Abstract
This descriptive paper presents case studies of how various course teams have set about teaching about sustainability through their art and design discipline. The common way to incorporate sustainability has been to introduce a specific project on this topic, for example, designing a product out of recycled materials which could itself be easily recycled at the end of its life, or designing a low-carbon building.

Introduction
As well as presenting case studies, this paper analyses how sustainability fits with other university priorities. It asks whether sustainability is a utopian fad or a valid means of moving art and design away from introspection to engagement with local, national and global communities. It concludes by showing that sustainability presents a challenge to those who see the purpose of education as being an instrument which serves the needs of the markets. Sustainability in this context not only builds on the legacy of the Arts and Crafts Movement and the Bauhaus, but also on the tradition of critical pedagogy. It is therefore both highly relevant to the present-day world and in danger of being marginalised if perceived to be radical. Yet if it is not radical, it becomes little more than tokenism.

This paper reports and analyses how some United Kingdom (UK) universities are teaching about sustainability through their art, craft and design courses. Many UK universities have declared that one of their roles is to take a lead in trying to bring about a sustainable future. It would be gratifying to report that this was because universities had, of their own volition, made a decision to act. However, the truth is that they were also reacting to external factors, in particular a strong push from the Quality Assurance Agency for Higher Education (QAA), the Higher Education Academy, as well as the Higher Education Funding Council for England (HEFCE) which states on its website (2013):

Our vision is that, within the next 10 years, the HE sector in England will be recognised as a major contributor to society’s efforts to achieve sustainability – through the skills and knowledge that its graduates learn and put into practice, its research and exchange of knowledge through business, community and public policy engagement, and through its own strategies and operations.

The QAA and the HEA are preparing a new document to be published in 2014 (Higher Education Academy 2013). This will offer guidance to universities about sustainability in the curriculum. In a draft version, it is notable that it promotes not just knowledge and understanding of these issues, but of turning this into action.

Another incentive for universities to embrace sustainability is the fact that their performance in environmental management and performance is evaluated each year against thirteen criteria by People and Planet, a student-led charity. One of the thirteen criteria is ‘education and learning’. The results are published in the form of a green league table, both online (People and Planet 2013) and in the Guardian newspaper. The picture it paints is mixed. However, it is clear that the sector as a whole is not so much leading society in this area as following it. This was also the conclusion of Lozano (2011), whose research found that universities lag behind the corporate sector in sustainability reporting.

In comparing institutional sustainability policies, it needs to be noted that each university will have their own definition of the term sustainability. Most policies include some sort of combination of the environmental and the social, with some adding an ethical dimension. There are clear common threads around enhancing environmental literacy in students and promoting engagement with the wider community. Sustainable behaviour is often referred to as being ethical in that it is about not harming individuals or the environment and is seen as a means of promoting social and environmental responsibility and justice. Many of these, even if only aspirations, are almost impossible to realise, such as leaving the planet in the state we found it, or having no net
environmental impact. One only has to consider one aspect, such as travel, to realise how unrealistic this is. Even without taking into account staff travel (for example, to conferences), one only has to consider the dependence of UK universities on international students (arriving by air) to realise the huge gap between what is written in a policy and the reality.

In reading these policy documents it becomes unclear whether they are written for the benefit of the university or the students. Perhaps there is an assumption that they share identical interests. This is not necessarily the case.

At present universities have concentrated on areas where the near-term cost savings are so apparent that they would be idiotic not to embrace them. Hence simple things such as ensuring lights are switched off, heating isn’t wasted and waste recycled have been seized upon by all but the most recalcitrant managements. Where some have gone much further, it is probably because those with influence in the institution have been convinced of the importance of sustainability. Without action being promoted through leadership, sustainability withers on the vine.

Sustainability poses some particular challenges for art, craft and design. There has long been an oscillation between the poles of social engagement and art for art’s sake; all the same, there is the social engagement tradition and this can be claimed. One of the best-known institutions of learning of these disciplines — the Bauhaus — tended to be firmly on the side of ensuring that what was made would be useful for society. Hence the social doesn’t have to be a problem whereas the environmental is. These disciplines are concentrated on making or producing things and it is inevitable this will use resources. Even if somebody’s activity consists only of working on a computer, there are issues to do with energy use, as well as the environmental impact of the computer.

