Exploring Education for Sustainable Development in creative disciplines

This article reviews literature to investigate the importance and wide benefits of fully integrating sustainability throughout Higher Education in creative disciplines. It looks at some ways that Education for Sustainable Development is proposed or already incorporated in creative education. It looks at how ESD can be integrated, particularly on Fashion Business courses, supported by Discovery Learning Theory. The research highlights many positive benefits of ESD and individual education initiatives. It sees the opportunity and support to incorporate EDS fully throughout creative disciplines. Suggesting there is now an opportunity to reset the curriculum and see the benefits of integrating ESD in creative disciplines via creative education to develop new industry models for the future.

Creatives are the thinkers, the doers, and the dreamers. We believe in their power to lead sustainable development and reinvent our future.
(Housley, 2021)

Introduction

As the fashion and retail industry shifts with consumer's growing awareness of ethical and sustainability implications, I am questioning is it also now necessary and even the urgent responsibility of creative educators to apply a "sustainability lens" and "ethical decision-making" throughout all creative courses? I am interested in looking at the benefits of and ways sustainability or ecoliteracy can be authentically integrated into education in creative disciplines especially fashion business courses. (Bell, 2016; Congreve, A. and Cross.I, 2021; Schaar and Baeza, 2021; Gormally, 2019; QAA 2021).

As a part-time lecturer and designer, I am reflecting on what is happening within the fashion retail industry, particularly the post- covid opportunity to reset the fashion industry and its education (Black, 2020). I am also noticing from global fashion and retail trends, that retailers and brands, are responding to consumer awareness. (WGSN, 2020). This is particularly the GenZ consumer's calls for authentic sustainable and ethical

fashion. This includes the rise of Depop, rented fashion, and "Who made my Clothes?" Fashion Revolution other social media activism (Amjad and. Reading Fashionopolis by D. Thomas 2020, attending the CFSD Sustainable conference and researching sustainability on industry trend data bases, and UCA CEN, have been influential to me in writing this article and how I have been educating myself and students. (Caldana, L. 2020; Charter, 2021; Reeves, 2015)

Definition

I thought it important initially to define what I am referring to when talking of sustainability and ethics as I know it covers a wide interpretation. (Houghton, 2016.)

I am using the definition from the recent QAA guidance "Sustainable Development is an aspirational ongoing process of addressing social, environmental and economic concerns to create a better world "(QAA 2021). Although I prefer the phase sustainable lens, as a new way of seeing and teaching through or as a framework for teaching, for ease of writing, I will use the phrase ESD (Education for Sustainable Development).

Opportunity and challenges

In reviewing the literature, I will focus first on the value of this collective piece from many global contributors. It gives their experiences and responses on how to use the Covid-19 crisis to reconsider and imagine new "pedagogic possibilities" (Peters, M.A., et al. 2020). Gorur provides inspiration and evidence that support my ideas on ethics and sustainability awareness. Highlighting how important this is to be integral to all curriculum even" fundamentally underpinning "the discipline. Gorur states "Impact on the planet should be an integral part of disciplinary knowledge; not as a six-week course in Semester One" (Peters, M.A., et al. 2020:5).
Greg William Misiaszek's article within this also introduced me to the term "ecopedagogical literacy", which I discover is rooted in Freire, and again highlighted the challenges and led me to read more on the possibilities of environmental teaching. (Misiaszek, G.W,2019).

Post-Covid opportunity to reset.

There is much evidence that post-covid there is a chance to reset both the business model of fashion industry and it's education (Black, S,2020; Charter, 2021; Peters et al., 2020; Raworth, 2018b; Schaar and Baeza, 2020; Stevens, 2021). Using post-covid challenges and changes in both education and fashion industry positively "By disrupting time the pandemic becomes an 'opportunity' for movement to another, better place. "(M. Papastephanou cited in Peters et al., 2020:16)

Why incorporate ESD? Three themes

When I reflected on my research, I noticed three main themes.

- the opportunity and urgency to reset the curriculum and integrate ESD as discussed briefly above.
- ESD and the link to and opportunity for inclusivity and decolonization.
- the positive link between ESD creativity, employability, and wellbeing benefits. For this journal I focus on this last theme with exploring ideas and possible solutions for teaching ESD.

Value of ESD and lifelong learning, life skills and employability

Many resources showed the link between ESD and employability (Bell, 2016; D'Orville, H, 2019; Lucas, 2020; QAA ,2021; Schaar and Baeza, 2020; Stirling, 2012). There is evidence already of many COP, community links and the value of interaction between industry and courses such as UAL, BAM and University of Exeter (CSF, 2018; EAUC; 2021; Gordon, 2019; Diez, 2019; Stirling, 2012).

