accounting 30.7.2008  
Accounting 31.8.2008  
Accounting 31.12.2008

Carinthia

Styria

# Strategy-Fullstop 2014



most successful project

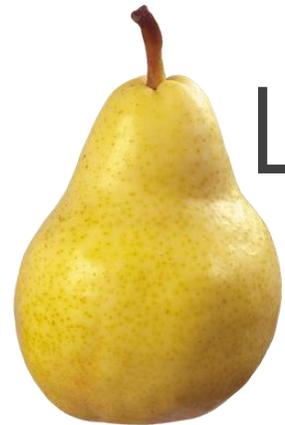
**eLP**

UPPER AUSTRIA +  
STYRIA

# Important Definition



eLearning  
Self-responsible Learning



Learning in Presence  
Learning at an educational premise



blended Learning



## Project Profile: eLP

- since 15 years
- blended Learning setting
- Free choice from portfolio
- 11 OR 12 weeks | individual learning time
- Expert Tutoring Online
- 1 or. 2 learning in presence with guidance coach
- 1500 participants per year



# Lighthouse Project eLP Upper Austria



[https://www.youtube.com/watch?v=uw8i3nWR\\_fg](https://www.youtube.com/watch?v=uw8i3nWR_fg)

# eLP is distinctive because

REASONS ...

**Participant  
Satisfaction**

**Educational Success /  
Completion**

INDIVIDUALITY

SELF-EFFICACY

SELF-RESPONSIBILITY

**Job Placement  
Rate**

**Individual Project  
Success Factors**

## Pedagogical Mechanisms

INDIVIDUALITY

SELF-EFFICACY

SELF-RESPONSIBILITY

## eLP-Analysis

### Resources

Technology

Software

Content

# Pedagogical Mechanisms - Conclusion drawn from Science

3 Key Concepts

Individuality

Self-Efficacy

Self-Responsibility

e.g. Neuroscience rewarding systems in the brain are activated when people experience their self-efficacy

e.g. health sciences – sense of coherence > influencing one's own context generates feeling of self-control and power (resilience)

e.g. philosophy of science, epistemology – constructivism and system science: learning is only possible if systems can activate their self-organizing processes

z.B. pedagogical psychology- social cognitive theory – explicitly naming self-efficacy

# Educational Portfolio

## ICT

ECDL Base  
ECDL Standard  
ECDL Advanced  
ECDL Computing  
ECDL Web Management

## SAP

### Foreign Languages

English, Italian, Spanish, Russian, Polish, Czech,  
Hungarian, Croatian, Slovenian, French

### Commerce

Office Administration  
Business Administration  
Accounting, Book-Keeping and Payroll Accounting

## CAD

CAD Grundlagen  
CAD Aufbau  
ECDL CAD

## Project Management

## Quality Management

basically easy to adapt and complement the portfolio ...

-----  
from provider to state certificates

-----  
multiple educations can be combined

# Organization of eLP

12 participants



each participant decides for one or multiple educations from the portfolio



Individual learning paths and tasks



Skype, GoToMeeting-Sessions – Hand in Tasks



Finding Appointments between eTutor and participant upon request or necessity of educational design



dropout | ~ <0,5% / pro Jahr



1 Intense week in presence  
Introduction to blended Learning

1 day (Upper Austria) / 8 units oder 2 days (Styria) / 16 units per week in presence

1 intense Outplacement Coaching

Presence = Coaching and Guidance | Monitoring of Needs and Educational Targets

eTutoring = synchron or asynchron communication with regard to content or know-how

Application Coaching

## Resource-Analysis: what happens around us...

digital educational revolution **MOOCs**

digital schoolbooks Social Learning 2.0

**Youtube-Videos** Forums and Panels

**IT-basierte Assessments**

Learning Managements Software

new collaboration

**Gaming | APPs**

**Online Tutoring**

Democratization of Education

**Learning Analytics**

**Flipped Classroom**

## Findings from our Analysis

Educational Architecture (package) is far more important than CONTENT und PLATFORM

ONLY eLearning won't be the philosophy – magic setting „blended“

We do not use the potential of technology yet ...

