
Transition to Transformation in Fashion Education for Sustainability

Dilys Williams

Abstract

Contemporary practices in many educational and business establishments in Europe, the US, and elsewhere are built on an industrialized context set in motion in the mid 19th century, and further the accelerating digital and technological discoveries of the past century have been used to compound and multiply this perspective. This context has enabled the creation of incredible advances across a plethora of life's activities, giving freedom and opportunity to millions, whilst creating irreparable damage, loss of life and an increasingly imbalanced world for its inhabitants. The business and education of fashion exemplify this global changing of lives, and do so in a number of ways quite spectacularly as a sector, due to the singular nature of fashion; universal in society as a marker of identity and a mirror to culture and attitudes. Fashion also reaches into lives through its huge global impact (25+ million employees and vast resource use). Education for Sustainable Development (ESD) offers an apt location for the critique of current models of fashion education and business to be set against our ability to live well without jeopardizing our futures and our fellows. The emergent properties of our changing world require skills and aptitudes that are quite different from those previously acquired by (fashion) practitioners (Sennett in *Together: the rituals, pleasures and politics of cooperation*. Penguin, London, 2013), thus creating an imperative and an opportunity to bring together stakeholders from business, research and university teaching in a dialogue through ESD. Education offers an opportunity to foster new ideas that can take us beyond what already exists, with an emerging body of

D. Williams (✉)

Fashion Design for Sustainability, Centre for Sustainable Fashion, London College of Fashion, London, UK

e-mail: d.williams@fashion.arts.ac.uk

research (Sterling, Orr, Blewitt, Wals, Creighton) highlighting the need for systemic change in how and what we teach and learn. This chapter discusses the engagement of stakeholders in fashion ESD and introduces a co-created curriculum between world leading company Kering, whose portfolio of fashion brands includes Gucci, Stella McCartney and Puma, in partnership with globally reaching educator, London College of Fashion (LCF) at University of the Arts, London (UAL). The convenor of this partnership is the research centre, Centre for Sustainable Fashion, (CSF) where fashion is explored as a means to better lives through sustainability, and the principle investigator in researching this partnership is the centre's director and author of this chapter.

Keywords

Transformation · Co-creation · Design for sustainability · Bridge · Ecological literacy

1 Introduction

Educators in fashion nurture students in creating visions and actions for the future, whilst enabling them to join and contribute positively to the present. As a discipline it has potential to cross borders of theory with practice, link intellectual enquiry and industry application, and create dialogue across fashion's places of impact and influence. However, whilst directly reliant on resources and raw materials from nature, there is little evidence of fashion education that locates itself in that radical ecological paradigm that is most evidently needed (Chick 2013). The power that comes from the linking of knowledge in use (industry practice) and knowledge in incubation (teaching and learning) highlights the role of industry and business stakeholders. In this space the exchanging of practiced wisdom with academic stakeholders who are engaging speculative ideation processes can take place. Exploring how each are able to inform the other in a collective ambition; working towards better or new versions of what already exists, must be evaluated against the distinctive domains of commerce and education and their differing measures of success.

The partnership of Kering and LCF, created for the purpose of exploring ESD, acts as an exemplar in giving industry a role as contributors to the future beyond usual business activities, and of education a role as generators of graduates with skills and competencies that may not yet be marked on job descriptions or interview questions. This chapter seeks to offer insights from the first year of this collaboration to other universities and businesses considering co-creation of curriculum in ESD. This does not suggest that engaging stakeholders from industry and education in ESD can be in any way generalizable, but the high profile and commitment of participants in this case is distinctive, and the ripple effect of its endeavours can already be seen inside and beyond the organisations involved.

