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# Values: a bridge between sustainability and institutional assessment - a case study from BOKU University

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## Abstract

**Purpose:** Illustrate that values-focused assessment can provide a useful lens for integrating sustainability and institutional performance assessment in universities.

**Design/methodology/approach:** Application of values elicitation methodology for indicator development, through thematic analysis of semi-structured interviews and a stakeholder workshop, in a pilot project at BOKU University, Vienna.

**Findings:** This case highlights that many of the values held by university staff and students are pro-sustainability values. Starting from these values may be a useful way of engaging University stakeholders in sustainability dialogues. The paper illustrates how values-based indicators can be integrated into university performance assessments, providing a novel way of thinking about sustainability assessment in universities.

**Research limitations/implications:** The exploratory pilot was carried out in a university with a focus on natural sciences. Further research could replicate and compare the results of this study in other institutions.

**Originality/value:** Creating a shared understanding of pro-sustainability values can help individuals to reconceptualise sustainability in relation to their own work and motivations. In doing so, it can highlight the inherent synergies between sustainability assessment and institutional performance assessment in the higher education sector, which are usually seen as separate domains.

**Keywords:** sustainability, values, university, performance, assessment, engagement

## 1. Introduction

There is increasing recognition within the university sector that higher education institutions (HEIs) need to engage in more sustainable practices within their campuses, educational, research and engagement activities (COPERNICUS, 2012; Ferrer-Balas et al., 2010; 2011). One aspect of this has been to develop ways to assess progress in sustainability using assessment or appraisal tools such as the *Auditing Instrument for Sustainable Higher Education (AISHE)*<sup>[1]</sup> (N. Roorda, 2014; N. C. Roorda, Rammel, Waara, & Paleo, 2009), *Green Plan*<sup>[2]</sup> (AASHE, 2012), *Alternative University Appraisal (AUA)*<sup>[3]</sup> (AASHE, 2012), *Sustainability Tracking, Assessment & Rating System (STARS)*<sup>[4]</sup> (AASHE, 2012), the *Learning in Future Environments (LiFE)* index (Martin, Dillon, Higgins, Peters, & Scott, 2013), or one of the many Environmental Management Systems available (Clarke & Kouri, 2009).

In this context, there has been increasing research on the ability of different assessment approaches to capture different aspects of sustainability. A significant limitation of many such approaches is that 'sustainability' is widely understood by managers in HEIs as being 'environmental' (Wright, 2010), while important social and cultural aspects of sustainability tend to be neglected. In most cases, approaches focus on environmental management or 'eco-efficiency' (Fonseca, Macdonald, Dandy, & Valenti, 2011; R Lozano, 2006). In particular, several authors have highlighted the limitations of current sustainability assessments with regards to social aspects of sustainability such as considering the long term implications of research, interdisciplinary, collaborative work and community engagement activities (Mader, 2012; Yarime & Tanaka, 2012), the importance of supportive formal and informal social networks and interpersonal and institutional trust (Evangelinos & Jones, 2009) or the ability to capture participatory processes and create a shared understanding (Disterheft, Caeiro, Ramos, & Azeiteiro, 2012; Mader, 2012). Underlying many of these aspects is a concern for still less tangible values such as justice, solidarity, trust and respect for the environment and its limits, which, as noted by Dahl (2012), are required for transitions towards sustainability.

One reason why sustainability assessments have not fully integrated these values may be that they are perceived as difficult or impossible to measure (Dahl, 2012). In earlier work, however, the authors have illustrated that indicators for the enactment of less tangible values can be developed when they are defined collectively within a clearly specified practical context (Burford et al., 2013). This paper explores the usefulness of this approach within a university context by building consensus around shared values. The authors reflect on the implications for sustainability and broader institutional performance assessments, in the light of literature showing that movements of HEIs towards sustainability could be accelerated if conventional university evaluation systems meaningfully

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<sup>1</sup> This is the first sustainable assessment tool, applied 200-300 times in Netherlands, Belgium, Sweden, Germany, Finland, Austria, Spain, Ukraine, Lithuania, Bangladesh and Brazil. It is built from a participatory process and focus on working the very identity of the organisation restructuring in such a way the HE institution that sustainable development becomes a part of the fundamental nature of the organization.