My research revealed the value of creative ESD for lifelong learning and life skills (Bell, D.V.J; 2016; McVitty, D. and Andrews, M. ,2021; Misiaszek, G.W;2019; QAA ,2021). It also showed the social benefit (Schaar and Baeza, 2020) and commercial benefit for the creative economy (D'Orville,2019).

Research emphasised that we need to ensure that the ESD skills and teaching should be commercial and relevant (Armstrong and LeHew, 2014; Houghton, 2016; Stirling, 2012). The research highlighted that the workplace is changing. (QAA ;2021; Stirling. S,2021). This supports the need not just to teach relevant skills and incorporate ESD, but again for this to underpin courses and this is time for a reorientation of the curriculum. (Armstrong and LeHew, 2014; Congreve, A. and Cross. I; 2021; Guadagnolo, 2021).
D'Orville also spoke of the importance of creativity and innovation that are needed to achieve long term sustainability (D'Orville. H, 2019). There is evidence of a positive link between creativity and sustainability (Bell, 2016), even that "creativity is at the heart of sustainability" (D'Orville, H; 2019:65. My research revealed creativity skills were the most in demand soft skill of 2019, (Wright, K; 2019) and strong evidence of a link between creativity sustainability and entrepreneurship (Lucas,2020; Shu, Y,et al 2020; Schaar and Baeza, 2020; QAA ,2021).

Wider benefits of Education for Sustainable Development

Although I have not time to explore fully here, my research also confirmed my opinion of the wider benefits of applying a genuine sustainability lens throughout the curriculum such as; student wellbeing, motivation, (McVitty, D. and Andrews, M;2021; Ronen, T. and Kerret, D; 2020), student rating (Student, 2021), (Barber, M;2020), employability (Bell, D.V.J;2016), decolonising learning (QAA; 2021) and potential for greater industry research and interaction. (Diez, T, 2019).

Ideas and solutions for ESD

Inspiring sustainable mindsets and new business models

Although a slightly older text I found Transformative Education for Sustainability and Responsible Citizenship. (Bell, D.V.J; 2016) a relevant and useful to guide for teaching ESD. It reminded me of the important role teachers have in supporting sustainability learning, not by transmitting knowledge but by inspiring and guiding our students as learners. "education is not about filling a pail it is about lighting a fire "(Bell, D.V.J. 2016). Also accepting, as I do in my teaching on this subject, that we are co researchers, "teachers cannot possibly expect to be the omniscient source of knowledge" (Bell, D.V.J, 2016: 52). This research looked at the contribution of transformative theory of education "by helping develop sustainability mindsets" (Spence, 2012 cited in Bell, D.V.J, 2016: 52). Illustrated aptly in this quote in Bell's article.

If you are planning ahead 1 year, plant a seed.
If you are planning ahead 10 years, plant a tree.
*If you are planning ahead 100 years, educate the people.^*

(Hung Hsu, Chinese poet, 500 BC, Cited in Bell, D.V.J,2016).
The benefit Bell explores again is the various lifelong skills that sustainability education offers. "We need to prepare students not only for employment in a sustainable economy, but also with the skills and values that will allow them to live sustainable lifestyles on this planet" (Bell, D.V.J, 2016:55).

That in teaching business, in my case fashion business, no longer to teach the "old "business model, but through applying creativity and innovation the students can help form the new form of sustainable enterprise. (Bell, D.V.J, 2016.) In my teaching, has been interesting for me to explore with students, models such as the circular economy (Ellen Macarthur Foundation, 2018) and the "doughnut economy" Raworth, K. (2018).

Challenges of embedding ESD

Although all this research confirms my opinion that applying a sustainable lens to all my teaching, has many benefits, I will just raise some challenges and opposition noted to ESD. Such as assumptions about "indoctrinating students" (Gormally, 2019) to one, and some would say, political way of thought. Also, relevant to decolonisation, the awareness of what sustainable "development" means and acknowledging students will have different experiences and environmental value.

Many acknowledge it is a "wicked problem" for the fashion industry and education (Charter, 2021; Cross, I.D. and Congreve. A, 2020). That ESD is not easy, that" transforming curricula is not a simple task and takes real commitment from an institution to do so".

(QAA, 2021:9) Many find it difficult to understand ESD or integrate or face many barriers to implementing. (Houghton, 2016; Stirling, 2012)

Other relevant challenges that have been raised include whether it the role of design teachers to teach ethics or sustainability. Acknowledging that these are difficult subjects to teach, I feel training and support should be given staff and students. I have found this in my experience discussing the impact of Rana Plaza incident (Chan, 2021) and subsequent reforms or the impact of the climate emergency with students from countries directly affected, such as students from Bangladesh that I teach.