2 The Origins of a Connected Curriculum

University education holds in its arms a vital dynamic between the exploration of self, society, commerce and the world; its ambition, role and purpose considered through discussion in homes, government offices, businesses, charities and public spaces. From the establishment of the world's first university by Plato in around 385 BC (Hummel 1993), to universities in the 21st century, enduring values bind the term, whilst internal and external conditions dramatically affect their application. Plato's successor Aristotle established a premise for university education that contemporary educators can critically reflect upon; to marry a deep concern for the ethical and the political with an energetic curiosity about what makes for human flourishing. In the early 21st century, however, universities find themselves held in a perplexing tension. On the one hand, accessible to an unprecedented number of students, in the UK alone, 49 % of school leavers entered HE in 2011/2, compared with only 4 % in the 1960s (Department for Business Innovation and Skills 2013), but at the same time experiencing 'a disabling lack of confidence and loss of identity' (Collini 2012). If university education is to form both person and society, then why do we feel such a crisis of confidence? The answer is perhaps partly due, in a western university sphere, to political ambition for education that foregrounds contribution to a growth economy (Till 2013), based on sustaining a well established system that creates employability, generates income and increases competitiveness in global business. This is a contested space for universities in an art school system, whilst the great contribution of the arts to economy is visible in a variety of places and guises, its value lies beyond as well as within the creation of commoditised 'cultural products.' Interacting with stakeholders from across the system might offer ESD a means to empathise with tensions that exist, whilst simultaneously creating space for understanding at a systemic level what might be deemed right (ethically and morally), over what seems to be correct (technically and socially). Partnerships bring the outside into the classroom, but care must be taken not to compromise universities' ambition in exploring open notions of flourishing; exposing students to real world problems, informing must be focused on cultivating moral motivation (Podger et al. 2010), empowering them to radically resolve and dissolve them.

3 Fashion as Challenge and Possibility

Fashion education at university level encompasses an intertwining of theoretical, technical and practical elements that make up a range of artistic and business-focused manifestations of a phenomena close to the centre of the modern world (Svendsen 2006). This complexity can lead to a reductionist perspective on sustainability, focused on individual problems in its parts, to be solved by the cognitive skills of knowledge, but this approach often succeeds in disabling students who may feel burdened by the enormity of the problem (Fletcher and

Williams 2012). As a values-led process however, fashion education for sustainability offers the chance to explore affective learning, based on the unchanging values of what it is to be human from a more constructivist standpoint, piecing together how we might live well in the world. Yet many courses still tend towards traditional lecture-based delivery of fixed knowledge, and many students are focused on learning the correct answers to the problems, how to 'get it right' (LCF MA student feedback 2015), a tendency even in ESD (Shephard 2008).

Fashion as industry operates across vast scales from bespoke to mass production, creating livelihoods within communities and remote offices, its activities inextricably linked with the implications of 21st century living. Fashion involves the making of meaning (identity and belonging) and of matter (its material and 3D contents). It is a conduit to social acceptability, a route to aspiration in living and being; its power in these terms is phenomenal. In education, fashion requires affective and cognitive dimensions of learning. The cultivation of design, making, buying, selling, wearing, caring, socializing and influencing that make up the actions and artifacts of fashion involve us all. These actions are important in a world in which we are breaking the fabric upon which our existence relies, taking us into an unknown position in environmental, socio-cultural and economic terms (World Economic Forum 2015). Both as citizens and through roles that they take on, fashion graduates need to be conversant in an ecological literacy to shape the contents and contribution of a master tailor, image maker, performance sportswear designer, entrepreneur, strategic planner, buyer, exhibition curator, shoe maker, illustrator, merchandiser and much more besides.

Graduates from art and design courses, whether employees in established businesses (68 %, UAL 2013) or setting up on their own (18 %, UAL 2013) are not usually equipped with an understanding of nature or human flourishing as part of their skills set. For an industry in need of such skills, an interest in an exchange between business and academia offers a chance to enable future livelihoods for employee and employer alike. A common understanding of sustainability, shared by academia and industry, is that change comes through sharing and learning from others, based on the evidence that the challenges are too big for anyone to tackle alone.

4 Kering X LCF

As a practiced fashion designer, tutor and researcher, I understand first hand, the need and duty of care in preparing students for roles in fashion's industry, for destinations that offer opportunities, fulfillment and play out ambitions which may be rewarding and exacting in equal measure. But if higher education is to offer an expansive space for possibility to grow, then it needs to be more than a training ground for skills and competencies in an existing industry. Sustainability pedagogies offer fashion education a chance to move beyond a narrow vision of the commerce of garment making as a means for identity making. The experiential,

immersive, values-led uncovering through experimentation of who we are and where we are, through fashion ESD, might help us to learn to live well, together.

The Kering X LCF project involves a recognition of the imperatives for change and a vision for prosperity, equality and ideology based on living well in nature. The collaboration involves three levels of engagement:

Vision: An exchange of ideas in public, between industry and academia creating value in nature and society. To be realized through a series of five annual events.

Transition: Identifying a current challenge within a Kering fashion business and supporting a range of students in developing possibilities to solve or dissolve it.