<sup>2</sup> Created in 2007 adapted to the French context.

<sup>3</sup> Created in 2009 adapted to the Japanese context.

<sup>4</sup> Created in 2006 is a voluntary, self-reporting framework for HE institution in US and Canada. In 2012 101 institutions submitted a STARS report.

integrated sustainability perspectives in their assessment frameworks (Alshuwaikhat & Abubakar, 2008; Yarime & Tanaka, 2012).

The first section presents a reflection on the relevance of values within sustainability practices and university performance assessment. After outlining the context in more detail, the authors present an approach to identifying and developing an institutional assessment of shared values in the context of sustainability work in universities. There follows a discussion on how these findings can illuminate future work on performance assessments in HEIs.

### **1.1. Why consider values in sustainability work?**

In addition to the increasing calls for integrating social, environmental and economic dimensions of sustainability work, the last two decades have seen explicit calls for an “ethical framework” for sustainability (e.g. the Earth Charter and the Earth System Science Partnership), as well as several commitments to ethical and spiritual dimensions of sustainable development (e.g. Fourth World Conference on Women, 1995; UN-DESA, 1992; UN-HABITAT, 1991; World Summit for Social Development, 1995). Ethical and spiritual values such as trustworthiness, equality, respect and justice are emerging as the fourth “pillar” of sustainable development and there is growing recognition of the importance of values within the global sustainability debate (Burford et al., 2013; Clugston, 2011; Nurse, 2006). Although values are widely assumed to be intangible and immeasurable, the increasing work in this area demonstrates that it is possible to operationalize values in terms of measurable indicators if they are intersubjectively conceptualized within a clearly defined context (Burford et al., 2013).

From a social psychology perspective, collective and individual environmental decisions are influenced by a number of factors that are often unconscious such as emotions or individuals and cultural values (Fietkau & Kessel, 1981; Kasser, Cohn, Kanner, & Ryan, 2007; Rokeach, 1968). Values are principles or standards for the ways in which people “ought to behave” and are inherently rooted in judgments about what is important in life (Burford et al., 2013; Meglino & Ravlin, 1998). There is a growing body of research that demonstrates the complex relationship between individual value systems and behaviours (González & Amérigo, 2008; Kollmuss & Agyeman, 2002), and more specifically pro-sustainability behaviours (Crompton, Brewer, Chilton, & Kasser, 2010; Gatersleben, Murtagh, & Abrahamse, 2012; Juarez-Najera, Rivera-Martinez, & Hafkamp, 2010). A way of understanding this link between values and behaviour is to use a framework of intrinsic and extrinsic values; while extrinsic values (e.g. wealth, public image, power) are centred on external approval or rewards, intrinsic values (e.g. freedom, equality, unity with all and nature, creativity and self-respect) are focused on more inherently rewarding pursuits (Crompton et al., 2010). In the context of sustainability work, individuals who prioritise intrinsic values tend to have higher levels of concern about social justice and are thought to engage more readily in environmentally-friendly behaviours. In contrast, individuals placing more importance on extrinsic values tend to have less concern about the environment or human rights issues (Crompton et al., 2010). As a result, promoting and reinforcing certain values may help to engage people in more sustainable behaviours.

