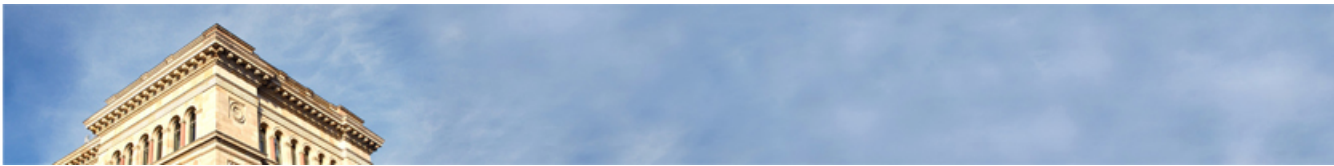




Entrepreneurship Education in TVET Education

Some notes from a German perspective

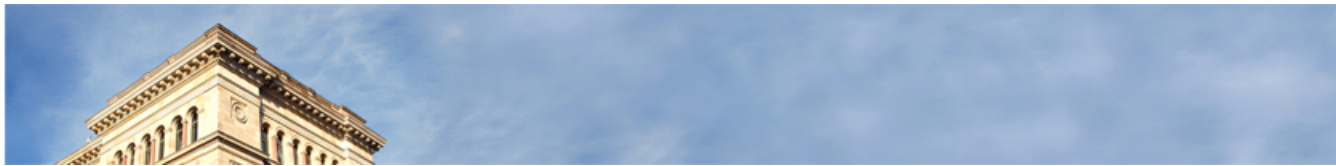


General remarks to the understanding of Entrepreneurship Education (E.E.)

- The general understanding of what means Entrepreneurship Education is controversial in the pluralistic academic world and society
 - One side means only the business activities of doing enterprises i.e. business education
 - Other side means the willingness and capacity to turn ideas into practice, supported by the necessary skills with impact in economic and social dimensions.

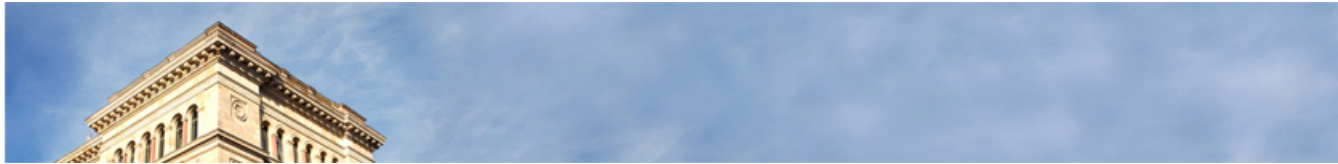
- The debate of a coherent understanding of E.E. continues, but from the EU commission we will get the following:

“The vision should reflect a broad definition of entrepreneurship. Entrepreneurship is much more than “just” starting businesses: it is a mindset for creating sustainable change.”



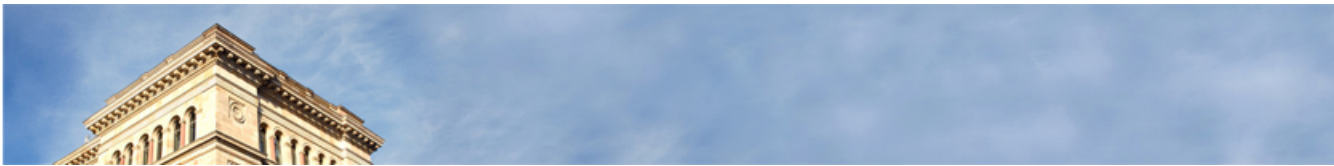
Notes on the understanding of Entrepreneurship Education

- One should differ between commercial entrepreneurship and social entrepreneurship
- The coherence between practice and theory is a core base of teaching and studying in the field of TVET in Germany
- It doesn't exist either an explicit wording of Entrepreneurship Education in German TVET or an understanding of the concept of E.E. in German TVET
- BUT, it exists a huge number of relevant and successful activities regarding to the concept of E.E.



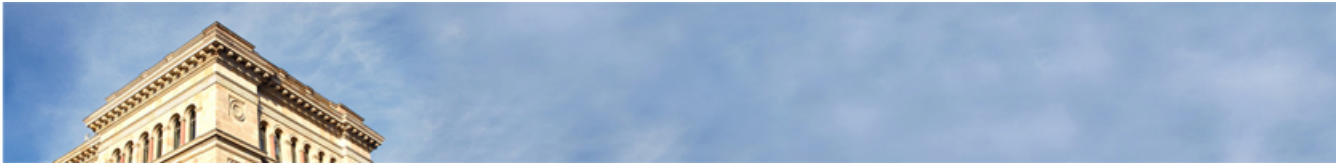
Short excursus into the German Dual-TVET system

- Driven by the interest of private companies and organise by themselves
- Public schools are partners of the companies
- The curricula for the in-company training are develop mutually by social actors from the economy (Trade Unions and Business associations moderated by public agency)
- The part of the school based curricula is develop in cooperation and consultancy with economic and social actors but under the responsibility of federal countries government educational administration
- A shared responsibility exists between the social and economic actors, the government bases on different jurisdiction for different parts of the TVET systems



