geographically and functionally. De-contextualisation has severe repercussions, and while environments and periods can be mixed, this must be done judiciously and with great care. The problem with most modern designs is that both judiciousness and care are exercised in terms of economics, not creativity. While there are no universal solutions, it should be emphasised that sustainable design interventions need to identify, preserve, and promote what is unique to Botswana indigenous products.

Conclusion

There are enormous possibilities for the exploration of indigenous craft products for designers and crafts people in Botswana. Integration of research efforts in design for social contract and economic growth requires understanding of culture, crafts people dynamics and utilisation of local available renewable materials such as bamboo, cane and reed. Designers and crafts people in Africa should collaborate and employ design intervention to envision new scenarios for economic diversification and sustainable development. This will go a long way in re-inventing the informal sector to boast local economy and meet global challenges. Design workshops and seminars helped create and visualise new products range. These presented opportunities from the rich fabric of crafts sector.

Bibliography

- Ahmendabad Declaration on Industrial Design for Development, UNIDO, 1979
- Crul, M. Dehiel J.C. (2006), Design for Sustainability; A practical Approach for developing Economies,
- Craft Industries Development Strategy, Newfoundland & Labrador, 2002
- Creative Industries & Micro & Small Scale Enterprise Development, UNIDO, 2002
- Kolmodin A., Pelli A. (2005), Design for Innovation and Growth; Swedish Institute
- Moalosi R., (2007), The impart of Socio-cultural factors upon Human-centred Design in Botswana,
- Building a Case for Added Value through Design, New Zealand Industrial report, 2005
- The Strategic Partnership between Design & Sustainable Development: ICSID, 2003
- Success by Design; Report & Strategic Plan, New Zealand, 2003

Design programmes' responsiveness to economic, ecological and social imperatives: the case of University of Botswana

- S. Molokwane
- S. Khumomotse
- R. Moalosi

Department of Industrial Design and Technology, University of Botswana, Gaborone, Botswana. molokwaneb@mopipi.ub.bw

Abstract

Having been established as one of the tools for economic and social development, design is instrumental in shaping the form of many epochs, economies, and cultures. The new emerging economies have an important part to play and would stand to benefit more from the design strategies that are more contextual to their circumstances, as well as addressing the world's economic, social and ecological problems. This paper analyzes, as a case study, Botswana's design context. It looks at how the University of Botswana design programmes respond to these dynamics. The authors argue that any programme that only satisfies the economic imperatives while ignoring the ecological and social dynamics cannot justify its existence in the modern world. The paper concludes by proposing strategies to make the programmes more responsive to the modern day sustainability challenges.

Keywords

Design programmes, Botswana, economic, social, ecological, development

Global and Local Factors that Shape Design Curriculum

There are many factors that influence the development of the curriculum including; economic, social and ecological imperatives. In case that some might be tempted to dismiss the above facts as mere 'rhetoric' devoid of substance, Thackara (1997) points out that the winners of the European Design Prize had successfully mapped these imperatives, resulting in being more innovative.

Botswana is industrialising at a fast pace; in fact it is said to be one of the fastest growing economies in the world. It is reliant on diamonds, though there are diversification efforts. Furthermore with a capitalist system in place design has a possibility to flourish because; "Design without capitalism is like a car without an engine-it goes nowhere" (Heller 1992). Botswana has a dynamic culture, which is characterised by the quest for novelty and consumption patterns not much different from those of the industrialised world.

Industrial Design at the University of Botswana.

The University of Botswana (UB) offers two Bachelor of Design degrees, viz Industrial Design (ID), which produces graduates for the design and manufacturing industry, and Design and Technology (D&T), which produces secondary school teachers of design. The small nature of the industry needs the design graduate to have requisite skills not only in designing, but also in complementary areas such as engineering, manufacturing, entrepreneurship, and even marketing. Whilst it is not generally possible to train a single person in all these areas, the design curriculum of the University of Botswana is cognisant of the regional industrial climate and its graduate exigency. Both design programmes at UB (Figure 1) have a Science base, an Engineering foundation, a Design core, Business, general education for D&T and specialist design courses for the ID programme.

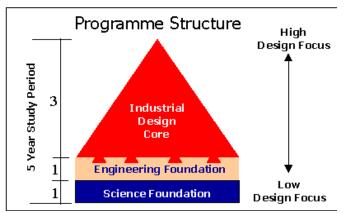


Figure 1. Structure of Design Programmes at the University of Botswana

Economic, Social and Ecological Imperatives

This section discusses how various courses offered by the design programmes at UB address the economic, social and ecological imperatives with the local context. Table

1-3 show various courses together with their objectives tailored to address the afore-mentioned challenges.

