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Virtual Exchange International - von der Idee zum Modul

Workshop agile Lehrkonzepte; 26.04.2024

Agenda

1. Virtual Mobility
2. Virtual Collaborative Learning
3. Exemplary Cases
4. From local, over regional to international Virtual Mobility
5. Conclusion

Virtual Mobility

- Modern ICT enables more flexible, interactive, attractive and user-friendly collaborative virtual exchange settings
- Allows to bring local students together with students abroad at an affordable price using virtual devices
- Social media allows active participation in virtual group learning processes, which significantly increases learning success compared to passive reception (Davies and Merchant, 2009).
- International virtual collaborations can be summarised under the term virtual mobility

“The use of information and communication technologies (ICT) to obtain the same benefits as one would have with physical mobility but without the need to travel” (van Schaik, 2019).

Virtual Mobility

- Cooperation of at least two HE Institutes
- ICT Supported learning environment with virtual components
- Collaboration of participants with different backgrounds, cultures [...]
- Working and study together, creation of a virtual community
- Clear formulation of the learning activities and learning objectives
- Main purpose is the exchange of knowledge and improvement of intercultural competence
- Recognition of the course from the home university / acquisition of ECTS points

Virtual Collaborative Learning Framework

Key Elements of VCL

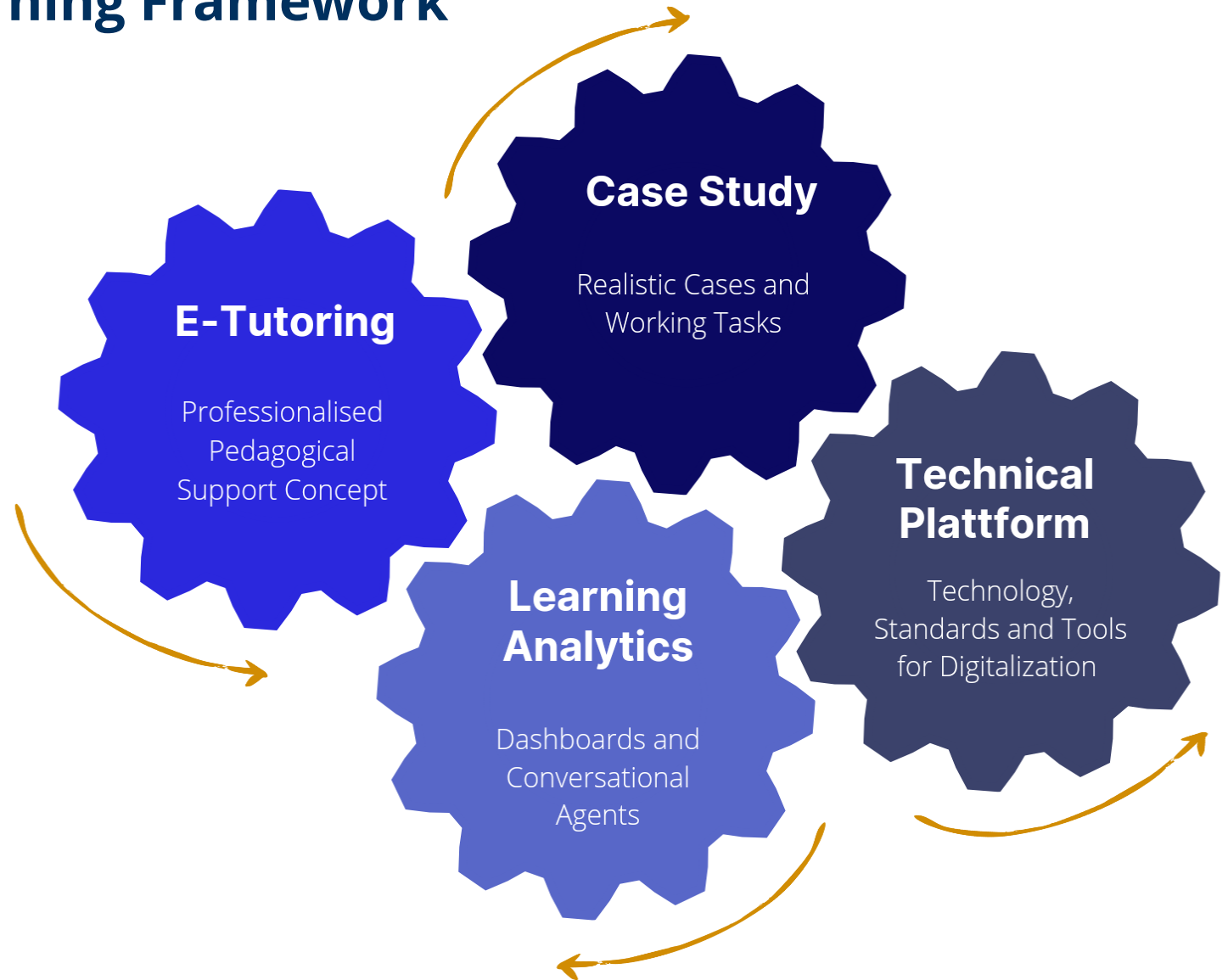
- **Formal setting**
(learning goals ← examinations, grades & credits)
- **Higher Education** (reaching out to other forms of academic courses, e.g. dual/cooperative study programs, vocational training)
- **Completely online** (vs. on-site or blended learning formats)
- **Asynchronous & synchronous**
- Learning in **mixed teams** (vs. individual learning)
- **Case study**-style learning (open scenarios and solutions)
- Close supervision by **qualified E-Tutors**
- **Situative learning** (authentic cases, project style collaboration
→ reducing inert knowledge)