Technology will allow to better work with our learning architectures

# Analysis of Tutoring-Effort ...

## WAS

- 25% Direct Contact with Participants (Skype, Adobe Connect, Teams)
- 25% Correction of Tasks and Exercises estimation: ½ through erroneous content
- 20% Development of own and student-specific content
- 30% General Tutor Requests (Forum)

## SHALL BE

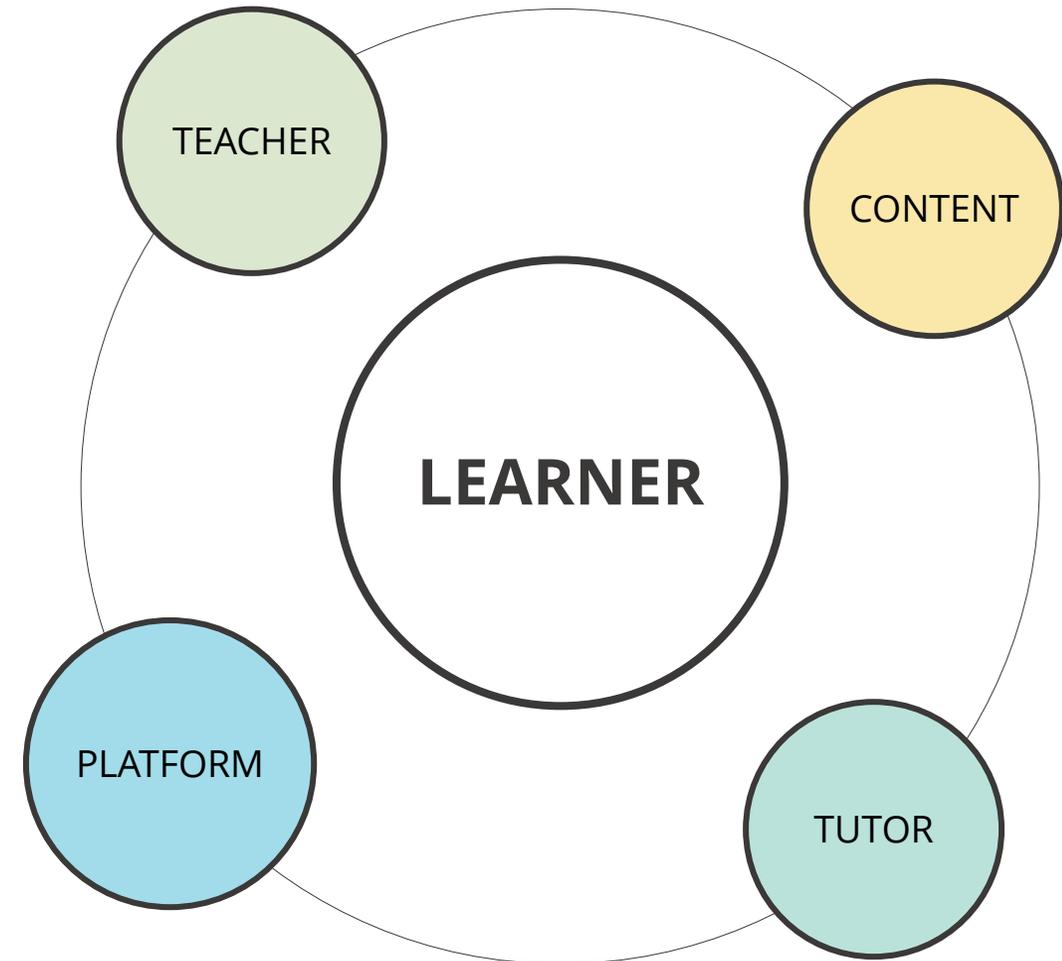
- 30% Direct Contact with Participants (Skype, Adobe Connect, Teams)
- 10% Correction of Tasks and Exercises
- 50% Development of own and student-specific content
- 10% General Tutor Requests (Forum)

