ICT TOOLS IN EDUCATION IN AN INTERNATIONAL CONTEXT

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About me

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Content

ICT Tools in education in an international context

- International/national level
- Institutional level
- Course level
<table>
<thead>
<tr>
<th>Didactical Onion (Baumgartner, 2007)</th>
</tr>
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<tbody>
<tr>
<td>nat. international Politics</td>
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<td>Didactic Module (ECTS Credits)</td>
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Diagram:
- Makrodidaktic
- Mesodidactis
- Microdidactic
Didactical Onion (Baumgartner, 2007)

<table>
<thead>
<tr>
<th>Institution</th>
<th>Makrodidaktic</th>
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International Level

- 8 key competences for lifelong learning
- 21st century skills
- Openeducation Europe
- Creative classroom framework
Framework for 21st Century Learning
### 21st Century Skills

<table>
<thead>
<tr>
<th>Learning and Innovation &quot;The 4 C's&quot;</th>
<th>Digital Literacy</th>
<th>Career and Life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical thinking &amp; problem solving</td>
<td>Information literacy</td>
<td>Flexibility &amp; adaptability</td>
</tr>
<tr>
<td>Creativity and innovation</td>
<td>Media Literacy</td>
<td>Initiative &amp; self-direction</td>
</tr>
<tr>
<td>Communication</td>
<td>ICT Literacy</td>
<td>Social &amp; cross-cultural interaction</td>
</tr>
<tr>
<td>Collaboration</td>
<td></td>
<td>Productivity &amp; Accountability</td>
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<td></td>
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<td>Leadership &amp; responsibility</td>
</tr>
</tbody>
</table>

Table 1 - P21 Skills
Creative Classroom Framework
Didactical Onion (Baumgartner, 2007)

- national int. Politics
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Makrodidaktic → Mesodidactis → Microdidactic
Virtuelle PH (national)
digi.kompP – DIGITALE KOMPETENZEN FÜR PÄDAGOGInNEN

0
vor dem Studium

A
Digitale Kompetenzen
und informatische Bildung auf Matur- niveau und dessen laufende Aktualisierung

B
Leben, Lernen und Lernen im Zeichen der Digitalität, Fragen der Technikethik, Medien- bildung und -literatur, Semiowissenschaft

C
Gestalten, Verändern und Verstehen von Unterricht für den Unterricht: Rechtfertigen und damit verbundene Rechte und Pflichten (Creative Commons, Wettbewerb, Urheberrecht, OER)

D
Planen, Durchführen und Evaluieren von Lehr- und Lernprozessen mit digitalen Medien und Lernumgebungen; formative und summative Beurteilung; Feedback; Social Internet

1
während des Studiums

E
Fachspezifisch lernkorporativer Einsatz von Content, Software, Medien und Werkzeugen

F
Effizienz und verantwortungs- voller Umgang mit Schul- inhalt, digitales Klassenbuch, Schüler- innenverwaltung

G
Kommunikation und Kollaboration in der Schule, im Netz und über die Schulgemeinschaft hinaus

H
Digital-inklusive Professionsentwicklung

2
während der ersten fünf Praxisjahre

Tabelle 1: Übersicht digi.kompP
Didactical Onion (Baumgartner, 2007)

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- Makrodidaktic
- Mesodidactis
- Microdidactic
University College of Teacher Education Styria

- Medienbeirat (advisory board for digital media)
- Institute of Digital Competence and Media Education
- Learning Management System
Didactical Onion (Baumgartner, 2007)

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Makrodidaktic

Mesodidaktis

Microdidactic
The Rostock model for systematic development of E-Learning (ROME) (Hambach, 2008)

- **Analysis**
  - Need of education
  - Target group
  - Context
  - Perform and evaluate this stage

- **Master Plan**
  - Fix targets
  - Develop didactic approach
  - Develop master plan
  - Perform and evaluate this stage

- **Concept Details**
  - Define teaching and learning goals
  - Develop teaching and learning content
  - Create teaching and learning concept
  - Create teaching material concept
  - Perform and evaluate this stage

- **Implementation**
  - Plan the implementation
  - Create media and multimedia contents
  - Compose learning material
  - Compose e-learning material
  - Perform and evaluate this stage

- **Introduction**
  - Prepare introduction
  - Technical introduction
  - Organizational introduction
  - Perform and evaluate this stage

- **Performance**
  - Prepare performance
  - Perform e-learning course
  - Analyse e-learning course
  - Perform and evaluate this stage
5-stage model (Salmon, 2011)
# Didactical Onion (Baumgartner, 2007)

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Technology-based model (Back et al., 1998)
Three-dimensional categorization model (Baumgartner, 2004)
Categorization model by didactically based scenarios (Schulmeister, 2003)

<table>
<thead>
<tr>
<th>Scenario I</th>
<th>Scenario II</th>
<th>Scenario III</th>
<th>Scenario IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom lecture or seminar</td>
<td>Classroom lecture or seminar</td>
<td>Classroom lecture or seminar</td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Additional webpages, handout</td>
<td>Additional webpages for communication</td>
<td>Alternating with virtual seminar</td>
</tr>
<tr>
<td>Function</td>
<td>Information (www, downloading)</td>
<td>Data exchange</td>
<td>Synchron communication</td>
</tr>
<tr>
<td>Methode</td>
<td>Instruction and expository teaching</td>
<td>Gradual interactive class discussion</td>
<td>Tutorial guided Learning</td>
</tr>
</tbody>
</table>
E-Tivities (Salmon, 2004, 2013)