### **1.2. Why consider values in universities’ performance assessment?**

Within HEIs, values are often captured in institutional statements, and increasing attention is being paid to pro-sustainability attitudes and behaviours among university stakeholders (see Davis, O'Callaghan, & Knox, 2009; Juarez-Najera et al., 2010). In the management literature, values are important at project or organisational levels as they help to define desired modes of behaviour and shared norms (Gruys, Stewart, Goodstein, Bing, & Wicks, 2008; Meglino & Ravlin, 1998; O'Reilly & Chatman, 1996). Although values often provide motivations for the work of organisations, and are sometimes explicitly expressed in project mission statements and goals, they are not included in performance assessments as they are perceived as difficult to measure (Burford et al., 2013). Instead, conventional evaluation methods of university performance focus on concrete outputs (e.g. turnover figures, number of research projects acquired, number of students, number of publications), overlooking values and 'value-based work'. This gap can lead to inconsistencies, e.g. when values are publicly espoused by organisations/projects but neither backed up by tangible actions nor fully integrated into the processes and structures of organizations, often undermining trust, integrity and the long-term performance of the organization (Gruys et al., 2008).

One possible reason for a lack of overwhelming support for sustainability within the sector may be that, although the ethical imperative of universities' commitment to sustainability or sustainable development is often clear, its values-based concepts are also the subject of much debate in relation to the priorities and purpose of higher education institutions (Hoover & Harder, 2014; R. Lozano et al., 2011; Wright, 2010). In HEIs performance indicators are used in order to measure success or progress in their social functions of teaching and research. They are also used as a conceptual tool to reflect on what is important in an institutional or societal contexts; in this sense "what gets measured gets done" (Henshaw, 2006). A new set of value-based indicators is required to measure and motivate the implementation of ethical principles and values necessary to guide the transition towards sustainability (Dahl, 2012; Moore, 2005). Thus, there is an opportunity for researchers and practitioners working on sustainability in HEI to learn from the work on values. This will also contribute to broader debates about values and value conflicts within universities' decision making processes.

## **2. Case study – University of Natural Resources and Life Sciences (BOKU)**

### **2.1. Introducing BOKU**

BOKU University is an institution of research and higher education in the field of life sciences, natural resources and engineering. In 2010/11 the BOKU had approximately 10,000 students, 1000 research staff (professors and academic staff) and 500 administrative personnel (BOKU, 2012). The institution's mission statement includes values or concepts such as "diversity", "trustful cooperation", "holistic" and "coordinated" teaching (BOKU, 2013), but as in most universities, there has hitherto been no attempt to carry out an assessment to check whether these values are being considered at all levels of the organisation. A possible consequence is that the BOKU may be explicitly motivating some sustainability-supporting values, yet simultaneously hindering sustainability by implicitly promoting extrinsic values which interfere with sustainable development through conventional output-based assessments (Auberger et al., 2011).

In 2005, the BOKU was the first university in Austria to be certified under the European Eco-Management and Audit Scheme (EMAS), although the fields of research, education and internal and external social responsibility remained unchanged. The first sustainability report in 2011 (using GRI assessment) was a first step towards addressing these important fields of activity. The BOKU has signed a binding agreement with eight other Austrian universities and the Austrian Ministry of Science to develop a sustainability strategy for the period 2013 – 2015. The AISHE tool (N. Roorda, 2001) is used as a framework to guide this process, and it integrates sustainability throughout the five fields of BOKU activity: research, education, operations, society and identity.

The sustainability discourse at BOKU is pushed forward by a small and well-connected network of BOKU stakeholders (students, administrative personnel, researchers, rector's office) and external stakeholders (a sustainability alliance of eight other Austrian universities). These stakeholders cut across different roles, levels of participation, interest and formality in different working groups.

Although there has been increasing attention to sustainability and values in recent years, much work remains to be done in embedding and integrating these practices in research, education and economic and social engagement activities. The BOKU has shown no significant reduction in greenhouse gas emissions, and there is currently an ongoing project to address issues related to a lack of appreciation, esteem and respect between members of the University (e.g. bullying). Thus there is a gap between "ideal" and "reality" that is not being highlighted by the university's performance indicators.

## **2.2. Methodology**

The process that allowed us to identify a set of meaningful shared values and value-based indicators relevant to BOKU stakeholders was adopted from Podger and colleagues (2012). It included an exploratory qualitative design in six stages: data collection (interviews), data analysis (transcription and coding), prioritisation (online survey) and participatory validation of the initial findings (workshop), comparison of findings with literature on pro-sustainability values and results of preliminary discussions with university management (see Figure 1).

