
Empowering Tomorrow's Sustainability Educators (POWER-SE)

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- I. Insights Into the POWER-SE Program
- II. Self-Reflection of SE-related Teaching Competencies (Small Taste of our Approach)
- III. Q&A and Discussion



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I. Insights Into the POWER-SE Program

From insight to impact.

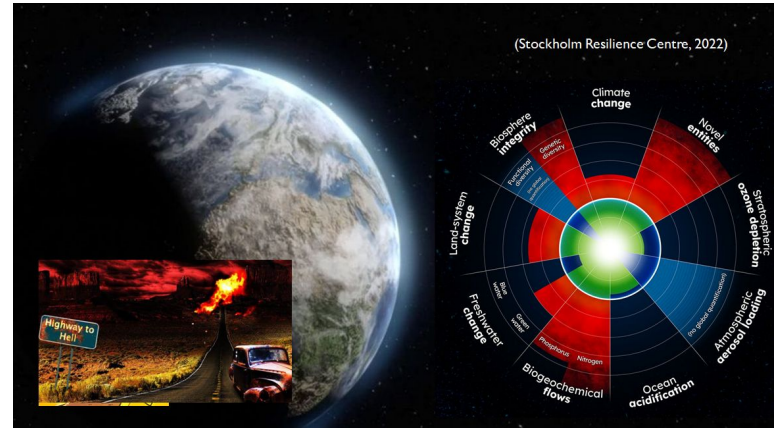
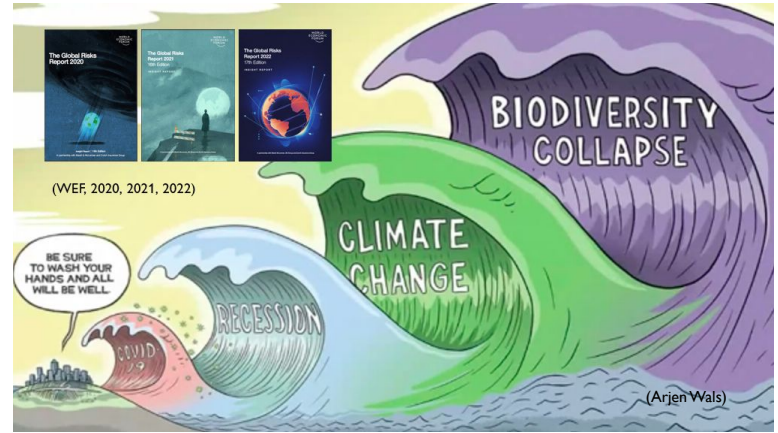
The POWER-SE Team



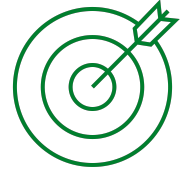
From left to right: Dr. Stefan T. Siegel, Prof. Dr. Bernadette Dilger, Lenka Kepkova, Carolin Lemke, Abigail Lynam

Rationale: The Importance of Sustainability in Higher Education

- Multiple and multiplying crises aka grand challenges in today's world (e.g., Adams, 2016; UNESCO, 2017; WEF, 2023)
- Crucial role of higher education institutions and faculty (Siegel & Dilger, 2023)
- Challenges and uncertainties faced by university instructors Uis (Hedefalk et al., 2021; McFarlane & Ogazon, 2011)
- Need for SE-related materials, exchange, and guidance (e.g., Brandt et al., 2022; Johnston, 2012; Scherak & Rieckmann, 2020)



Power SE: Project Objectives & Target Group



Objectives

- Develop a virtual international certificate program that
 - empowers educators (UIs) to develop their SE-related competencies
 - accompanies the participants in designing own teaching project
 - contributes to integrating SE into teaching in an evidence-informed, effective, ethically responsible manner
- Implement and test the program with approx. 20 international participants
- Evaluate the program impact, harvest key learnings incl. proposals for improvement and decide on the project continuation

Target Group

- 20 educators (UIs) from different disciplines and career stages
- From Switzerland (at least 20%) and internationally
- Focus on professionalizing teaching competencies in SE





POWER SE: Program Overview

Guiding principles

- High level of participants and students engagement; Relationship-rich education, Peer-Learning
- Transformative learning , Flexible Structure that Meets Participants' Needs
- Principles of Design Based Research Approach

Program Development (5m)

Selecting Participants & Needs Mapping

Revisiting the Program Flow

Setting Evaluation Strategy & intended impact

individual: Empowerment of SE-Teachers

community: Building-up SE Teaching Community

institutional: Changes in SE Teaching, professionalization, materials under OER

Program Implementation (12m)

Two Interconnected Program Elements

1. Guided Practice (SE Teaching Portfolio)

Each participant will develop own teaching project and individual SE teaching portfolio (teaching statement, course design example, curricular scope)
Professional coaches will support participants in this process.

