

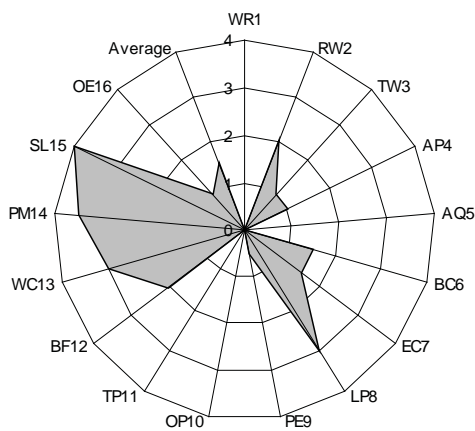


UNIT-BASED SUSTAINABILITY ASSESSMENT TOOL

A resource book to
complement the UNEP
Mainstreaming
Environment and
Sustainability in
African Universities
Partnership

Muchaiteyi Togo

& Heila Lotz-Sisitka



Acknowledgements

This sustainability assessment tool was developed for use in the Swedish/Africa International Training Programme (ITP) on 'Education for Sustainable Development in Higher Education', and complements the UNEP Mainstreaming Environment and Sustainability into African Universities (MESA) '*Education for Sustainable Development Innovations Programmes for Universities in Africa*' materials

(available on www.unep.org/training/mesa/toolkit.asp).

It is part of the broader UNEP MESA initiative which aims to resource African Universities to mainstream environment and sustainability into African Universities. The tool was developed through the PhD research of Muchaiteyi Togo, supervised and supported by Heila Lotz-Sisitka at Rhodes University, South Africa.



See www.unep.org/training/mesa/toolkit.asp for materials on '*Education for Sustainable Development Innovations Programmes for Universities in Africa*'. These provide more information on ESD in Higher Education.

First published in 2009 by

Share Net

PO Box 394, Howick, 3290, South Africa

Reference: Togo, M. & Lotz-Sisitka, H. 2009. *Unit Based Sustainability Assessment Tool. A resource book to complement the UNEP Mainstreaming Environment and Sustainability in African Universities Partnership*. Howick, Share-Net.

ISBN: 978-1-919991-09-2

Artwork by: Tammy Griffiths

Contents



Unit-based Sustainability Assessment Tool	1
List of Tables	2
List of Figures	2
Introduction	3
Background	3
Different Sustainability Assessment Tools	5
Unit-based Sustainability Assessment Tool (USAT)	7
Indicators: Part A of USAT	9
<i>Teaching</i>	9
<i>Indicator cluster 1: Curriculum</i>	9
<i>Indicator cluster 2: Teaching approaches</i>	10
<i>Indicator cluster 3: Research and scholarship activities</i>	11
<i>Indicator cluster 4: Community engagement</i>	12
<i>Indicator cluster 5: Examination/assessment of sustainability topics</i>	12
<i>Indicator cluster 6: Staff expertise and willingness to participate</i>	12
Indicators: Part B of USAT	13
<i>Operations and Management</i>	13
Indicators: Part C of USAT	14
<i>Student Involvement</i>	14
Policy Indicators: Part D of USAT	15
<i>Policy and written statements</i>	15
Rating Part A, B, C and D of USAT	15
Additional documents and interview data	17
Interpreting the results	18
<i>USAT Part A</i>	18
<i>USAT Part B</i>	24
<i>USAT Part C</i>	26
Putting it all together	30
Conclusion	30
References	32

List of Tables

Table 1.	USAT Part A: Departmental sustainability rating per indicator (hypothetical)	18
Table 2.	USAT Part B: Operations and management sustainability rating per indicator (hypothetical)	24
Table 3.	USAT Part C: Students' involvement sustainability rating per indicator (hypothetical)	26
Table 4.	Results of sustainability assessment using Part D of the USAT	28



List of Figures

Figure 1.	Sustainability Performance of the Anthropology Department	20
Figure 2.	Overall departmental performance	21
Figure 3.	Average sustainability performance per department (%).	22
Figure 4.	Average university sustainability performance per indicator (%)	23
Figure 5.	Sustainability performance of the university in various operations and management practices	25
Figure 6.	The extent of involvement of students in sustainability initiatives	27
Figure 7.	Sustainability performance of the university in policy practices	29



Introduction

This booklet begins with an outline of the **Unit-based Sustainability Assessment Tool (USAT)**, which is designed to assess sustainability at universities. The tool focuses on **the different functional units** in a university (e.g. departments, research units, management units etc.), and how they are integrating sustainability concerns into their core functions of teaching, research and community engagement and university management operations. Using a unit-based assessment tool allows for 'building the picture' of the whole, *as well as* concentrating on specific units as required (e.g. concentrating on one department etc.). This framework allows for the integration of sustainability thinking across the different units of the university, and creates possibilities for sustainability issues to be managed within functional units, *as well as* through a broader systemic framework. The booklet explains the indicators, the assessment criteria and ways of representing results of a unit-based sustainability assessment using the USAT. It also suggests other data collection methods to complement the USAT in carrying out a sustainability assessment.

For more information on sustainable development and sustainability in Higher Education, see the 'Education for Sustainable Development Innovations Programmes for Universities in Africa' materials (Module 1), available on www.unep.org/training/imesa/toolkit.asp

Background

Sustainability in Higher Education describes "*a positive movement towards environmental accountability and social and environmental responsibility*" (Nicolaidis, 2006, p. 415). According to Cobb, cited in University Leaders for a Sustainable Future (ULSF) (1999), there can be no sustainable communities and institutions without social justice. **Sustainability therefore comprises social and economic, as well as ecological dimensions.** Clugston and Calder (2000, p. 34) describe sustainable institutions as institutions that "*help students understand the roots of environmental degradation and motivate them to seek environmentally sustainable practices while also teaching the roots of today's injustices in full integration with modelling justice and humanness*". Genuine commitment to sustainability should be evidenced in the critical dimensions of institutional life (for example, written statements of mission and purpose, academic

NOTE:
The USAT is included at the end of this booklet, for direct use or adaptation



programmes, energy and purchasing practices, outreach, faculty hiring and development, etc.) (*ibid*).

Academic institutions vary in the way they approach sustainability. Some concentrate on minimising their ecological impact through emphasising operational practices that include waste reduction and/or recycling, carbon dioxide and air pollution reduction, energy and water conservation practices, sustainable landscaping and so on (ULSF, 1999). Others emphasise sustainability in the curriculum and take up the question of sustainability into their teaching, research and community service activities. In Africa, a concern for sustainability is often reflected in contributions to sustainable development and poverty alleviation at community and national levels. Universities that show commitments to sustainable development often feature topics like globalisation and sustainable development; environment and development; poverty reduction; appropriate technologies; land ethics, rural development and sustainable agriculture; urban ecology and social justice; population, women and development etc. in the curriculum. A concern for sustainability can also be taken up in faculty and student research and community service activities on topics such as natural resource management, renewable energy, sustainable campus management, ecological economics, indigenous knowledge and technologies, population and development, total environmental quality management, etc. (UNEP, 2006 www.unep.org/training/mesa/toolkit.asp)

For case studies on how Universities in Africa are approaching sustainability, see the “Education for Sustainable Development Innovations Programmes for Universities in Africa” materials (Module 1), available on www.unep.org/training/mesa/toolkit.asp



Different Sustainability Assessment Tools

In considering these aforementioned tools in the context of the UNEP Mainstreaming Environment and Sustainability in African Universities Partnership, and its intention to integrate environment and sustainability initiatives into a wide range of different faculties and departments, administrative and research units, and given the way that universities tend to be managed via department or unit heads (within a broader systemic management system), it was necessary to develop a tool that could easily be used at department or unit level. Such a tool would also need to give an insight into the 'whole' picture of sustainability in universities. It would need to allow for flexibility in the use of the tool so that it could be used at department, faculty or unit level to identify change projects, or to guide assessment of university wide change initiatives. To develop such a tool, it was necessary to review existing sustainability assessment tools, and to develop and adapt the USAT for use in African universities.

A variety of tools have been developed for use in assessing sustainability efforts in higher education (Shriberg, 2002; Shriberg, 2004; Lozano, 2006). Among them are the **Sustainability Assessment Questionnaire (SAQ)**, the **Auditing Instrument for Sustainability in Higher Education (AISHE)** and the tool for the **Graphical Assessment for Sustainability in Higher Education (GASU)**.

The Sustainability Assessment Questionnaire (SAQ)

http://www.ulsf.org/programs_saq.html

The SAQ offers its users a comprehensive definition of sustainability in higher education as well as providing a snapshot of institutions on the path to sustainability. It covers seven critical dimensions of higher education including:

- curriculum,
- research and scholarship,
- operations,
- faculty and staff development and rewards,
- outreach and service,
- student opportunities, and
- institutional mission, structure and planning. (ULSF, 1999)

It is often difficult to 'get started' with sustainability activities in universities. Sustainability Assessment Tools can be very helpful to assess what progress is being made, and what still needs to be done.

These tools can help you identify a 'change project' in your institution.