But usually it goes much further than this. People working in glass or ceramics need a kiln to be heated to between 800 and 1400 degrees. There is a serious environmental impact in the production of many textiles. Most colours used are a by-product of the petrochemical industry, but whatever their source, they use resources. It is possible to go through discipline by discipline and demonstrate the environmental impact of the resources used — and of transporting these materials. What is more, it is hard to work in any of these disciplines and not be feeding consumerism, unless you are the most conceptual of conceptual artists.

In the first instance, universities are attempting to teach about sustainability and, therefore, it can be possible to use unsustainable means to teach about sustainable ends. However, it is clear that the direction of travel isn’t likely to be easy, because the more students embrace the issue of sustainability, the more they are learning to question practice in their discipline.

Some teachers of art, craft and design will have a personal commitment to sustainability and have made this issue a part of the curriculum. For most, though, teaching about sustainability has come either as an instruction from above, or because their university has put in place incentives to do this, such as a competition or making it a source of extra funding. In either case, it is a question of turning lofty ideals into concrete learning opportunities, but there can be real difficulties if those doing the teaching have only a half-hearted commitment to sustainability (Stables 2009). For all, there is the challenge of how and where to fit sustainability in. After all, the curriculum in art, craft and design, has become ever more crowded, as more and more things have been added while few, if any, have been taken away (Houghton 2009).

Through studying the ways in which sustainability has been implemented in these disciplines, it has been possible to identify a series of stages, or levels of engagement. The quality of these varies, with the most important factor being the level of knowledge and commitment of the teacher(s). The first of these is a single project which could best be described as being less unsustainable.

The less unsustainable single project usually introduces just an aspect of sustainability and varies from a naïve propagation of ill-considered greenwash to enabling students to do something which is at least a step in the right direction. Examples include making and using a sawdust kiln, making jewellery out of traceable precious materials, experimenting with vegetable dyes or designing packaging which uses only recycled materials which are themselves easy to recycle.

Where they are most successful, these projects can engender debates about the issue. After all, these topics are uncomfortable and not easy to answer. Take the packaging project, for example; if one conclusion is that there is no need for a packaging industry to exist in its present form, then students could be talking themselves out of the career they were studying for. On the other hand, if
they conclude that they need to reduce the carbon footprint of packaging, then they could find that when they leave university and start to practise, this chimes perfectly with the new needs of manufacturers and retailers. In the same vein, product design students might conclude that there is no need for the products they design. But if they instead decide to design so that recycling at the end of a product’s life is easy, this could make them very employable.

The less unsustainable project might consider some of: the choice of materials, the means of production, how to minimise impact and waste, the social context and the life-cycle of the outcome. The next stage in implementing sustainability in the curriculum is a single project which considers not one or two, but all of these criteria. Some product design and architecture courses have been doing this for some time. Being further along has only led to a deeper understanding of the extent of the problem. For example, an architect might have to juggle the environmental impact of producing an insulation material together with its value in reducing energy use for the lifetime of the building. No longer is a building judged only on its carbon footprint when built; now the carbon footprint of its construction and all its materials are calculated. In the case of architecture, because it is accredited, sustainability will need to meet the requirements of the Royal Institute of British Architects. This isn’t the case for product designers. All the same, being able to design products which are easy to recycle when they reach the end of their life will make these designers better able to meet the needs of manufacturers.

Fashion is another context in which this stage of sustainability is sometimes introduced. For the over-earnest, sustainable fashion is an oxymoron. However, human culture has always included a preoccupation with body adornment and personal decoration, and this important human activity shows no sign of going away (Perlingieri 2003). Moreover, instead of being po-faced about this, they should instead welcome the potential changes it could usher in, which could include encouraging people to buy fewer, better-made garments. The choice of materials is very important, because in the regular fashion business these can be very harmful to the environment. For example, in the growing of cotton copious amounts of chemical sprays are used, while it also requires extravagant amounts of water (often in parts of the world where water is a scarce resource). In the processing of cotton (and in particular of the washed look needed for jeans denim) more dangerous chemicals and dyes are employed.