Transformation: Co-creating masters level curriculum with a team from Kering, and CSF with LCF students and tutors, to enable graduate eco-literacy through validated courses. The sharing of methods, initial findings and plans for next steps seeks to inform the project going forwards and other industry/academia ESD exchanges.

Initial methods of exchange included face-to-face meetings, brainstorming techniques, ideology discussion, and teaching methods development in relation to ESD principles with reference to change agents guide (Moore 2005). Expected outcomes relate to student and industry expectations and course content development, leading to a prototype course, located in the second of three terms of the master's programme at LCF, open to M.A. and M.Sc. students.

In the first year, this collaboration has involved 40 students, 12 members of the Kering team, 7 researchers from CSF and 5 tutors from LCF. Students were selected to take part through application with a short statement, and a series of still images or a short moving image clip or audio statement about what they sought and might offer to the course. Participants were selected from design, business, media and culture courses. Students were asked to commit to a regular half a day together, across 15 weeks, to listen, question, contribute, view, make, share and present responses to ESD curriculum. The course was located directly before students developed proposals for their own major projects.

Course delivery consisted of mixed methods including workshops, lectures, formal and informal presentation, group work, tutorials and peer review. Critically, the course was delivered directly by Kering and CSF teams, following three key themes:

Theme One: Why Sustainability?

The programme involved creating a new starting position, through backcasting, forecasting, mapping of place, and values-based description of objects. This was followed by historical, cultural, social and climate science contexts of sustainability. Personal narratives of the sustainability journeys of the leaders of Kering's senior team, CSF researchers, and related applications of their ideas involved affective elements of research and business practice. Students, in teams, were asked to create manifestos as a means to commit to shared priorities, to begin to form an ethic in their work, and to decide any non-negotiable elements in their working practices.

Theme Two: Sustainability Systems

A visualization of the systems within which fashion operates set the context for sustainability in practice applied through a pioneering new system of natural capital accounting (Environmental Profit and Loss, EP&L). Students were introduced to a rationale and methodology for environmental accounting for fashion using data sets, scientific methods, and their application to design practice. Students reflected on this through a counter consideration of the stewardship of nature. Through role-play, lectures, workshops and student presentations, ideas were explored and progressed.

Theme Three: Sourcing for Sustainability

The course culminated in a series of insights into techniques, methods and knowledge bases used in selecting materials and processes for fashion products. A review of resources, resourcefulness, and fashion's human and material dimensions ran the gamut of fashion design for biodiversity preservation and conservation, fashion and social change, empowerment and social innovation, with first hand case studies from experts in the field of biodiversity, materials sourcing and sustainability co-ordination.

Through the course, students engaged in a reflexive processes to interpret, respond to and present ideas about how else fashion might achieve its ambition of identity making, culture shaping, community forming and livelihood enabling, through weekly contribution to an online workflow site. The range of ideas emerging from this immersive, discursive interface was presented to the leadership teams at Kering and LCF, and for the research team to analyze in developing year two of the collaboration. As this is a live and dynamic set of working practices, as part of a longitudinal study of graduate eco-literacy, this chapter offers a work in progress account of engaging actors across the system through a period of exchange.

5 Capture and Review

A range of methods captured feedback and learning from students, industry experts, tutors and researchers:

- One to one interviews, questionnaires, submission of text based responses, confidential feedback sessions and online student team journey capture.
- Review of student submission.
- Analysis of the above by CSF research team.

Emerging themes were identified from the content of submitted work in year one by cross course teams:

- Democratic design practice
- Materials led enquiry
- Social engagement as fashion business

- Storytelling for a generation of eco-literate children
- Media interaction to profile fashion as sustainability
- Extending experience beyond material product purchase

Projects were mapped across scales of change from business as usual, efficiencies made in current practice, to transformation, new paradigms and worldviews. In this first year, projects tend to cluster towards the lower end of change, but with encouraging signs of work starting to encroach outwards. The discourse between Better Lives and Living Well with Nature (CSF), and Empowering Imagination (Kering), uses Design for Sustainability methods (Walker and Girard 2013), Systems Thinking, Meadows and Wright (1972), and New Prosperity (Jackson 2009) with sustainability methods and practices developed and applied by Kering (EP&L, Materials Lab, Patagonia Wool project). Deep change involves deep understanding of motivations and imperatives for change, and the outcomes of year one must be viewed in relation to a western socio-economic context.