2. Expert and Peer Learning during Monthly Sessions

2. Transforming Education open space

4. SE - educational patterns

6. curriculum development in SE

8. CLOSING SE Forum

1. KICK-OFF SE Approaches Myths & tensions

3. SE - Intended Learning Outcomes

5. self-awareness

7. whole campus approach

Evaluation & Publication (7m)

Outputs, Outcomes & Impact

individual:

e.g. quality of SE Teaching portfolio, teaching competencies, self-awareness, etc.

SE-community:

Validation of specific needs
Fist Feedback to prototypes for SE-Training material

institutional:

Education Transformation

Publications

2 SE papers (specific needs and institutional demand)
prototypes for SE-Training materials (OER-based)



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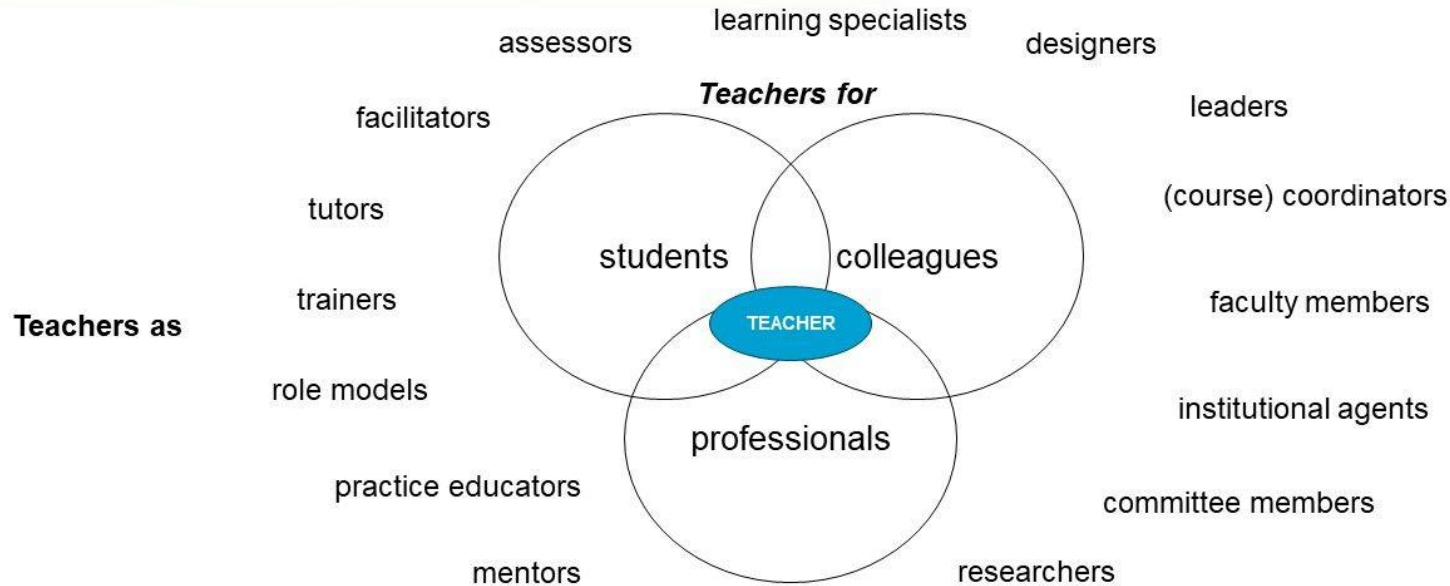
II. Self-Reflection of SE-related Teaching Competencies

From insight to impact.

17.02.2022

Should a teacher have five legs?

16 Core roles of Teachers in Higher (Professional) Education
online & face-to-face, inside and outside the (home) institute



