Design is our Success – the Importance of Modelling a Virtual Enterprise

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SIEC-ISBE Helsinki, August 2014
All of these schools culminate in a matriculation or diploma exam. This entitles students to admission to university.
Austrian Education System – Secondary level II

- 21% attend upper level of grammar school
- 79% enter VET-system
  - 37% dual system
  - 63% middle and higher VET full-time schools and colleges
- VET full-time:
  - 77% VET colleges
  - 23% VET schools
- Types e.g. for engineering, arts & crafts, for business administration, for tourism & service, for agriculture & forestry
- Focus on:
  - Business school (3 years) and business colleges (5 years)
  - Compulsory in curriculum: Virtual Enterprise and work placement
Objectives and structure

- Virtual Enterprise (VE) as a business simulation
- Definition, market situation and concept of Virtual Enterprise
- Design a Virtual Enterprise
- Methods for modelling a Virtual Enterprise
- Examples
  - VE at school
  - VE at university
- Conclusion & discussion
## Virtual Enterprise as a business simulation

- Learning company as a business simulation for learning purposes
- Different types of learning companies

<table>
<thead>
<tr>
<th></th>
<th>Learning Office</th>
<th>Virtual Enterprise</th>
<th>Junior Company/Team Academy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow of goods and services</td>
<td>Fictitious</td>
<td>Fictitious</td>
<td>Real</td>
</tr>
<tr>
<td>External contacts</td>
<td>Fictitious</td>
<td>Real</td>
<td>Real</td>
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</tbody>
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Gramlinger, 2004
Definition of Virtual Enterprise

- Virtual Enterprise (VE) is a complex teaching method.
- VE is a business simulation – it is a business model.
- VE works nearly like a real-life business.
- Employees (e.g. students) of VE do all real-life business work according to their line of business within the national and international network of VE.
- The only difference between real-life businesses and VE is that neither the goods produced and services made available nor the money dealt with exists in reality.
International market situation of VE

~7600 VE registered with EUROPEN-PEN International

Top countries:
- Austria
- Germany
- Romania
- China
- US

www.europen.info
November 2013
Concept of the method VE – 1

Develop the learner’s competences by competence-based learning methods ⇒ “Handlungskompetenz” as the goal

“Handlungskompetenz” means:

• To be able to handle lots of different situations in life
• Problem solving
• Make progress on your own initiative
• Self responsibility

• Develop different competences
• Completeness of acting

Peterßen, 2009
In this concept acting means you have to do things:
• targeted, goal-oriented
• planned, intended
• independently and
• complete
Concept of the method VE – 3

- Learning empowerment – completeness of acting
- Reflection of work and learning processes
- Dual view of VE
  - working site
  - learning site
- Role of a teacher in the VE
- Leadership – new understanding
- Support of self responsibility and independent learning
- Discussion of company’s strategy – structure follows strategy (Mintzberg)
- Entrepreneurship Education
- Cross linking and working on the model
- Designing the model
Design a VE – purpose

- Need for an economically valid and realistic simulation (of a real enterprise)
- Considering economic systems, business principles, market conditions, legal structure
- Designing the business site:
  - Designing the learning site:
    - Analysis of economic interconnections and business processes
    - Reflection of impact of one’s own actions and learning processes
    - …
Design a VE – overview

**VE as working site**
working & learning in the model

**VE as learning site**
working & learning on the model

**company**

**model / simulation**

*Learning Empowerment*
Design a VE – working site

company

- planning
- purposing
- executing
- judging
Design a VE – working & learning site

company

planning

executing

purposing

judging

learning site
meta level 1

designing the model – working site

meta level 2

leading the practice firm as a teacher – learning site

company

planning → purposing → judging → executing

Berchtold/Stock, 2005

Stock/Riebenbauer

SIEC-ISBE Helsinki 2014
Methods for modelling a VE

- **Partner company** – cooperation with a real enterprise (*contact*)
- **Business model** – illustration of production and operational systems, analysis of core areas (*complex, from IT-sector*)
- **Key figures** of relevant industry/business line – planning of adequate expenses according to achieved sales (*average business ratio, from banks and insurance companies*)
- **Business plan** – description of core areas and environment (*structur = common thread through*)

➔ **Combination of business plan und key figures**

key-figure-further-education.pdf
Example – VE at school

- Core course in the curriculum of business schools and colleges
- Weekly block lessons 3-4 hours per week
- VE open plan office
- Mission statement and aims
- Model:
  - Trading with office equipment
  - 2 full time employees, 1 minor employee
  - Sales € 178,000 per school year
- Departments: Accounting, Sales & Marketing, Purchase, Office, HR
- Highlights during a semester:
  - Online trading day
  - World café
  - Quality certificate
- Regular financial report
- Portfolio including reflection report
Example – VE at university

- Core course in the curriculum – 4 h / 6 ECTS for 1 semester
- Weekly meetings – 3 h per week
- 24 / 7 in our own PF office
- Mission statement and aims
- Business and pedagogical meetings
- Working on the model – business plan
- Monthly controlling reports
- Monthly discussion of aim sheets
- Highlights during a semester:
  - Strategy seminar
  - Pedagogical projects, e.g. VE planning, VE student assessment
  - Further education, e.g. TQM seminar, world café
  - Special events, e.g. trade fair, quality certificate
- Annual financial report and business report
- Portfolio including reflection report
Conclusion & discussion

• Design is VE’s success
• Modelling as a central task of a VE teacher
• Modelling of working and learning site
• Several roles of the student:
  – @ School: employee and learner
  – @ Business teacher education: employee, learner and prospective VE teacher
• VE as an appropriate teaching method for all learning levels
  (= advantage compared to work placement)
  ⇒ provided a realistic VE model
• Design is our success!
Selected References


• Trummer, M.; Berchtold, S. (2001): Practice Firms – Businesses without strategies: An approach to promote further development of Practice Firms through TQM. In Klein H. E. (Eds.), Creative Teaching (pp. 29–35), Wien: ACT 4.


Questions & discussion

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