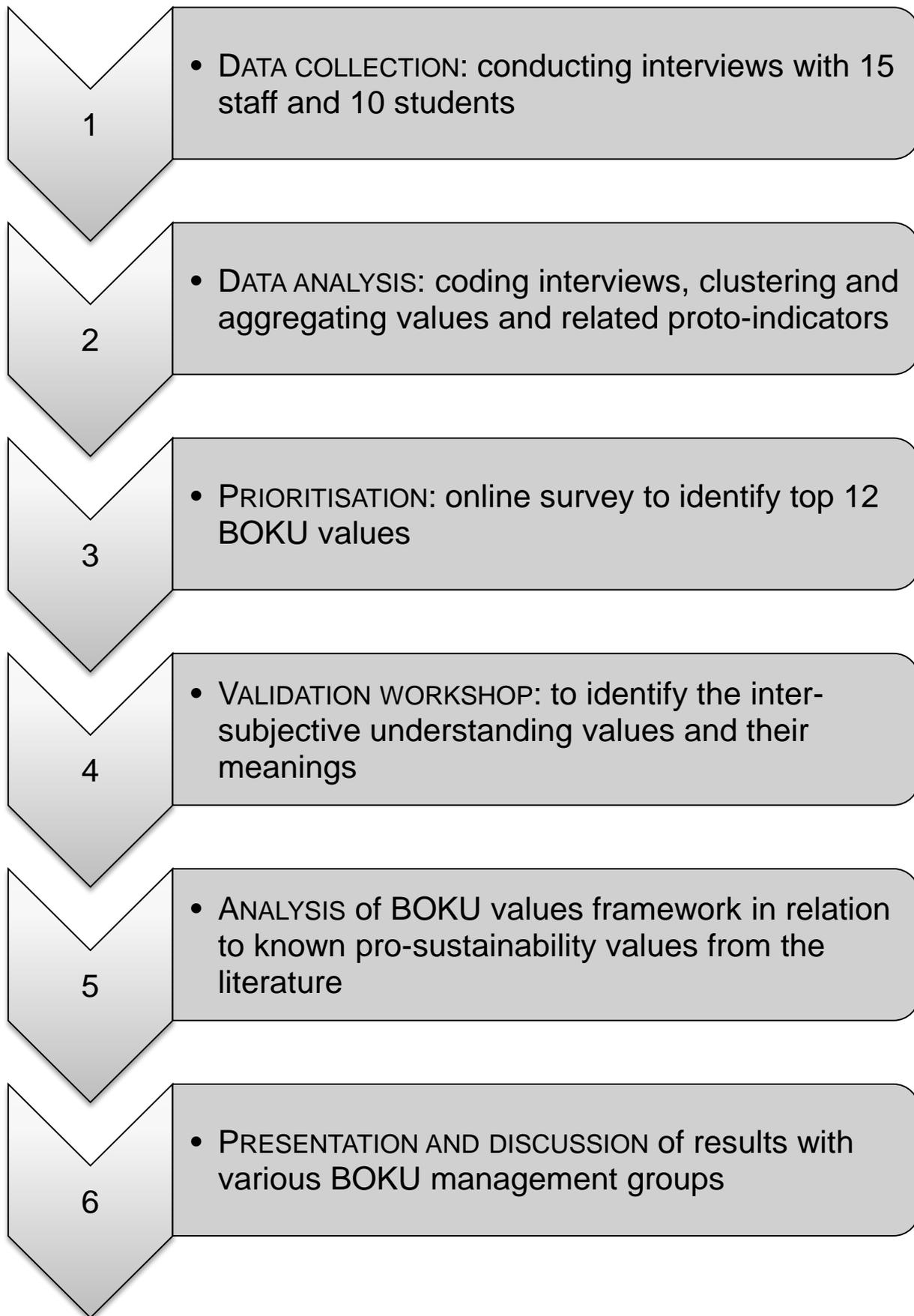


Figure 1: Methodological steps in research process

Data collection occurred between September 2012 and March 2013. In the first phase, a total of 20 semi-structured interviews were carried with 15 BOKU staff members (12 academic staff and 3 support staff) and 10 students. A representative sample of BOKU employees were selected by using an online random number generator in combination with the telephone directory, while students were purposefully selected for focus groups in order to identify key informants, e.g. union officials and class representatives. The interview schedule was designed to elicit values from individuals in indirect and qualitative ways. Questions such as *“What is important for you in the context of your daily work at BOKU?”* or *“Can you give me an example of a recent event that you found significant or meaningful?”* allowed for the collection of values. If values (e.g. *“respect”, “quality of life”*) were mentioned, the interviewees were asked to describe and define the respective value in their own words by means of sub-questions (for instance, *“What exactly do you mean by respect?”*). This allowed the researcher to derive statements relating to the enactment of the values in practice, which the authors have termed ‘proto-indicators’ because they can be viewed as prototypes of, or signposts towards, measurable indicators.

The data from the interviews was coded using thematic analysis to identify values and proto-indicators. The analysis was done using codes in MS Office Word and transferred to MS Office Excel, and then aggregating all of the individual values into 24 value clusters (expressed as statements, as shown in Table 2) with their corresponding proto-indicators. The values statements were prioritised using a quantitative ranking online survey (n=33). The 12 highest ranked value statements were taken to the workshop for validation.

The validation workshop provided a space for developing an intersubjective, common understanding of values and their proto-indicators where BOKU stakeholders (n=14, interviewees and ethics platform members) validated the value statements and proto-indicators. The results from the workshop were then analysed in terms of a framework of pro-sustainability values (Buchebner 2011) to identify those that were both important to BOKU members and supporting sustainability work. The final analysis was then presented to four BOKU operative units: which include leaders and members of the university management board who are also active in the creation of the sustainability strategy for the University.

### **2.3. Findings**

BOKU stakeholders validated eleven values and related proto-indicators, five of which were modified during the validation workshop (see Table 1). Further analysis using the pro-sustainability values framework developed by Buchebner (2011) highlighted that 8 of these 11 values are related to clear pro-sustainability values clusters (see Table 1).