The Auditing Instrument for Sustainability in Higher Education (AISHE)

<http://www.science.uva.nl/ecdo/dho21/publicaties/AISHE/AISEH-book1.5.pdf>

The AISHE was developed in recognition of the fact that, while various charters give direction on the way in which higher education can contribute to sustainable development, they do not offer guidelines on what exactly needs to be done. Hence there was need for a concrete list of criteria, operationalised through some auditing instrument. The AISHE was then developed to make it possible to decide by internal or external auditing, to which level the university (or a part of it) has succeeded in implementing sustainability. AISHE is also a tool that can foster participation in the auditing process. There are 20 criteria within five fields of attention:

- vision and policy,
- expertise,
- educational goals and methodology,
- education contents, and
- result assessment. (Roorda, 2001)

Graphical Assessment of Sustainability in Universities (GASU)

http://works.bepress.com/rodrigo_lozano/4/

The GASU was designed to facilitate the analysis, longitudinal comparison and benchmarking of universities' sustainability efforts and achievement. It makes use of indicators grouped under economic, environmental, social and educational dimensions and offers a condensed graphical overview of these indicators (Lozano, 2006).

For information and an activity to explore how sustainability assessments work, see the 'Education for Sustainable Development Innovations Programmes for Universities in Africa' materials (Module 3), available on www.unep.org/training/menta/toolkit.asp



Unit-based Sustainability Assessment Tool (USAT)

In considering these tools in the context of the UNEP Mainstreaming Environment and Sustainability into African Universities Programme's intention to integrate environment and sustainability initiatives into a wide range of different faculties and departments, administrative and research units, and given the way that universities tend to be managed via department or unit heads (within a broader systemic management system), it was necessary to develop a tool that could easily be used at department or unit level. Such a tool also needed to give insight into the 'whole' picture of sustainability in universities. There was also a need for a tool that could be flexibly used department, faculty or unit level to identify change projects, *or* to guide assessment of university wide change initiatives. The SAQ, AISHE and GASU were therefore reviewed and adapted, and were used as a basis for developing indicators for a **unit-based** sustainability assessment tool, with built-in flexibility to be used at departmental or unit level and/or across the entire institution.

The USAT is designed to established to what level universities have integrated sustainability concerns in teaching, research and community service, *but also considers* organisational level and management unit contributions, student initiatives *and* policy statements (similar to SAQ, AISHE and GASU). Like these other three tools, it is an indicator-based tool. It is divided into four parts for ease of administration:

- **Part A** pays particular attention to the core mission of universities and covers curriculum, teaching approach, research, community service activities, examinations/assessment and staff expertise. It is targeted at heads of teaching departments (HODs) to give their impression on the indicators.
- **Part B** deals with other university operations and the management of the university, including the estates division and management divisions such as human resources, planning and research.
- **Part C** deals with student activities which may be linked to, or independent of the other parts.
- **Part D** focuses on policy including institutional written statements.



NOTE: This makes the USAT a flexible tool to be used at individual department or faculty level, or at institutional level, to identify potential change projects / areas for future development and growth.



A whole systems approach (Sterling, 2003; Sterling, 2004) argues that the whole institution is of concern. Archer (1995) in her theory of social change, argues that different strata (or units) may possess different emergent properties and powers thus influencing the whole in different ways. For example, one faculty or unit may have different structures, histories, cultures, priorities, resources, leadership styles, visions, philosophies (including understandings of sustainable development), actors etc. to another, and may therefore influence the whole system in a different way to another faculty, department or unit. Thus, to get an in-depth and more complex picture of the different emergent powers that may be co-existing in various relationships to one another in a broader system (the university and its community), it is necessary to design a tool that can be used to study teaching departments and other institutional units at a university separately as some may be performing much better than others due to different influences and emergent properties, resulting in a larger impact or influence on the whole institution. If these are not differentiated in the analysis, areas of success and areas of possible intervention may be overshadowed, and may remain poorly understood in the context of the whole.

The USAT therefore facilitates a quick identification of departments leading, and departments lagging in sustainability as well as detection of the areas (indicators) in which they are leading or lagging. It therefore simplifies more complex emergent properties, but helps to identify areas of change and success through a relatively rapid assessment technique. Though the USAT is designed to be used at departmental/institutional unit level, the results representing the performance of various departments can be averaged to get the overall performance of the institution. Not all the teaching departments or institutional units at a university need necessarily be included in the survey though it is important to have all faculties represented if the results are to represent overall university sustainability performance. However, individual departments / units can also assess their own sustainability performance using the tool and benchmark themselves over time or compare themselves against other departments. They can also use the USAT as a basis for a deeper analysis of causal factors and emergent properties that are influencing their performance. This can contribute to reflexive and adaptive change management towards sustainable development.



Indicators: Part A of USAT

Teaching

The first part of the USAT (Part A) is for use in **academic departments**, or **research and teaching units**. It makes use of twenty indicators grouped under five clusters. These are:

- **Indicator cluster 1:** Curriculum
- **Indicator cluster 2:** Teaching approach
- **Indicator cluster 3:** Research/ and scholarship activities
- **Indicator cluster 4:** Community service
- **Indicator cluster 5:** Examination / assessment of sustainability topics
- **Indicator cluster 6:** Staff expertise and willingness to participate in sustainability teaching and research.



Use Part A of USAT to help identify potential change projects in academic departments and research units.

These have been coded for easier tabular/graphical representation of results. The curriculum cluster has six indicators (C1-C6), teaching approach has 5 (T7-T11), research and scholarship activities has six (R12-R17). Community engagement/community service is composed of five indicators (E18-22). Examination of sustainability topics is composed of three (X23-X25) and staff expertise and willingness to participate has three (S26-S28).

Indicator cluster 1: Curriculum

Indicators in the curriculum cluster are meant to establish if the department offers courses which deal with sustainability concerns and the integration of sustainability topics in such courses. They also determine the degree to which local and global sustainability issues and challenges form part of the department's teaching programme and the extent to which the department enrolls students in courses that engage sustainability concerns. In addition, it is intended to establish the extent of cross faculty collaboration in teaching sustainability topics.

The presence of courses that address sustainability issues requires further exploration to determine the level of integration of sustainability issues in these courses. The USAT does not

Compliment the use of the USAT curriculum assessment with interviews and documents to get a more comprehensive picture.



distinguish between or elaborate on the dimension(s) of sustainability (environmental, economic or social sustainability). For these dimension to surface there is need to qualify the USAT with interviews with heads of departments to establish in more detail what dimensions of sustainability are privileged or emphasised in their department; or to complement it with document analysis as explained later. Documents may also serve to triangulate data on the extent to which sustainability topics are integrated in the courses. Establishing enrolment in courses with sustainability content helps give a picture of the extent to which students get exposure to that information. This can also be qualified by asking whether those courses are compulsory or not.

Wright (2002, 2004) argues that universities, through their curricula, should promote ecological literacy by enabling the development of an environment and social justice literate populace to help in understanding the functions of world, human impacts on the biosphere and on other people, and translation of understanding to action. Including aspects of sustainable development in the curriculum may therefore contribute to social change, as learners are empowered to make better decisions and choices in life. Students can potentially become more environmentally literate if their subjects consider environmental questions, and more socially conscious if social justice issues are foregrounded in curricula. If alternative approaches to economics that strengthen sustainable development are shared, students are more likely to be able to conceptualise alternative economic frameworks and systems that can strengthen sustainability practices and social justice.

Indicator cluster 2: Teaching approaches

This cluster of indicators determines how far teaching approaches contribute to the development of critical thinking skills, capacity to make informed decisions, a sense of responsibility, respect for the opinions of others and integrated problem solving skills among students. Selection of these characteristics to inform indicators in the USAT was guided by the AISHE. According to Roorda (2001) these are characteristics that are essential for enabling people to engage in sustainability practices and actions.

Including sustainability issues in the curriculum is important to strengthen capacity for **social learning and change** among students through giving them exposure to knowledge concerning past, current and future sustainability challenges. There is also a need to support students to develop skills and values that are

See the 'Education for Sustainable Development Innovations Programmes for Universities in Africa' materials (Module 2), available on www.unep.org/training/imesa/toolkit.asp for a review of transformative learning approaches in ESD.



necessary for living sustainably in a changing world, and to confront complexity, uncertainty, risk and change. Sustainable development issues are evolving and differ with geographical areas and socio-historical and cultural contexts. It is therefore necessary to complement sustainability curricula with a teaching approach which develops the above mentioned characteristics among students to enable them to adapt to evolving sustainable development issues and challenges and to live sustainably even in unfamiliar environments and in the face of complex issues and risks such as climate change for example. Graduates must therefore be equipped to deal with conflicting norms and values and uncertain outcomes and futures (Corcoran and Wals, 2004).



Indicator cluster 3: Research and scholarship activities

Indicators falling under this group determine the extent to which staff and students in the department are involved in research and scholarship activities in the area of sustainability; and the degree to which local and global sustainability issues and challenges form part of their research activities. They are also meant to establish if there is collaborative research between the department and other stakeholders in pursuit of solutions to sustainability problems. The indicators also help to determine the extent to which aspects of sustainable development are used in the selection/execution of research activities and to establish the extent to which sustainable development is reflected in the department's research outputs. All this gives an idea of how far sustainable development challenges are given visibility in research and community service activities in the concerned department.

Research, especially applied or action research can complement the curriculum by equipping students with hands-on experience in solving real world problems. Such research processes can support students to develop the skills necessary to solve real problems, thus making a positive contribution to societal well-being. Though local sustainability issues are especially important because they are challenges facing immediate society, it is necessary to be involved in global sustainability issues as environmental and sustainability issues know no boundaries. In addition, collaboration and cooperation is important as it leads to quality results due to a variety of expertise and backgrounds among participants. It facilitates coordination of efforts and sharing of information (Wright, 2002; Wright, 2004).