Gormally highlights teaching about sustainability should be about "teaching students to think critically" (Jones, et al cited in Gormally, 2019:) and to encourage debate. This leads onto my ideas on teaching theory that I could use.

What learning theories can help support ESD

I think many theories could be applied and be useful to support fully integrating sustainability in creative education, such as cross discipline and industry Communities of Practice, Transformative, Discovery Theory, Constructivism, or Critical Pedagogy.
In my research I noted that the Transformative theory of education is advocated by QAA and Bell (Bell, D.V.J, 2016; QAA, 2021) to teach ESD. I can clearly see the connection and relevance of this theory in the "disorientating dilemma" sustainability in fashion business education poses. (Learning-theories.org, 2011). I think it is also relevant to implement ESD relevant to other creative education literature. (Smith, Nerantzi and Middleton, 2014). It could also be valid to underpin ESD with critical pedagogy as "critical pedagogy is not a methodology…. It's not simply or mainly a set of pedagogical procedures or analytical steps as one might typically envision . . . It is more about problem-posing than solution-giving" (McLaren, 2019a: 177. cited in Jandrić and McLaren, 2020)

Using discovery learning theory to help support ESD.

I have chosen to look at Bruner's Discovery Learning theory as a valid approach to integrate sustainability throughout my teaching. I thought it would bring a new angle to the debate, although acknowledge Bruner's theory was also analysed in the Yu Shul et al article on developing a creative entrepreneurship education framework. (Shu, Ho and Huang, 2020).

I have identified the main attributes of discovery learning theory I feel relevant to ESD, are.

Exploring and problem solving, which stimulate learners to actively approach to creation, acquisition, and generalisation of new knowledge instead of passively being exposed to lectures and practice.

Students are more than passive listeners; they are engaged in various activities. "Learning by doing".

Learners are taking responsibility for learning in terms of the ability of learners to choose their own learning pace.

Failure is important, feedback is necessary, and then understanding is deeper.

Learning activities are anchored in real-life scenarios and are student interest-based building new knowledge from the existing.

"Intellectual engagement"-students go beyond learning for the sake of comprehension.

(Bicknell-Holmes and Hoffman, 2000; Bruner, J.,2014; Learning-theories.org, 2011)

Exploring, problem solving learning by doing

I feel Discovery Learning is relevant as it is "very learner centered" and some of the main attributes are exploring and problem solving, with learners taking responsibility for learning, researching, and building new knowledge from the existing. (Learning-theories.org, 2011) This idea of students independently and co researching this area is one I have found beneficial and is again supported by literature I have read. (Bell, D.V.J.,2016). The facilitation structure of the "spiral "manner of introducing concepts works well as knowledge can be built up and revised through projects and year groups. (Shu, Ho and Huang, 2020). This method is being used in examples shown on the UCA CEN (Reeves, T.,2015) and in QAA ESD guidance.

Failure as a teachable moment

This exploring and problem-solving approach and the value of failure brings a "teachable moment" (Bicknell-Holmes and Hoffman, 2000) are all key to Bruner's theory. (Learning-theories.org, 2011). This approach I think also sits well with ideas for ecoliteracy such as new ideas of teaching like "design fiction" proposed by (Schaar and Baeza, 2020) and the Fashion Futures scenarios tool kit created by LCF (LCF, 2019). This promotes and the gives students the opportunity to create and solve problems in an imagined world.

Contexts and motivation

Discovery theory also provides students with experiences and real-life contexts to motivate and be ready and able to learn. In my own experience and research on this subject, sustainability is very relevant to the majority demographic of many students, (Amjad and Houghton, 2020; Amjad and Josephs, 2021; People & Planet, 2019; QAA, 2021; SOS, 2019) and so there are many benefits in providing context and industry experiences in providing opportunity of learning by doing (Learning-theories.org, 2011) with live case

studies and industry collaboration. (EAUC, 2021; Gordon, 2019). This active, hands-on approach of discovery theory is supported in the many positive examples of the development of curricula in ESD (Reeves, 2015).

Feedback

Finally, the importance of feedback is promoted in Discovery Learning theory. This again connects to this idea that this is a developing subject which is jointly peer and tutor researched and reviewed, also that even wider community and industry feedback is welcome and necessary.

