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An Holistic Model For Incorporating Sustainability In Fashion Education.

Introduction

Sustainable development has been on the agenda for numerous government bodies since the 1987 The Brundtland Report (p.43) alerted the world to the urgency of engaging in economic development that "...meets the needs of the present without compromising the ability of future generations to meet their own needs". In this paper, the idea of Education for Sustainability (EfS) will be discussed and examined in relation to fashion education. The current program for Product Development and Merchandising – Diploma of Textiles, Clothing and Footwear at the Royal Melbourne Institute of Technology (RMIT) is proffered as an example of how, with support from an industry partner, an holistic model can be utilised in addressing the incorporation of EfS.

Education for Sustainability

There is no doubt that human activity has had an adverse affect on the environment. We now see the results –pollution, turbulent weather patterns, restricted access to sustainable water supplies and dwindling world oil stocks -

affecting our well-being. It is claimed that our present rate of development is unsustainable and changes must be implemented for the well-being of the planet. It is necessary for society to have an informed basis upon which to review and modify their behaviour. Education is considered to be the key to changing behaviour. Pedagogy involves "the teacher's role, the relationship between teacher and learner, the learning process and the learning context" (Waters, 2005: 4). All too frequently, the vocational educational and training (VET) sector has focused on teaching rather than learning. A transmission approach is customary. The teacher imparts knowledge to students through modules, competency standards, programs and courses (Chappell, 2003:8). As such, the VET sector has been seen as providing only 'training for growth' and 'skills for work', without consideration of the broader purpose of the sector. To remain valid, VET must not only serve the needs of globalisation, it must also provide for development in the areas of personal autonomy, citizenship and sustainability. (Goldney, Murphy, Fien, Kent, 2007:15).

Goldney et al (2007:9), claim that "...if vocational education and training is to remain relevant in the changing workplace and community in general, the integration of sustainability education in policy and practice should become mandatory". They state that "Education for Sustainability (EfS) has been acknowledged globally as a means of achieving this change for future generations." (Ibid 2007:8)

Since the late 1960's environmental education has aided the promotion of a greater environmental consciousness. Along with this there has been recognition of the complex social, economic and environmental issues which challenge our world. Subsequently, EfS is now acknowledged as an international policy imperative. Deep behavioural changes need to be created via the education system for the successful teaching of sustainability. Part of this education will be to provide learners with the ability to critically analyse and change the world in which they live. (Ibid, p.11)

The implications of EfS on cooperative education are explored in recent work by Coll, Taylor and Nathan (2003). They suggest EfS can be developed through experiential learning; transferring EfS knowledge learned in the classroom to the workplace; and integration of work-based EfS knowledge - learning about environmental values in the context of the work place. (Coll, Taylor and Nathan, 2003:173).

Challenges for EfS

It must be accepted however, that sustainable development is an evolving concept. Understanding of the implications of triple bottom line plus one - economy, environment, society plus governance - continues to improve. This challenges VET to be continually innovative. Therefore, according to Newman et al (2004), the integration of EfS into VET needs to be flexible, adaptive, interdisciplinary, collaborative, experiential, locally relevant, value oriented and

future, action and learner oriented (Newman in Mazzotti, Murphy, Kent, 2007:12).

The implication at more than one level is that EfS is an area that should be pursued by tertiary institutes. Donald Schon wrote thirty years ago "We must ... become adept at learning ... in response to changing situations and requirements ..." (Schon in Fullan, 2006:42) As Cox (2005) points out, tertiary education must tackle the "... issue of broadening the understanding and skills of tomorrow's business leaders, creative specialists, engineers and technologists". (Cox, 2005:4) The focus for academics engaged in EfS should be ethical engagement, the processes of critical analysis and the use of holistic approaches. Other associated broad principles see educators as role models and learners, promoting experiential learning by reconnecting to real-life situations using holistic thinking. (Thomas, 2008)

It is suggested that this holistic approach is what has been occurring for the last seven years in the program Product Development and Merchandising – Diploma of TCF at RMIT. However, prior to examining the program and the way it functions, it is necessary to contextualise the discussion about fashion and well-being, and sustainability.