Top 12 value statements prioritised in the online survey <sup>5</sup>	rank	Validated value statements (workshop outcome)	Associated pro-sustainability values (from Buchebner, 2011)
Appreciation and mutual respect ( <i>Wertschätzung und Respekt füreinander</i> )	1	Appreciation and mutual respect	n/a
Friendly, cooperative working atmosphere and social interaction ( <i>Freundliche, kollegiale Stimmung und soziales Miteinander</i> )	2	Friendly, cooperative working atmosphere and social interaction	Cooperation & co-determination
Openness, trust and honesty ( <i>Offenheit, Vertrauen und Ehrlichkeit</i> )	3	Openness, trust and honesty	n/a
Spirit of research, science and developing solutions for existing problems ( <i>Forschergeist, Wissenschaft und die Entwicklung von Lösungen zu bestehenden Probleme</i> )	4	<u>New/Modified:</u> Spirit of research, science and developing solutions for existing problems in society and in practice ( <i>Forschergeist, Wissenschaft und die Entwicklung von Lösungen zu bestehenden Problemen aus Gesellschaft und Praxis</i> )	Taking action and responsibility
Networking and exchange of know-how and experience ( <i>Vernetzung und Austausch von Wissen und Erfahrungen</i> )	5	<u>New/Modified:</u> Networking and (interdisciplinary) exchange of know-how and experience ( <i>Vernetzung und (fächerübergreifender) Austausch von Wissen und Erfahrungen</i> )	Cooperation & co-determination
Critical thinking ( <i>Kritisches Denke</i> )	6	Critical thinking	Reflexivity
Cooperation and teamwork ( <i>Zusammenarbeit und Teamwork</i> )	7	Cooperation and teamwork	Cooperation & co-determination
Integral and systemic reflection ( <i>Ganzheitliche und systemische Betrachtungen</i> )	8	Integral and systemic reflection	Reflexivity
Change and diversity in the job ( <i>Abwechslung &amp; Vielfalt im Tätigkeitsbereich</i> )	9	<u>New/Modified:</u> Rich diversity ( <i>Abwechslungsreichtum</i> )	n/a
Personal development and following one's own path ( <i>Sich persönlich weiterentwickeln und seinen eigenen Weg gehen</i> )	10	<u>New/Modified:</u> Find and follow within and „with“ the BOKU one's own path ( <i>Innerhalb und „mit“ der BOKU seinen eigenen Weg finden und gehen</i> )	Liberty and Self-determination
Take over responsibility and taking pro-environment action ( <i>Verantwortung wahrnehmen und etwas für die Umwelt tun</i> )	11	<u>New/Modified (merging 11 and 12):</u> Take over responsibility for the environment and protect, preserve and respect nature for future generations ( <i>Verantwortung für die Umwelt übernehmen und Natur für kommende Generationen schützen, erhalten und respektieren</i> )	Ecocentric world views and environmental ethics
Protect, maintain and respect the environment/nature for future generations ( <i>Umwelt/Natur für kommende Generationen schützen, erhalten und respektieren</i> )	12		Long-term thinking and minimization of risks