## Thus the following things are history ...

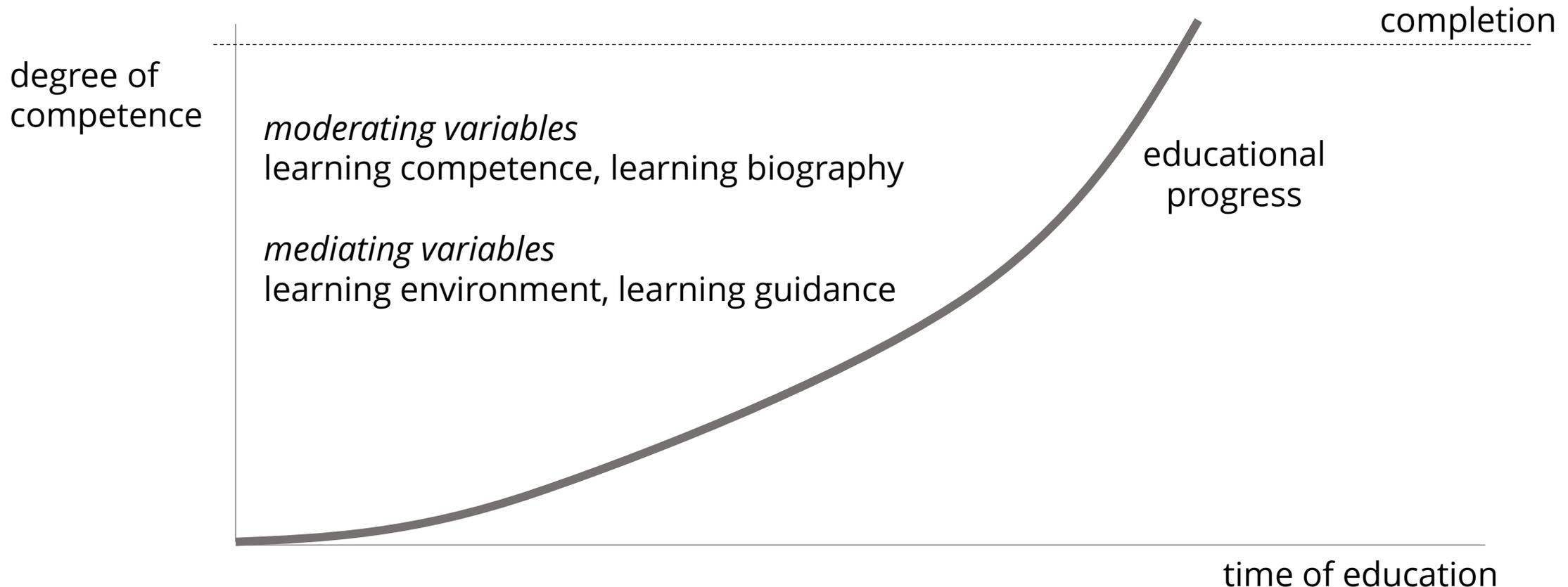
- Classical teaching settings with the teacher as focal point
- Overemphasis of the teachers know-how
- Teachers cannot „give“ the knowledge
- „the class“ is the environment, but you cannot address the class (social construct)