- Numbering, pacing and sequencing
- Title
- Purpose
- Brief summary of overall task
- Spark
- Individual contribution
- Dialogue begins
- E-moderator interventions
- Schedule and time
- Next
ICT Tools in education in an international context – Example on Bachelor level

INTERNATIONAL TEACHER COMPETENCES (ITC)
ITC Course

- Course for international Erasmus+ students
- 21 students winter term 2016/17
- 8 countries (AT, HR, CZ, PL, ES, TH, GR, IT)
- 15 languages
- Different study levels
- Different cultures

(Image CC by 2.0 Jirka Matousek https://www.flickr.com/photos/jirka_matousek/8482332566)
International Teacher Competences

- Erasmus+ Course for Erasmus Students (30EC)
- English / German
- Welcome days
- Language courses
- School practice
- Optional courses
- Buddies
- Social and cultural programme
- Research

(Image CC by 2.0 Jirka Matousek https://www.flickr.com/photos/jirka_matousek/8482332566)
Aim of the Course

• The aim of the course is to expand international and European teachers competencies and apply them in the context of school placement.

• Another goal is to implement the European dimension and promote international mobility, in particular competence orientation, lifelong learning, multilingualism linked to a European and inter-cultural perspective.
Theoretical Framework

- European Key Competences for Lifelong Learning
- International Teacher Competencies
- Five Dimensions of Multicultural Personalities
- European Teacher Competencies
Eight Key Competences

- Communication in the mother tongue
- Communication in foreign languages
- Mathematical competence and basic competences in science and technology
- Digital competence
- Learning to learn
- Social and civic competences
- Sense of initiative and entrepreneurship
- Cultural awareness and expression
European Teacher Competences

- European identity
- European knowledge
- European multiculturalism
- European language competence
- European professionalism
- European citizenship
Five Dimension of multicultural personality

• Cultural empathy
• Open-mindedness
• Social initiative
• Flexibility
• Emotional stability
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<th>International Teacher Competences 1 (5 EC)</th>
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<th>International Teacher Competences 5 Creativity and Diversity (5 EC)</th>
<th>International Teacher Competences 6 Optional Subjects (5 EC)</th>
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<td>German Language Course 2 EC</td>
<td>European School Concepts 1 EC</td>
<td>Incomings Tutorial 1 1 EC</td>
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</tr>
<tr>
<td>Fit for International Teams 1 EC</td>
<td>European Dimension in Culture, Society and Education (Exursion) 1 EC</td>
<td>Learning Language for Mobility 1 EC</td>
<td>School Placement 2 EC</td>
<td>Creativity and Diversity 4 EC</td>
<td>Optional Subjects 4 EC</td>
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<tr>
<td>Methods of Interaction 2 EC</td>
<td>Educational Trends in a European Perspective. 2 EC</td>
<td>CLIL 2 EC</td>
<td>Reflection and Analysis of School Placement 2 EC</td>
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ITC - innovative approach

2 / Content from EU Projects an Initiatives
3 / MOOC
4 / most activities are linked to the mobility
5 / Campus Radio Igel, videos, e-portfolio
7 / MOOC
ITC - innovative approach

8 / Research tasks
9 / Online whiteboards, stop-motion videos
11 / MOOC, e-tivities
13 / most of learning happens in heterogeneous groups, collaborative e-book
ITC - innovative approach

14 / e.g. cultural awareness (fit for international teams)
16 / educomics, (digital) story telling
17 / creativity training, story cubes, story dice
ITC - innovative approach

18 / virtual meetings before arrival (WhatsApp, Facebook), mobility management system (Mobility-Online), PH-Online

20 / PDCA (Deming circle), research
ITC - innovative approach

24 / BarCamp: Teacher Education in Europe
25 Facebook and Whatsapp Community with buddies
26 / Europe Direct information centre Styria, ESN
ITC - innovative approach

28 / WIFI, VPN, Eduroam, LMS, iPads (to rent)
<table>
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<tr>
<th>Pre mobility</th>
<th>International Teacher Competences 1 (5 EC)</th>
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<td>Facebook group</td>
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<td>Digital support systems</td>
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Ways of learning

- classroom based learning
- distance learning
- self directed learning
- ICT as supporting system in multicultural classes
ICT Tools in education in an international context

ICT TOOLS – EXAMPLES
Cmap Cloud
Storytelling
Erasmus+ InComic
Erasmus TV
E-Portfolios
ICT Tools in education in an international context – Example on school level

DIGIDAZ & DIGIMU
New projects

• DidiDaZ&DigiMU
• Online seminars for refugee children in schools
• iPads
• Synchronized online learning
THANK YOU FOR YOUR ATTENTION

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https://www.facebook.com/heiko.vogl
http://www.european-teachers.eu
References


