
Appendix 3 USAT

The USAT is designed to establish 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.
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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.

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*: 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.

- Indicator cluster 2: *Teaching approach* : 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.
- 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.
- Indicator cluster 4: *Community service*: 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
- 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> 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.
- Indicator cluster 6: *Staff expertise and willingness to participate* in sustainability teaching and research: 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.

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).

Assessment Tool

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

PART A

Teaching, Research and Community Service

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):							

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.. 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. 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.

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):					

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 a set of indicators for student involvement in sustainability issues. 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

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):				

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.

Cod e	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):					

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 Chancellor. The rating is based on evidence indicating the presence of the identified indicators and practices. This results in ordered response levels . 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.

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- 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.