Sustainability and Fashion

For the purpose of this discussion, fashion can be understood to consist of three components. Fashion is a style of dress or adornment that is adopted by a significant number of people, for a limited amount of time. The idea of change or newness is an important consideration of fashion. New fashions are seen as distinctive or different. At the same time there is a perception of commonly accepted ideals. (Nelson, Welsh, Sargent, Botkin, 2002) Generating fashion is commonly held to be a creative process. According to the 2005 Cox Review,

'Creativity' is the generation of new ideas – either new ways of looking at existing problems, or of seeing new opportunities ... or changes in markets. 'Innovation' is the successful exploitation of new ideas ... new ways of doing business. 'Design' is what links creativity and innovation. (Cox, 2005:2)

Creative approaches to business also indicate a need to focus on educating for sustainability. Recent reports from Women's Wear Daily coincide with this view. Marci Zaroff, founder and president of 'Under the Canopy' insists that entry into the sustainable fashion market means"... you have to get educated and understand the whole picture ... It's not just a marketing gimmick, there is really a very serious process that goes into it." (Zaroff in Strugatz, 2007b).

Elsewhere, there are concurring views. Hong Kong firms are now saying organic textiles are "... only a very small part of the story. It's ... the dyeing, the spinning, weaving, knitting, fabric finishing and garment finishing ..." where the

impact comes in. "The supply chain is made up of three or four very different businesses and what best practices and sustainability means for each part is very different." (Woo in Haisma-Kwok, 2008a). An additional concern for these firms is the cost of energy and improving energy efficiency, and the escalating costs of raw material and oil. These factors are driving "...sustainable development (which) can not only reduce our impact on the environment, it can also ensure that we're employing best practices."

Carbon trading is another area that the Hong Kong firms are pursuing "...carbon trading looks to be a solid game plan. "It's not just cutting costs, it becomes an asset, a capital source. The first people to adapt will be the first to benefit." "(Loh in Haisma-Kwok, 2008b). Parallel to these activities, other companies are researching or utilising renewable resources. One example is "... Ingeo fibers, touted as the world's first man-made fiber from 100 percent annually renewable resources." These resources now mean that designers going 'green' have "... more variety than ever when it comes to creating apparel that won't harm the environment." (Strugatz, 2007b)

Sustainability and Well-being

Thus the challenge for EfS is to improve our ability to care for the environment. This in turn will have an impact on well-being - a term that invokes many connotations, both on a personal and a societal level. We are driven by globalisation to grow our economies, pursuing ever greater wealth, yet increased wealth does not automatically equate to greater happiness and well-being. The pursuit of wealth can be deleterious when it crowds out more important sources of happiness that feed our sense of well-being. Research

carried out during the 1990's into the association between higher incomes and happiness, indicates that above a certain threshold more money makes virtually no difference to perceived life satisfaction. In fact, the more materialistic people become, the less happy they are, potentially resulting in psychological disorders and poorer quality relationships. This materialism may diminish our sense of self worth, making us more reliant on others for our personal identity. It confuses our values, making it difficult for us to find meaning in life and full-fill our potential. (Eckersley, 2005). Hutchison (2008) agrees, pointing to "...a significant body of evidence suggesting that an excessively materialistic, consumption-oriented outlook actually damages wellbeing." Creating national wealth means individuals consuming more. The drive for greater economic efficiencies not only delivers high growth rates it is also inextricably connected to well-being and environmental destruction. Increasingly, the viability of consumerism is being questioned.

Euromonitor International reported in October 2008 that "Anxiety is a key driver of consumer behaviour Green consumers ... worry about mankind's negative impact on the natural environment and ... desire to alleviate it through altering their consumption patterns." (Euromonitor International, 2008a) Thus the indications are that there appears to be a change in attitude for many in 'generation Y'. Another article on Gen Y points to the notion that they "...care more for the environment ... 47% would be willing to pay more for environmentally friendly brands, products or services. "The article then states that according to the results of a recent survey, more than one third of Gen Y.

workers in the U.S.A. are drawn "... to work for companies with strong green credentials..." (Euromonitor International, 2008b). These issues of sustainability and well-being are of particular interest when examining the program for Product Development and Merchandising – Diploma of TCF at RMIT where the current industry partner places them as a priority.

The Holistic Program

Students studying the previously mentioned Diploma of TCF at RMIT develop skills and knowledge required for a career in fashion merchandising and marketing in the retail and wholesale sectors of the TCF industries. The two year program focuses on the practical application of skills and the formation of theories in merchandise management and marketing in the context of the TCF industries. Units from the National Industry Training Packages form the program's courses. The selected units have facilitated the successful implementation of holistic assessment. This assessment method supports the integration of a total of ten courses in one full-time year of study in the certificate program.