**... a new concept  
gets in place ...**

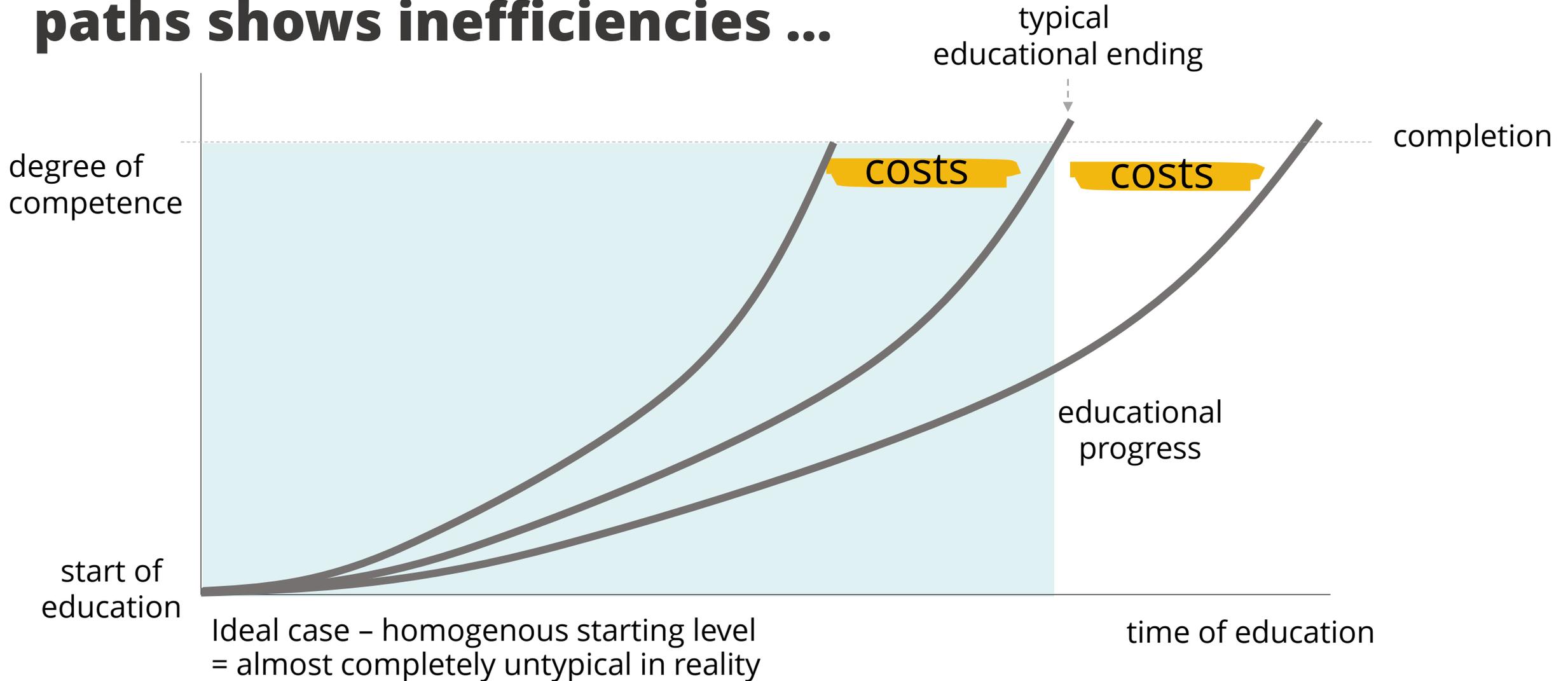
**... with the individual  
in the center!**



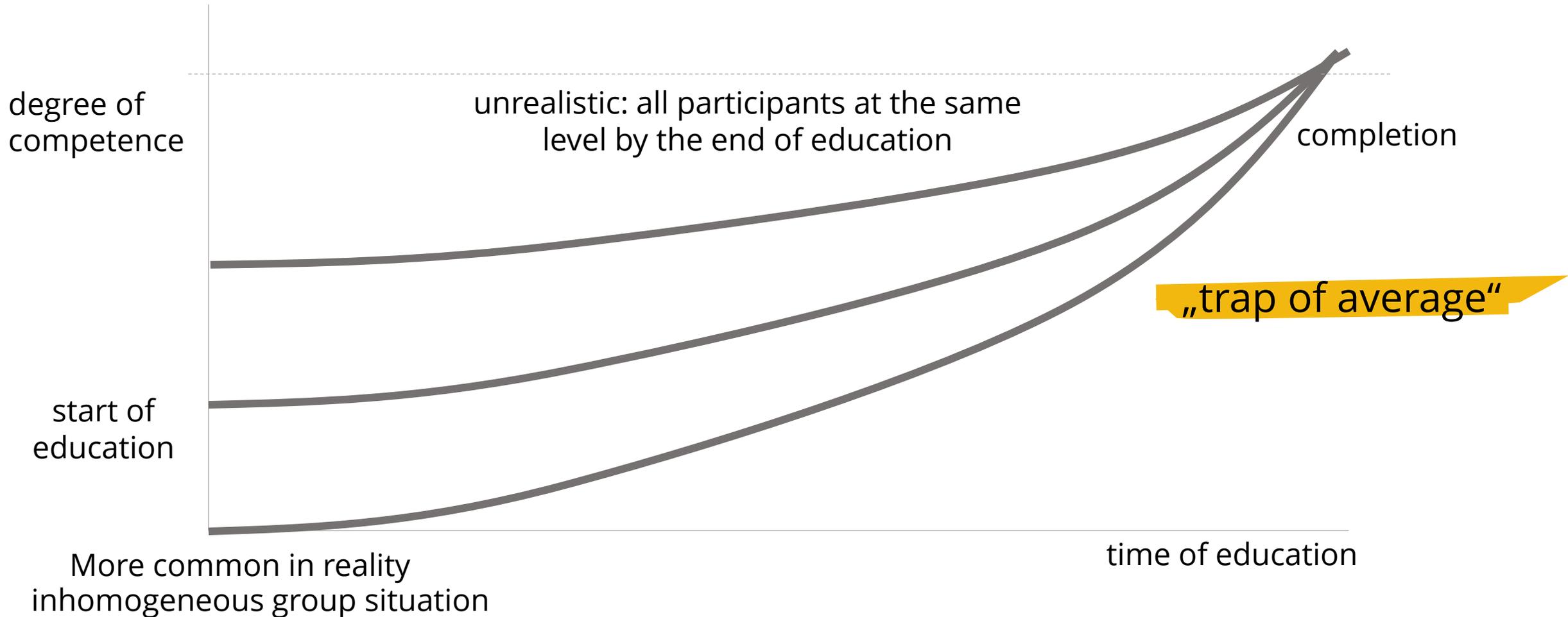
# If the individual is at the center, then we have to focus the individual learning path ...