**Table 1: Summary of values prioritised and validated by BOKU stakeholders, and associated pro-sustainability values clusters**

<sup>5</sup> Original wording in German is provided in italics within the table

Our findings identify values that are meaningful for BOKU stakeholders, i.e. they inspire stakeholders in their work/life at BOKU, and defined in their own terms, but also directly contribute to broader institutional sustainability activities. The findings also include validated proto-indicators for each value cluster (see Table 2). These provide detailed statements about what these values mean in practice, and a starting point for developing measurable indicators.. These results were well received by several university working and management groups and progress is now being made towards including values and values-based indicators in the performance evaluation of the university.

BOKU values	Some sample proto-indicators
Taking responsibility for the environment and protecting, preserving and respecting nature for future generations	<ul style="list-style-type: none"> <li>• People at BOKU consider <i>Generationenfähigkeit</i> (equity/fairness between generations) in their decision-making</li> <li>• People at BOKU take long-term sustainability into account when planning and solving problems</li> <li>• People at BOKU do not perceive nature as an exploitable resource to be taken for granted, but appreciate and accept its intrinsic value</li> </ul>
Critical thinking	<ul style="list-style-type: none"> <li>• People at BOKU think and critically reflect and have constructive discussions with others</li> <li>• People at BOKU have the courage and opportunity to take a critical look at themselves and others, regardless of hierarchies, and openly ask questions</li> </ul>
Finding and following one's own path within and 'with' BOKU	<ul style="list-style-type: none"> <li>• People at BOKU expand their own experiences by rising to new challenges and limits and trying out new tasks</li> </ul>
Spirit of research, science and developing solutions for existing problems in society and in practice	<ul style="list-style-type: none"> <li>• People at BOKU use creative approaches to problems, challenges and solutions and develop new approaches</li> <li>• People at BOKU observe, analyse and integrate individual results and draw conclusions for sustainable responses</li> <li>• People at BOKU are not afraid of making mistakes or discussing them, but are tolerant towards each other as well as themselves</li> </ul>
Integral and systemic reflection	<ul style="list-style-type: none"> <li>• People at BOKU understand systemic connections in nature and integrate this awareness into their work and lives</li> <li>• People at BOKU do not focus only on their own subject but embrace the entire context</li> </ul>
Cooperation and teamwork	<ul style="list-style-type: none"> <li>• Colleagues are working together well, constructively and considerately</li> <li>• Colleagues from science and other areas are working together trying to achieve a common goal</li> <li>• Colleagues can trust each other</li> </ul>
Networking and (interdisciplinary) exchange of knowledge and experience	<ul style="list-style-type: none"> <li>• People at BOKU are open to other people and different ways of thinking</li> <li>• People at BOKU exchange experiences and are interested in the work of other people</li> <li>• People at BOKU are thinking and acting in global networks and jointly look for solutions to problems</li> </ul>
Friendly, cooperative working atmosphere and social interaction	<ul style="list-style-type: none"> <li>• A positive mood and a pleasant, friendly atmosphere prevail at the university</li> <li>• People at BOKU feel happy and satisfied at university and in their relations with colleagues</li> <li>• At BOKU there is a supportive, appreciative working culture, even if conflicts of opinion sometimes occur</li> </ul>