Economic Imperatives

Global realities cannot be ignored in designing a programme of study, more so in a globalised world of today. At the same time Woudhuysen (1998) brings to light the fact that a globalised economy is a challenge to designers.

Course	Objectives
DTB 300, IDB 400 Industrial Training	 Learn and use equipment in a safe and effective manner Empower theoretical knowledge gained in class room. Familiarize how to make products with due regard to time cost, designs quality and standards.
IDB/DTB 511&521 Major Project	 Use practical, intellectual and inventive skills of manufacturing a 3-dimen- sional design Employ a range of plan- ning, making, modelling and communication skills for making products Design and produce a device, product, system or service Conduct a reasoned analysis and evaluation of the final product.
IDB 523 Professional Practice	 Analyse the daily tasks of a Designer as a practitioner in industry Identify professional, labour, legal, ethical and moral factors that govern design practice Differentiate methods, strategies and techniques of operating a successful design practice Identify problems that occur within a professional practice and their remedies

Table 1. Economic imperatives

The above courses indicate economic imperatives driven through practical project work where the student is simulating actual professional practice and having to come up with economically viable product deliverables. One important aspect of the above courses is the costing of the project, from conceptualization to production, so the designer has a good idea of the economic dimension of his work. The Professional Practice course outlines the theoretical foundation for varying operational conditions in the actual design world, preparing the designer for a coordinated management of all the informing factors for a successful design output. The economic imperatives are brought together in a practical context during the Industrial Training course, where the students are working under supervision of experienced designers on live projects, with direct economic implications.

Social imperatives

In line with this Balcioglu (1998) highlights that the role of product design in the post-industrial society needs to be reassessed and questioned. Margolin (1998) identifies the fact that the world is suffering from a structural problem and that design must play a significant role in enabling the world to attain an equilibrium model. In addition, Papanek, the most outstanding 20th century advocate of 'Responsible Design' emphasised the need for designers to respond to massive amounts of new knowledge from other fields about human responses to technological environments.

Course	Objectives
DTB 311 Design, Technology and Society	 Describe the social implications of design and of developing technologies Explain the physical, social and psychological aspects of human beings in relation to the design of products.
IDB 313 History of Design	 Identify, analyse and critique various design movements, designers and products and to appreciate their impact on the society throughout human history. Identify, analyse and critique some indigenous products which exemplify the evolution of design in Botswana and the region.

DTB 413 Special Human Needs	 Sensitise students to the needs of the handicapped, underprivileged and the aged in the society. Understand a special human need context, identifying a real problem situation that may be solved by designing and making artefacts, services and systems.
IDB 512 Contemporary Issues in Design	 identify major issues of controversy in industrial design education, practice and society evaluate new philoso- phies and theories which are a response to the con- temporary environment.

Table 2. Social imperatives

The courses shown in Table 2 demonstrate how the design programme at the University of Botswana is attempting to address the same so that the graduates become sensitive to societal issues and problems. The expectation is that the graduates should develop a new paradigm shift on how to successful address social issues in their practice. The social imperatives range from society's needs, wants and opportunities and the underlying philosophy is to address social imperatives from the local context perspective.

Ecological imperatives

Manzini (1998) proposes a new way of rethinking product design for the information and sustainable society. He advocates change of consumption patterns rather than new design methods but proposes new types of products in the period of transition. Rams (1998) argue for new responsibility for Industrial Design so as to contribute to social and ecological sustainability.

Course	Objectives
DTB 415 Design for Sustainable Development	- Identify the relationship between rural ecological and social sustainability and design practice

 Explain the nature of human environment and the need to preserve it. Describe the effect of po- pulation growth and new materials and processes.
 Explain the need for ecological balance and steps being undertaken. Design environmentally friendly products.
 Identify major environmental problems facing the planet earth as a consequence discrete products. Critique various methods used for evaluating environmental performance of products and systems in the design phase. Identify the various strategies, methods and techniques used by designers to create environmentally friendly products.
- Explore and critique ethical and environmental issues pertinent to the design of packages.

Table 3. Ecological imperatives

Courses in Table 3 familiarize students with the demands and rigour of designing with environmental sensitivity, for a more sustainable world. The material covered including identifying the appropriate materials and resources, with least adverse effects to the environment, and employing the indicative best practices to maintain an ecological equilibrium and ecological ambience. It must be noted that the above courses are not only theoretical but some of them have provision for practical application of the theory gained into practical design projects.

