2013 DEFSA conference

Design Cultures: Encultured Design

Conference proceedings of the 2013 DEFSA conference

Compilers

Thinus Mathee

Kate Chmela-Jones

© Copyright 2013 by the Design Education Forum of South Africa (www.defsa.co.za)
Extracted from the 2013 DEFSA conference proceedings

PUBLICATION OF DEFSA CONFERENCE PROCEEDINGS

The conference proceedings are published by the Design Education Forum of Southern Africa (DEFSA) on the following website: www.defsa.org.za

The views expressed in this publication are those of the authors and not necessarily of DEFSA. Papers are published as submitted by the authors, after they have considered and included recommendations from peer reviewers.

Full papers are submitted for peer review after successful acceptance of a conference abstract. All full papers submitted to the DEFSA conference committee are subjected to a rigorous double blind peer review process. This process takes place prior to both the verbal presentation at the conference and the publication of the proceedings. Expert specialists within the field of Art, Design and Architecture are selected to perform the reviews (Reviewers list is included). Authors receive feedback in the form of a peer review report. A confidentiality clause ensures that both authors and reviewers remain anonymous during the peer review process.

ISBN No 978-1-77012-131-7

© 2013 Design Education Forum of Southern Africa

All rights reserved. The materials published in this conference proceedings may be reproduced for instructional and non-commercial use, providing that proper reference to the source is acknowledged. Any use for commercial purposes must have prior approval of the Executive Committee of the Design Education Forum of Southern Africa.

© Copyright 2013 by the Design Education Forum of South Africa (www.defsa.co.za)
Extracted from the 2013 DEFSA conference proceedings

FOREWORD

Brief overview of the conference theme

The 2013 DEFSA conference was titled Design Cultures: Encultured Design. A design is shaped by the communities in which it is to operate, and, conversely it shapes those communities. Thus "design cultures" refers both to the communities of design, but also to the way in which design shapes community – "to design communities". The designer shapes and is shaped by the communities in which the designer operates.

A total of 38 abstracts were received of which 27 papers were presented over a two-day period, addressing a range of topics that were pertinent to the conference theme. All 27 papers were accepted for publication in the conference proceedings.

Subthemes

Within this broad framework, contributors are encouraged to address their papers to one of the following sub-themes and are encouraged to present both theoretical underpinnings and practical applications of their work:

1. **Individuated design**

   (practices, products, personalities, purposes, principles);

2. **Educating designers, designing educators**

   (the cultures of praxis in the academy);

3. **Design-in/for-community, community–in-design**

   (the communal in design, the design in the communal);

4. **Reflective design**

   (acts of reflection on design – 'the reflective practitioner' in community, according to Donald Schön);

5. **The symbiotic design**

   (enculturation between the designer and the natural and urban environment).

© Copyright 2013 by the Design Education Forum of South Africa (www.defsa.co.za)
Extracted from the 2013 DEFSA conference proceedings

KEYNOTE SPEAKERS

Four internationally acclaimed design education visionaries delivered keynote talks at the conference. A short biography of each speaker is presented below with the title or focus area of their presentations.

Prof. Roy Marcus

Prof. Marcus graduated with a BSc in Mechanical Engineering from the University of the Witwatersrand in 1972. In 1974 and 1978, he was awarded an MSc and a PhD respectively for research work conducted in the field of the pipeline transportation of solids. In 2004, he received an Honorary Doctorate in Technology from the Technikon Witwatersrand.

Prof. Marcus was appointed to a range of positions in both the academic and commercial world and was responsible for the establishment of the Materials Handling Research Unit and was founding Director of the Science Park at Frankenwald.

From the inception of the new democracy until 2004, Prof. Marcus played an active role in the development of the new government's science and technology initiatives, acting as the Ministerial Advisor on science and technology and the Chairperson of the National Advisory Council on Innovation. He was elected as Chairperson of the Council of the University of Johannesburg in March 2006.

He is currently the Chairperson of the Da Vinci Institute for Technology Management: a private postgraduate school of business that specialises in the management of technology, innovation and people. He also chairs the Honorary Consul of the Republic of Belarus and the South African Power Utility Research Advisory Board. He is an honorary professor at the University of Warwick and the University of Johannesburg and a Fellow of the South African Academy of Engineering.

Prof. Marcus has been appointed by the Deputy President to the technical working group of JIPSA and represents South Africa as a board member of the International Sustainable Trade and Innovation Centre.

Dr. Ian Campbell

Dr. Campbell has experience in both academic and "real world" applications of CAD technology. At the 2013 DEFSA Conference he presented a paper on "Using New Technology to Improve Students' Opportunities".