Entrepreneurship Education and Employability

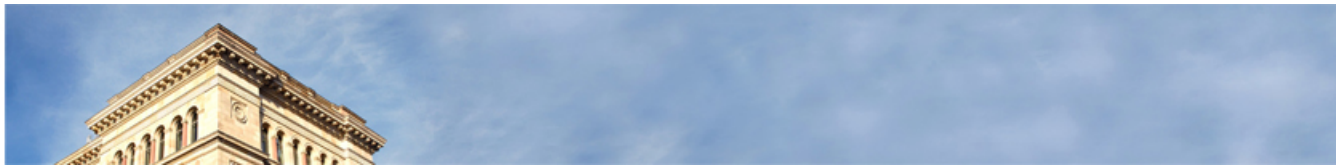
- It is accepted and culturally embedded in the German TVET system
 - With its strongest impact in the dual apprenticeship part of the German TVET
 - With a clear and curricular defined impacts in the full-time-schooling TVET part
 - With fewer impacts in the university preparatory part into the TVET schools
- In the vocational preparation courses into the TVET the focus is strong on employability to bring young students into the apprenticeship system and with some exercise regards to the concept of E.E.
- At the level of further or continuous education e.g. master craftsman examination the creation of an own company is an important issue of the preparatory study
- In public schools the activities regarding to the concepts of E.E. are on-syllabus of the general education subject of economic, social and political studies or of the subject of labour studies in general schools



General purpose of German VET curricula

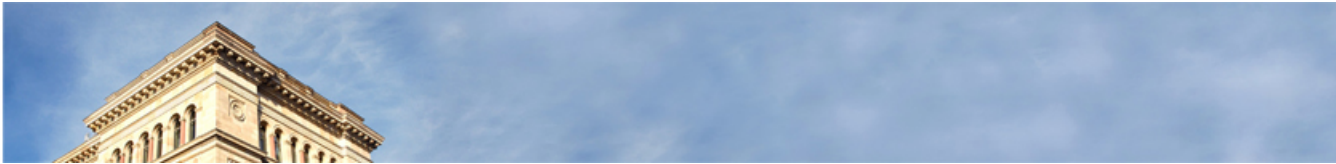
Competencies to act professionally in work and life situations





Examples of what additional doing in German TVET regarding to E.E.

- Use of a specific didactic to improve the activity orientation of TVET learning and teaching
- Working with learn-and-work-assignments deriving from professional practice
- Project learning within the professional and/or social environment
- Simulate / role play of creating an own business company
- Establishing a students' company in the TVET or general schools



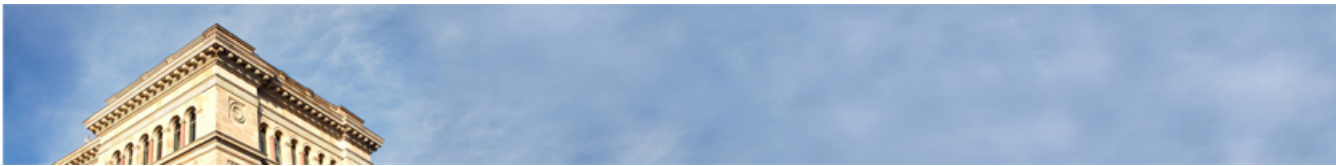
Competencies to act professionally in work and life situations

Professional competences

- Qualified expertise
- Good material knowledge
- Reasoning
- Flexible thinking
- Recognising relationships
- Economic thinking
- Ecological thinking etc.

Methodological competences

- Independent work
- Information gathering
- Critical thinking
- Problem-solving skills
- Ability to apply knowledge to new problems
- Organisational skills



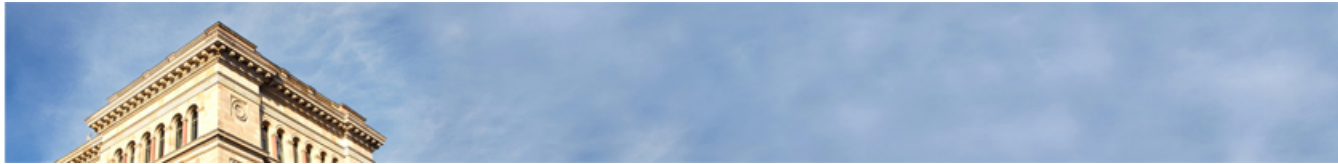
Competencies to act professionally in work and life situations

Social competences

- Ability to work in a team
- Conflict management skills
- Motivation
- Communication skills

Personal competences

- Diligence
- Ability to work in a focussed and disciplined manner
- Ability to adapt to a new working situation
- Willingness to work hard
- Ability to take responsibility



Entrepreneurship Education (E.E.) in TVET education

Thank you very much for your attention

Notes from your side, remarks, discussion

Priv. Doz. Dr. phil Stefan Wolf,
TU Berlin, Dept. Vocational Education and Training

s.wolf@tu-berlin.de

Professional competencies certified by final exam of skilled journeymen

- Process orders in a customer-oriented manner, plan and control work processes
- Monitor and assess results and apply quality assurance systems
- Repair and maintain operating equipment
- Install and dismantle supply engineering plants and systems, conduits and piping, ducts and components for supply engineering plants and systems
- Carry out insulation, sealing and protective measures
- Produce electrical connections for supply engineering plants and systems and install and test electrical subassemblies and components in supply engineering plants and systems
- Install and measuring systems, open and closed loop control systems, safety and monitoring equipment and set index values for such systems and equipment
- Test, adjust, optimise and maintain the functionality of supply engineering plants and systems
- Commission supply engineering plants and systems, deliver supply engineering plants and systems to the customer and instruct the customer in the operation of such plants and systems
- Maintain supply engineering plants and systems
- Conduct inspections, maintenance and repair of supply engineering plants and systems
- Advise and support customers with regard to products and services offered by the company according due consideration to environmental and economic aspects
- Accord due consideration to sustainable energy and water use systems
- Work with English language documentation and use specialist English language terminology