Discussion

The two design programmes have been running for about six years and they are being reviewed so that they are in line with the current dynamics and the mission and vision of the University of Botswana. The University of Botswana has set-up eleven graduates' attributes through its teaching and learning policy. The attributes are responsive to the current challenges in Botswana and the region. Each student upon graduation should have attained these attributes in order to face the challenges posed by economic, ecological and social imperatives. The revised programmes have four strands, which are linked to these attributes as follows:

Strand	Graduate Attribute
Design Technology (Courses in this strand cover materials, processes and technology)	 Entrepreneurial and employability skills Organizational and team work skills Critical and creative thinking skills
Design Communication (Graphics)	- Information and com- munication technology knowledge and skills - Communication skills
Design Practice (Projects and internship)	 Self-directed, long life learning skills Critical and creative thinking skills Cross-cultural fluency Innovation skills Organisation and team wok skills
Design Theory (Theories of design)	 Accountability and ethical standards Interpersonal skills Social responsibility and leadership skills Research and information literacy

Whilst most industries in Botswana may be a single commodity producing company, the role of the designer in the same has mostly been multi-faceted, owing to the generally small to medium size profile of the industry, and not affording the variegated professionals needed for different sectors. This is a common trend in the small and medium industries in most of the developing world.

Conclusion

Given Botswana's context and global trends, the Designer or Design Educator of the 21st century must not be 'appearance designers'. It is believed that for a Designer to be having an impact in Botswana, and indeed the whole of Africa he/she must not only be familiar with the cosmetic aspects of a product but equally conversant economic, social and ecological contexts. The revision of the design programmes at the University of Botswana was in line with the local and global challenges posed by social, economic and ecological imperatives. The underlying philosophy is to equip students with the necessary skills to face these challenges in the work environment and to be sensitive to society's needs in a sustainable way.

References

- Thackara, J. (1997), Winners: How today's Successful Companies Innovate by Design, Gower.
- Heller S. (1992), "Design without Capitalism", Industrial Design (USA), vol.39, no.3(May/June'92) pp12
- Woudhuysen, J. (1998), Beyond the Dogma of Globalisation, In Baclcioglu, T, (ed) 1998, The Role of Product Design in Post-Industrial Society. METU Faculty of Architecture Press, Ankara.
- Baclcioglu, T. (1998), The Role of Product Design in Post-Industrial SocietyMETU Faculty of Architecture Press, Ankara.
- Margolin, V. (1998), Design and the World Situation, In Baclcioglu, T, (ed) 1998, The Role of Product Design in Post-Industrial Society METU Faculty of Architecture Press, Ankara.
- Baxter, M. (1995), Product Design: Practical Methods for Systematic development of New Products, Gower Publishing, Vermont.
- Manzini, E. (1998), Products in the Period of Transition, In Baclcioglu, T, (ed) 1998, The Role of Product Design in Post-Industrial Society METU Faculty of Architecture Press, Ankara.

Designing with the enemy: poster diplomacy via Seattle-Moscow-Tehran-Havana

Daniel R. Smith Command z, Seattle, USA command_z_design@hotmail.com

Abstract

Designing with the Enemy is an examination of a three-part curatorial project by Daniel R. Smith that has united the city of Seattle with the capitols of nations often at odds politically with the United States—namely Cuba, Iran and Russia. Focusing on the poster as cultural expression, this series of city-to-city exhibitions brought contemporary work of these disparate cities together through thoughtful exchanges shared with public at large.

Keywords

Social Activism, Responsibility, Cultural Diversity

Whose Enemy?

For a brief moment following the events of September 11, 2001, there was an outpouring of heartfelt, grassroots patriotism in my country, including my city of Seattle, famous as a liberal, left-wing corner of the U.S. In my city, Seattle, the remote, liberal capitol of the United States, there was a brief moment of heartfelt, grass roots patriotism for our country following the events of September 11, 2001. We felt for those who died and the rescuers who tried to save them. The world responded, too, with an outpouring of sympathy, sharing our grief and shock. It seemed this tragedy contained an opportunity to bring the world together through our common reaction and desire for global justice. Instead, our President embarked on a public relations campaign to whip-up support for his plan to attack Irag, a country unconnected to the hijackings. We entered an era of excuses, misdirection and outright lies from the Bush administration about who was responsible and who deserved punishment. The result was to obscure the connections we felt and deepen divisions.

"Either you are with us, or you are with the terrorists."