

7 Steps to: Using the campus for learning about sustainability

Overview

Education for Sustainable Development (ESD) is an increasingly important feature of Higher Education which poses new challenges for teaching and learning. Recent Plymouth University (PU) research suggests that to implement ESD effectively, universities should adopt sustainability as an institution-wide agenda which links curriculum, campus, community and culture (CSF, 2008). However, despite the centrality of campus operations to ESD, most university campuses are poor examples of sustainable estates and few institutions have invested in developing campus-based learning opportunities. Indeed, there has been a prevailing notion that 'the typical campus is ... the source of no useful learning' (Savanick et al., 2008:668).

Nonetheless, whether institutions acknowledge it or not, students learn about sustainability from the campus. Jackson (1968) coins the term 'hidden curriculum' to describe the messages sent by a tutor or an institution, often unconsciously, to students about how they ought to think and behave. In reference to sustainability this might be illustrated by provision of recycling facilities or by student engagement in decision-making and democratic processes (Cotton & Winter, 2010). Other researchers emphasise the relevance of lived experience for enhancing the transformative capacity of ESD and note how the physical campus impacts on behaviour (Hopkinson et al., 2008).

Universities could therefore do a great deal more to enact change in their student populations by explicitly raising the profile of campus sustainability issues (by appropriate signage, informal learning opportunities and links to the formal curriculum). This can raise awareness of sustainability in practice as well as socialising students into sustainable ways of learning and living.

1. Share with students what sustainability issues the university is addressing

Recent research at Plymouth University found participating students unaware of the university's achievements in sustainability (Winter et al., 2010). However, institutional contexts which promote sustainability are essential for ESD to become transformative (DEFRA, 2005). This suggests that signposting the University's sustainability achievements is key to creating a culture based on sustainability principles.

Practical pointer: Tell students about the University's national track record in sustainability. The University is currently ranked No 1 in the People and Planet Green League for environmental performance, has been awarded silver status for corporate social responsibility (Universities that Count) and has been accredited with ISO14001 for environmental management. Sustainability has a strong presence in both the University's Teaching and Learning and Research and Innovation strategies.

2. Adopt appropriate pedagogic approaches

ESD is best taught through student centred pedagogies which promote collaborative learning, utilise discovery and problem based approaches whilst also challenging individual values and behaviour (Sterling, 2004; Cotton & Winter, 2010).

Practical pointer: When designing sustainability-focused learning activities, encourage students to work in groups to explore different perspectives on sustainability and set up research questions which prompt discovery learning. Using visual media can help students bring the campus to the classroom

3. Utilise the physical campus in teaching and learning for sustainability.

Strengthening links between education and estates can promote greater understanding of the challenges universities face when attempting to implement sustainability (Orr, 2004). This can be communicated to students through using campus based examples within a disciplinary context.

Practical pointer: Hopkinson et al. (2008) suggest that estate projects could include sustainability principles in design and operations. Similarly, environmental performance data has the potential to be used in teaching statistics, well-being and inclusivity in the social sciences and procurement in the business disciplines.

To see other titles in the 7 Steps series go to

www.educationaldevelopment.net

> Teaching and Learning Resources > 7 Steps Series.

References

Centre for Sustainable Futures (CSF) (2008). Sustainability News. Plymouth Plymouth University.

Cotton, D.R.E. and Winter, J. (2010). It's not just bits of paper and light bulbs. Sustainability Education: Perspectives and Practice across Higher Education. (Eds.) Jones P, Selby, D. and Sterling, S. London Earthscan

DEFRA(2005a). "Changing Behaviour through Policy Making." www.sustainable-development.gov.uk/what/priority/paf/change-behaviour-model.pdf (Accessed 12/12/07)

Hopkinson, P., Hughes, P. & Layer, G. (2008) "Sustainable graduates: linking formal, informal and campus curricula to embed education for sustainable development in the student learning experience." Environmental Education Research 14 (4): 435-454.

Jackson, P. W. (1968) Life in Classrooms. Chicago Teaching College Press.