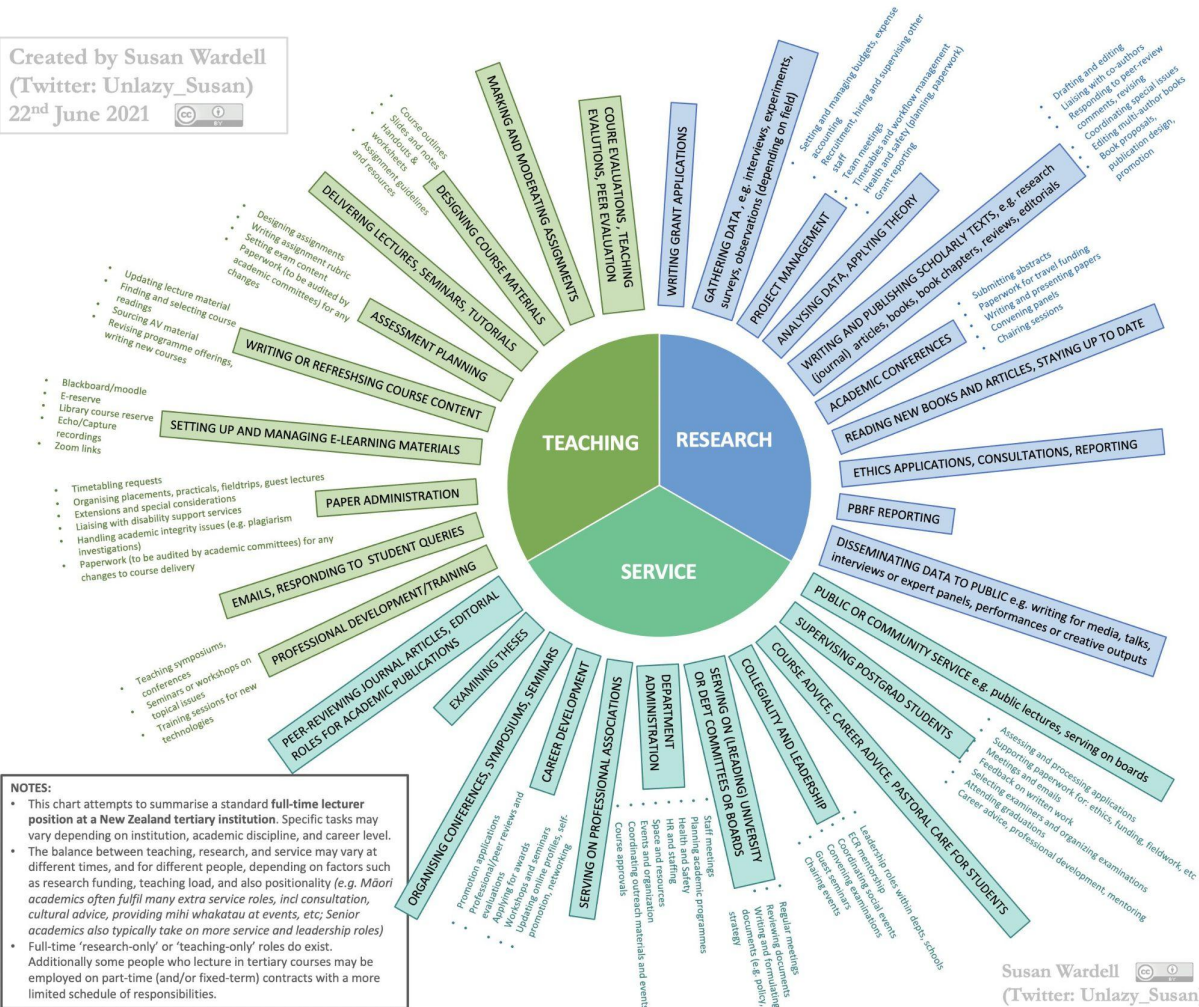
Key goal =
To develop skills and knowledge and to socialize learners to the profession [and citizenship]



Ommering & Koeslag-Kreunen (in preparation)

ACADEMIC LIFE: WHAT DOES A "LECTURER" DO?

