Learning and teaching for transformational capacity:
Today’s needs for learning and teaching innovation
imply integrated institutional transformation

EUA Learning and Teaching Forum 2021
Session III: Connecting the dots - How to transform
education to generate comprehensive knowledge and skills

Dr. Sybille Reichert, 18 February 2021
Quadrants of Transformation in Higher Education:
Critical moment with great potential for integrating teaching & learning reforms with overall institutional transformation

Ubiquitous transformation - urgent needs for societal, ecological and technological transformation,
• rethinking and redesigning current practices,
• redefining boundaries or relations: state/market, human/machine, humanity&technology/nature, public/private, social identities or divides, global north/south

Innovation revisited - New emphasis on / notion of innovation:
• joining technological with social innovation
• multi-stakeholder-based
• challenge-driven
• systemic, trans-sectoral
• mixing public and private institutions and aims

New urgency for t&l reforms – for redefining competences & taking student-centered learning seriously:
• critical and transformational capacity
• ownership of learning process

New centrality of university – institutional transformation unavoidable, incl. integration of teaching, research, knowledge exchange

Value of Higher Education: Responsible citizenship and critical analysis & reflection
Innovation Needs and Competences: Teaching reforms affect institutional culture and policy

Table 2 Learning and teaching: needs, responses and framework conditions

<table>
<thead>
<tr>
<th>New needs and concerns related to universities' role in innovation</th>
<th>Institutional responses of universities</th>
<th>Necessary framework conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative aims:</td>
<td>Teaching reforms:</td>
<td>Regulatory:</td>
</tr>
<tr>
<td>• Prepare for disruptive innovation</td>
<td>• Extend interdisciplinary, project-based learning</td>
<td>• Sufficient academic autonomy of universities for introducing new study programmes and design their content</td>
</tr>
<tr>
<td>• Promote systemic understanding and competences</td>
<td>• Support student self-organisation</td>
<td>• Sufficient academic autonomy of universities for the selection of students to study programmes</td>
</tr>
<tr>
<td>• Create game-changers</td>
<td>• Improve teaching innovation services</td>
<td>Financial:</td>
</tr>
<tr>
<td>• Extend students research-related competences</td>
<td>• Extend mentoring, including by external stakeholders</td>
<td>• Sustainable funding for low student/staff-ratios to allow for project-based learning, orientation in diverse learning paths, and mentoring</td>
</tr>
<tr>
<td>• Promote digital skills</td>
<td>• Provide entrepreneurial modules, as extra offer or integrated into curriculum.</td>
<td></td>
</tr>
<tr>
<td>• Foster entrepreneurial mind-set and skills</td>
<td>• Develop digital skills modules</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Encourage and support start-ups</td>
<td></td>
</tr>
</tbody>
</table>

New urgency for t&l reforms – redefining competences & making students owners of their learning

importance of research competences
entrepreneurial mind-set & competence
interdisciplinary understanding based on disciplinary comp.,
tercultural, global understanding
Information, data & science literacy
Critical thinking and understanding of scientific methods

Example 1: The European Entrepreneurship Competence Framework

Example 2: The AAUC Value Rubrics
Example 2: AACU 16 Value Rubrics with different levels of learner performance & autonomy

CIVIC ENGAGEMENT VALUE RUBRIC

For more information, please contact value@aacu.org

**Definition**

Civic engagement is “working to make a difference in the civic life of our communities and developing the combination of knowledge, skills, values, and motivation to make that difference.” It means promoting the quality of life in a community, through both political and non-political processes.” (Excerpted from *Civic Responsibility and Higher Education*, edited by Thomas Ehrlich, published by Oryx Press, 2000, Preface, page vi.) In addition, civic engagement encompasses actions wherein individuals participate in activities of personal and public concern that are both individually enriching and socially beneficial to the community.

**Evaluator are encouraged to assign a zero to any work sample or collection of work that does not meet benchmark (call one) level performance.**