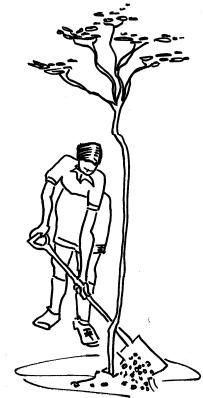
For more information or ideas for research / service /service learning, assessment and examination related change projects, see Module 2 of the **'Education for Sustainable Development Innovations Programmes for Universities in Africa'** materials, available on www.unep.org/training/mesa/toolkit.asp



Indicator cluster 4: Community engagement

This cluster of indicators is meant to establish the level of involvement of departments in sustainability related community engagement activities and the extent to which each department commits its resources to such projects. It is also intended to determine the level to which this involvement helps in addressing sustainable development challenges in the local community. The cluster also determines the level to which aspects of sustainable development are considered in selection and execution of community engagement projects and the level of collaboration in sustainability related community engagement projects between the department and other stakeholders.

Community engagement provides an opportunity for both staff and students to gain experience in addressing sustainability challenges facing society, and like in applied research, it affords them a chance for the development of problem solving skills. Service learning programmes which are part of community engagement have been widely used in education for sustainable development in universities. Such programmes create a situation where both the university and the community end up winners through provision of experiential learning, which is sometimes a pre-requisite of some university programmes, to students; and addressing some of the challenges facing the community respectively.



Indicator cluster 5: Examination/assessment of sustainability topics

The indicators under examination/assessment of sustainability topics attempt to establish the extent to which issues are examined or assessed and the extent to which they are considered in evaluating projects or traineeships. According to Roorda (2001) if a clearly visible examination or assessment of sustainable development issues and topics is absent, students may get the impression that sustainability is a kind of secondary consideration. It is therefore important to examine and assess sustainability issues and activities to encourage students to consider them seriously within the institutional practices of the university.

Indicator cluster 6: Staff expertise and willingness to participate

The intention of indicators under this cluster is to determine staff expertise in the area of sustainability and to establish their willingness to carry out sustainability research and community

service and teach sustainability topics. Expertise in the area of sustainability is essential in improving integration of sustainability issues in a department's activities. Without that expertise it becomes difficult to carry out sustainability research and to teach sustainability topics. At the same time, that expertise will be put to good use if complemented with a willingness to do that kind of research or teaching among staff. Sustainability issues are relatively 'new' in the context of longer term university traditions and curricular practice, and may therefore require staff development.

Indicators: Part B of USAT

Operations and Management

The first part of the USAT by design targets teaching departments and hence emphasises the core functions of the university leaving out other management practices. The second part is dedicated to other university operations and management practices. The design of the USAT Part B was modelled on the operations section of the SAQ (ULSF, 1999). It covers university operations that fall outside of teaching, research and community service. These include waste management practices, air pollution, energy, water conservation, landscaping, pest management, transportation programmes and purchasing. According to ULSF (1999), these are (among others) some of the operational practices emphasised by institutions moving towards sustainability internationally. Part B of the USAT gives an option to add any other sustainability operations in a university context not mentioned in the list. It also includes management practices, for example staff recruitment and staff development, research funding allocations and academic planning. These practices were included since they have potential to influence the sustainability of other university units. To cite an example, the undertaking of sustainability research in teaching departments and research institutes can be influenced by the allocation of funds for such projects by the university research division. The various practices have been coded for easier representation in tables or graphs. The same assessment criteria as for the USAT Part A are used in Part B.

The operations section also requires the assessor to indicate prime project areas and to show where he/she does not have adequate information regarding the practice. Another column asks for



Use Part B of USAT to help identify potential change projects in university operations and management practices.

For more information or ideas on operational management and sustainability (and organisational change), see Module 3 of the **'Education for Sustainable Development Innovations Programmes for Universities in Africa'** materials, available on www.unep.org/trainin g/ mesa/ toolkit.asp



reasons for the implementation of the practice. This is intended to find out if the practice was driven by the need to respond to sustainability concerns or by other factors, despite the fact that it has sustainability implications. The purpose of the last column is basically to establish if the university is doing all it can regarding the practice or whether there is still room for improvement.

Indicators: Part C of USAT

Student Involvement

Another aspect to consider in university wide sustainability assessment is the way students are involved in the operational management in the university (e.g. are student groups involved in recycling, waste management or energy saving initiatives on campus?), and how students think about and participate in sustainability issues. Part C of USAT draws on the SAQ (ULSF, 1999) to design a set of indicators for student involvement in sustainability issues. Such initiatives can be linked to other activities (outlined in Part A and B of USAT), or they can be self-initiated, independent initiatives taken by students outside of the mainstream teaching, research and management activities of the university. For this reason it is necessary to consider student involvement within a separate indicator framework within the USAT.

The indicators in the USAT Part C include assessment of student involvement in voluntary activities related to sustainability, student orientation programmes and career counselling, student politics and governance for sustainability, collaboration of students and management on sustainability issues, and student involvement in sustainability practices in residences (amongst others). The USAT indicators therefore cover voluntary activities by students, as well as student support, student organisations and governance systems.

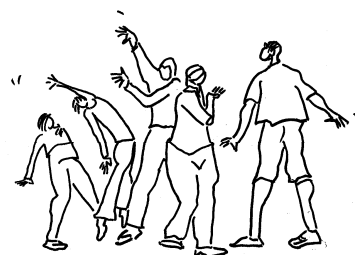
Interviews or student project analysis might be needed to gain more information on this aspect of the USAT.



Use Part C of USAT to help identify potential change projects related to student involvement in sustainability issues in the University.

Students are a powerful force for helping a University re-orient towards sustainability. Integrating sustainability questions into all aspects of university life contributes to a broad based approach to ESD in universities.

See www.unep.org/training/mesa/toolkit.asp for some discussion and ideas for student involvement.



Policy Indicators: Part D of USAT

Policy and written statements

Part D of the USAT is designed to assess sustainable development related policy at various levels, and other university written statements. It also partly draws from the SAQ (ULSF, 1999). It is targeted at university managers. At national level, Part D focuses on integration of sustainability in higher education policy and the degree to which such higher education policy is shaped by national and global sustainability issues and policy. It also considers the level to which institutional policies and written statements reflect mainstream sustainability issues, and the degree to which they show commitment of the university to national and global sustainable development agendas. According to ULSF (1999), institutional commitment to sustainability can also be expressed through written statements of the mission and purpose of the institution.



Use Part D of USAT to help identify potential areas of intervention related to university policies and written statements.



Rating Part A, B, C and D of USAT

The indicators under USAT Part A are rated by the head of each teaching department/unit forming part of the study, using the given assessment criteria. For USAT Part B, the head of the department or management unit responsible for the practice should undertake the assessment. For USAT Part C, the Student Representative Council or a similar student leadership body can undertake the assessment while for Part D those in university management are targeted, for example, the Deputy Vice

Work with your head of department/other heads of departments/units in the University to complete the USAT questionnaire. Decide on who to work with based on the kind of change project you think you can realistically develop and implement.

Chancellor. The rating is based on evidence indicating the presence of the identified indicators and practices. This results in ordered response levels (Uebersax, 2006) loosely based on the Likert scale. Explanation and translation of the scales into percentages was based on the GASU (Lozano, 2006). Respondents select the rate from six choices ranging from X to 4 where:

- **X** (don't know) indicates a lack of information concerning the practice but not necessarily an absence of such information.
- **0** (none) indicates the absence of information regarding the indicator in question; this is an equivalent of about 0% of such information.
- **1** (a little) indicates that the evidence shows poor performance in the concerned indicator and this is about 25% of full information regarding the indicator.
- **2** (adequate) indicates that the evidence shows regular performance, about 50% of full information required by the indicator.
- **3** (substantial) indicates that the evidence shows good performance about 75% of full information.
- **4** (a great deal) indicates that the evidence shows excellent performance more than 75% of full information.

Understanding X: If you get a response rate of more than 40% of the total responses as X in the assessment, then you need to try to identify another, more knowledgeable main respondent.

Individual X scores in the assessment can also be followed up with other respondents (the main respondent may be able to refer you to a relevant person). X issues can also be discussed in staff meetings or other collective forums where someone else might have insight into the question being raised. X is therefore an indicator that requires further probing until you are satisfied that it should rather be a 0 score or any other relevant score.

To establish whether X can be allocated, you need to have done preparatory research (document searches) to identify whether information *does* exist, but is not known. X may be changed to 0 if, after trying other respondents, document searches and interviews no information can be found. X is therefore a 'holding score' which requires further investigation and research before assigning a more definitive score.



Additional documents and interview data

To supplement information generated through using Part A of the USAT, it is necessary to collect course outline(s) and most recent past examination question paper(s) for at least one course in each department in which sustainable development issues are highly integrated. The documents serve to triangulate and provide evidence of such work. A list of research topics and publications by students and staff members in the department for the previous year will provide further evidence of sustainability research. Both documents will elaborate on the nature of sustainability issues the department is involved in, whether ecological, social or economic sustainability issues. Community engagement reports (departmental or at university level) also help to substantiate and elaborate information related to community engagement initiatives. The USAT does not provide such information but it is essential in determining the relevance of the issues being addressed in relation to the context. Similarly, the university website can also be a valuable source of additional information.

To complement Part B of the USAT, strategic plans and other relevant documents from the specific unit/management sector can help extend the insights gained from the assessment. For example, there may be annual expenditure records that can help assess energy use on campus etc. At the same time, the university website can also be a source of data.

To complement and extend Part C of the USAT, student interviews, the student newspaper, resident management committee minutes, or Student Representative Council documents might provide more information on student involvement in sustainability issues (amongst other sources).

