

# DESIGNING AND USING VALUES-BASED INDICATORS IN FORMAL EDUCATION CONTEXTS

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# Overview

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- Education and Sustainable Production & Consumption
- Values-based indicators
- Applications of values-based indicators in education
  - 3 illustrative examples
- Discussion
- Concluding remarks



# Formal education and SPaC...

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- Developing critical thinking among current and future consumers
- Future producers
- Educational institutions as consumers and producers

(e.g. Ferrer-Balas et al., 2010; Sterling, 2004)



# Introducing values-based indicators

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- Linking values-related words and phrases (value-labels) to actual practice
- *Local* operationalization of abstract concepts  
e.g. What would “empowerment” look like here?

Women and girls participate actively in decision-making!

Students express their own opinions!

Youth feel they have the power to effect change!

e.g. Burford et al., 2013



# Using values-based indicators in education

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## Strategic planning

e.g. organisational  
development,  
performance  
management...

## Learning and teaching

e.g. assessment,  
learning activities,  
critical reflection...



# Using values-based indicators in education

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## Strategic planning

e.g. organisational development, performance management...

## Learning and teaching

e.g. assessment, learning activities, critical reflection...



# Example 1: BOKU, Vienna

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- University of Natural Resources and Life Sciences, Vienna (Austria)
- 1-year project
- Aim: to develop values-based indicators of sustainability
- Methods: Interviews, a survey and a workshop



# Example 1: BOKU, Vienna

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- Outcomes:
  - 11 values and associated indicators were validated
  - Many values were found to support sustainability, although they hadn't been framed that way
  - Indicators were used to create a checklist for ethical approval of BOKU research projects
  - Integrated into sustainability strategy - AISHE 2.0



# Values and indicators for BOKU (sample)

## Integral and systemic reflection

People at BOKU do not see others only as experts in their area, but holistically as human beings

People at BOKU pass on and spread their systematic knowledge

People at BOKU do not stick only to their own subject, but embrace the entire context

## Taking responsibility for environment; protecting, preserving and respecting nature for future generations

People at BOKU take long-term nature and sustainability into account when planning and solving problems

People at BOKU consider *Generationenfähigkeit* (equity/fairness between generations) in their decisions

People at BOKU are aware of others' environmental behaviour as well as their own, and give each other positive tips



# Values and indicators for BOKU (sample)

| <b>Networking and exchange of know-how and experience</b>  | <b>Finding and following one's own path in and "with" BOKU</b>                                   |
|--|--|
| People at BOKU...  | People at BOKU...  |
| ...are open to other people and different ways of thinking   | ...are aware of other priorities in life, besides work and material values                       |
| ...exchange experiences and are interested in others' work   | ...are able to work both independently and cooperatively   |
| ...are interconnected locally, internationally and globally, and have scientific exchange networks | ...expand their own experiences by rising to new challenges and limits, and trying out new tasks |



# Values strongly related to sustainability

Take responsibility for the environment and protect, preserve and respect nature for future generations

Critical thinking

Finding and following one's own path within and 'with' the university

Integral and systemic reflection

Cooperation and teamwork

Networking and (interdisciplinary) exchange of know-how and experience

Friendly, cooperative working atmosphere and social interaction

Spirit of research, science and developing solutions for existing problems in society and in practice



# Ethics checklist developed

- People at BOKU have the courage and opportunity to take a critical look at themselves and others, regardless of hierarchies, and openly ask questions
- Project-engaged people pay attention to good information flow and have a good communication structure
- Project-engaged people can trust each other
- Project-engaged people help and respect each other
- Project-engaged people are working together well, constructively and considerately
- Project-engaged people are open to other people and different ways of thinking
- Project-engaged people consider equity / fairness between generations in their judgments regarding this research.
- This project contributes to maintaining a circular flow of everything
- This project considers the long-term sustainability of society, nature and economy
- Project-engaged people make a careful, conscious use of resources