Orr, D. (2004) Can educational institutions learn? The creation of the Adam Joseph Lewis Centre at Oberlin College. In Sustainability on Campus: Stories and Strategies for Change. Eds. Bartlett, P.F. & Chase, G.W. USA:MIT p. 159-176

Savanick, S., String, R. and Manning, C. (2008). "Explicitly linking pedagogy and facilities to campus sustainability: lessons from Carleton College and the University of Minnesota." Environmental Education Research 14 (6): 667-679.

Sterling, S. (2004) Higher education, sustainability, and the role of systemic learning'. In Higher Education and the Challenge of Sustainability: Problematics, Promise, and Practice. P. Corcoran, B. and Wals, A.E.J. . Dordrecht: Kluwer Academic Publishers: 47-70.

Winter, J., Cotton, D.R.E. and Dyer, A. (2010) A Sustainable Campus? Students' perspectives of campus based learning for sustainability. Plymouth University

Further Reading

Centre for Sustainable Futures (CSF) (2008). Sustainability News. Plymouth Plymouth University.

Centre for Sustainable Futures (CSF) Campus. Available at: <http://www.csf.plymouth.ac.uk/?q=campus>.

Kagawa, F. (2007). Dissonance in students' perceptions of sustainable development and sustainability. International Journal of Higher Education 8 (3): 317-338.

Scott, W. and Gough, S. (2003) Sustainable Development and Learning: Framing the Issues. London, Routledge.

Temple, P. (2007) Learning spaces for the twenty-first century. HEA. York.

Plymouth University. (2006) Sustainability Policy Summary. Available at: <http://csf.plymouth.ac.uk/files/UPSUSTPOLICY12.pdf>

Plymouth University (2009) Teaching and Learning Strategy 2009-2012. Plymouth.

Plymouth University (2009) Research and Innovation Strategy 2009-2012. Plymouth.

4. Raise awareness of environmental, social and economic dimensions of sustainability

Sustainability is a multi-dimensional concept which encompasses environment, society and economy. However, research at PU demonstrates that students perceive sustainability uni-dimensionally in relation to the environment at the expense of social and economic dimensions (Winter et al. 2010). Encouraging students to learn about and critique sustainability in its broadest sense can help to develop student awareness of the different dimensions as well as the connections between them.

Practical pointer: Teaching and learning activities can explore themes such as environmental impact, social and economic wellbeing, global citizenship, volunteering, community involvement and corporate social responsibility in the campus environment.

5. Challenge students to consider their own values and behaviour.

Reorienting individuals' values and behaviour in favour of sustainability is an important component of ESD. Institutional cultures impact on sustainability values and behaviour (DEFRA, 2005), therefore exploring campus sustainability with students can encourage students to evaluate critically their own experience of, and response to, sustainability.

Practical pointer: Get students to discuss what sorts of values are associated with sustainability, how these are communicated by the University and to what extent these are manifested in the campus environment. It may be useful to explore the ways that students are encouraged to reflect these values through behaviour, for example, what kinds of pro-environmental behaviours are facilitated (or not) on the campus.

6. Invite students to contribute ideas for improving sustainability on campus.

Democracy, participation and inclusion are key principles of sustainability and therefore an essential part of communicating ESD to students. Using the campus as a vehicle for learning about sustainability should therefore provide students with opportunities to identify areas of unsustainable practice and to suggest improvements.

Practical pointer: Learning activities can focus on particular buildings, resources, processes, health and safety or stakeholder groups to identify (un)sustainable practice and propose improvements.

7. Measure sustainability

How the sustainability of resources and activities is conceptualised and measured is increasingly important. Raising students' awareness of the university's monitoring processes can help develop skills for implementing sustainability in organisational settings.

Practical pointer: There are a number of internal and external indicators used to evaluate sustainability at the PU. Getting students to critically evaluate indicators and to develop their own can help them to engage with this aspect of sustainability on the campus.

Educational Development Teaching and Learning Directorate



The university is committed to providing information in accessible formats. If you require this publication in an alternative format, please contact the Teaching & Learning Directorate on: +44 (0)1752 587608