6 The University/Industry Semi-Permeable Membrane

Whilst distinguished by its level and scope of engagement, exchange between industry and education in fashion at university level is common. Often fluid, many tutors possess current or recent experience of industry practice, either through their own business or as employees across scales of business. Students and tutors therefore reflect on real life issues relating to practical, ethical, financial and commercial dilemmas and possibilities. Alongside this exchange of developing and applied knowledge in lecture, workshop or tutorial settings, more formal exchange between a course and industry frequently takes place through course validation processes, review and industry led projects, and competitions and awards. Just as the relationships of fashion involve a range of actors from farmers to brand managers, the location of a university might enable connection with particular regional elements of fashion, such as lace makers in the case of Moratuwa University, Colombo, Sri Lanka, SEWA women's co-operative in Pearl Academy, Delhi, India, and designers and retailers as in the case of London College of Fashion, UK. Through these relationships, universities may be able to contribute to local communities, cultures and ecosystems whilst maintaining a balance between mastery of a body of information useful to the current guise of those businesses, the 'industry ready graduate', and the students' capacity to challenge or extend the received understanding of a particular topic (Collini 2012). Educators have to wrestle with an ethos of care for the student, preparing them for employability, independence and participation in society, alongside skills that the world needs, but may as yet not fully recognize. This is a tough but exciting call. Educators are dealing with the future first and then linking back to the present as part of a change-making process, visualizing and making 'real' a holistic and collaborative model of fashion, which provides a vital way to bridge between different paradigms and contexts (Fletcher and Williams 2012).

The increasing rate at which our contexts for education and business are changing necessitates collective action committed to future prosperity, enabled by skills, values and knowledge to build social and ecological balance. This radical shift requires the development of methodologies of participation, the development of personal design ethic, and application of design for transformation, as well as methods of knowledge exchange and information led case studies, to enable the often-termed paradigm shift to a society that thrives within nature and with human equality at its core.

7 The Bridge

Kering X LCF creates a bridge, seeking an understanding of the means to thrive now, without jeopardizing our futures and our fellows. In places it remains within a modernist worldview, taking a microscope to see better how to reduce harmful and expand good aspects of fashion through technical, strategic, innovative, quantifiable methods. A close look at industry practices such as Kering's Environmental Profit and Loss system, offer unprecedented insights to educators and students, breaking new ground not fully evidenced in literature. In other places, the pedagogy steps outside this more mechanistic worldview, with more constructivist approaches that put things together in material and human relationship terms, a position well suited to the pattern forming tendencies of art and design. In this position, sustainability is 'an emergent quality arising from sets of relationships in a system, whether viewed at macro or micro scale' (Sterling 2004). Thus seen, we seek to build a system in which commerce resides, rather than one where commerce acts as fashion's sole identity, its common representation in contemporary discourse. In social and ecological systems, fashion also takes on a role to conceive and make, together; to share, express and exchange; to connect to available material resources and local knowledge; to create visible manifestations of identity and belonging in place and time; to offer novelty and delight, to enable livelihoods that offer autonomy, and to achieve fulfillment in self and community. Emphasis on this role of fashion is a bold vision for both industry and academia, each feeling the hot breath of political expectation based on growth, and driven to push the boundaries by economic activity in the hope that we'll find a way out of our problems further down the line.

Fashion ESD requires skills and values that help us transition from the current consumption model of commerce, based on an economic logic of surplus production and desire creation, to a post-industrial model, where livelihoods, delight and belonging are achieved within social and ecological balance. Such a transition in education inside and outside of formal fashion curriculum is taking place not only through the enquiry based learning of Kering X LCF, but also at California College of the Arts, KEA and Kolding in Denmark, Parsons, New York, Pearl Academy, Delhi and St Catherine University, Minnesota, USA, amongst others. Whilst critiquing the current fashion system, the great majority of these places engage interest from and collaboration with stakeholders from industry through what they do.

8 What ESD Might Offer to Fashion and What Fashion Might Offer to ESD

Locations of engagement of stakeholders in ESD in fashion can be mapped across scales from micro to global enterprises. Documentation of these thousands of change-makers would be impossible to précis here. From the use of fashion as radical place-making as by designer/activist Katie Jones, knitting her way to authenticity and new models for business, through to JJ Noki's House of Sustainability; these and other designers are also fashion tutors, sharing their design ethic, aesthetic and business dynamic. CSF's exchanges with businesses are built on the basis of mutual learning, understanding the current landscape, whilst imagining possible futures. Thus a widely understood role of designer as problem-solver is engaged, but new roles emerge; as sense-maker (Manzini 2015), as host (Williams 2015), and as guide.