A key feature of the holistic model project is the inclusion of an industry partner
- a Melbourne based TCF company that contributes to the program in various
ways. The industry partner participates by formulating a company brief, making
company staff members available to be interviewed by students and by
providing feedback on the findings from student research. Students benefit from

this exchange by being involved in a realistic environment where the association with the participating organisation provides an action learning experience, incorporating problem solving and business communication skills.

The Industry Partner

In 2008 the industry partner is Lisa Gorman's company. The eponymous Melbourne based business was established around ten years ago. The company produce a range of women's wear garments that are designed locally and predominately manufactured offshore. The Gorman philosophy is strongly supportive of sustainable fashion and they have investigated viable ways in which they can incorporate sustainability across the board in their business practices.

Gorman claims to have closely studied what it means to go 'carbon neutral'. Although the company could officially be labelled as 'carbon neutral' they have gone further in their attempt to genuinely assist environmental care, customers and the fashion industry. Essentially they believe "...that drawing a line at what emissions we are responsible for and what emissions we aren't responsible for is too airy, and really who can say who should take care of what"? (Gorman website). The company feels that they are responsible for more than just their office and retail stores' emissions. Although current standards do not extend to 'outsourced activities', Gorman regards it their responsibility to consider the emissions produced by the factories that make their goods. Gorman ensure they engage with companies aligned with environmental sustainability, from

stationary suppliers through to freight forwarders, only considering new suppliers if they have an environmental policy. Some of the alternatives available on the regulated emissions offset market have been identified by Gorman. Rather than purchasing offsets and making the claim of 'carbon neutrality', their marketing team have formulated another option – that of rewarding customers – those who buy domestic green-power and those who use public transport or ride bikes to the stores. Gorman insist this option has an immediate impact on emission reductions. They take pride in the conviction that they are forcing other companies to re-think the way they do business and seeing the flow on effect, broad and wide - much further than the fashion industry. (Gorman website) These views have encouraged students to engage in research to gain a better understanding of the issues.

By way of introducing the work integrated learning project, Lisa Gorman presented a snapshot of the company's history and philosophy to the students. An excursion was organised to visit the Gorman retail outlets, warehouse and head office. The students were made aware of what initiatives the company has instigated to improve their sustainability. These include the launch of the Gorman organic collection, sustainable fashion using organic and sustainable yarns and fabrics. They have also circumvented the use of harmful discharge printing methods in favour of safer techniques using water-base printing only and reducing the production of garment-washed styles. Along with this they have cut back the use of garment packaging by 90%, changing to recyclable packaging. Further to this, they use only 100% accredited green power and

have exchanged light fittings for more energy efficient bulbs across all Gorman stores. An environmental consultant has been engaged to advise what can be done locally, and what is working with off-shore factories to reduce environmental impact. In addition, Gorman have future initiatives including developing innovative organic fabrics. They also plan to work with 'Engineers without Borders' and Gorman's main garment manufacturer to develop community based projects to improve sustainability. These and other initiatives have provided students with an insight to environmental sustainability and encouraged them to research and discuss other possibilities.

Students are made aware of the importance of community well-being through the charities supported by Gorman. The company donates to 'Kids Under Cover' which supports the homeless people in Australia by building homes on land given to them by the state government. Gorman also support 'Friends of the Earth' whose main focus is a campaign focusing on combating climate change. Gorman donates five dollars from every 'green & serene' tee sale (about \$1000 per month) to this climate justice campaign. Further to these contributions, Gorman are now accepting old Gorman garments from customers and donating them to the Australian based charity 'Seconds to Give' who provide rural villages in the Philippines with second hand garments and goods. The connection with Gorman has thus given the students a much broader view of the fashion industry and the work that can be undertaken to support environmental issues and community well-being.

Program Courses: Making Connections

Working with an industry partner provides an opportunity to integrate a realistic experience with the theoretical studies and research undertaken by the students. The Industry Studies course requires the students to examine the background of the industry partner and determine the company's position in the market place. Students work in groups and market research is completed and used to analyse the target market, including customers needs, perceptions and buying behaviour. The product's place in the market is examined with regard to the sales and price points. Students are able to work backwards from retail price to calculate the margins and profits of the product line. Students must determine who the three chief competitors are and perform a situational or SWOT analysis. The submitted work provides details of the company size and goals, along with product, price and promotion strategies, and a perceptual map based on the surveys. Students must also include details of distribution, discussing the size and importance of each distribution channel. Finally, they must provide an analysis of the macro-environment situation, summarising the broad trends that influence the product's future.