Guided discovery

The role of the tutor is both promoting guided and unguided discovery. I have already seen in my own limited experience, how successful the discovery learning approach on this subject has been. On assessment tasks set on this subject, it has motivated students, their independent research has been varied and wide, and their outcomes unique and creative. This knowledge has then been applied and motivated the majority of students to independently choose to base their final major projects on sustainability investigation and solutions.

Going beyond the information given.

Overall, this method of teaching promotes deeper understanding and I hope through this structure and the spiral manner of sessions and independent study students can develop "learned concepts in more and more detail" and hope with they will "go beyond the information given" and realise the opportunities and responsibilities ahead for them and the industry. Really "leading them "and us all into "to a world of possibility" (Bruner, 2014; Learning-theories.org, 2011))

Summary

In summary I have found out there is growing support for and updated guidance in and widely shared resources and discussions on teaching and being taught ethics and sustainability. (Budd, L,2018; Congreve, A. and Cross. I; 2021; Fashion Seeds, 2020; Raworth, K. (2018a); SOS, 2019; UAL ,2020a; UAL, 2020c; QAA, 2021).

There are many individual examples of how it is being integrated on creative courses (bournemouthuni ,2018; Reeves, 2015) and across campuses or links with industry. (Millard, L, 2019; UAL ,2021; Unprme; 2020a). I feel the sense of urgency in the fashion retail industry (WGSN, 2019) and momentum in education for ESD. This is evident in recent conferences, definite UN goals and updated QAA advice for education (QAA 2021; United Nations, 2021). This is combined with student and staff activity (Congreve, A. and Cross, I,

2021; People & Planet, 2019; QAA 2021; SOS (2019). The role of the global south, student and staff experience needs to be acknowledged and valued in the approach to teaching sustainability. (LUCCC, 2019; QAA 2021).

There are some exciting and creative approaches in HE and widely shared information, that I would like to model in courses I teach such as "design fiction", cross discipline and industry engagement. (C Baeza & E Quinn ,2021; Millard. L. ,2019; UAL (2020b).
Although there are these inspiring individual projects, I feel it still not clearly visible that ESD is integral to all creative courses or institutions. Changes in industry and education seem still slow to change, I noted that some of this literature was first written nearly 10 years ago. (Stirling, 2012). It often appears more of a goal or part of course yet there is much evidence that entrepreneurship, and creative problem solving that ESD in creative disciplines can offer is acknowledged as much sort after skill (Bell, 2016; Lucas, 2020; QAA ,2021). However, it has been acknowledged it is a "wicked problem" and difficult to implement. (Houghton, 2016; Stirling, 2012).

I have found applying the discovery learning theory could help create a framework to teaching this area encouraging student centred, active, self-motivated exploring and problem solving.

Further research

Interesting areas of further research could be:-

- How to upscale from looking at ESD on one course and integrate this throughout the teaching across all FE and HE creative courses.
- Further research on what the different challenges are for each creative discipline and their industries face, so that ESD can be integral and industry commercially relevant.
- What creative education solutions can be learnt from this cross-course research and solutions. Looking at the benefits of setting up Communities of Practice, greater integration with industry or initiatives such as fablabs (Diez, 2019; Fashion Seeds, 2020).
- How ESD can serve as a means of uniting research and teaching across an institution such as how it can facilitate a culture of co-design and collaboration between individuals, groups, and organisations across the public and private sectors, to tackle SD challenges. (QAA ,2021)
- Further research into the international perspective especially on how the global south universities LUCCC (2019), often most affected by climate changes approach sustainable education. How the global north and south can work together, support and learn from their experiences and how they are incorporating this in creative disciplines education.
- Looking at more depth at ESD in relation to critical pedagogy.

Conclusion

From all this research and wider reading, I see evidence of the urgency and responsibility of educators in HE to provide ESD. I note the many wider social benefits of integral sustainability and ethics for the student, on wellbeing, motivation, student rating, employability, and social responsibility. As many acknowledge this is an unprecedented opportunity to use the positive power of creativity "and help catalyse the academic and industry community to rethink how fashion is done and may become "(Black, 2020:330). Although all courses have been disrupted, as a result of the impact of covid-19, with already many changes to curriculum and delivery, creating many additional demands and challenges for students and staff, this is also a positive time to refresh. This can be a time to underpin all courses and delivery, with a not only a more decolonised, inclusive perspective but additionally through a sustainable ethical lens. I plan to continue to research and support ESD with renewed focus, teaching this using a critical pedagogy and Discovery Learning framework. I hope with this aim students can then be led in "to a world of possibility" (Bruner, 2014) by being supported in creative sustainable education. Students can then feel empowered with flexible lifelong skills to direct, disrupt, make choices, and design creative solutions that benefit them, the global creative economy and all of our futures.

About the author

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