Woollens might sound the obvious choice for those who want a natural fabric, but in fact there is also a long trail of harmful chemicals used in its production, starting with those used in sheep dips. It is normal for wool to go from Australia or New Zealand to China for processing and then to another country, such as Bangladesh, for making up into a garment. Viscose, which is made from wood pulp, also requires harmful chemicals and much energy to be produced. Nylons and polyester are by-products of the petro-chemical industry and hence it is self-evident they cannot be sustainable.

One answer is to use organic cotton or wool, or fabrics made out of recycled polyester (there are, for example, fabrics made from recycled plastic bottles). In considering the life-cycle of a garment, it is important to bear in mind that mixed fabric garments cannot be recycled. As if this wasn’t a long enough list of considerations, sustainable fashion also needs to consider the working conditions of the workers who produce the clothes and ensure that the marketing and retailing is ethical. There is clearly a lot which students need to learn.

The next stage for introducing sustainability into the curriculum is to introduce projects where the students have to educate others about aspects of sustainability. It has been proven that the very best way to learn about something is to teach about it (Biggs and Tang 2011). Therefore, requiring students to find out about a sustainability issue and then turn this into a message which others will receive is a very effective way of enabling learning by students, as well as improving engagement.

Such messages have to be effective, and it is probably ineffective to use a metaphoric megaphone to tell people off. It’s also probably not a good idea to have ‘don’t’ as a central message. Hence, these projects are working on two levels: on the one hand students are learning about sustainability, on the other hand they are learning how to effectively get a message across. An example includes a photography project for which the issue was lawns. The wildflower meadow at the park of the 2012 London Olympic Games demonstrated that lawns can be more than single variety rye grass. However, rye grass remains the norm. To have one species growing necessitates endless use of chemical herbicide. The students in this project were asked not only to discourage the one kind of lawn but to promote the advantages of a bio-diverse lawn.
Another example is a graphics project which concentrates on issues around water use. Students learned that water use can be indirect, as well as direct, so that all sorts of manufactured or agricultural goods increase a person’s use of water, albeit the water was used in another country. For example, if flowers are grown in Saudi Arabia, or Kenya, by buying those flowers, we import the water used. This means that some of the countries where fresh water is scarce using, or exporting, this water to parts of the world where water is more plentiful. In this case, the project set was to represent this through graphic means.

The next stage is to take the learning of sustainability beyond the university and into society. An example is the Lost Skills project of the North Wales School of Art and Design, Wrexham. In 2010, final year Illustration students took a space in the town centre where they set up a skills exchange, so that those who had (often endangered) skills could demonstrate them and pass them on. Examples of ‘lost’ skills (it would be more accurate to call them skills which are in danger of being lost) which were revived in that way include sign writing and painting, flower crocheting and making and using a pinhole film camera (The Department of Illustration 2010).

Another example is a project at Glasgow School of Art, Scotland, where students from Fine Art and Architecture worked in collaboration. Put into groups, they were told to go to the edge of the city (by bus) and then to study this locale and plan and implement an intervention which would benefit the local community. These areas all had in common that they were areas of social deprivation.

One group of students found in their locality there was an area of wasteland which was used by dog walkers. They used debris which was lying around in this land to build an attractive shelter, with a seat, so that dog walkers would have somewhere to go if it rained, but also an opportunity to meet others. Another group found that, in their locality, there was a large number of discarded supermarket trolleys; there were also many people who had no jobs and who were hanging about killing time. So they organised trolley-pushing races which were enthusiastically taken up. They designed a trophy for the winner, which is much like the kind of cups awarded for sporting success, but in the form of a mini supermarket trolley (Carter 2010).

One striking example of this kind of social project was reported at Making Futures 2 (Barber and Swindells 2013). The project had many layers, but to put it simply: textile students from Huddersfield University transformed and personalised sleeping bags discarded at the end of the Leeds Music Festival. These were then given to homeless people in Bradford.