Part D can be complemented through collection and analysis of policies and written statements, for example, sustainable development policy, environmental policy, HIV/AIDS policy, Research policy and Vision and Mission statement to mention a few. These documents will provide examples and therefore substantiate USAT data.

For a more in-depth assessment of university sustainability, complement the USAT Part A-D assessments with interviews and documents to get a more comprehensive sustainability picture.



Supplementing USAT questions with follow up document analysis and interviews will provide you with a more in-depth assessment.

Interpreting the results

USAT Part A

Results of Part A of the USAT can be presented in table form or graphically. A table can be generated, showing the performance of all the departments that were part of the study and their respective rates per indicator (see Table 1 below).



Table 1. USAT Part A: Departmental sustainability rating per indicator (hypothetical)

Indicator Code	Score									
	Management	Accounting	Education	Biochemistry	History	Anthropology	Law	Average	Total (28)	% rating
C1	1	1	2	2	3	4	2	2.1	15	54
C2	2	1	3	2	3	4	2	2.4	17	61
C3	2	1	2	2	2	3	1	1.9	13	46
C4	1	1	3	2	3	2	1	1.9	13	46
C5	1	1	2	3	2	4	2	2.1	15	54
C6	3	1	2	2	2	4	1	2.1	15	54
T7	4	2	3	1	1	3	4	2.6	18	64
T8	4	2	2	0	1	3	4	2.3	16	57
T9	2	1	1	0	2	4	3	1.9	13	46
T10	2	1	2	2	1	4	2	2.0	14	50
T11	1	1	2	3	2	3	2	2.0	14	50
R 12	4	3	3	3	4	4	3	3.4	24	86
R 13	4	3	3	3	3	4	3	3.3	23	82
R 14	4	3	4	3	4	4	3	3.6	25	89
R 15	3	4	4	3	3	4	4	3.6	25	89
R 16	4	4	4	3	4	4	4	3.9	27	96
R 17	3	3	4	3	4	4	4	3.6	25	89
E18	2	2	2	2	2	2	1	1.9	13	46
E19	2	1	2	2	2	3	1	1.9	13	46
E20	1	1	1	3	3	2	0	1.6	11	39
E21	2	0	3	2	3	2	0	1.7	12	43
E22	3	1	3	4	1	2	0	2.0	14	50
X23	1	1	2	0	0	1	0	0.7	5	18
X24	1	0	1	1	1	1	1	0.9	6	21
X25	0	0	0	0	0	2	1	0.4	3	11
S26	1	2	3	2	2	4	2	2.3	16	57
S27	2	1	1	0	1	4	2	1.6	11	39
S28	1	2	2	0	1	3	1	1.4	10	36
Average	2.2	1.6	2.4	1.9	2.1	3.1	1.9	2.2		
Total (112)	61	44	66	53	60	88	54			
% rating	54	39	59	47	54	79	48	54		

Results presented this way allow for a quick comparison of performance in the indicated areas among departments in a university. Total performance for each department is obtained by adding up the rates for each of the indicators. Dividing the total by 28 (the total number of USAT indicators for Part A) gives the average performance of the department. Average university performance for each indicator can furthermore be obtained through totalising the performance of each single indicator across departments and dividing by the total number of departments which formed part of the study.



From the hypothetical situation presented in Table 1, a quick scan of the results would show that the Anthropology Department at the university in question has higher scores (average rate 3.1 (emboldened in table 1)) than all the other departments. This helps as a quick pointer to departments that require strengthening in the area of sustainability provided the intention is to have all departments incorporating sustainable development concerns in their activities. At the same time, it is also shown that the university is stronger in indicator R16 with a rating of 3.9. This is also a quick pointer to the general areas (defined by the indicators) lagging behind (e.g. X25) and requiring attention to improve the university's overall performance.

The results can also be presented using radar diagrams. The radar diagram can represent the sustainability performance of each of the departments at a university. Figure 1 below represents the performance of the Anthropology department in the hypothetical situation represented by the data in Table 1.



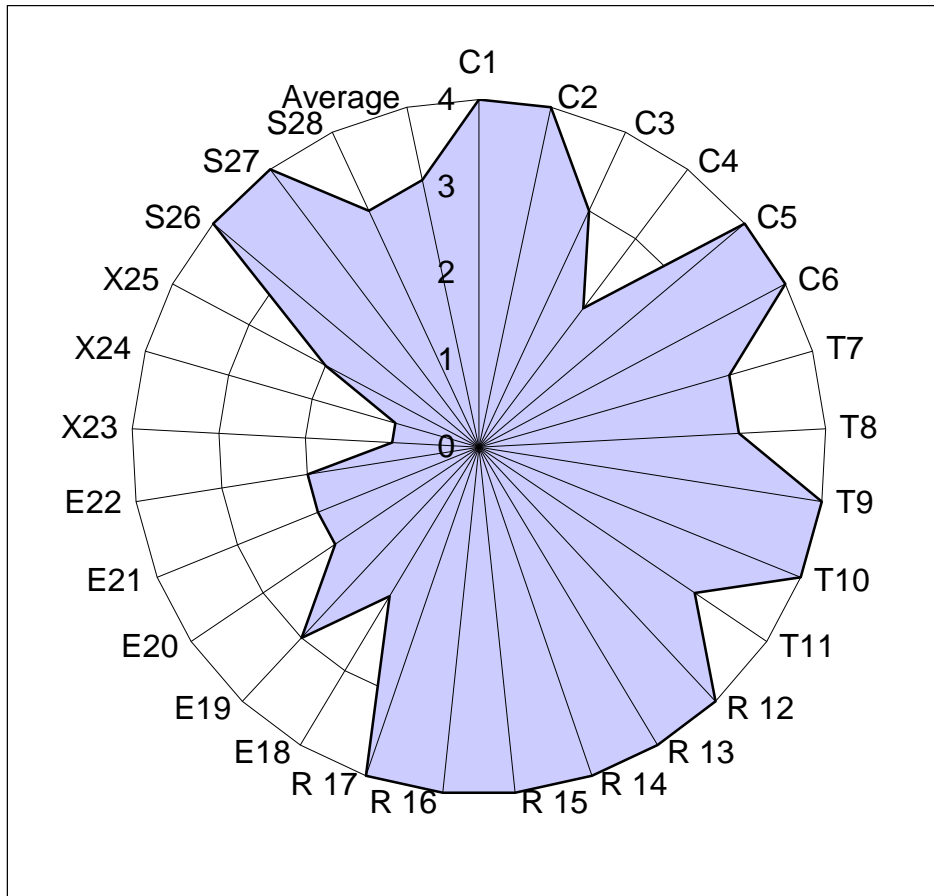


Figure 1. Sustainability Performance of the Anthropology Department

Representing departmental performance in such a diagram facilitates a quick identification of the areas in which each of the departments has high integration of sustainability initiatives in place and those in which there is low integration and where there may be need for extending and/or expanding existing initiatives. From the diagram above for example, the department scored highest in the research cluster (R12-R17) in which all indicators scored 4, which is the maximum possible score. The area with lowest scores can also be identified as the examinations cluster in which indicators (X23-25) scored between 1 and 2. If the department was in the process of promoting sustainability in all its operations, examinations could thus be identified as the area in most need of intervention.



Total performance of each department can be represented against other departments at the same university allowing comparisons across departments to be made. The department can also benchmark its sustainability and monitor progress with time.

Figure 2 represents the overall performance of all the departments out of a maximum possible of 112 scores (4 possible scores per indicator multiplied by 28 indicators). It shows both the total performance of each of the departments and the scores for each of the indicators per department.

