TEMPLATE FOR THE GOOD PRACTICE

What is a good practice?

A good practice is not only a practice that is good, but a practice that has been proven to work well and produce good results, and is therefore recommended as a model. It is a successful experience, which has been tested and validated, in the broad sense, which has been repeated and deserves to be shared so that a greater number of people can adopt it.

Element	Description
Title*	*Agile workshops with international composed teams*
Name of the VET Provider	*ITECH Elbinsel*
Thematic domain	What is the thematic domain covered by this good practice? More than one domain can be indicated • **Innovation** • **Digital** • **Green** • Inclusion • **Entrepreneurial** • Career guidance • Lifelong learning • **Creating partnerships/skills ecosystems**
Introduction*	ITECH Elbinsel is first of all responsible for dual VET IT specialist (Application developer and system integration). Furthermore, there are some full time TVET courses leading to the higher education entry certificate. The best practice described here was developed in the IT sector and then transferred to other types of schools. The starting point was the changing skill requirements of training companies, which were reported back to us as part of the cooperation. The companies focused on agile working methods at an early stage. In this context, they also expect trainees who, after graduation, are able to work independently and in teams, critically question processes and develop new solutions.

In other words, they expect the skills that are summarised in 21st Century Skills.

This raised the question of which methodological approaches promote these skills.

ITECH therefore developed the concept of three-week agile workshops with international teams. The teams are made up of IT specialists, design students from Taiwan and/or school pupils from Finland and Spain.

These workshops were introduced in 2017 and have been an integral part of the curriculum since 2020. They are a kind of extended hackathon that can take place either on site in a partner country, in Hamburg or online.

Since each workshop begins with a macro challenge within the UN sustainability goals, i.e. a kind of problem landscape from which the teams can choose a specific problem for their work, real problems are sought from external case providers. Representatives of these institutions are then invited to the school to present their problems and expected solutions.

The concrete planning then includes team-building activities, an introduction to SCRUM and design thinking, a storyboard for scheduling the work, contact persons and input on specific topics.

Planning is done in sprints. The respective team members have dedicated SCRUM roles and follow the SCRUM process.

Based on Design Thinking tools, the teams then work out a problem statement, empathy maps and personas. In the ideation phase, they learn to apply creativity techniques such as the Disney method, among others. This forms the basis for the initial ideas for prototype development, which takes place in several sprints and is supported by experts as needed. Finally, considerations regarding the customer journey and the business canvas must be made.

The finished prototypes will be presented to external customers at a large trade fair and discussed. The participants have to create result presentations on https://www.designentrepreneurshipworkshop.org/

| **Stakeholders and Partners** | Stakeholders for the agile workshops at ITECH are: The teaching team of the three bilingual classes of IT specialists. Approximately 90 students from the |

aforementioned classes. External case providers, including Hacker School, civic associations, the Fraunhofer Institute and local companies.

In Taiwan, Taipei MCUT University is one of the key stakeholders. In Hamburg, it is the Vocational University of Applied Sciences, with which ITECH has implemented a joint dual training programme leading to a bachelor's degree. These classes also participate in the agile workshops.

A management consultant from Chicago is also involved, speaking on the topics of entrepreneurship and marketing of solutions.

Impact*	The workshops have a very significant impact in various areas. The SCRUM method greatly promotes 21st century skills, in detail considering the follwing list.

- Creative Problem solving
- Creativity,Decision Making
- Critical Thinking
- Communication
- Collaboration
- Negotiation
- Teamwork
- Leadership
- Entrepreneurial Mindset
- Task Management
- Ownership

The impact is evident not only by a closer look at retrospectives of the teams but also looking at the final presentations and discussions with the external case givers.

Furthermore, intercultural competences are in focus due to the mixed teams. And last but not least, improvement of language competences is evident.

Innovation and Success Factors *	The workshop format is innovative as such, but it developed impact in other areas. Due to the fact, that many challenges came from the area of sustainability, this subject became of course an importance for the students.

The independence they have learned has also led to ITECH trainees being involved in planning the curriculum and organising lessons. This was one of the factors that contributed to the school winning the German School Award.

Constraints*	There are some crucial competences required on side of the teachers and some organizational prerequisites as well. Starting with the teacher team, it is important that these teachers have the 21st century skills. Catchwords are agile methodologies, SCRUM, design thinking, development of sprint-orientated storyboards, mastering all kind of digital tools. And they must be team player. English is mandatory. For these issues training is mandatory. At ITECH in-house training was organized by the developers of that apüproach – teachers at ITECH. It is possible to ask ITECH for such trainings.
Lessons learned *	The whole approach is excellent for the development of 21st century skills. It turned out that external case givers and real world problems are crucial for high motivation on side of the participants. The workshops require complete freedom for the team to plan their time. Traditional time constraints (45/90-minute intervals) are an insurmountable obstacle for agile workshops. Regarding international workshops, challenges are the communication before and the time difference between involved countries.
Replicability and/or up-scaling	The approach is replicable regarding the requirements on side of the school. Furthermore, It is recommended to find collaboration partner from Universities. A recommendation is to order training courses to meet the above mentioned requirements.
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URL of the practice	*https://www.designentrepreneurshipworkshop.org/*, *www.itech-bs14.de*
Related resources that have been developed	*Presentations with elements and sprint-planning are available.*