The implications of such fluidity of exchange between stakeholders in ESD are that the methods, measures and contents of collaboration are often difficult to assess, whilst the rise in participants suggests positive impact from these engagements. The momentum of these interactions encourages us to give space to them whilst also seeking ways to engage stakeholders in ESD in more formalized ways. At the recent Business Climate Summit in Paris, convened to prepare for COP21 in Paris in December 2015, a resonant and clear statement was repeated; we are the first generation to really understand the imperative of climate change, and the last to be able to do something about it. However, sustainability has yet to radically change either fashion education or fashion business. Could a bringing together of each enable collective transformation towards sustainability?

9 What Do We Want to Sustain?

This is a question that was posed by John Thackara at the Cultures of Resilience gathering in London College of Communication in 2015. The day was 27th March; a date when students from three of London's most prestigious universities were protesting against cuts in funding across the arts. These students perceived that universities were showing little activism in questioning the nature of governmental constraints. The consideration of what we teach, how and why, seemed a particularly poignant discussion in terms of a student's and society's ability to flourish. The role of education and its interplay between the present and the future, between short term-ism and long term-ism, the familiar and the unknown, came into stark relief as a student spoke of the tension between the present (living, housing, employment conditions) and the future (concepts emerging through study). To create conditions for participants to engage in deep understanding of the

relationships between themselves, others, place, business, nature and society, we need to be able to recognize equilibrium from a systems perspective on the one hand, and in our own back yards on the other.

“What can I actually do?” The answer is as simple as it is disconcerting: we can, each of us, work to put our own inner house in order. (Schumacher 1993: 252)

What and how we teach and learn must start with our values and the actions that we take then expand out to the systems within which we live (Capra and Luisi 2014). To enter into a dialogue about flourishing (Ehrenfeld 2008) we must recognize that we are the incumbents, as educational and business establishments, and to recalibrate how we assess progress within a systems view, deciding what is both the right and the best thing to do.

Our perceptions of value, worth and etiquette differ according to the cultures and actions of those around us. (Henrich et al. 2009)

It is hoped that the strength generated by this stakeholder partnership will create a boldness to take us beyond what we might individually manage and risk. To transform education in fashion at masters level means supporting views on education and business quite different from the current status quo. The imperative is clear, but the actions need careful consideration. To encourage students to evolve possibilities based on a future that we can all enjoy, might mean radical change in what and how we teach, learn and do; business enacting change at a level that disrupts but does not destroy.

10 The Pushmi Pullyu

As a child, I was fascinated by Doctor Dolittle’s ability to converse with a wide range of extraordinary animals, but what intrigued me more was one particular creature, the pushmi pullyu, a kind of llama with a head at both ends of its body. The notion of two simultaneous conversations, two lines of thought being played out in synchronicity, two landscapes to look out on, all seemed like a great idea to me. Many years later, as I reflect on the syllabus that we are drawing up as an interdisciplinary course in fashion for sustainability, co-created by members of the sustainability team at Kering, our research team at CSF, tutors and students, this fictional creature comes back to mind; the parallel strands of developing a ‘knowledge system’ and a ‘belief system’ shape the contents and the methods of the course. We seek on the one hand to navigate the complexity of sustainability applied to fashion through ways to inform decision making, suggesting intervention points in a system populated by diminishing resources, incomplete accounting systems, corruption, destructive practices, cultures of disposability and the commoditization of practically everything. The push towards better practices, efficiencies, extending value, switching materials or processes, closing the loop and offering what Manzini (1994) refers to as ‘Existenzminimum’ can create clarity,

confidence building and rational decisions about what ‘matters.’ Businesses, governments, educators and other organizations are exerting considerable effort in the push towards ‘more sustainable’ ways to create products, services and experiences that can create low carbon lifestyles and more resilience in an economy of diminishing returns. This push however, whilst offering a logical, rational approach that helps to make sustainability actions visible, measurable and impactful, involves incremental change. This type of push may reduce the current state of unsustainability, but does little towards creating a ‘quality maximum’ position, one that emerges from a philosophy, a belief, a conviction and ambition for a more expansive sense of being human and living with nature. The pull towards an imagining of a flourishing world on the other hand might do more towards the creation of sustainability lifestyles, than a myriad of checklists and information gathering.