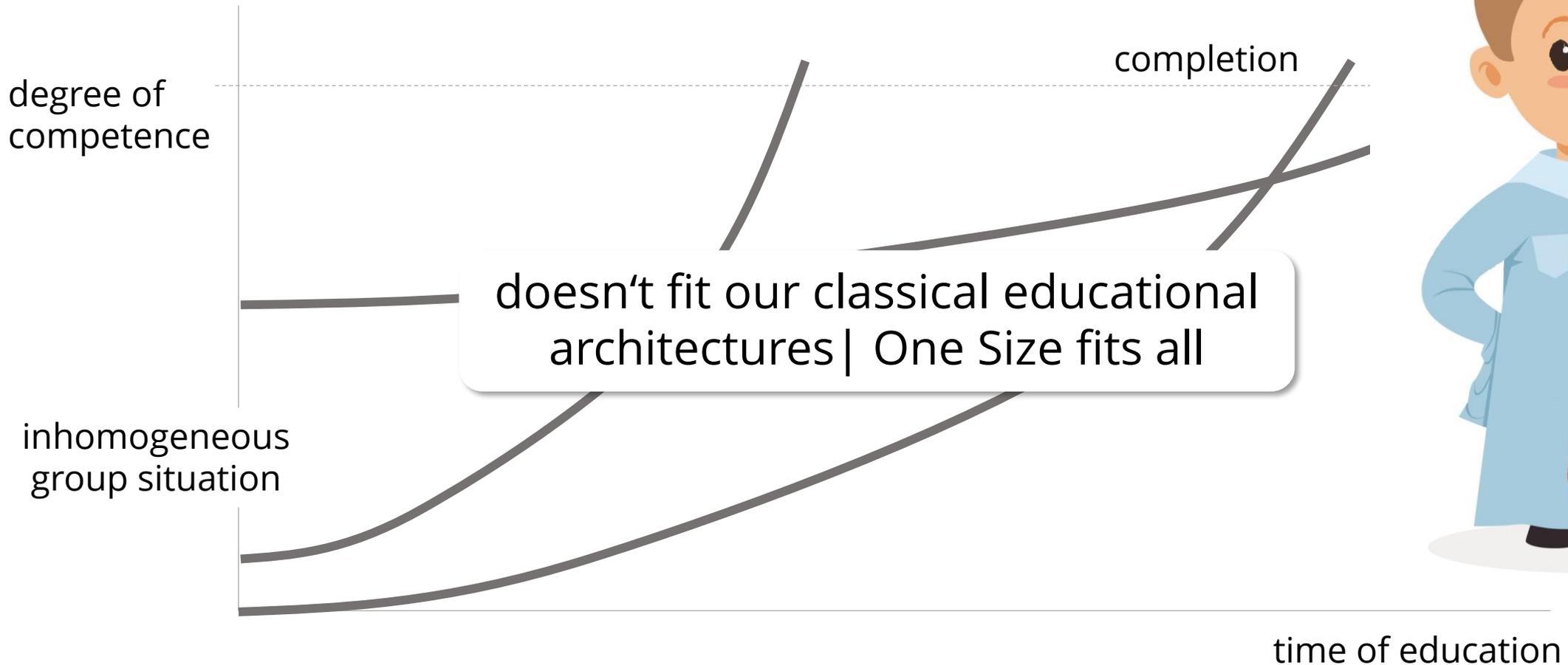
# Focusing individual learning paths shows inefficiencies ...