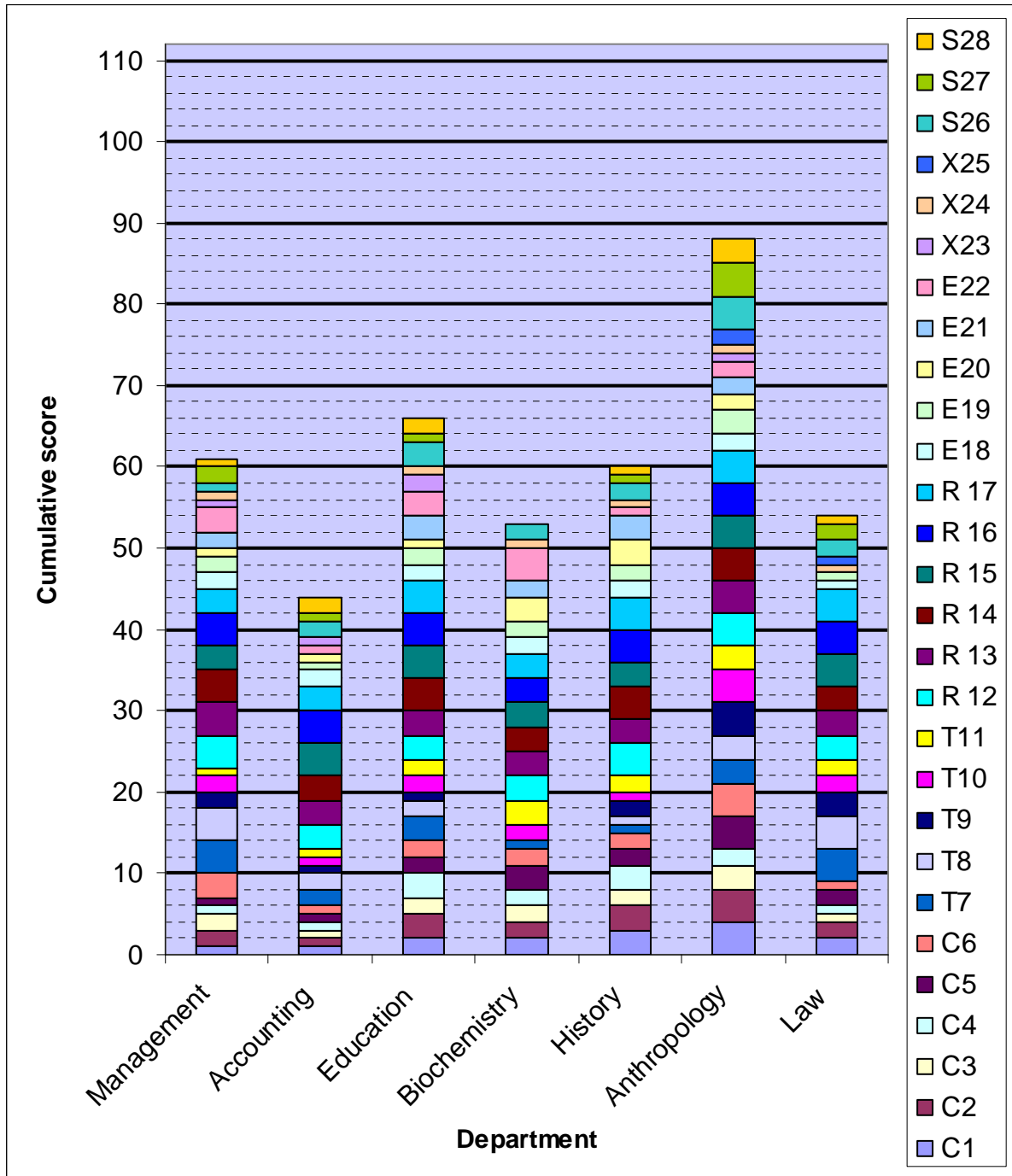


Figure 2. Overall departmental performance

Comparison can also be based on average rates for each department (the Average row immediately below S28 in Table 1)



or on percentage rating (total performance of each department converted into percentage) represented by the last row in Table 1, see Figure 3 below.

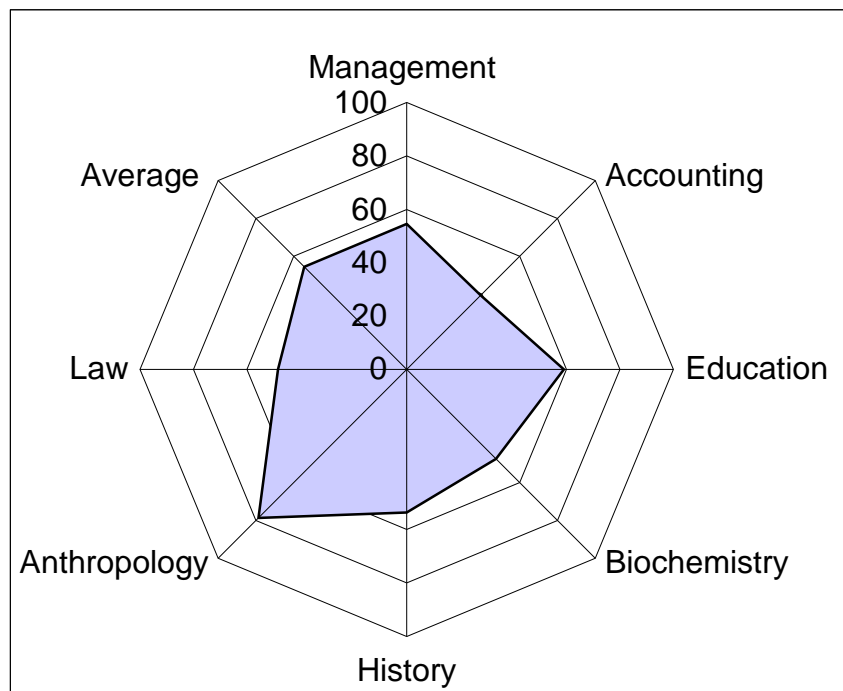


Figure 3. Average sustainability performance per department (%).

Figure 2 and 3 allow for a quick identification of departments with high integration and those with low integration of sustainability. In both graphs, it is easy to recognise that the Anthropology Department has the highest integration of sustainability in its operations while Accounting has the lowest. In universities moving towards sustainability, the USAT is therefore providing a quick way of determining the *status quo* in integration of sustainability, which is the starting point in implementing or promoting sustainability. If intervention is to be at departmental level, USAT results from the hypothetical case presented above can influence the selection of departments to focus on.

Total or average performance (in absolute figures or as percentages) of each indicator in a university can also be presented graphically (see columns titled Average, Total and % rating in Table 1). This form of result generated from sustainability assessment using the USAT averages the performance of each of the indicators across all the departments forming part of the study, which gives an estimate of the university's performance per indicator. Figure 4 below represents

this average performance of all indicators across all the departments in the hypothetical case.

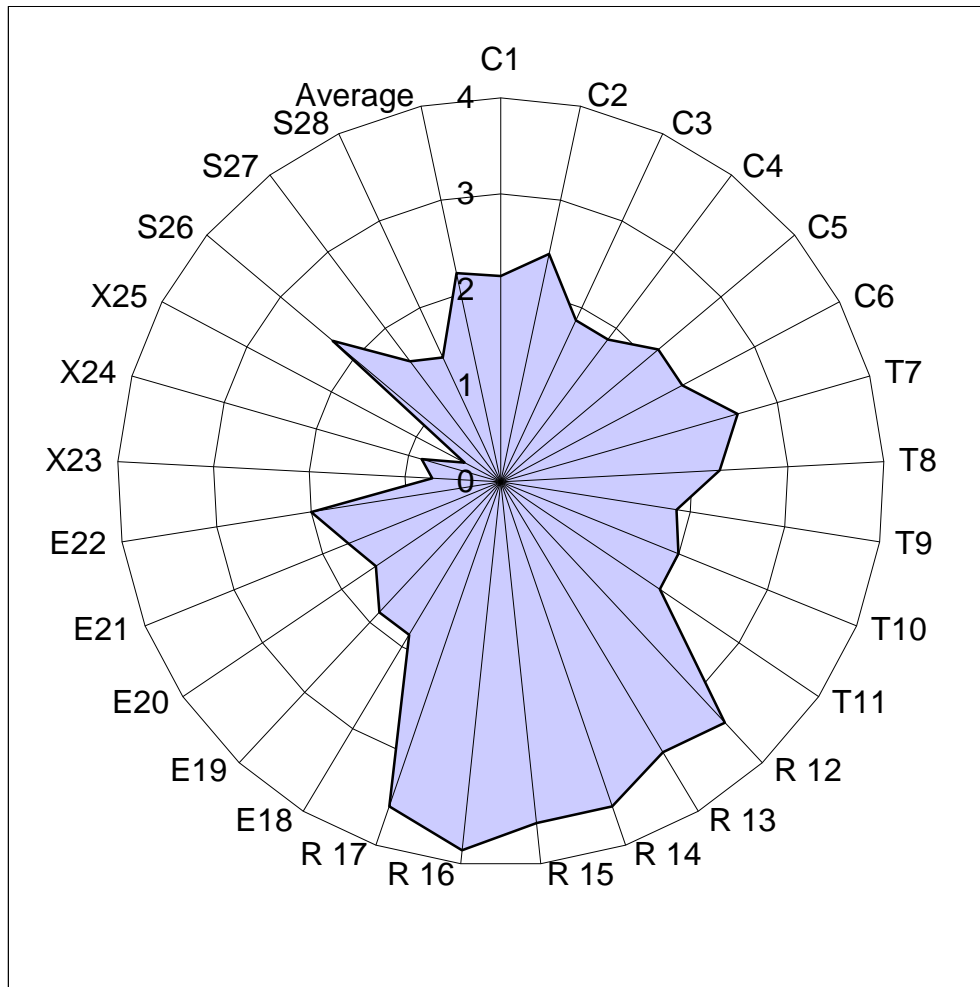
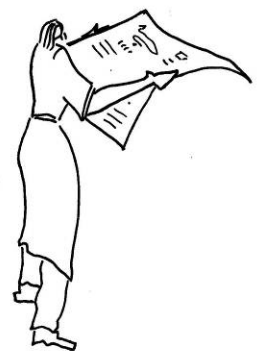


Figure 4. Average university sustainability performance per indicator (%)

A quick scan of Figure 4 shows that the university has high average scores in the research cluster of indicators and very low scores in the examinations cluster. This facilitates a quick identification of broad operational areas of the university in which there may be a need for intervention. In addition to identifying departments that have low integration of sustainability in their operations, a university can then define lagging areas in which all departments, including those with high integration of sustainability, have to pay special attention to. In the hypothetical case presented here this could be examinations.



Both the average sustainability performance department and the average sustainability performance per indicator provide a way of benchmarking the university's sustainability. This makes it

possible for the university to monitor its progress with time. They also allow for comparisons to be made among universities.

USAT Part B

Table 2 shows raw data from a hypothetical assessment of sustainability using part B of the USAT. It represents the performance of the university in selected non-teaching practices forming USAT Part B indicators.