In South Africa, the UK and around the world, students' learning opportunities can be disadvantaged by their geographical location, social background, physical impairments and so on. This may engender an entire culture of low expectations amongst the students, their educators and society in general.

The solution to this problem is multi-facetted and complex, and no single intervention should be seen as a panacea. However, the use of leading-edge design and build digital technology undoubtedly has a role to play.

This presentation brings an overview of some collaborative research being undertaken by Vaal University of

© Copyright 2013 by the Design Education Forum of South Africa (www.defsa.co.za)
Extracted from the 2013 DEFSA conference proceedings

Technology and Loughborough University, involving high school students from disadvantaged backgrounds and with physical impairments. The students were given access to state-of-the-art computer aided design and direct digital manufacturing technologies and were able to achieve project outcomes that far surpassed the expectations of their teachers.

The specific activities undertaken and wider implications of the research are presented with a view to inspiring similar work elsewhere.

After graduating from Brunel University in 1985, Ian Campbell worked as a design engineer, first in Ford Motor Company, and later in the Rover Group. In 1989, he was appointed as a Senior Teaching Fellow for CAD/CAM at the University of Warwick, where he undertook a part-time MSc degree by research. In 1993, he obtained a lectureship at the University of Nottingham and gained his PhD, again through part-time study, in 1998. His current position, since October 2000, is Reader in Computer Aided Product Design at Loughborough University in the Design School. Currently Dr. Campbell is also engaged as the editor of the Rapid Prototyping Journal.

Prof. Eileen MacAvery

Prof. MacAvery is an art educator, graphic designer, author, and photographer. She is currently with Berkeley College serving as Professor/Chair—Graphic Design. She is the author and designer of the books Ethics: A Graphic Designer's Field Guide, East End Stories, and Teacup Secrets and the blogs www.ethicsingraphicdesign.com and www.chakraspirit.com.

Prof. MacAvery has over 25 years' experience as a creative director, art director, and graphic designer. An expert in creating integrated marketing that reaches every touchpoint, she has worked for some of the biggest names in entertainment and media marketing.

Prof. Deon de Beer

Prof. de Beer is currently the Executive Director: Technology Transfer and Innovation at the Vaal University of Technology, Vanderbijlpark, South Africa. His experience includes 10 years of industrial R&D at the AEC, supplemented by 24 years of Higher Education experience (teaching, research and management).

Last mentioned includes an 18 month secondment to Tshumisano as CEO in 2003 to establish a government agency to promote technology transfer at South African Universities of Technology. He has published widely on topics in product development, technology transfer, innovation, research development and commercialization, is a rated researcher with the National Research Foundation, was the founder/leader of Integrated product development, the Centre for Rapid Prototyping and Manufacturing (CRPM), Product Development Technology Transfer Centre and FabLab at the Central University of Technology, and serves on the editorial boards of various journals. Prof. de Beer is also a visiting professor locally and internationally.

© Copyright 2013 by the Design Education Forum of South Africa (www.defsa.co.za)
Extracted from the 2013 DEFSA conference proceedings

PEER REVIEWERS

REVIEWER	AFFILIATION
Jolanda Morkel	Cape Peninsula University of Technology
Mari Arnot	Cape Peninsula University of Technology
Dr Alletia Chistin	Cape Peninsula University of Technology
Prof Mugendi M'Rithaa	Cape Peninsula University of Technology
Hermie Voulgaleris	Cape Peninsula University of Technology
Bruce Cadle	Nelson Mandela Metropolitan University
Mary Duker	Nelson Mandela Metropolitan University
Inge Economou	Nelson Mandela Metropolitan University
Dr Heidi Saayman-Hattingh	Nelson Mandela Metropolitan University
Louise Mari Combrink	North West University
Wessie van der Westhuizen	North West University
Waldemar Bussiahn	Tshwane University of Technology
Flip Du Toit	Tshwane University of Technology
Prof Rudi de Lange	Tshwane University of Technology
Prof Alan J Munro	Tshwane University of Technology
Schalk van Staden	Tshwane University of Technology
Amanda Breytenbach	University of Johannesburg
Neshane Harvey	University of Johannesburg
Farieda Nazier	University of Johannesburg
Dr Deidre Pretorius	University of Johannesburg
Ilse Prinsloo	University of Johannesburg
Dr Judy Ramgolam	University of Johannesburg
Desiree Smal	University of Johannesburg
Dr Finzi Saidi	University of Johannesburg
Raymund Königk	University of Pretoria
Ria van Zyl	University of Pretoria
Kate Chmela-Jones	Vaal University of Technology
Carol Kuhn	Vaal University of Technology
Anneke Laurie	Vaal University of Technology
Thinus Mathee	Vaal University of Technology
Prof Connie Moloi	Vaal University of Technology
Nicolene Smit	Vaal University of Technology
Avitha Sooful	Vaal University of Technology

© Copyright 2013 by the Design Education Forum of South Africa (www.defsa.co.za)
Extracted from the 2013 DEFSA conference proceedings

ACKNOWLEDGEMENT

A number of people have made significant contributions to the successful delivery of the 2013 DEFSA Conference and the publication of the conference proceedings.