## ... shows us sources of demotivation e.g. due to overload, boredom ...



# Customizing of education as future model?!



# What does customizing or individualizing training mean ...



- Individualization of training duration
  - Individualization of training modules
  - Individualization of learning paths
- „Everyone can start the training any time“
- Individualized target formulations
- „No course/training is comparable to the other“
- Breakup of the classic training group or class
- „Every educational contract looks differently“
- Promotion of peer groups similar to the learning level
  - Use of the learning community (experiences, competencies)
- „Everyone only learns what's missing“
- Teacher becomes coach or training companion
  - Coach controls through consistent monitoring
  - Targeted individual coaching or tutoring

# Learning Systems of the Future

## INDIVIDUALIZED

Individual Curricula  
Individual Learning Paths  
Individual Learning Times  
Individual Learning Environments

## GUIDED

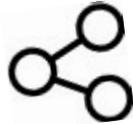
More space for Relation  
Better curated Resources

## ADAPTIV

Strengthen strengths - weaken weaknesses  
Learning progress support  
Configuration according to interests and needs



**SUPPORTS SELF-MANAGEMENT**



**GRANULARITY**



**BIG DATA**

## TRANSPARENT

Performance analyses  
competence-oriented  
represent neural model of knowledge  
didactic model

## LERNENDES SYSTEM

Continuous improvement of content through interaction  
more and better (meta) information for all stakeholders