Table 2. USAT Part B: Operations and management sustainability rating per indicator (hypothetical)

Indicator	Estates Division
WR1	1
RW2	2
TW3	2
AP4	0
AQ5	1
BC6	2
EC7	2
LP8	2
PE9	3
OP10	1
TP11	1
BF12	0
WC13	3
PM14	4
SL15	4
OE16	1
RB17	3
SH18	1
OR19	1
ST20	3
RE21	2
IP22	2
RF23	2
AW24	4
SV25	3
Average	2
Total (100)	50
Rating (%)	50

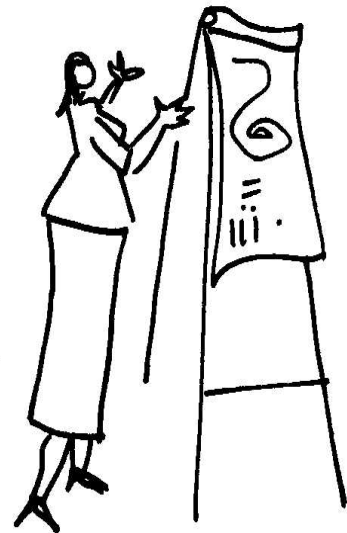


Figure 5 below is a hypothetical illustration of USAT Part B data presented in Table 2.

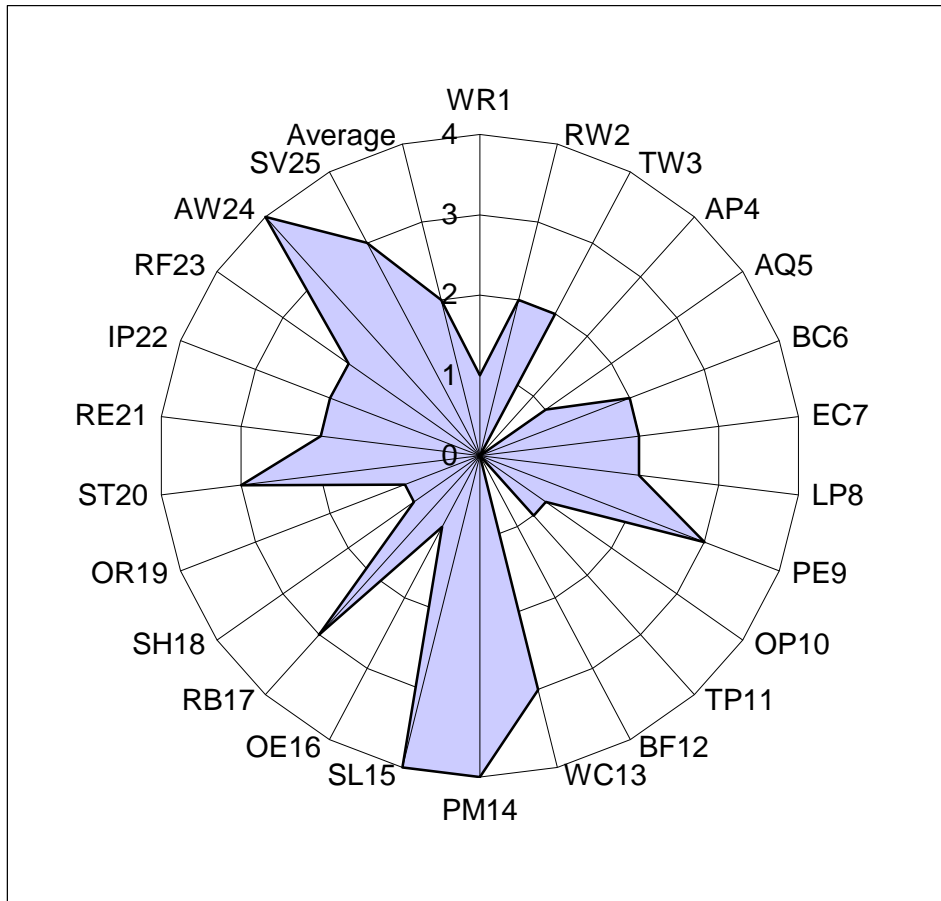


Figure 5. Sustainability performance of the university in various operations and management practices

Figure 5 also enables easy identification of areas of high integration of sustainability initiatives and those with low integration which enables informed decision making in promoting sustainability in university operations and management. Figure 5 shows areas of low sustainability integration to be 'carbon dioxide and air pollution reduction practices' (AP4) and 'use of bio fuel' (BF12) both of which scored 0, with areas of high integration being 'integrated pest management practices' (PM14), 'sustainable landscaping' (SL15) and 'awareness raising in sustainable development' (AW 24).

As in the case of USAT Part A, assessment of sustainability using USAT Part B produces data which makes it possible to benchmark university performance in its operations and management, with the opportunity for continuous assessment to check on progress with time. Part B also allows for comparisons among universities.



USAT Part C

Table 3 below presents raw data from a hypothetical sustainability assessment using Part C of the USAT.

Table 3. USAT Part C: Students' involvement sustainability rating per indicator (hypothetical)

Indicator	Students' Involvement
SC1	1
CC2	0
ES3	4
SD4	2
OP5	1
SA6	1
VS7	2
SI8	2
SR9	2
SM10	2
ES11	3
SW12	1
Average	1.8
Total (48)	21
Rating in %	43.8



Figure 6 is a representation of results of sustainability assessment using Part C of the USAT as in Table 3 above. It gives a snapshot of student opportunities and activities in sustainability initiatives.



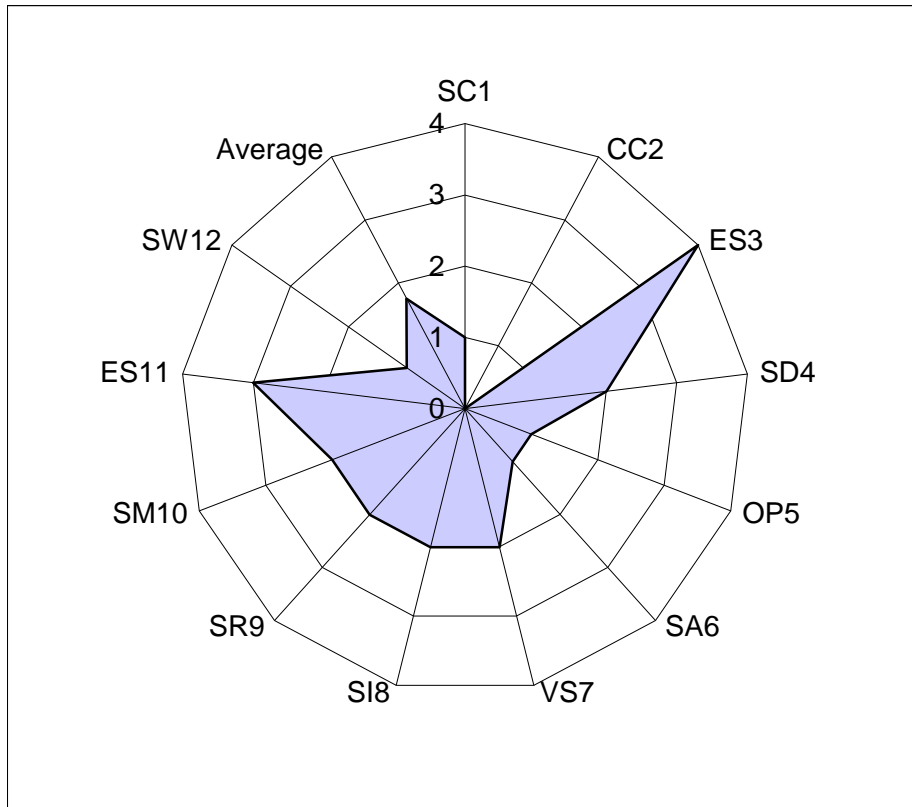


Figure 6. The extent of involvement of students in sustainability initiatives

Figure 6 allows identification of opportunities for, and activities by students in which sustainable development issues are mainstreamed. It also reveals the level of integration of sustainability in such initiatives. In the above hypothetical case, the university is shown to have most of the identified practices except 1, 'career counselling focused on work opportunities related to environment and sustainability' (CC2) which scored 0. The indicator which scored highest (4) is 'environmental societies or other student group(s) with an environmental or sustainability focus' (ES3).

Data generated using USAT Part C can be used to benchmark sustainability initiatives assess progress with time and for comparison purposes.



USAT Part D

Table 4 presents raw data from hypothetical assessment of sustainability in a university using USAT Part D.

Table 4. Results of sustainability assessment using Part D of the USAT

Indicator	Policy
PH1	1
PN2	1
PS3	1
PE4	3
PR5	2
PV6	3
PC7	1
PG8	1
PI9	1
PP10	2
Average	1.6
Total (40)	16
Rating in %	40



Results of sustainability assessment using part D of the USAT (Table 4) can be represented as in Figure 7. As is the case with Part C, Part D is meant to establish the presence of identified policy related practices and to rate performance based on level of integration of sustainability initiatives.