(Jödicke et al. 2014, Clauss et al. 2020)

Virtual Collaborative Learning Framework

Concrete realisation

- Four main design dimensions, as “pivotal points” to ensure quality in our VCL settings
- Professional pedagogical support
- Realistic Cases and working tasks
- Technical Platform
- Learning Analytics

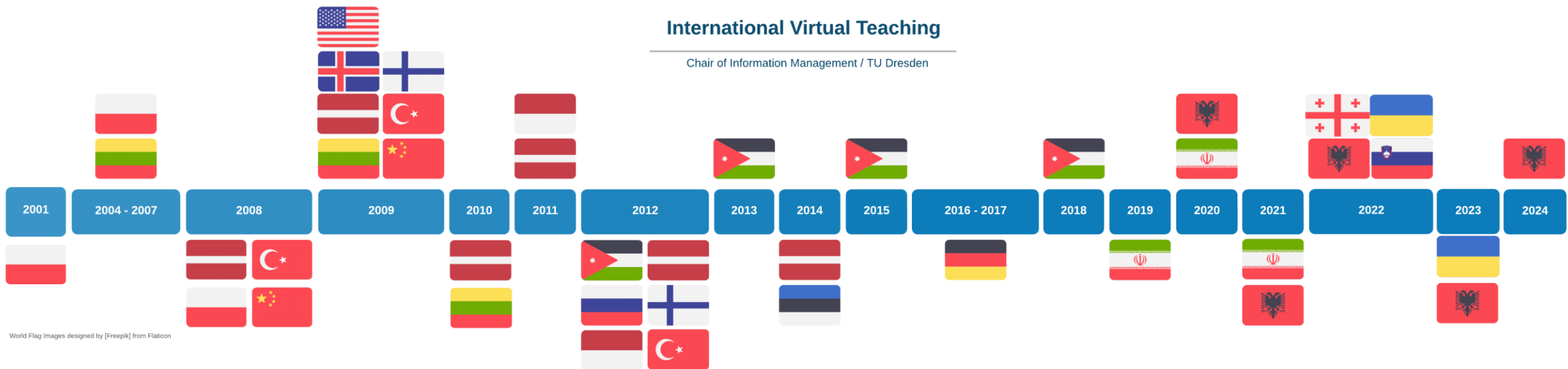


Virtual Collaborative Learning Framework

Virtual = online, using new communication channels

Collaborative = in groups, benefitting from the experience of others

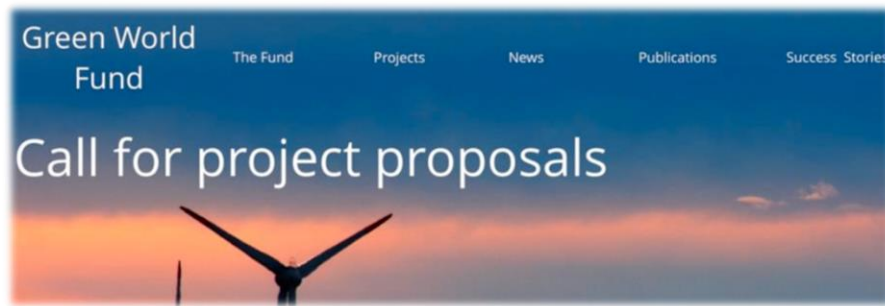
Learning = gaining new knowledge and experience



Exemplary Cases

Collaboration in the Virtual Classroom – International Masters Module

International cooperation of two Universities in **2020**, and 2021 13 TUD, 13 SU students and 9 industrial experts



1. Introduction

Development of global power generation:

Starting point of Innovation Blu
The future
The past and the present

THE PROBLEM
Why Decentralised Energy?

- HIGH COST BARRIERS TO EXTENSION OF CENTRAL GRID**
Difficult geography and low population density make extension of the national grid difficult for both developing and OECD countries...
• many communities left without access to reliable, affordable, clean electricity
- RISE OF INTERMITTENT RENEWABLES**
More localized production and distribution of electricity due to rise of intermittent renewables, creating...
• need for a same-day market for electricity
• more complex/flexible local distribution systems
• and mounting data management challenges

01 July 2020 Collaboration in the Virtual Classroom | Final presentation



Your Mission

Faculty of Business and Economics | Chair of Information Management | Prof. Schoop

Schedule

Assignment	Date
Kick-off	29.04.2020
Task 0 Team building	30.04.2020 – 05.05.2020*
Task 1 Ontology	06.05.2020 – 12.05.2020*
Task 2 Brainstorming	13.05.2020 – 19.05.2020*
Pitch 1	20.05.2020
Break	21.05.2020 – 25.05.2020
Task 3 Peer review	27.05.2020 – 02.06.2020*
Task 4 Dilemma	03.06.2020 – 09.06.2020*
Task 5 CIT	10.06.2020 – 16.06.2020*
Imam Sadeq (Break)	17.06.2020