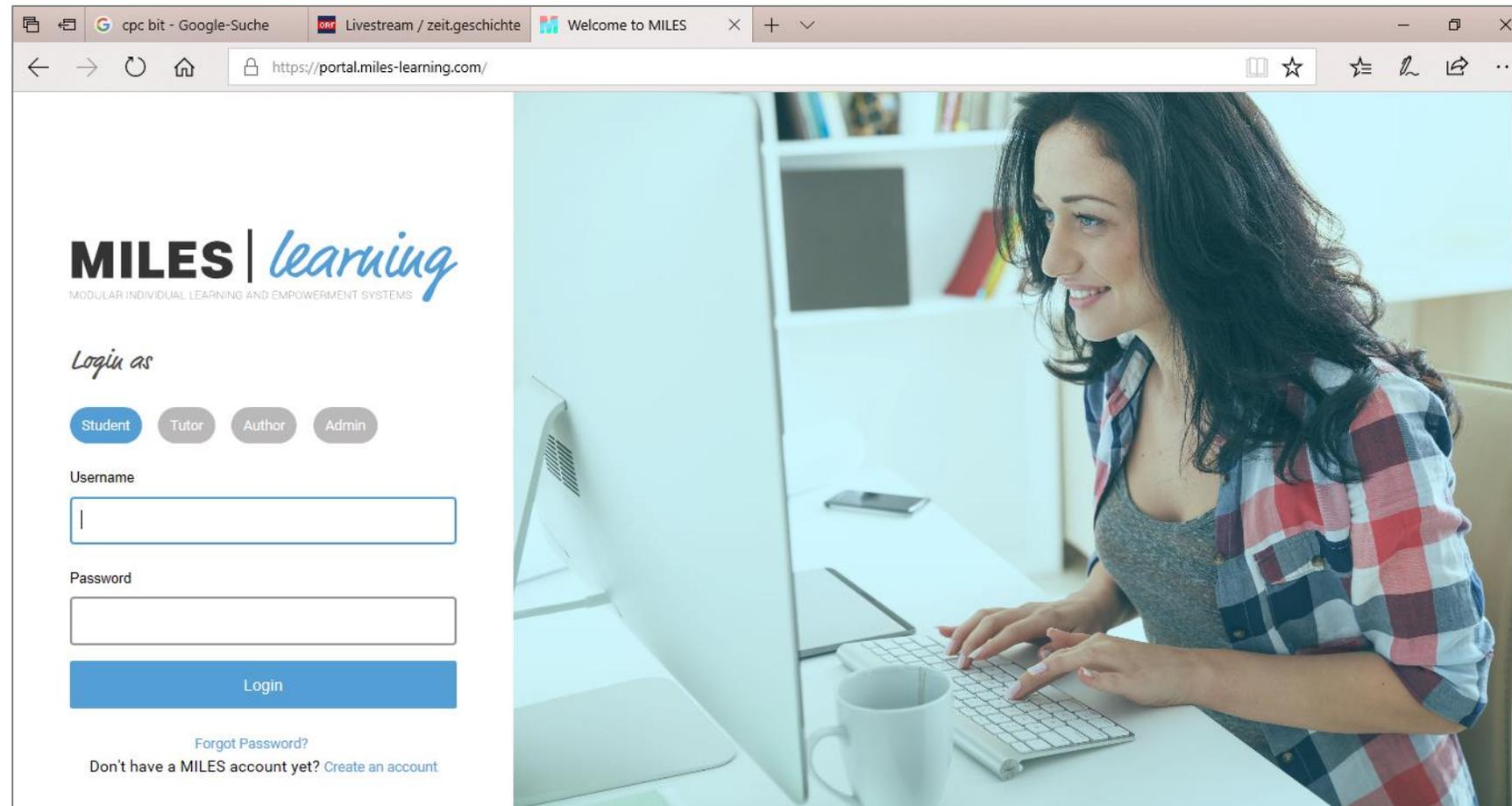
## MULTIMODAL

Learning Type Adapted  
Analog | Paper and Pen  
Digital | Laptop, Mobile, Tablet and Pen

## BESTÄRKEND

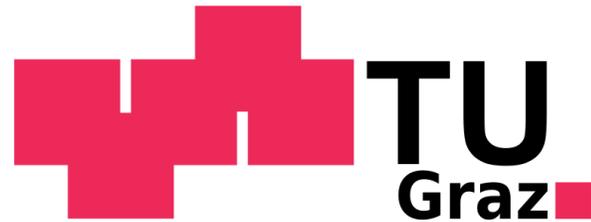
Recommendation Systems  
Gamification  
AI Motivation  
Student Matching

# Technology supports: high quality individualized training ...



The image shows a screenshot of a web browser displaying the login page for the MILES learning portal. The browser's address bar shows the URL <https://portal.miles-learning.com/>. The page features the MILES | learning logo, with the tagline "MODULAR INDIVIDUAL LEARNING AND EMPOWERMENT SYSTEMS". Below the logo, there is a "Login as" section with four buttons: "Student", "Tutor", "Author", and "Admin". The "Student" button is selected. Underneath, there are input fields for "Username" and "Password", followed by a blue "Login" button. At the bottom, there are links for "Forgot Password?" and "Don't have a MILES account yet? Create an account". The right side of the screenshot shows a woman with long dark hair, wearing a red and blue plaid shirt, sitting at a desk and smiling while looking at a computer monitor. A white mug is on the desk in front of her.

# Cooperations with Academia



TU GRAZ – MOTIVATIONAL MEDIA TECHNOLOGIES  
TU GRAZ – COGNITIVE SCIENCE TEAM



KNOWCENTER – TU GRAZ



KFU GRAZ - BILDUNGSWISSENSCHAFTEN  
KFU GRAZ - PSYCHOLOGIE



JOANNEUM RESEARCH

## What does that mean and show in effects ...

!!! Permanent onboarding of participants / starting any time

!!! 100% places filled | exits immediately replaced (if people pick up jobs)

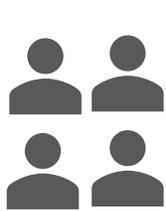
!!! Lower average cost per Completion

!!! Learners Motivation and Satisfaction

# Architectural Considerations

## Depending on the design, there are a number of implementation variants

### Variant eLP OÖ / STMK



Fixed duration of training  
→  
Different training targets



Fixed duration of training  
→  
Different training targets

### Variant blendend LAP



Immediate refilling in case of dropouts/exits

***Thanks for your attention...***



# MILES SYSTEMS ARCHITECTURE

## MILES IN BRIEF

MILES is a learning system based on didactic principles. Fine learning objectives can be considered as synapses of this system. These are "coded" (tagged) with a level of competence and a level of learning objectives. Directly and indirectly, learners interact with these fine learning objectives. The granular structure results in a vast density of data points that can be used to guide the learning process.

