

### Executive Summary

Plymouth University has gained a national and international reputation for sustainability and it is therefore important that its claims for excellence in sustainability-related teaching and learning can be substantiated. This is a report on a review of the incidence and status of sustainability in the curriculum offered and delivered at programme level across four Faculties (Arts; Science & technology; Health, Education, & Society; Plymouth Business School), carried out by the Centre for Sustainable Futures (CSF) in the spring and summer of 2012. A questionnaire review was designed and distributed to the leaders of 201 undergraduate and postgraduate degree and related programmes, across these four faculties, and reviews from 98 programmes (57 undergraduate/ 41 postgraduate) were returned, giving 49% coverage.

This review aimed to:

- help programme leaders assess the extent of the sustainability curriculum in their programmes and identify opportunities for enhancement;
- develop a whole institutional picture of the status of sustainability education and illuminate good practice;
- gain research information that will help shape teaching and learning policy and help target support; and
- generate information of direct use to the university's submission to the LiFE (Learning in Future Environments) index and People & Planet Green League.

Whilst the review has had a good measure of success in achieving these aims, the limited return from programmes affects what inferences and conclusions can be drawn at a whole institutional level, not least as some examples of excellent practice known to exist have unfortunately not been included in returned review questionnaires. Therefore, the report should be read in this light.

### Key findings

- A wide range of indicative **curricular themes** of sustainability are being addressed across the reviewed programmes, but there is evidence of subject bias towards the different dimensions of environmental, social, and economic sustainability. This subject-specific engagement with the different aspects of sustainability could be

extended if further programmes embraced more interdisciplinary modes of practice. There were, however, a number of areas of good practice working to underpin entire programmes with sustainability, or to integrate all facets of sustainability into their programmes.

- The review provides tentative indication of a shift towards more diverse **pedagogies** often associated with sustainability, including group or peer learning, experiential learning, and collaborative work, as well as more traditional approaches such as lectures, project-based learning, debates, case studies, and guest speakers.
- Evidence and experience shows that sustainability education is enhanced through collaboration and engagement beyond disciplinary boundaries, and **partnerships** can inspire creative solutions, challenge perceptions, provide insights, and share expertise and learning. Some excellent examples of partnerships were provided by the programme leaders in this review, but similar collaborations across other programmes would be needed to transcend disciplinary boundaries. International and intercultural partnerships are under-represented, with more programmes emphasising connections with local business, industry and community.
- Sustainability is evidently competing for academics' time with other key institutional and sector priorities, particularly students' future employability. More explicit connections could be made between sustainability and employability.
- The review indicated that a degree of **student engagement** was standard practice across most programmes, although limitations to greater student involvement in designing and producing curriculum remain, including external constraints placed on the structure and content of the curriculum from professional accreditation bodies.
- **Obstacles and barriers** to further engagement with sustainability-related teaching and learning, familiar across the HE sector, are evident in Plymouth University. These included uncertainty or scepticism about the nature of sustainability, a lack of staff knowledge and skills, external constraints placed on academics by professional accrediting bodies, competing priorities in Higher Education, and practical limitations. Reassuringly, institutional support was *not* identified as a notable barrier to programme development along sustainability lines as it is often is in other institutions.
- This report shares programme leaders' plans for **moving forward** with sustainability-related teaching in their programme areas, and includes details of innovative modules, activities or events being undertaken in programme areas.
- The review proved to be a useful pedagogical device in itself, which enabled some staff to discover that they were already addressing curricular themes and practicing pedagogical approaches related to sustainability without necessarily 'naming' it as such.

### Key recommendations

- Given the limited return to the 2012 review from across the university – which has in turn limited the validity and potential of the review in building a whole institutional picture – decisions need to be made at Dean or senior management level, about mandate, support for, and management of, future follow-up reviews, in the light of the university's commitment to its sustainability performance with regard to the corporate strategy, and Green League and LiFE index. (Action: OVC )

- Repeat this review every two to three years. There is also a need to conduct a review at module level, which may best be undertaken within the Schools. The mandate for this needs to be clarified at Dean, ADTL and Head of School level. (Action: ADTLs, Deans, HoS)
- Ensure a joined-up and strategically orientated research programme within and between CSF and ED/PedRIO, as regards to sustainability-related teaching and learning. (Action: CSF, Ed Dev, PedRIO)
- Seek ways in which the link between PGCAP/ PSF recognition and 'sustainability pedagogies' (see Aznar Minguet, *et al*, 2011) can be enhanced, with the correlation between 'good' and 'sustainability-related' teaching being made more explicit. Conduct research into active student involvement in the construction of the curriculum. (Action: CSF, Ed Dev, PedRIO)
- CSF needs to work more closely with those areas that would benefit from, and have indicated a need for, enhanced support in order to develop further the provision of sustainability-related teaching and learning at Plymouth University. These may include Schools relating to Nursing, Health and Education in the first instance. (Action: CSF)

(For full list of findings and recommendations, see pages 64-5 in the report.)

## Acknowledgements

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