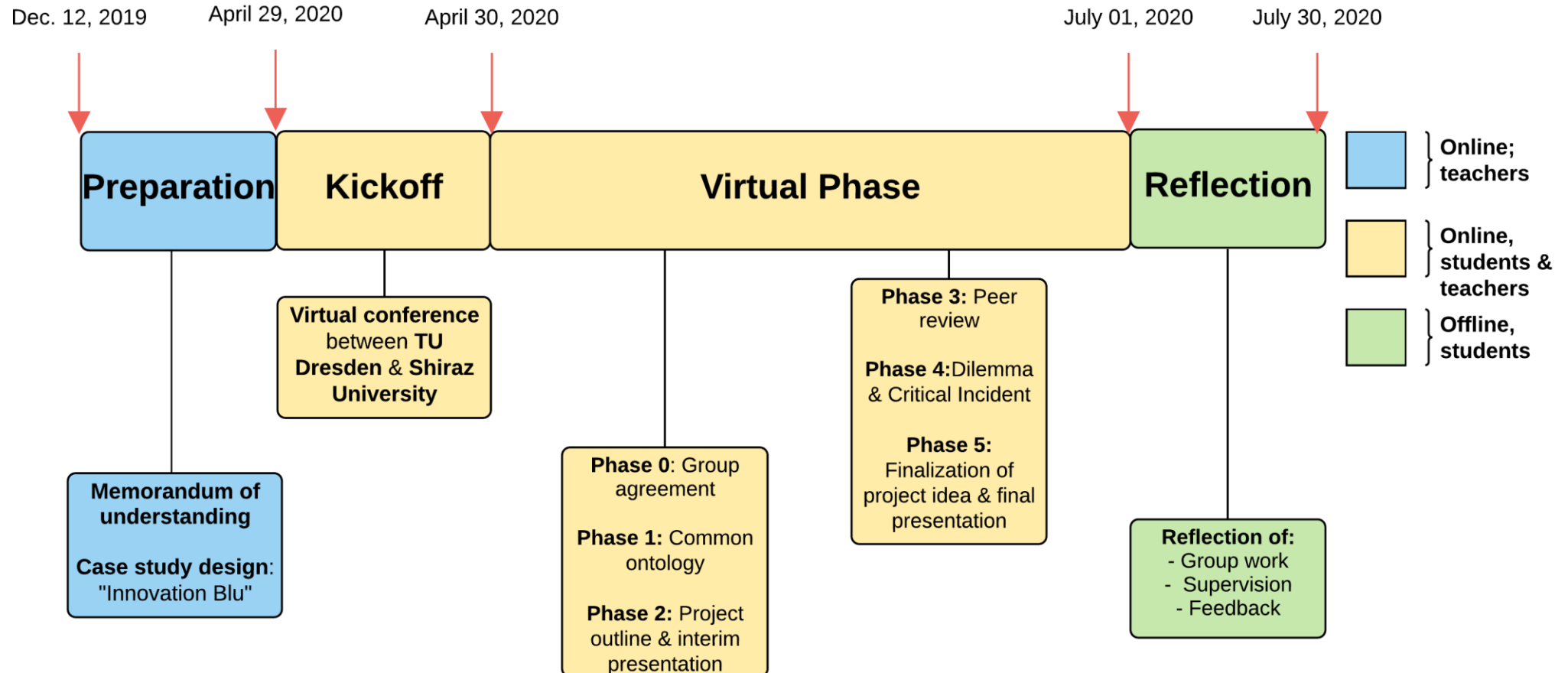
*Latest submission: 20:00 (German time) or 22:30 (Iranian time)

29.04.20 Collaboration in the Virtual Classroom | Kick-Off | Schoop, Altmann, Jantos Slide 22 of 37



Exemplary Cases

Collaboration in the Virtual Classroom – International Masters Module



Exemplary Cases

Case-based Learning in the Virtual Classroom

The Learning Objectives:

Formation of own competencies in the area of teamwork, conflict management, collaboration and communication.

Professional competencies in the area of business models, digitalization and human resources.

The Mission:

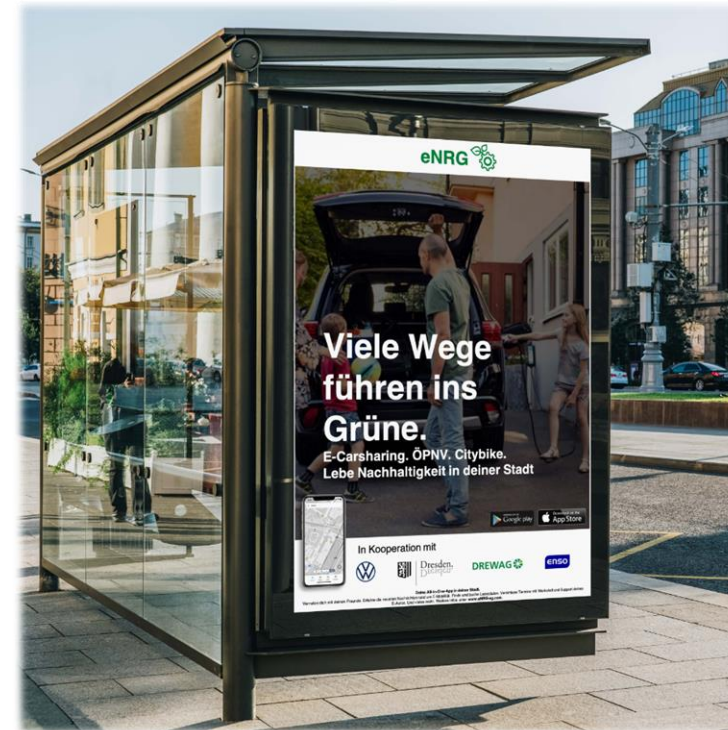


The city of Dresden wants to become climate-neutral: more charging stations, more e-cars, more environmental protection.