**Table 2: Values found to be both meaningful for BOKU members and pro-sustainability (translated from German)**

### **3. Discussion**

The following section presents the implications of the findings from the pilot study. The authors focus in a first instance on opportunities created by the elicitation of shared pro-sustainability values, especially in terms of the way in which individuals understand and potentially engage with sustainability initiatives. This is followed by a discussion about implications for the way in which values are communicated within institutions, and the integration of sustainability into institutional assessment through the development of values-based indicators.

#### **3.1. Pro-sustainability values as a way to engage university stakeholders in the sustainability**

Researchers noted that discussions of values brought together people from different backgrounds and fields of study to agree on behaviour/expectations that they found important at BOKU. University staff and students were open and identified themselves with pro-sustainability values, which were derived from their own motivations in their work. This process revealed a strong similarity between the values stated in the BOKU mission statement and the pro-sustainability values identified through interviews. Values and principles stated in BOKU's mission statement – such as *“conservation of nature for future generations”*; *“sustainable use of natural resources”*; *“holistic and coordinated teaching”*; *“trustful cooperation”*, *“interdisciplinary research”*, *“participation in decisions”* *“foresighted and creative thinking”* or *“open-mindedness”* were also found in the project findings. This was an encouraging finding, as it may suggest that the institutional statement is not far removed from the values of its stakeholders. Other HEI contexts also show overlap between academics' values and pro-sustainability values (Barlett, 2008; Blake & Sterling, 2011; Juarez-Najera et al., 2010). An insight from this study is that by engaging university staff and students from the ground up and developing a localised understanding of what values mean, one can deconstruct perceptions that university mission statements are imposed on their members (Winter, 2009). This process thus demonstrates the potential for using values elicitation to give legitimation to an organisation's mission statement. There is an important difference between sustainability discussions that are grounded in stakeholders' own motivations and values, and discussions imposed through top-down codes of ethics. The former could facilitate sustainability processes in HEI, which often fails to agree on the goals and definitions of sustainability and may lack commitment from all HEI members (Moore et al., 2005). Dialogue and awareness about the correspondence between stakeholders' own values and pro-sustainability values can facilitate agreement on value definitions and assist progress towards the enactment of those values. Through this approach people may be enabled to see the broader connection of their work and beliefs to sustainability, especially in the case of those who do not view themselves as “green”. This supports the idea of reconceptualising sustainability at University by highlighting those aspects that resonate with stakeholders' core values.

#### **3.2. Making values explicit in communication across all levels**

Most of the communication in HEI is laden with values, which are often implicitly presented. Making values explicit in mission statements and/or performance indicators is a useful systematic task which can be taken up by university management at all levels. There may be a tendency to talk about “excellence”, being “the top” or “the best”, promoting mainstream values such as competition, which could divert from the important task of defining “best” and reflecting on which values could be beneficial in building sustainable futures (Moore, 2005). Transparency could help sustainability processes by providing a context for dialogue, putting things into perspective in situations where a conflict of values is delaying a decision (Crompton et al., 2010).