# Example 2: PERL project

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- Partnership for Education and Research about Responsible Living ([www. perlprojects.org](http://www.perlprojects.org))
- 2-year EU-funded project
- *Aim: Empower citizens to live responsible and sustainable lifestyles*



# Sub-project on Values-Based Indicators

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- Aim: To develop values-based indicators suitable for use in secondary schools
- Methods:
  - Surveys of educators & education experts
  - Analysis of conference notes and a book (*Nature and the Human Soul*, Bill Plotkin, 2009)
  - Workshop to integrate new & existing indicators
  - Testing in schools



# Outcome: 2 different ‘toolkits’:

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- **School Evaluation Toolkit, “Building a Shared Vision”**: To help staff to reflect on what’s going well, and what could be done better
- **Student Activities Toolkit, “Discovering What Matters”**: To help students think about skills and values that underlie sustainable lifestyles



# Sample indicators from school evaluation toolkit

## Indicators

The school offers appropriate, multi-tiered support and guidance to students with problems

Teachers open each other's, and students', hearts and minds to new ideas

A wide variety of teaching and learning styles are used

Teachers find creative ways to increase engagement with students

The school implements policies of environmentally sustainable procurement, renewable energy, reducing carbon emissions, sustainable waste management and ethical investment

The school has an embedded culture of respect for students' abilities

Teachers see themselves as 'learners' rather than 'knowers'



# Sample indicators from student toolkit

## Indicator

Taking responsibility for our learning and using our own initiative

Having an insight into possible consequences of what we say and do

Using our mistakes as starting points for learning and growth

Connecting knowledge from different subjects, as a way of thinking about solutions to difficult problems

Thinking critically about the ideas and information that are given to us

Having the courage to take a step beyond our 'comfort zone'

Helping people to solve conflicts, by listening to both sides and trying to find acceptable solutions

Listening to other people and trying to understand what they really mean

Finding the courage to be ourselves



# Example 3: Group assessment

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- 3<sup>rd</sup> year undergraduate module: Rural Development and Conservation in Africa
- Trial of values-based indicators:
  1. Learning contract & selection of indicators
  2. Pre-set group learning tasks
  3. Interim self-assessment in week 5
  4. Final self-assessment in week 11