The city of Dresden approaches local electric utilities and a car manufacturer.

Together they are considering diversifying their business areas and setting up new business units.

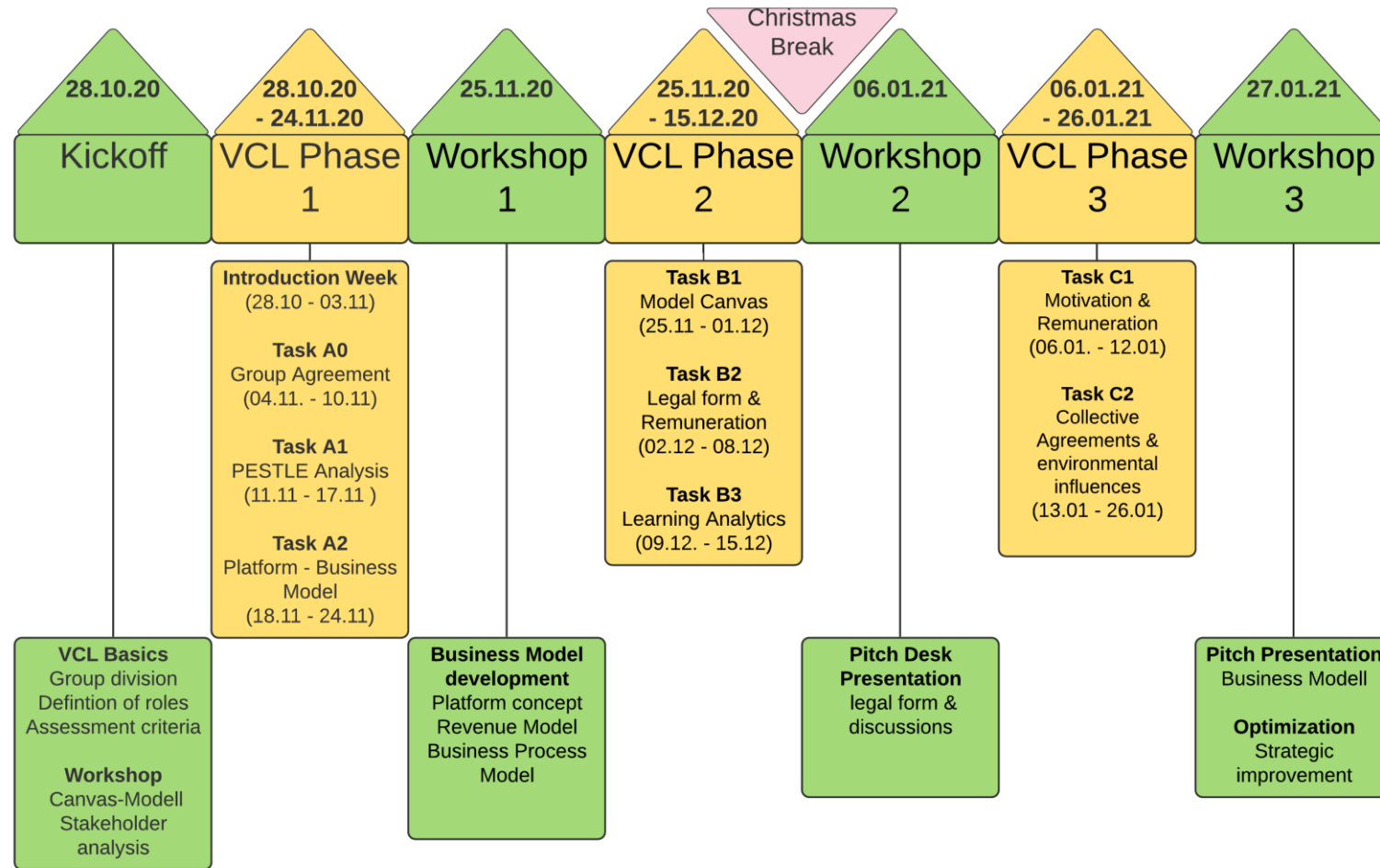
All three partners want to set up a joint venture in which e-cars could be both energy consumers and suppliers.