Through the first phase of the exchange between Kering and LCF, we have been gathering conversations with members of Kering, LCF, and students, to understand the sustainability actions taking place in these business and education environments. Speaking to members of the Kering team with strategic and project specific roles reveals that whilst the job might entail a lot of energy and time focused on the push, it is the power of the pull that is seen as most transformative. This double helix that we are developing links back to the opening of this chapter, where a definition of fashion education lies between the assimilation of knowledge of its material contents, and the interpretation of its meaning. The marriage of the push of the technical and the pull of the philosophical is made through the practical, the making, and learning together. What we have learnt about the dynamic of the course, as CSF team member Kate Fletcher described to the students in her session, is that sustainability education is a functional set of knowledge, and something in your soul (Fletcher 2015).

11 Transformative Scenario Planning

In order to build a change-makers framework, we need to step out of our current position. From a viewpoint from within the current system, we are in a position of conflict, between the seemingly successful current scenarios within which both Kering and LCF operate (the logic of a post-modern consumerist economy), and the needs of a more equitable future. Conflict resolution has a number of methods and approaches from which we have much to learn. Adam Kahane shares methods that he has used in positions of extreme conflict in political and other terms; his method of convening offer useful ways to frame a collaboration understanding (Fig. 1).

Following this method, the prototype phase of the curriculum was conceived and tested out, whilst at the same time being observed, narrated and moved on through a reflexive process of questioning, interaction and analysis (Cunliffe 2004). Unlike most conflict resolution, the actors in this transformative planning scenario committed to ambitions of social and environmental balance through their work.

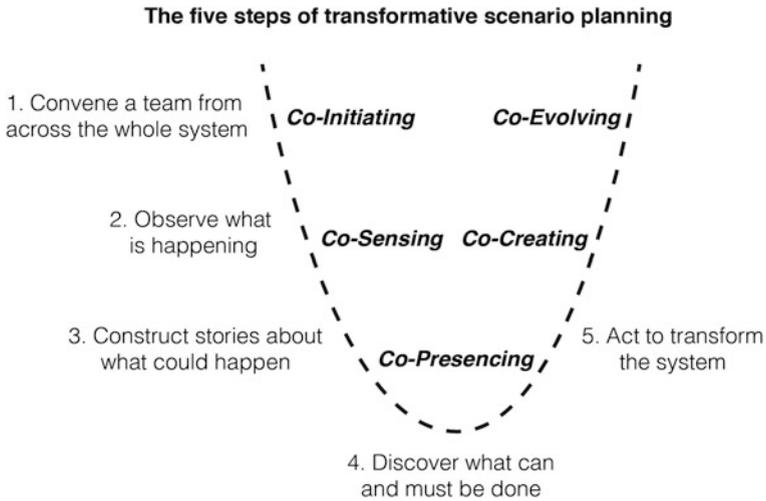


Fig. 1 The five steps of transformative scenario planning. *Source* Adapted from Kahane (2012)

12 Be the Change

Whilst Gandhi's quote "be the change that you wish to see in the world" is a well worn phrase, the shift to education for sustainability has been enhanced in this work by personal commitment on the part of participants, alongside a portfolio of knowledge to inform decision making. These initial insights are by no means generalisable either in terms of the partnership itself, which will evolve over the next few years, or the ways in which a range of stakeholders might engage in ESD. It does however offer a reflection on an immersive experience with deeply committed participants representing leading and high profile fashion businesses and educators. The art of co-operation and its practices are enhanced by shared purpose (Leadbetter 2010), but as we know, when the purpose is tangible, visible and responds to coordinated teamwork in a manner that is applauded by onlookers, participants become energized and encouraged towards success. But unlike the dedicated co-operation of a premiere league football team, the players in education for sustainability teams are seldom able to visualize the direct impact of their endeavours, and often lack applause or encouragement from onlookers who see the world as it 'appears'. We know full well of the challenges of sustaining co-operation. As we approach COP21, to be held in Paris in December 2015, our hopes focus on our ability to agree to the rules of the game; of living well on earth, within nature's boundaries. To this end we must hone and practice team-working skills. Whilst world-leaders in government struggle to work together, business leaders, students and tutors in the Kering X LCF partnership are exploring ways and

means towards a shared prosperity. How we demonstrate being human in nature, through fashion's agency, will contribute to our legacy as either making meaning or destroying what matters.