The following people deserve receiving individual acknowledgement:

- Thinus Mathee (Conference Chair/ organiser)
- Kate Chmela-Jones (Conference organiser)
- Dr Bernadette Johnson (Research Support)
- Dianne Volek (DEFSA website manager)
- Rochelle Moolman (Formatting of conference papers)

The following groups are acknowledged for their input:

- DEFSA Executive Committee
- Department of Visual Arts and Design at the Vaal University of Technology

DEFSA appreciates all the authors that invested a considerable amount of time and effort in the preparation and submission of the conference papers. In addition, a word of sincere appreciation is extended to the peer reviewers for reviewing the papers.

© Copyright 2013 by the Design Education Forum of South Africa (www.defsa.co.za)
Extracted from the 2013 DEFSA conference proceedings

TABLE OF CONTENTS

	AUTHOR(S)	TITLE	PAGE
1	Amanda Breytenbach	Cultivating sustainable thinking through employing a student-centred learning approach	1
2	Waldemar Bussiahn	Designing environments for a stressful and traumatic workplace culture: a case study in a mental institution	10
3	Bruce Cadle & Simon Kuhn	Critical Design as critique of the design status quo	22
4	Kate Chmela-Jones	Democratising graphic design: the role of human-centred practice within communication design projects	34
5	Rudi de Lange & Alan Munro	Ethics in Design Research: a reflection on Intercultural Praxis in the Design Disciplines	43
6	Inge Economou	Problematic motifs: portrayals and identity construction of women in visual consumer media	51
7	Cariana Fouche	Failing schools in South Africa: a symptom of defeatism in school leadership	64
8	Rolf Gaede	Visual literacy in community communication: pre-testing nutrition education materials for elderly care-givers in Boipatong	74
9	Andrew Gill	Positioning 'constructivist' academic research into project-based pedagogical design studies for fourth year Interior Design Degree programmes	82
10	Lize Groenewald	Introducing De Jong: reflections upon reconstructing the life and practice of a white English-speaking designer	92
11	Neshane Harvey	Design process of novice fashion design students: an educator's reflective analysis	102
12	Neshane Harvey	Sustaining the Johannesburg fashion design incubators: The role of fashion design education	111
13	Nicolaas Jacobs & Marth Munro & Chris Broodryk	Green Screen: The Actor's Challenge	120
14	Raymund Königk	Determining selection criteria for the compilation of an interior design corpus	134

© Copyright 2013 by the Design Education Forum of South Africa (www.defsa.co.za)
Extracted from the 2013 DEFSA conference proceedings

	AUTHOR(S)	TITLE	PAGE
15	Carol Kuhn	Additive manufacturing in 3D product design and development practice: an interdisciplinary shift	145
16	Anneke Laurie	Interactions: shaping the places we inhabit	155
17	Elzabe Meiring	Praxis of Design Education to the current Digital Culture Student	166
18	Thlolo Modiba & Rudi De lange	A reflexive account of developing community health care material through the use of pre-testing methods and visual persuasion techniques	174
19	Nina Newman	Idealisation as a design approach in enamelled contemporary jewellery	191
20	Ola-Afolanyan Olubunmi & Anne Mastamet-Mason	A customized size chart for the African pear shaped plus-sized South African women	202
21	Ilse Prinsloo	Embracing a culture of Active Citizenship in Interior Design education	211
22	Aubrey Ramatla & Anne Mastamet-Mason	The decision making process of visually impaired consumers in an apparel retail environment	220
23	Pfunzo Sidogi	The demise of design programmes within the public FET system in South Africa: a case for non-formal education	229
24	Avitha Sooful	Designing education for sale: a price tag on Universities of Technology	238
25	Mike Swanepoel	The Myth of Unified Global Culture: transcoding national cultures within website interfaces	245
26	Thea Tselepis & Anne Mastamet-Mason	Toward an entrepreneully orientated design model for the SA small business that provides custom-made apparel	259
27	Christa van Zyl	Supporting a community through design: Melville Johannesburg	271

© Copyright 2013 by the Design Education Forum of South Africa (www.defsa.co.za)
Extracted from the 2013 DEFSA conference proceedings