<table>
<thead>
<tr>
<th>Capstone</th>
<th>3</th>
<th>Milestones</th>
<th>2</th>
<th>Benchmark</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diversity of Communities and Cultures</strong></td>
<td>Demonstrates evidence of adjustment in own attitudes and beliefs because of working within and learning from diversity of communities and cultures. Promotes other engagement with diversity.</td>
<td>Reflects on how own attitudes and beliefs are different from those of other cultures and communities. Exhibits curiosity about what can be learned from diversity of communities and cultures.</td>
<td>Has awareness that own attitudes and beliefs are different from those of other cultures and communities. Exhibits little curiosity about what can be learned from diversity of communities and cultures.</td>
<td>Expresses attitudes and beliefs as an individual, from a one-sided view. Is indifferent or resistant to what can be learned from diversity of communities and cultures.</td>
</tr>
<tr>
<td><strong>Analysis of Knowledge</strong></td>
<td>Contexts and expands knowledge (facts, theories, etc.) from one’s own academic study/field/discipline to civic engagement and to one’s own participation in civic life, politics, and government.</td>
<td>Analyzes knowledge (facts, theories, etc.) from one’s own academic study/field/discipline making relevant connections to civic engagement and to one’s own participation in civic life, politics, and government.</td>
<td>Begins to connect knowledge (facts, theories, etc.) from one’s own academic study/field/discipline to civic engagement and to one’s own participation in civic life, politics, and government.</td>
<td>Begins to identify knowledge (facts, theories, etc.) from one’s own academic study/field/discipline that is relevant to civic engagement and to one’s own participation in civic life, politics, and government.</td>
</tr>
<tr>
<td><strong>Civic Identity and Commitment</strong></td>
<td>Provides evidence of experience in civic-engagement activities and describes what she/he has learned about her or himself as it relates to a reinforced and clarified sense of civic identity and continued commitment to public action.</td>
<td>Provides evidence of experience in civic-engagement activities and describes what she/he has learned about her or himself as it relates to a growing sense of civic identity and continued commitment.</td>
<td>Evidence suggests involvement in civic-engagement activities is generated from expectations or course requirements rather than from a sense of civic identity.</td>
<td>Provides little evidence of her/his experience in civic-engagement activities and does not connect experiences to civic identity.</td>
</tr>
<tr>
<td><strong>Civic Communication</strong></td>
<td>Tailors communication strategies to effectively express, listen, and adapt to others to establish relationships for further civic action.</td>
<td>Effectively communicates in civic context, showing ability to do all of the following: express, listen, and adapt ideas and messages based on others’ perspectives.</td>
<td>Communicates in civic context, showing ability to do one of the following: express, listen, and adapt ideas and messages based on others’ perspectives.</td>
<td>Communicates in civic context, showing ability to do one of the following: express, listen, and adapt ideas and messages based on others’ perspectives.</td>
</tr>
<tr>
<td><strong>Civic Action and Reflection</strong></td>
<td>Demonstrates independent experience and shows initiative in new leadership of complex or multiple civic-engagement activities, accompanied by reflective insights or analysis about the aims and accomplishments of one’s actions.</td>
<td>Demonstrates independent experience and shows leadership of civic action, with reflective insights or analysis of the aims and accomplishments of one’s actions.</td>
<td>Has clearly participated in civic-focused actions and begins to reflect or describe how these actions may benefit individual(s) or communities.</td>
<td>Has experienced some civic activity but shows little internalized understanding of their aims or effects and little commitment to future action.</td>
</tr>
<tr>
<td><strong>Civic Contexts/Structures</strong></td>
<td>Demonstrates ability and commitment to collaboratively work across and within community contexts and structures to achieve a civic aim.</td>
<td>Demonstrates ability and commitment to work activity within community contexts and structures to achieve a civic aim.</td>
<td>Demonstrates experience identifying intentional ways to participate in civic contexts and structures.</td>
<td>Demonstrates experience identifying intentional ways to participate in civic contexts and structures.</td>
</tr>
</tbody>
</table>

EUA: Learning & Teaching Forum 2021 - Sybille Reichert
21st Century Teaching & Learning Reforms presuppose integrated institutional transformation

- Increasing importance of research and research competences (data & science literacy)
- Research projects at all levels incl. bachelor
- High value of research in academic career progression
- Integration of industry/user/citizen perspectives and data in research projects, incl. bachelor and master projects, community learning
- Strategic partnerships and Joint (infra-) structures

- Student-centered learning
- Increasing levels of learner autonomy
- Project-based learning
- Teachers as learning coaches, supervisors, mentors
- Requires didactic training, continuing professional development for academic staff
- Extended support services

Academic freedom
Expert institution: Large degree of autonomy and participation in institutional development for students, academic staff
- Involvement of external stakeholders in boards, strategic dialogue, curriculum development

Research
Teaching & Learning
Institutional Development & Governance
Knowledge Exchange
Examples:
Aalto Design Factory
TU/e Challenge Projects
Manchester Univ. Stellify
TUMentrepreneurship education/ StarTUM
Example: StarTUM (start-up/ stardom)

StarTUM - The Integrated TUMentrepreneurship Education Approach

TUMentrepreneurship Education instructs and guides its participants through all the different phases of establishing a business, ensuring that the content and method of instruction is practically oriented and tailored to the needs of each project. Our program is geared toward participants with a variety of disciplinary backgrounds and experience, from Bachelor’s and Master’s students, to doctoral and post-doctoral candidates through to scientists and professionals.

<table>
<thead>
<tr>
<th>S</th>
<th>Sense</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>Touch</td>
</tr>
<tr>
<td>A</td>
<td>Assess</td>
</tr>
<tr>
<td>R</td>
<td>Recognize</td>
</tr>
<tr>
<td>T</td>
<td>Take-off</td>
</tr>
<tr>
<td>U</td>
<td>Understand</td>
</tr>
<tr>
<td>M</td>
<td>More</td>
</tr>
</tbody>
</table>

- What options do I have besides traditional employment? **See for yourself!**
- Can I make a living from being an entrepreneur? **Get in touch with real entrepreneurs!**
- Do I want to become an entrepreneur? **Find out how it feels to be an entrepreneur!**
- What do I have to do to become an entrepreneur? **Recognize opportunities and get all the important information!**
- How do I get my own business started? **Get Practical!**
- How can I understand more about entrepreneurship theory and advance it further by doing cutting edge research? **Delve deep!**

EUA: Learning & Teaching Forum 2021 - Sybille Reichert
EUA STUDY

The Role of Universities in Regional Innovation Ecosystems


By Dr Sybille Reichert

sybille@reichert-consulting.de