13 Findings and Conclusions

Engaging stakeholders in ESD through a five-year commitment enables a more experimental approach due to a longer 'payback' period and a trust in the partnership beyond the short term. Timescales for radical change in curriculum involve the existing course validation cycle, which in the case of UAL is a two-year process from initial registration of intent, through to final validation and recruitment onto courses. By allowing an open experimental curriculum to be developed and its learning to be taken forward into validated courses, enables exploration beyond boundaries and boundary changing. This also enables businesses to expand their consideration beyond a more usual problem minimising approach.

Participation in the transformation curriculum to date has led to high levels of sustainability engagement beyond the project. Whilst this cannot all be directly attributable to the partnership, with no previous data, the findings this year include:

- 60 % of students naming ESD course as 'definitely informing final master's projects', with a further 23 % 'maybe informing final projects' (student survey)
- 43 % of students 'definitely taking specific elements of group project into their final projects', with a further 43 % maybe doing so (student survey)
- Increased profile of ESD at LCF (press articles in news, fashion and sustainability publications)
- Students gain unprecedented insight into world-leading fashion business practice (student feedback)
- Dialogue between students and Kering has increased student employability skills (student feedback)
- Interdisciplinary teams have built networks, co-operative skills and knowledge exchange (student feedback)
- Gaps identified in incoming MA student ecological literacy (workshop session)
- Increased sustainability literacy evidenced through final presentation of student work (work review)
- Strong appetite for factual information for evidence based decision making (student interviews)
- Final presentations evidence some engagement in ideas of sustainability as an ethical imperative (work review)

We are relying on educational institutions to create global citizens who understand the complexities of today's world. Sustainability should not be at the margins of our educational system but integrated into the core of our approach. Nothing is more important than providing the framework to educate and inspire the next generation to act and become the change makers we need.—François-Henri Pinault

Findings listed above focus on student activity and feedback, as they are key stakeholders in our collective futures. Implications for us as researchers and educators within our own and other locations include the necessity to create a feedback loop between knowledge in incubation and knowledge in action, through a dynamic that is mutually supportive whilst cognizant of different measures of success. The great majority of UAL partnerships with industry consist of businesses setting projects for students to respond to, competitions to apply for or contract research that responds to a particular problem or area in need of in-depth analysis. A distinction of this partnership is its ambition to provide ESD through co-creation and vitally, co-delivery of curriculum by all stakeholders involved. Implications for business include the need for support at senior level due to the substantial time commitment in building a mutual learning environment. Acknowledgement of the role of ESD in business innovation, and success and the recognition of the need for industry to contribute to ESD, made public by Kering's CEO Francois Henri Pinault when addressing a room packed with students, journalists, tutors, designers and others, evidenced leadership, commitment and a ripple effect, felt, but not always measurable, across both education and industry in fashion. For Kering, which has already committed to sustainability, and London College of Fashion, already committed to ESD, this acts as a major amplification and scaling of intentions. For places ripe for scaling up and shining a light on ESD, an exercise in assessing matched values could enable productive engagement of a similar kind. One of the most important elements of year one, not registered on ambitions or project plans, has been the trust-building on both sides, so that the next phase can scale, not only in reach but in boldness of contents and methods used in co-creating and co-delivering such curriculum. The necessary step from transition education, a refining of content and delivery to transformational education, moves us swiftly along the line from convening to discovery (see above) so that emphasis can be placed much more in the 'acting' phase of transformation.

Fashion, in its personal and mass industrial form, involves making of matter (the contents of fashion) and making of meaning (building of identity and belonging) thus offering a potentially interesting place to evolve educational programmes that 'transform perspectives and ways of being in the world' (Moore 2005). In order to evolve both our ways of being, and our ways of doing (education and business), we need highly visible projects relating to everyday phenomena such as fashion, alongside a range of other disciplinary approaches, to create a social as well as scientific consensus on our actions in relation to climate change and social change. Joined-up forms of knowledge (Parker 2010) require us to work both across disciplines and with stakeholders across economic, social, aesthetic and cultural dimensions of art and design education. It is hoped that this example, along with the others in this publication, can contribute to a landscape of change that paints a new picture of us in the world.