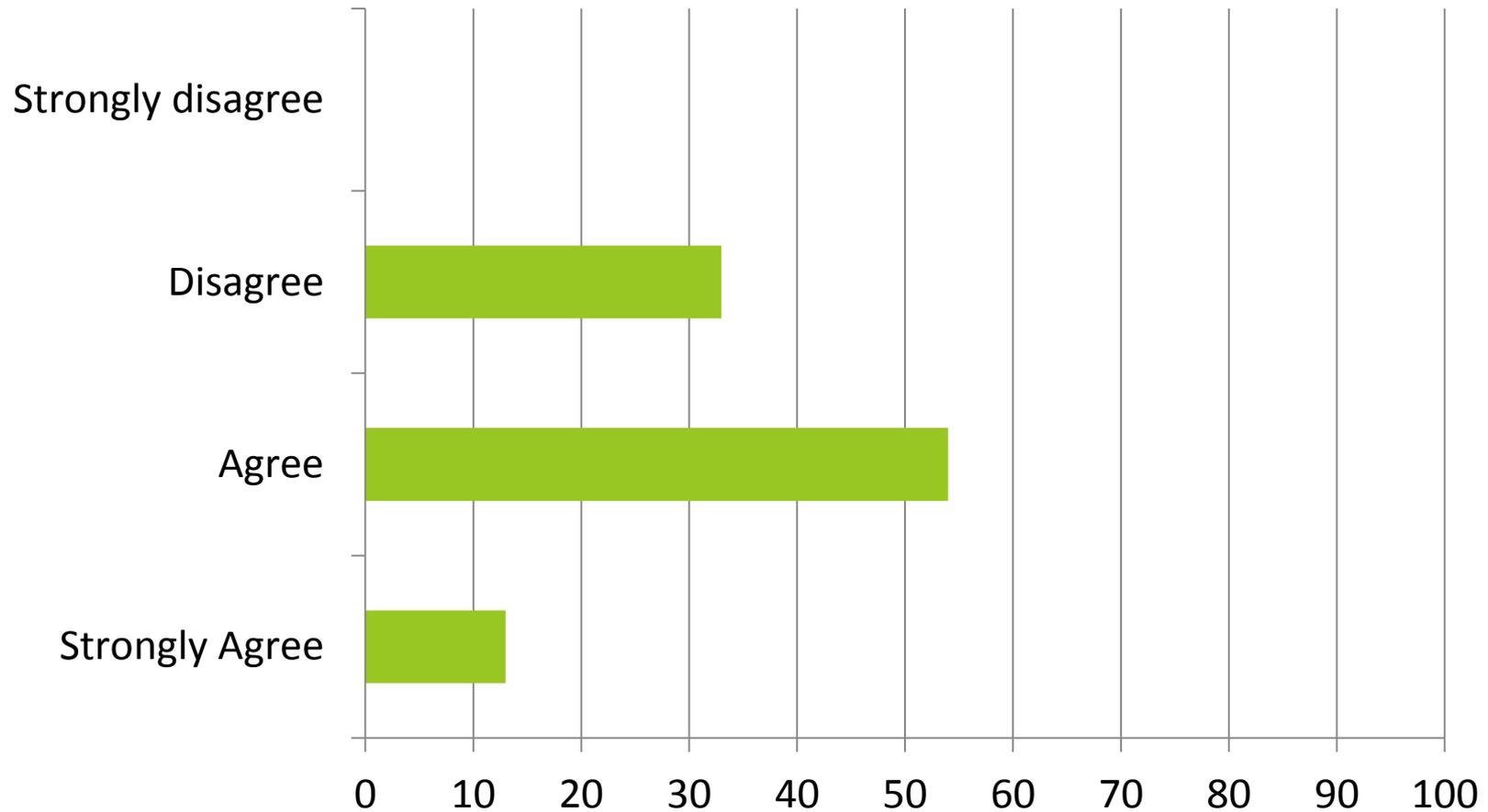


# Indicators chosen by 5 student groups

| Indicator  | No. of Groups |
|--|---------------|
| Group members feel that they have an equal opportunity to express their opinions | 3             |
| Group members feel that everyone's opinions are respected                        | 3             |
| Group members trust that each shares a commitment & willingness to collaborate   | 3             |
| Everyone participates actively in every task                                     | 2             |
| Group members feel that their own individual identity and approach is respected  | 2             |
| Group members appreciate one another's differences                               | 2             |
| Group members introduce ideas to each other with respect, humility and patience  | 2             |



# “I feel that my group learning skills have improved as a result of participating in this module”



# Discussion

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- Challenges:
  - How do we create a new generation of sustainable consumers and producers?
  - How can educational institutions shift towards sustainability?
- Research shows that...
  - Environmental knowledge alone is not enough (e.g. Flowers, 2010)
  - ‘Talking the talk’ about values is not enough (e.g. Cha & Edmondson, 2006)



# Moving from knowledge and 'mission statements' to meaningful action?

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Values-based indicators may be useful for:

- Explicitly linking values, specific actions, and sustainability
- Promoting a broader vision of sustainability – not **just** 'the environment'
- Embedding a **skills focus** – highlighting existing skills, strengthening 'neglected' ones
- Putting **values** at the heart of **evaluation**



# Concluding remarks

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- ‘Business as usual’ will not deliver education for SCP
- ‘Doom and gloom’ can be disempowering and induce apathy, not sustainability
- Values-based indicators can help to focus attention on positive ways forward, and skills



# Questions?

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Thank you!

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