The ultimate stage of implementing sustainability is to embed it into all aspects of a course (Gürel 2010). A parallel could be drawn with digital technologies. When in their infancy in the 1980s, students might have been given a single project (or part of a project) which gave them some experience of, for example, designing on a computer. In the event of there being a staff member present who embraced the new technology, these opportunities might be expanded. Now digital technology is taken for granted, thought of as essential and runs through many aspects of learning on courses like annual rings in a cross-section of a tree trunk.

It would be gratifying to think that sustainability will become embedded on many courses. The trouble is that it competes with so many other university priorities. As noted above, UK universities are dependent on the fees of overseas students, yet by no stretch of the imagination can flying regularly round the world be considered sustainable. In other words, most universities would probably be comfortable being light green, but resist embracing a darker shade. They are able to embrace serving fair trade coffee in the cafeteria, but just as happy to install an energy-hungry giant plasma screen by the reception and keep it permanently turned on.

Research at universities is subject to ethical policies which stipulate there should be no harm to people. It would be unthinkable to extend this to no harm to the planet. Even when it comes to the social realm, universities are notorious for keeping themselves to themselves: the infamous town/gown divide. The government requirement to show evidence of research impact often means impact within the academic community.

One way universities have entered the arena of social responsibility has been through considering issues of employability of their students (and on occasion adjusting the curriculum to better make graduates able to find work). All the same, this is in reaction to a narrow interpretation of the benefits of education by government which isn’t necessarily in the best interests of students. As explained above, familiarity with some issues around sustainability can enhance the job prospects of some art, craft
and design graduates, but at a certain point the aims and needs of a lightly regulated, capitalist economy and issues of sustainability will start to rub up against each other.

Art, craft and design sometimes pay scant regard to anything other than issues embedded in these disciplines, but they can also call on a rich tradition of social engagement. For all its internal contradictions, the arts and crafts movement came firmly down on the duty of the arts worker to society. But social engagement isn’t the whole issue. For sustainability to be more than tokenism, arts practitioners need to show leadership and not passively follow social trends. This is not always comfortable.

Engaging with issues of sustainability may be comfortable as long as it is paying lip service to prevailing educational policies, but it can be anything but when it goes much beyond this. An instrumental education does not include the encouragement of free thinking and questioning the status quo. Instead, the role of the university is considered to be the provision of unthinking, compliant subjects (Shor 1996). In my experience, students express a large amount of disillusionment with their socio-political lot, but only a minority feel there is the slightest point in looking deeper into this and trying to do something about it.

Of course this could be changed. But do universities, or university teachers, see this as their role? It is doubtful. And this is the difficulty for sustainability. As long as it remains one (or even two) token projects, it can be accommodated, provided there is space in the curriculum. However, the more it becomes an integral part of a course and the more students engage with the issue, the more they are likely to ask awkward questions of the institution where they are studying. It might be thought that the bargain they consider they are signing up to is to pay their fees in return for being equipped to slot into society, not to overturn it. All the same, research shows that two-thirds of UK undergraduates expect their fees in return for being equipped to slot into society, not to overturn it. All the same, research shows that two-thirds of UK undergraduates expect to show leadership and not passively follow social trends. This is not always comfortable.

Sustainability is unlikely to make large inroads as long as most teachers remain, at best, lukewarm about the issue. However, for those who are keen to introduce it to the curriculum, learning theory provides a way forward. The best way to learn is to find out for oneself, not be told (Beard and Wilson 2006). The best projects should be doing just this. Sustainability education is far more likely to succeed if the teachers are not dogmatic and don’t try to ram it down students’ throats, but instead provide opportunities for them to discover about it for themselves (Illeris 2012).

My view is that global society is like people on a wooden steamship, sailing full-speed ahead and frantically fuelling the boilers with the very wood the ship is built out of. Others might take a more optimistic view. But if not, then it is apparent that we have a duty to our students to point out that the voyage of this ship is unsustainable. We resist change at our peril.

References