Competence Degree  
(Bloom's Taxonomy)

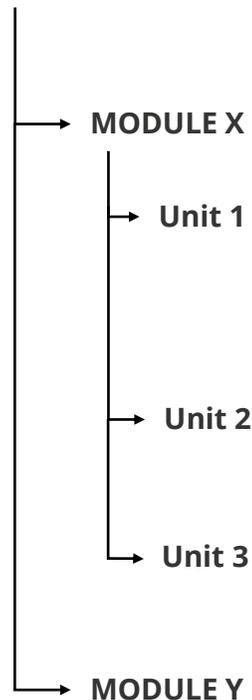
- KD 1: Know
- KD 2: Understand
- KD 3: Apply
- KD 4: Analyse
- KD 5: Evaluate
- KD 6: Synthesize

LEVEL EQR

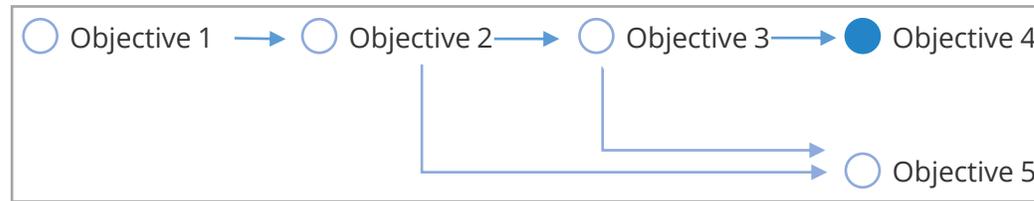
- LL 1: Grundlegendes Allgemeinwissen
- LL 2: Grundlegendes Faktenwissen
- LL 3: Kenntnisse von Fakten, Grundsätzen, Verfahren und allgemeinen Begriffen
- LL 4: Breites Spektrum an Theorie- und Faktenwissen
- LL 5: Umfassendes, spezialisiertes Theorie- und Faktenwissen
- LL 6: Fortgeschrittene Kenntnisse in einem Arbeits- oder Lernbereich
- LL 7: Hoch spezialisiertes Wissen, das zum Teil an neueste Erkenntnisse
- LL 8: Spitzenkenntnisse in einem Arbeits- oder Lernbereich

Fine Objective 4.1 | Sie können den Begriff „Target Costing“ erklären | KD 2 | LL 4

## COURSE | EDUCATION



- Fine Objective 1.1.1
- Fine Objective 1.1.2
- Fine Objective 1.1.3
- Fine Objective 1.2.1
- Fine Objective 1.2.2
- Fine Objective 1.2.3
- Fine Objective 1.2.4
- Fine Objective 1.3.1
- Fine Objective 1.3.2
- Fine Objective 1.3.3
- Fine Objective 1.3.4
- Fine Objective 1.3.5



Objective 4 | „Target Costing oder Zielkostenrechnung“

- Fine Objective 1.4.1 | Sie können den Begriff „Target Costing“ erklären | KD 2 | LL 4
- Fine Objective 1.4.2 | Sie können das Vorgehen beim Target Costing beschreiben | KD 2 | LL 4
- Fine Objective 1.4.3 | Sie können Vor- und Nachteile des Target Costing nennen. | KD 1 | LL 4

- Fine Objective 1.5.1
- Fine Objective 1.5.2
- Fine Objective 1.5.3

## PHASES WITHIN A LEARNING UNIT

EINFÜHRUNG

- BUILD KNOWLEDGE | APPLY KNOWLEDGE
- SAVE KNOWLEDGE
- SHOW KNOWLEDGE

### BUILD KNOWLEDGE

- Feinlernziel 1.4.1  
INHALTSBAUSTEIN 1  
INHALTSBAUSTEIN 2  
INHALTSBAUSTEIN 3  
INHALTSBAUSTEIN 4
- Feinlernziel 1.4.2  
INHALTSBAUSTEIN 1  
INHALTSBAUSTEIN 2  
INHALTSBAUSTEIN 3  
INHALTSBAUSTEIN 4  
INHALTSBAUSTEIN 5  
INHALTSBAUSTEIN 6
- Feinlernziel 1.4.3

### APPLY KNOWLEDGE

- Übung 1.4.1.1  
Übung 1.4.1.2  
Übung 1.4.1.3
- Übung 1.4.2.1  
Übung 1.4.2.2  
Übung 1.4.2.3  
Übung 1.4.2.3
- Übung 1.4.3.1  
Übung 1.4.3.2