Student work during the module

Exemplary Cases

Case-based Learning in the Virtual Classroom – Inter-institutional Bachelors Module



Exemplary Cases – Albania's next Unicorn

The Learning Objectives:

- Formation of own competencies in the area of teamwork, conflict management, collaboration and communication
- Professional competencies in the area of business models, digitalization and human resources

The Mission:

- Develop a start-up business idea with focus on the field of ecotourism in Albania
- Be creative and think outside the box, including a platform business model
- Work out a financial plan, including the usage of the prize money to bring your start-up to life
- Pitch your idea on the 15th of June 2022 for 10 minutes and be prepared to answer questions for 5 min afterward



ALBANIA'S NEXT UNICORN

Join our Pitch Contest!

The Prize

- **50.000€ equity-free funding for your Startup**
- Funding the most creative and convincing idea with the best pitch presentation

Important information

- **Pitch your idea on the 15th of June 2022** for 10 minutes and be prepared to answer questions for 5 min afterward
- The business idea has to focus on the **field of ecotourism in Albania**
- Be creative and think outside the box, including a **platform business model**
- Work out a **financial plan**, including the usage of the prize money to bring your Startup to life
- It is obligatory to participate in the incubator program for at least 6 weeks

Potential participants

- Student teams eager to make an **impact on sustainable traveling**
- The teams need to be composed of students from **different cultural backgrounds**

Over the last years, Albania has significantly strengthened its political and economic institutions and has transformed into **one of the fastest-growing economies in Europe**. Especially the Startup ecosystem shows big potential, and many young enthusiastic, and creative youngsters come up with excellent ideas.

It all started in 2012 with the first edition of the Startup Weekend Tirana – a global network of passionate leaders and entrepreneurs. Now, 10 years later, the local entrepreneurial **community has been developing rapidly**, and the ecosystem is now supported by a growing number of events and incubator programs. As a potential entrepreneur, these incubators help you get a little closer to your dreams and launch your own Startup business.

There are many factors to consider when funding your Startup. One important lesson is to keep all options open when it comes to fundraising. At the same time, receiving support from the right type of funder is one of the biggest challenges. Popular founding options are **Venture Capital, Business Angels, or Crowdfunding**. All these funding options are great opportunities, although they have one thing in common: You give away shares of your company in return for an amount of money.

This year a Pitch Contest by the Albanian government was launched for the first time: **Albania's next Unicorn** is your chance to fund your Startup without giving away your company share. We offer **50.000€ equity-free funding for promising Startups**.

It's your chance to become Albania's next Unicorn! Prepare a Pitch Deck of your business idea, present it on the 15th of June 2022 and win 50.000€ to bring your Startup to the next level.

Co-funded by the Erasmus+ Programme of the European Union

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Exemplary Cases Impressions from the final workshop event