References

- Capra F, Luisi PL (2014) *The systems view of life: a unifying vision*. Cambridge University Press, Cambridge
- Chick A (2013) In: Walker S, Girard J (eds) *The design for sustainability handbook*. Bloomsbury, London
- Collini S (2012) *What are universities for?*. Penguin, UK
- Cunliffe L (2004) On becoming a critically reflexive practitioner. *J Manag Educ* 28:407
- Department for Business Innovation and Skills (2013) *Participation rates in higher education: academic years 2006/2007–2011/2012* (Provisional). https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/306138/13-p140-HEIPR_PUBLICATION_2011-12_2_.pdf. Accessed 1 May 2015
- Ehrenfeld J (2008) *Sustainability by design: a subversive strategy for transforming our consumer culture*. Yale University Press, New Haven
- Fletcher K (2015) *Empowering imagination: Kering X LCF collaboration curriculum session*. 25 Feb 2015
- Fletcher K, Williams D (2012) *Fashion education in sustainability in practice*. *Res J Text Apparel*. ISSN 1560-6074
- Henrich L, Heine SJ, Norenzayan A (2010) The weirdest people in the world. *Behav Brain Sci* 33(2–3):61–83 2009
- Hummel C (1993) Aristotle. Originally published in *PROSPECTS—PROSPECTS: the quarterly review of comparative education* (Paris, UNESCO: International Bureau of Education), 23(1/2): 39–51
- Jackson T (2009) *Prosperity without growth: economics for a finite planet*. Earthscan, London
- Kahane A (2012) *Transformative scenario planning: changing the future by exploring alternatives*. *Strategy Leadersh* 40(5):19–23
- LCF MA student feedback (2015) Anonymous feedback session with MA students
- Leadbetter (2010) <http://charlesleadbeater.net/2010/01/we-think/>. Accessed 29 May 2015
- Manzini E (1994) Design, environment and social quality: from “existenzminimum” to “quality maximum”. *Des Issues* 10(1):37–43
- Manzini E (2015) *Design, when everybody designs: an introduction to design for social innovation*. MIT Press, Cambridge
- Meadows D, Wright D (1972) *Thinking in systems: a primer*. Chelsea Green Publishing Company
- Moore J (2005) Seven recommendations for creating sustainability education at the university level. *Int J Sustain High Educ* 6(4):326–339
- Parker J (2010) Competencies for interdisciplinarity in higher education. *Int J Sustain High Educ* 11(4):325–338
- Podger DM, Mustakova-Possardt E, Reid A (2010) A whole-person approach to educating for sustainability. *Int J Sustain High Educ* 11(4):339–352
- Schumacher EF (1993) *Small is beautiful: a study of economics as if people mattered*. Vintage
- Sennett R (2013) *Together: the rituals, pleasures and politics of cooperation*. Penguin, UK
- Shephard K (2008) Higher education for sustainability: seeking affective learning outcomes. *Int J Sustain High Educ* 9(1):87–98
- Sterling S (2004) An analysis of the development of sustainability education. In: Blewitt J, Cullingford C (eds) *The sustainability curriculum: the challenge for higher education*. Earthscan, London
- Svendsen L (2006) *Fashion: a Philosophy*. Reaktion Books, London
- Till J (2013) *What’s the point of art school?* Central St. Martins. 14 May 2013
- UAL (University of the Arts London) (2013) *SEE Stories Behind the Stats*. http://www.arts.ac.uk/media/arts/student-jobs-careers-new/about-see/SEE_Stories_Behind_the_Stats.pdf. Accessed 1 May 2015

- Walker S, Girard J (2013) *The design for sustainability handbook*. Bloomsbury
- Williams D (2015) Fashion design. In: Fletcher K, Tham M (eds) *Routledge handbook of sustainability and fashion*. Routledge, London
- World Economic Forum (2015) *Global risks 2015 10th edition*. World Economic Forum

Author Biography

Dilys Williams Professor of Fashion Design for Sustainability at University of the Arts London, Dilys Williams is a researcher, fashion designer, collaborator, and creator of the Centre for Sustainable Fashion. She engages translational leadership to devise and align emergent ideas towards sustainability through fashion's artistic and business practices. Through high-profile design positions and academic leadership roles, she explores empathy and interconnectivity to find means to support human fulfillment and nature's resilience. Manifestations of her work are applied to academic research, education, government, and industry interactions.