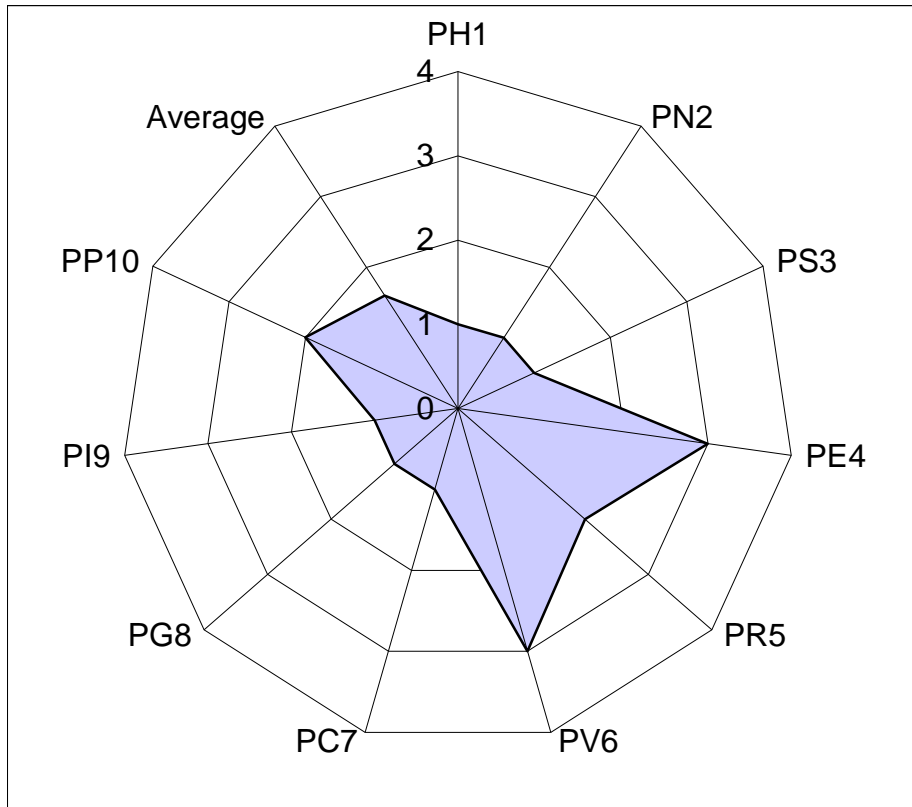


Figure 7. Sustainability performance of the university in policy practices

In the example above, the university has all the identified practices. Levels of integration of sustainability however differ with most practices scoring below 2. Only two practices were rated 3, that is, 'sustainability/sustainability related policies' (PE4) and integration of aspects of sustainable development in university vision and mission statement' (PV6).

Part D of the USAT, like the other three sections, generates data which can be used to benchmark university sustainability in policy issues and to assess progress with time. It also allows for comparisons among many departments.



Putting it all together

Putting together all the reports (from USAT Part A, B and C) into a University-wide report will provide useful insight into the entire institution's sustainability profile, and can help to identify change projects at university-wide level. Such a report could be tabled at senior management meetings or at Senate level, to argue for system-wide support for change towards sustainability. If carefully analysed and described (using complementary qualitative data) insight will also be gained into the differences and similarities in how sustainable development is being interpreted and practiced in the University. It can also bring out various relationships in sustainability practice (e.g. between departments and student activities, or between management and operational units and student activities), or identify where these don't exist.

See Module 3 of the **'Education for Sustainable Development Innovations Programmes for Universities in Africa'** materials for more insight into how to approach institutional change at a broader level. Available on www.unep.org/trainin/g/ mesa/ toolkit.asp

Conclusion

According to Lozano (2006), of the three approaches that can be used to assess and report sustainability, that is, indicator-based assessments, accounts and narrative assessments, indicator-based assessments are better in terms of transparency, consistency and usefulness for decision-making. They are measurable and comparable, and give a 'quick picture' of what is taking place. The USAT presents an alternative way of doing a sustainability assessment that allow for unit-based assessments, especially in teaching departments. Its major strength is that it is flexible, and easy to use, while giving a picture of progress being made towards sustainability. Data from assessments using the USAT are easy to represent, understand and compare, and can easily be discussed at for example staff meetings.

The other advantage of USAT is that it allows for assessment of the institution in constituent parts and analyses these separately before building up the whole picture again, thus allowing for a capturing of the specific contribution and diversity of individual departments. As indicated, however, it needs to be triangulated with other data collection methods to verify results and to

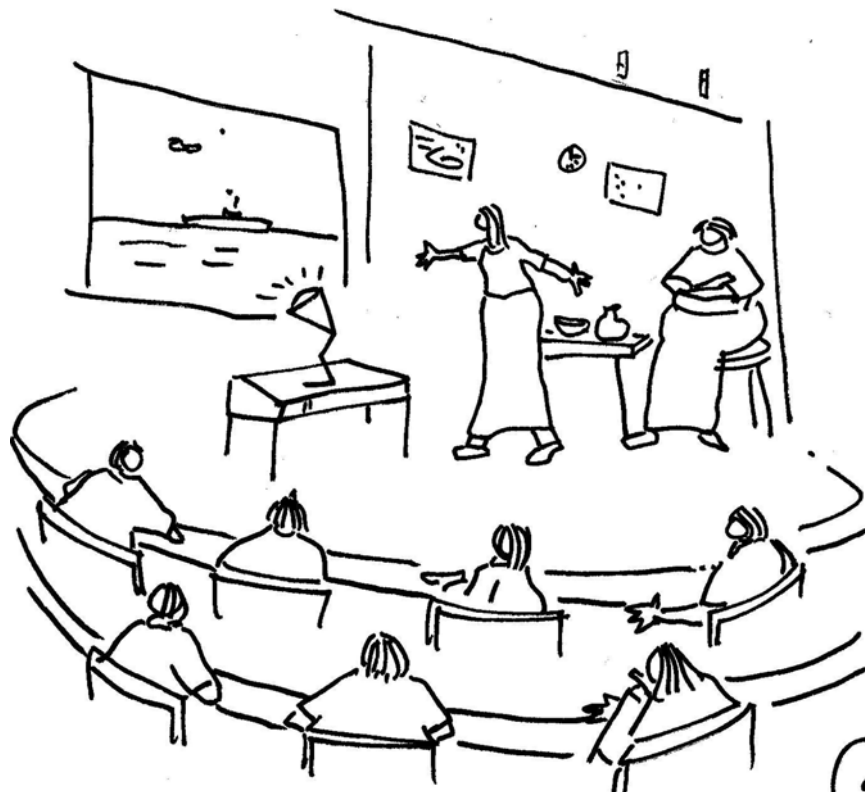


elaborate on the dimensions of sustainability which are not apparent from the indicators.

A more in-depth, qualitative analysis is also possible, using USAT as a starting point. Such an analysis might probe key influences such as:

- Available resources
- Structures and organisational means
- Qualifications, competence and interests of actors
- Length of time (history) of sustainability practices
- Philosophical assumptions influencing concepts of sustainable development etc.
- Demographics of student and staff involvement in sustainability issues etc.

For this USAT provides a starting point which can help to sample or identify departments, units or issues that require more in-depth study and analysis.



References

- Archer, M. S. (1995). *Realist social theory: The morphogenetic approach*. Cambridge: Cambridge University press.
- Clugston, R. M. and Calder, W. (2000). Critical dimensions of sustainability in higher education. In W. Leal Filho (Ed.), *Sustainability and university life*, (2nd Ed.) (pp 31-46). Frankfurt: Peter Lang.
- Corcoran, P. B. and Wals, A. E. J. (Eds.) (2004). *Higher education and the challenge of sustainability*. Dordrecht: Kluwer Academic Publishers.
- Lozano, R. (2006). A tool for a Graphical assessment for sustainability in Universities (GASU). *Journal of Cleaner Production*, 14, 963-972.
- Nicolaides, A. (2006). The implementation of environmental management towards sustainable universities and education for sustainable development as an ethical imperative. *International Journal of Sustainability in Higher Education*, 7(4), 414-424.
- Roorda, N. (2001). Auditing instrument for sustainability in higher education. Dutch Committee on Sustainable Higher Education (DHO).
- Shriberg, M. (2002). Institutional assessment tools for sustainability in higher education: strengths, weaknesses, and implications for practice and theory. *Higher education Policy*, 15(2), 153-167.
- Shriberg, M. (2004). Assessing sustainability: Criteria, tools and implications. In P. B. Corcoran and A. E. J. Wals (Eds.), *Higher education and the challenge of sustainability* (pp.71-86). Dordrecht: Kluwer Academic Publishers.
- Sterling, S. (2003). *Whole systems thinking as a basis for paradigm change in education: Explorations in the context of sustainability*. Unpublished doctoral thesis, University of Bath, United Kingdom.
- Sterling, S. (2004). Higher education, sustainability and the role of systemic learning. In P. B. Corcoran and A. E. J. Wals (Eds.), *Higher education and the challenge of sustainability* (pp.49-70). Dordrecht: Kluwer Academic Publishers.
- Uebersax, J. S. (2006). Likert scales: dispelling the confusion. Statistical Methods for Rater Agreement website. Retrieved 08 January 2008 from: <http://ourworld.compuserve.com/homepages/jsuebersax/like rt2.htm>.



- University Leaders for a Sustainable Future (1999). Sustainability assessment questionnaire (SAQ) for colleges and universities. Washington, DC: University Leaders for a Sustainable Future.
- Wright, T. (2004). The evolution of sustainability declarations in higher education. In P. B. Corcoran and A. E. J. Wals (Eds.), Higher education and the challenge of sustainability (pp.7-19). Dordrecht: Kluwer Academic Publishers.
- Wright, T. S. A. (2002). Definitions and frameworks for environmental sustainability in higher education. *International Journal of Sustainability in Higher Education*, 3(3), 203-220.