Exemplary Cases Impressions from the final workshop event



Exemplary Cases - VCL Case History

Recent - VCL Case Studies history

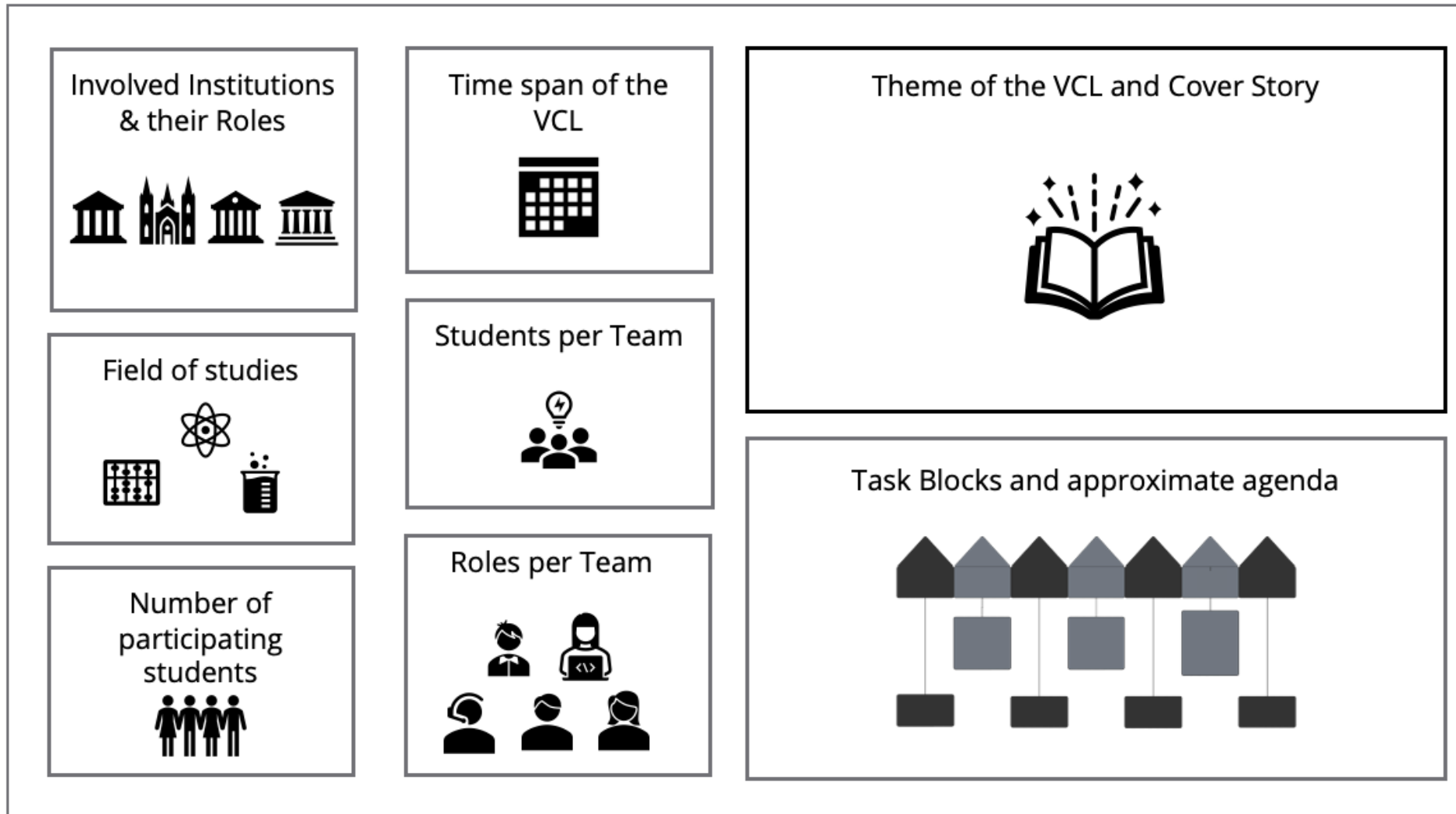
					
<p>Summer semester 2016, 2017, 2018 International master module</p>	<p>Summer semester 2019 International master module</p>	<p>Summer semester 2020, 2021 International master module</p>	<p>Winter semester 2020, 2021, 2022 Inter-Institutional bachelor module</p>	<p>Summer semester 2022 International master module</p>	<p>Summer semester 2023 International master module</p>
<p>Case: Develop Knowledge Management Solutions Partners: Jordan, Germany</p>	<p>Case: Develop Vocational Education offers Partners: Iran, Germany</p>	<p>Case: Develop Green Energy Solutions for MENA Partners: Iran, Germany</p>	<p>Case: Develop Electric Mobility Startup in Dresden Partners: HTW Dresden, TUD</p>	<p>Case: Develop Eco-tourism Startup in Albania Partners: 6 Albanian HEI's, Slovenia, Germany</p>	<p>Case: Develop post-war Marshall Plan for Ukraine Partners: Ukraine, Germany</p>

Exemplary Cases - VCL Cases recently developed

New VCL Case Studies

				
<p>Case: Develop Solar Energy Solutions for Albania</p>	<p>Case: Food Waste in Albania</p>	<p>Case: Prevent the regional desert in Saxony, Germany</p>	<p>Case: Develop sport communities to foster young talents</p>	<p>Case: Develop Strategies against brain drain in Albania</p>