If there is a relationship between certain values and sustainability behaviour, then it is our ethical imperative to make sure that the values behind decisions at university are visible and transparent. As universities open to see themselves as non-value-free institutions (UNESCO-CEPES, 2004), they begin to embrace the opportunity to take responsibility and action for promoting the highest possible ethical standards which are also environmental standards. This study shows that values identified as important are also contributing to advancing pro-sustainability work at the university. Although this may be specific to BOKU there will probably be a degree of overlap with other HEIs, as it is expected that pro-sustainability values such *critical thinking, spirit of research, problem solving, creativity and self-direction values* be associated with the goals of every university and their academic staff. This approach strengthens the ethical dialogue in HEIs, making values and value conflicts in HEI visible in daily decisions. Crompton et al. (2010) recommend to transparently engage the public in a way that helps to strengthen values which will be of more help in motivating concern about humanitarian and environmental issues. It is thus essential to enable a process of identifying shared values and principles, starting a critical reflection on pro-sustainability values making them and their potential implications explicit for the global society, University and sustainability discourse.

### **3.3. Integrating values-based indicators into existing university assessments**

If some values are more beneficial than others for engendering a systemic and durable process of creating sustainable organisations (Crompton et al., 2010; Kasser, 2011; Kasser, Ryan, Couchman, & Sheldon, 2004), then it would be relevant to include pro-sustainability values-based indicators in HEI performance assessments. Further measurable indicators could be developed and integrated into a sustainability assessment – in the case of BOKU, the authors are looking to integrate indicators into a sustainability strategy enclosed by the AISHE framework or as a section in the mainstream performance assessment of the university through the creation of a e.g. “BOKU Happiness Index”. Integrating sustainability assessment with institutional performance assessment in HEIs can reduce complexity and build synergies between these assessments. As long as they tend to be poorly integrated, their goals conflict, which may lead to “green-washing”. Changing the current vision of sustainability assessment as an external reporting system and embracing it as an internal monitoring mechanism could provide opportunities to learn, share and discuss about values and ethical principles, and in this way include self-reflection as a sustainable education principle (Juarez-Najera et al., 2010).

Including value-based indicators in HEI performance assessments can provide a tangible way of addressing “messy” elements of sustainability, particularly around institutional identity and culture (see Hoover & Harder, 2014. Contributing to long term and cross-institutional commitment to sustainable development is fundamental if researchers and practitioners wish to effectively bring sustainability discourse to the University (Sharp, 2002). Achieving institutional transformation requires a systemic transformation across all levels and functions of the organisation, to which values-based indicators can contribute by highlighting and strengthening its most essential goals and principles.

### **3.4. Limitations of the study**

It is critical in any debate about values and value-based indicators to keep in mind that values are cultural, context specific, evolving with time and affected by previous learning; thus, this process is not about the creation of universal definitions for values, nor universal indicators for them. Values are more complex than any indicator can describe, and the act of measurement may change the very thing that is attempting to be

measured (Bell & Morse, 2008). Nonetheless, this does not invalidate attempts at measurement, provided that this limitation is acknowledged and accepted by the respective group(s). Data validation steps and feedback options from the interviewees (e.g. workshop validation) and reflections from facilitators' meetings helped to reduce the effect of subjective interpretations from researchers. It would be important to do a similar pilot in other universities, as the type of university – an applied life sciences university – might have influenced the results.

#### **4. Conclusion**

Values have been largely overlooked by conventional institutional performance assessments in HEIs. The paper makes the case for the creation of context-specific sets of values-based indicators which can measure and motivate transitions towards sustainability. The authors see at least three benefits of this process: working with pro-sustainability values which are relevant for university staff and students; raising awareness of values and principles which are necessary to guide societal change; and integrating pro-sustainability values into existing HEI performance assessments. Value-based indicators were found useful by BOKU decision makers and opinion leaders as they were relevant for participants and made intangible areas related to sustainability visible.

Making values visible in the performance assessment of Universities can be a way to follow up on what universities state in their mission statements. It supports and raises decision-makers' awareness in situations where value conflicts exist. To move away from 'business as usual' and create the conditions for sustainable development, as researchers and practitioners, we need to identify, tackle and change the rules that control the outcomes of organisational activity, i.e. performance indicators, and bring them into alignment with the goals and values of an organisation. Inclusion of values-based indicators in the sustainability assessment of universities can provide a way of institutionalising commitment to sustainability in HEIs.

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