The industry partner supplies garments from their new season's range and the group are required to work with a specific garment in each of the remaining courses. For the Product Ranging course, the groups are required to develop variations of the supplied garments. Each group develops a range of garments and works on an assortment matrix that shows the garment types, fabrics, prices, sizes and colours. They are required to create a story board and a mood

board to convey the inspiration of the range and justify the development. These are produced digitally.

In Pattern Development, a full size and fifth scale pattern for the garment is made. A pattern specification sheet is completed with a sketch of the garment, trim details, pattern pieces listed, a written description and the manufacturing details included. Using the reduced scale pattern, the group estimates the fabric usage by creating a marker for the fabric they have sourced in the Global Logistics course.

In Global Logistics the students create and present a profile for a country they choose, using Australian data as a point of reference. Within the profile they are required to include information about the country's political situation and its stage of economic development. Research must also incorporate information about current global emissions. In addition, students investigate the concept of renewable energy and the country's stance. Another topic examined is the Fair Trade Status of the country: are there any textile related products that are currently sourced from the country under the Fair Trade Scheme; is there an opportunity to create a Fair Trade Agreement? Students must check the carbon trading regime and determine if the country is a signatory to the Kyoto Protocol. The group then has the task of rating the country on its environmental friendliness and making recommendations as to its suitability as a base for manufacturing or sourcing textiles.

In the Textile Product Knowledge course, the garment is examined to establish the content and structure of the fabric(s) used. The main fabric is analysed and a report is given on its characteristics including lustre, texture and drape.

Performance of the fabric is also described in terms of abrasion, chemical resistance, durability and pilling. These details are noted and the group uses the information to source an equivalent fabric.

Using the survey results, in the Quality Concepts course, groups must identify the industry partner's quality imperatives and those of their customers. The quality of the fabric and the make of the garment are written up in a report. This report also includes details of quality checks in pre-production, production and post-production. Each group must develop appropriate specifications for the size, fabric and make of the garment that communicate information clearly to all participants in the supply chain.

The fabric estimate is used in the calculations for the Merchandising Accounting course. Students develop an understanding of the relationship between the price the target market is willing to pay, and the textile and manufacturing costs. Groups must provide a breakdown of the specific costs involved in the production and retailing of the product under consideration. In preparing the analysis, they are required to consider the number of units produced and the

affect this has on the purchase price of components. An estimate for the cut, make and trim costs of the garment is used to complete a costing sheet that details costing per unit.

In the TCF Merchandising and Store Presentation course, it is necessary for groups to discuss the current philosophy of the industry partner and consider the target market, pattern of display, use of colour and any props, backdrops or signage. They use this information to merchandise the product they are working on and digitally create a concept corner or window display that would be appropriate for use in one of the company's outlets.

Support for the program is delivered in the TCF CAD and Management

Systems course, where students learn how to word-process written reports, use spreadsheets, create data bases, use illustration and photography software and use presentation software. The work that is required to be produced for many other courses is based on these skills: visual merchandising displays, mood boards, trade sketches, costing sheet templates, charts for marketing and databases for survey results and the final presentation.

In the culmination of the holistic project, during a fifteen minute presentation for assessment and feedback, each group delivers their findings to a panel of teachers, along with one or more representatives from the Industry Partner

Company. Students are able to see the interconnection of each course in the program. They benefit from the integration of study with an industry partner – creating a work integrated learning situation that is truly holistic.

Conclusion

There is no escaping the fact that the earth has suffered from human activity — industrial development has created pollution, adversely affected water supplies, indiscriminately depleted energy resources. Before it is too late to reverse this situation, we need to educate for sustainable development without compromising the ability of future generations to meet their needs. Holistic EfS incorporated in tertiary education is now considered essential. It has been demonstrated that EfS was successfully integrated in the courses of the program Product Development and Merchandising — Diploma of TCF at RMIT. Support from an industry partner has enabled a legitimate holistic model to be utilised in addressing the incorporation of EfS and assisted in providing learners with a broader understanding of current and future global issues. This promotes an ability to critically analyse and equips students with the skills and knowledge required for a career in the world of fashion merchandising and marketing.

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