From local, over regional to international Virtual Mobility



From local, over regional to international Virtual Mobility



COWEB

Virtual Collaborative
Learning in WB HEIs

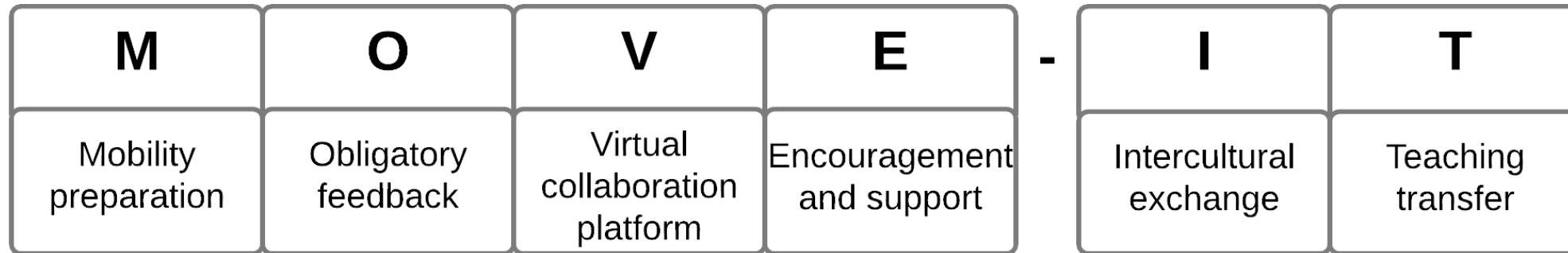
Local VCL Summer 2024

Regional VCL Winter 2024/2025

International VCL Summer
2025



Conclusion Recommendations for Action



Mobility preparation: Intensive organisational preparation is essential; Ensuring ECTS recognition is crucial, otherwise the motivation will vary → increased potential for conflicts

Obligatory feedback: Especially at the beginning feedback for students is crucial; Multi-perspective feedback should be encouraged (teachers, e-tutors, practical recommendations by industry experts); Peer-feedback within the groups should be encouraged; Peer reviews between the groups are advised

Virtual collaboration platform: Enable synchronous, asynchronous, transparent communication & document editing; Mobile access is recommended; As user-friendly as possible; Industry-standard tools may help to gain media competences

Encouragement & support: Accompanied –but not guided– by e-tutors & experts; Qualification program recommended; Constant contact between teachers, e-tutors & experts

Intercultural exchange: As heterogeneous groups as possible; Language skills are necessary; include additional time for informal & intercultural exchange

Teaching transfer: Potential to transfer knowledge & didactic concepts between participating institutions; Realistic design of the case studies allows students to transfer experiences into future professional practice

4. Conclusion

- The VCL Framework can serve as a basic element to realize Virtual Mobility and foster cross-locational cooperation, if delivered correctly.
- Design dimensions, professional pedagogical support, realistic working tasks, technical platform, and Learning Analytics need to be adjusted to the individual circumstances of virtual collaboration.
- The complex nature of international problem-based learning approaches such as VCL need an extensive program to ensure a functioning and satisfying teaching and learning experience on all levels of stakeholders (e.g. academic staff, students, administrative staff, decision makers).
 - We recommend to start the implementation of international VCL arrangements by a bootstrap project, involving the participating institutions, building capacities and a common ontology.
 - Local pilot modules can be a first step for implementation, followed by a second, and international pilot module.
 - We recommend at least 1 – 1,5 years for the implementation process.

→ To ensure a proper implementation we recommend using the above mentioned **strategies** and ensure the **equal participation and motivation of all stakeholders**.

Thank you for your attention!



Any questions?

Feel free to reach out!

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<https://tu-dresden.de/bu/wirtschaft/winf/wiim>



Resources

Didactical Design patterns: <https://patterns.im.wiwi.tu-dresden.de/doku.php>

Detailed description of „how to design VCL activities“ in wiki format

Documentation of tasks for „Albania’s next unicorn VCL“: https://patterns.im.wiwi.tu-dresden.de/best_practice/international_vcl

Literature:

[Case study „Dresden NRG](#)

[Case study „Global Trainer SE“](#)



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