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Using Institutional Logics to understand how Education for Sustainability could be taught in a research intensive university.

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Abstract

As part of its new "Science for Humanity" strategy Imperial College London has developed recommendations to teach sustainability across its entire taught portfolio. These include teaching sustainability broadly as the SDGs, rather than a narrower set aligned with institutional interests; delivering grassroots and top-down solutions; complementing disciplinary learning with interdisciplinary skills; and ensuring =students have opportunities to make a meaningful impact in the world.

These present tensions grounded in fundamental differences in values, norms and practices that act to legitimise disciplines, Imperial and the expectations set in contemporary sustainability discourse. A consequence is that teaching sustainability at Imperial must be delivered through a plurality of initiatives to be successful. In this preparatory paper I use "institutional logics" to identify and understand these tensions, and suggest how they can be used to develop concrete recommendations for teaching and learning sustainability.

Full paper

Imperial is recognised for disciplinary research excellence, which is reflected in its education programmes and an understanding that students will graduate as highly-skilled individuals in their disciplines.

A recent set of recommendations for teaching sustainability across all taught programmes has created normative tensions between what is done at Imperial, and what should be done They widen the nature of education and suggest challenges to the dominant way in which the university works, and to the values and practices of disciplinary science.

These tensions can be explained by examining disciplinary teaching and sustainability education through the lens of a "institutional logics". In short, particular types of institutions, be they universities, disciplines or nascent institutions such as sustainability,

are bound by socially-constructed expectations, or "logics", that legitimise them and their work as of that type (1).

Disciplinary science is an institution constituted by logics that value expertise, careful and systematic curation of data, incremental experimentation, and the generation of fundamental insights regarding the nature of things. These criteria manifest as peer-reviewed papers, grants and large research groups.

These logics are different than those of Imperial, which values its world-class reputation and high rankings in international research tables, a strong community ethic and is bound "to be useful. This allows it to form significant and influential partnerships with others. Increasingly these logics are "hybridised" with corporatist and neo-liberalist logics associated with bureaucracy, competitive metrics and an increasing drive to commercialise science (2).

Sustainability suggests a different set of logics. Systems and anticipatory thinking, transdisciplinary co-creation, and normative notions of justice and equity are valued (3). Sustainability problems are "wicked" and uncertain must be embraced rather than controlled. These logics challenge disciplines and universities to look wider than their own expertise for legitimate sources and solutions to sustainability problems, and the value that tackling these brings.

Imperial's Education for Sustainability working group presented recommendations for teaching and learning sustainability that present tensions between logics. While logics can co-exist, they can also be influenced, co-opted or replaced by others that are more dominant (4). Attempting to embed education for sustainability into a university with more dominant logics requires careful planning.

For example, when extra-curricular activities sit alongside disciplinary teaching the logics do not compete and there should be little resistance fro the dominant those who adhere to the dominant disciplinary logic. This can be contrasted with the clash that may arise if credit-bearing modules require resources perceived as being better used for disciplinary initiatives, or if are seen to dilute disciplinary education. Here, the dominant disciplinary logic will likely win out.

"Embedding" into disciplinary teaching was identified as the preferred mechanism to deliver education for sustainability. Disciplines identify sustainability topics that are relevant to their area and use them as worked examples. Disciplinary logics are dominant and sustainability problems are reduced to an articulation of the discipline. Only those aspects of sustainability that are compatible with and can be reduced to the discipline as seen as legitimate.

Unsustainability constitutes such pressing problems that institutions could legitimately be asked to work within that system of logics. However, that is impractical and ignores the understanding that sustainability logics are driven to hybridise through co-creation and experimentation (5). This is a dynamic and emergent process that is negotiated through practice, and merges aspects of logics important to each of the logics. This though challenges any existing set of logics and the hybridisation process must be protected in its own space.

Education that reflects this includes open-ended capstone projects designed to allow students to apply their disciplinary knowledge to small-scale sustainability problems and exposes them to ambiguity and uncertainty, and living laboratories where students are presented with real world, long-term, transdisciplinary problems to tackle using disciplinary and complementary skills.

Education for Sustainability is a pluralist endeavour that requires educations negotiate different and often opposing systems of logic. This means that the outcomes of different strategies will tackle sustainability in different, partial, but complementary ways. This reflects the understanding the solutions to sustainability should be devolved to and reinterpreted at the appropriated level of application.