APPENDIX A

Unit-based Sustainability Assessment Tool

PART A

Teaching, Research and Community Service

Assessment Criteria

Rating

X	=	Don't know	no information concerning the practice
0	=	None	there is total lack of evidence on the indicator
1	=	A little	evidence show poor performance
2	=	Adequate	evidence show regular performance
3	=	Substantial	evidence show good performance
4	=	A great deal	excellent performance

Code	Indicator	Score					
		x Don't know	0 None	1 A little	2 Adequate	3 Substantial	4 A great deal
	Curriculum						
C1	The extent to which the department offer courses that engage sustainability concerns						
C2	The level of integration of sustainability topics in courses referred to above						
C3	The degree to which local sustainability issues and challenges form part of the department's teaching programme						
C4	The degree to which global sustainability issues and challenges form part of the department's teaching programme						
C5	The extent to which the department enrol students in courses that engage sustainability concerns						
C6	The level of cross faculty collaboration in teaching sustainability programmes						
	Teaching approach How far the teaching approach contributes to development of the following characteristics among students:						
T7	The capacity to make informed decisions						
T8	Critical thinking skills						

T9	A sense of responsibility								
T10	Respect for the opinions of others								
T11	Integrated problem solving skills								
	Research and scholarship activities								
R12	The extent to which the department (staff and students) is involved in research and scholarship in the area of sustainability								
R13	The degree to which global sustainability issues and challenges form part of the department's research								
R14	The degree to which local sustainability issues and challenges form part of the department's research								
R15	The extent to which the department is collaborating with other faculties, institutions and stakeholders in pursuit of solutions to sustainability problems								
R16	The extent to which aspects of sustainable development are used in selection/execution of research								
R17	The level to which aspects of sustainable development are reflected in the department's research outputs								
	Community Engagement								
E18	The extent to which the department (staff and students) is involved in community engagement in the area of sustainability								
E19	The level of commitment of the department's resources in sustainability projects in the community								
E20	The degree to which local sustainability issues and challenges form part of the department's community engagement								
E21	The extent to which the department collaborates with other stakeholders in addressing community sustainability challenges								
E22	The extent to which aspects of sustainable development are used in selection/execution of community engagement projects								
	Examination (assessment) of sustainability topics								
X23	The extent to which sustainability aspects are assessed/examined during course								
X24	The extent to which sustainability aspects are considered in evaluating/assessing projects								
X25	The degree to which sustainability aspects are assessed in evaluating service learning programmes								
	Staff expertise and willingness to participate								
S26	The level of expertise of staff members in the area of sustainability								
S27	The extent to which staff members are willing to carry out research and service activities on sustainability aspects/topics								
S28	The extent to which staff members are willing to teach sustainability topics								
	Others (please specify):								

APPENDIX B

Unit-based Sustainability Assessment Tool

PART B

Operations and Management

Assessment Criteria

X	=	Don't know	no information concerning the practice
0	=	None	there is total lack of evidence on the indicator
1	=	A little	evidence show poor performance
2	=	Adequate	evidence show regular performance
3	=	Substantial	evidence show good performance
4	=	A great deal	excellent performance

(Add a tick (✓) for key project areas and where more information is needed)

Code	Practices	Rate	Key area	Inadequate info	Reasons for implementing the practice	What can be done to improve the sustainability of the practice?
WR1	Waste reduction practices					
RW2	Recycling of solid waste (including paper, plastic, metal, etc.)					
TW3	Source reduction of toxic materials and radioactive waste					
AP4	CO ₂ and air pollution reduction practices (including alternative fuel use, renewable energy sources, emission control devices, etc.)					
AQ5	Indoor air quality standards and practices					
BC6	Building construction and renovation based on ecological design principles					
EC7	Energy conservation practices (in offices, laboratories, libraries, classrooms and dormitories)					

LP8	Local food purchasing programme					
PE9	Purchasing from environmentally and socially responsible companies (including buying and using 100% post consumer chlorine free paper)					
OP10	Organic food purchasing programme					
TP11	Transportation programme (including bicycle/pedestrian friendly systems, car pools, bus pass programmes, electric/natural gas campus vehicles)					
BF12	Use of bio-fuel (not sourced from food production land)					
WC13	Water conservation practices (including efficient shower heads and irrigation systems)					
PM14	Integrated Pest Management practices (including reduction of pesticides to control weeds)					
SL15	Sustainable landscaping (emphasizing native plants, biodiversity, minimising lawn, etc.)					
OE16	Integration of sustainability operations into the educational and scholarly activities of the university					
RB17	The presence of a body responsible for sustainable development at the institution					
SH18	Consideration of aspects of sustainability in staff hiring decisions					
OR19	Consideration of aspects of sustainable development in orientation programmes for new staff members					
ST20	Staff development in sustainable development					
RE21	Staff rewards for sustainable development related activities					
IP22	Consideration of aspects of sustainable development in institutional planning					
RF23	Allocation of research funds for sustainability projects					

AW24	Awareness raising in sustainable development				
SV25	Visibility of sustainable development through celebration of environmental days (e.g. Arbor day, water week etc)				
	Others (please specify):				



APPENDIX C

Unit-based Sustainability Assessment Tool

PART C

Student's Involvement

Assessment Criteria

Rate activities and opportunities in the environmental and sustainability area.

X	=	Don't know	no information concerning the practice
0	=	None	there is total lack of evidence on the indicator
1	=	A little	evidence show poor performance
2	=	Adequate	evidence show regular performance
3	=	Substantial	evidence show good performance
4	=	A great deal	excellent performance

(Add a tick (✓) for key areas and where more information is needed; briefly outline key activities in the area of sustainability)

Code	Activities and opportunities	Rate	Key Area	Inadequate info	Outline of activities (what exactly is being done?)
SC1	Student Environmental Centre				
CC2	Career counselling focused on work opportunities related to environment and sustainability				
ES3	Environmental societies or other Student Group(s) with an environmental or sustainability focus				
SD4	Sustainability practices in residences or dormitories by students (e.g. recycling)				
OP5	Orientation programme(s) on sustainability for students				
SA6	Student environmental and sustainability awareness programmes				
VS7	Voluntary community service by students				

	related to sustainability issues and concerns				
SI8	Involvement of student groups across campus in sustainability initiatives				
SR9	SRC involvement in environmental and sustainability initiatives				
SM10	Student collaboration with management in the area of environmental and sustainability				
ES11	Environmental and sustainability activities initiated by students themselves (independent of departments, lecturers, management etc.)				
SW12	Students' willingness to take responsibility in the environmental and sustainability area				
	Others (please specify):				



APPENDIX D:

Unit-based Sustainability Assessment Tool

PART D

Policy and Written Statements

Assessment Criteria

Rate activities and opportunities in the environmental and sustainability area.

X	=	Don't know	no information concerning the practice
0	=	None	there is total lack of evidence on the indicator
1	=	A little	evidence show poor performance
2	=	Adequate	evidence show regular performance
3	=	Substantial	evidence show good performance
4	=	A great deal	excellent performance

(Add a tick (✓) for key areas and where more information is needed; briefly outline key activities in the area of sustainability)

Code	Practices	Rate	Key Area	Inadequate info	Elaborate on the situation	What can be done to improve the situation?
PH1	The extent to which the country's HE policy reflects an engagement with sustainability concerns					
PN2	The degree to which national and global sustainability issues inform decision making processes in HE policy and structures					
PS3	The level of support given to HE institutions on sustainability programmes					
PE4	Existence of sustainability/sustainability related policies at the institution					
PR5	Integration of sustainability issues in					

	institutional policies					
PV6	Integration of aspects of sustainable development in university vision and mission statement					
PC7	Reflection of local sustainability challenges in policies and written statements					
PG8	The degree to which policies and written statements reflect national and global sustainability issues					
PI9	Implementation of policies of sustainability/sustainability related policies					
PP10	Plans to improve sustainability focus in the next policy review cycle					
	Others (specify):					



The Unit-based Sustainability Assessment Tool (USAT) is a sustainability assessment tool for use in establishing the status quo relating to Education for Sustainable Development initiatives and sustainable development practices in universities. Sustainability assessment tools such as the USAT facilitate both the benchmarking of sustainability initiatives and the identification of new areas for action or improvement. They also allow for reflective review of progress over time, and for comparative analysis.

The USAT facilitates a quick assessment of the level of integration of sustainability issues in university functions and operations. It can be used to start sustainability assessments in universities within a systems framework as it gives an insight into the whole picture of sustainability in universities. The USAT is based on a unit-based framework which allows for sustainability assessments to be done per division, unit, department or faculty within universities, providing for ease of access and use. Collectively these unit-based assessments provide for development of an institution wide picture of university sustainability. The USAT is indicator-based and is divided into four parts for ease of administration:

Part A, which pays particular attention to the core mission of universities (teaching, research, community engagement) and is targeted at teaching departments,

Part B, which deals with other university operations such as the estates division and management units of the university,

Part C, which helps to assess student involvement in sustainability initiatives. This may be linked to, or independent of the other parts, and

Part D, which is targeted at policy and university written statements.

The USAT has been tested in some universities in Africa. It was found that for a thorough and in-depth sustainability assessment, the USAT data should be complemented with document analysis and interview data and through a participatory reflective process. Historical analyses also extend and complement the use of the USAT. USAT therefore provides useful starting points for analysis of Education for Sustainable Development (ESD) in universities, and for reflective deliberation on how ESD can be further developed.

The USAT has been developed with the support of Rhodes University and Ramboll Natura to extend the tools available to universities participating in the UNEP Mainstreaming Environment and Sustainability in African Universities Partnership (MESA). It extends the MESA toolkit entitled 'Education for Sustainable Development Innovations Programmes for Universities in Africa' (www.unep.org/training), developed to resource and support African universities to mainstream environment and sustainability into their teaching, research, community engagement, management and student activities. MESA is a UN Decade of Education for Sustainable Development partnership initiative.

www.unep.org/training

United Nations Environment Programme (UNEP)

P.O. Box 30552-00100, Nairobi, Kenya

Tel: +254 20 762 4101

Fax: +254 20 762 4249

E-mail: env.edu@unep.org