Created by Susan Wardell
(Twitter: Unlazy_Susan)
22nd June 2021

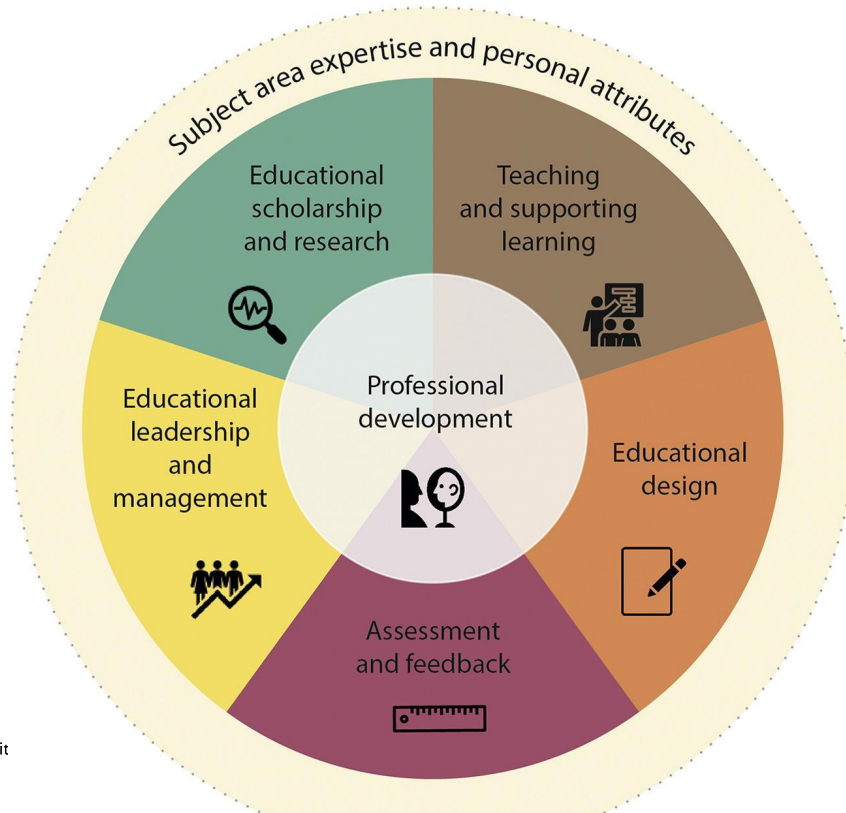


NOTES:

- This chart attempts to summarise a standard full-time lecturer position at a New Zealand tertiary institution. Specific tasks may vary depending on institution, academic discipline, and career level.
- The balance between teaching, research, and service may vary at different times, and for different people, depending on factors such as research funding, teaching load, and also positionality (e.g. Māori academics often fulfil many extra service roles, incl consultation, cultural advice, providing mihi whakatau at events, etc; Senior academics also typically take on more service and leadership roles)
- Full-time 'research-only' or 'teaching-only' roles do exist. Additionally some people who lecture in tertiary courses may be employed on part-time (and/or fixed-term) contracts with a more limited schedule of responsibilities.

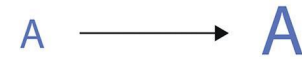
What makes an expert university teacher? (van Dijk et al., 2020)

Teacher tasks in higher education

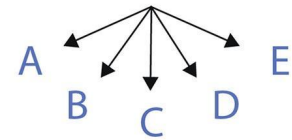


Task-related dimensions for development

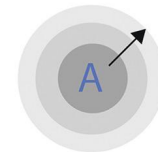
Better task performance



Greater variety of tasks



Larger sphere of influence



What are Sustainability Competences - “Green” Competences?



GreenComp (European Commission 2022)

Area	Competence
Embodying sustainable values	Valuing sustainability, Supporting fairness Promoting nature
Embracing complexity and sustainability	System thinking Critical thinking Problem framing
Envisioning sustainable future	Future literacy Adaptability Exploratory thinking
Acting for sustainability	Political agency Collective action Individual initiative

Education for SDGs – learning objectives (UNESCO 2017)

Key Competencies for sustainability

Normative competency
Strategic competency

System thinking
Anticipatory competency
Critical thinking
Integrated problem solving

Collaborative competency

Self awareness

Self-Reflection Tool



Sustainability Educator's Competences Survey (Bern Conference)



Welcome to our survey on sustainability competences!

Thank you very much for your participation.

★ Benefit

By participating in this survey, you can gain closer insights into your own competences to transform societies towards a sustainable future. In addition, your participation provides valuable information for the further development of the POWER-SE program.

🕒 Duration

We have tried to keep the duration of the survey as short as possible. To complete the questionnaire, you are expected to take less than 10 minutes in total time.

💬 Responses

We ask you to answer all questions, we are interested in your personal assessments. Even if you are not sure about an answer, please tick those that most closely reflects your assessment. Some questions and statements sound similar but differ in detail - we would therefore like to ask you to answer each individual each statement accurately.

🔒 Data protection

Your data will be treated confidentially and used only in pseudomized form. This means it will not be possible to draw any conclusions about your person from the results. The results and data of this study may be published in scientific publications. This will be done in anonymous form, i.e., the data cannot be assigned to a specific person.

❓ Questions

If you have any further questions about this survey, please contact: Stefan.Siegel@unisg.ch

Sustainability Educator's Competences Survey (Bern Conference)

QR-Code and
Link to the Survey

Reflection of using the tool

1. What did you think, learn, feel while filling out the survey?

2. Regarding the tool –

a) What fostered your self-reflection?

b) What hindered it?

c) What suggestions for improvement do you have? → Flipchart





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III. Q&A and Discussion

From insight to impact.

Q&A and Discussion

- Questions about your learning and SE-related competencies
- Questions around the POWER-SE program design
- Questions about the future collaborations

Questions?

Feedback?

Comments?

