In search of an integrated knowledge transfer approach in design doctoral studies

Keywords: emerging research culture, integrated knowledge transfer approach

This extended abstract commences with a brief background description of the post-1994 South African higher education landscape and reflects on utilisation and transfer of knowledge produced in public universities. Thereafter, a brief outline is presented of the challenges experienced by academics in both emerging research and postgraduate design environments. The background, outline and literature reflection, serves as a backdrop to explain the research questions, presented in the abstract, which I propose to investigate during and after the design education conference. The aim of the proposed paper is to observe and document integrated knowledge transfer approaches that currently exist in design doctoral studies at an international level. The answer in turn could inform international best practice examples of integrated knowledge transfer approaches, which could assist in the development of the doctoral studies curriculum in emerging postgraduate design programmes in South Africa.

BACKGROUND TO POST-1994 SOUTH AFRICAN HIGHER EDUCATION ENVIRONMENT

Since 1994, higher education in South Africa (SA) has witnessed drastic changes in its political ideologies and focus. The post-apartheid political ideologies were required to restructure and reform a racially divided higher education environment in SA (Mouton and Gevers 2009). National higher education policies such as the White Paper published in 1997 and the National Plan for Higher Education (NPHE) of 2001, indicate that the post-1994 government's broader national strategy focused not only on racial transformation but also on the acceleration of human capital development. The NPHE (SA 2001) presents five priorities that relate to postgraduate higher education and research. They are; increase research output ─ especially doctoral graduates, increase research outputs, sustain existing research capacity and create new centres of excellence, facilitate partnership and collaboration in research and postgraduate training; and promote articulation between the different elements of the research system (SA 2001:70).

The post-1994 government further deemed it necessary to transform a higher education system in which a clear distinction was made between the previous two institutional types namely; universities and technikons. Universities, generally speaking, were required to concentrate on the teaching and research of fundamental scientific principles while technikons concentrated on the application of scientific principles to practical problems and to technology (Bunting 2002). Technikons furthermore were tasked with the promotion and transfer of technology within a particular vocation or industry (Council of Higher Education 2002). The Transformation and Restructuring Policy (SA 2002) presented the new institutional landscape and the mandatory mergers of public higher education institutions, which aimed to improve the institutional landscape of the higher education system. The reformed public higher education landscape were reduced from 36 to 21 institutions which comprised three types of institutions namely; traditional universities, universities of technology (replacing the term technikon) and lastly the introduction of a new institutional type referred to as comprehensive institutions, which is the merger between a technikon and university (SA 2002).

VISION AND STRATEGIC DIRECTION FOR HIGHER EDUCATION IN SOUTH AFRICA

It is the purpose of the reformed South African higher education policies to provide guidance, rebuild the nation and drive transformation that is needed in a post-apartheid society and economy. The post-apartheid government was required to bear the global economic requirements in mind within the vision and strategic direction that was presented in

reformed state policies. Due to the nature and requirements of the knowledge centred global economy it was identified that "[H]igher education must provide education and training to develop the skills and innovations necessary for national development and successful participation in the global economy" (SA 1997:1.11). In 1997 with the publication of the White Paper, education was identified as a central role player in the development and training of a knowledge society and economy. The White Paper (SA 1997:1.1) identifies within the first paragraph of chapter one that "Higher education plays a central role in the social, cultural and economic development of modern societies".

The Council of Higher Education (2002) suggested in the *New Academic Policy for Programmes and Qualifications in Higher Education*, that higher education should be providing individuals for society that are trained to respond to the demands of the knowledge-based work place. This proposed policy identifies that the role of higher education has changed. In the past, higher education was allowed to impose definitions of knowledge on society. In the knowledge-economy paradigm, society is demanding that higher education provides more instrumental definitions of knowledge and more operational based knowledge products. Higher education is therefore expected to be more responsive to societal needs. The policy indicates that: "Globally, higher education is now expected to focus on the employability of its graduates and to contribute, at least in part, to national economic development" (Council on Higher Education 2002:3.1).

PRODUCTION AND UTILISATION OF KNOWLEDGE

Mouton (referenced in Venter 2006) indicates that basic or 'pure' research tends to be conducted mostly by universities in South Africa and explains that "universities offer the nation a great bargain" (Venter 2005:68). He verifies this statement through explaining that much of the research effort is offered at very little financial cost at universities in the pursuit of a passion for learning and qualifications (Venter 2006). An aspect that becomes evident in a research project conducted by Boshoff and Mouton (2005) is that the majority of research production role players value the extension of knowledge through research rather than only the immediate utilisation assigned to the research. The study further identifies that although universities have specialised roles and responsibilities, that society as a whole has a part to play as bearers, sharers and producers of knowledge.

Hall (referenced in Venter 2006) argues that the South African higher education system contains a wealth of knowledge. He presented the following question at the KM Africa conference in March 2005 "How can this publically owned knowledge resource best be integrated into a wider system that contributes effectively to the objectives of national and regional development strategies?" (as referenced in Venter 2006:73). Hall indicates a concern with the dissemination and use of knowledge produced within higher education. In the conference presentation Hall (referenced in Venter 2006) calls for universities to develop smart interfaces with the state and private sector, promote effective knowledge transfer and show through examples how valid social and economic return can be delivered through university resources.

RESEARCH AND POSTGRADAUTE OFFERING CHALLENGES WITHIN EMERGING RESEARCH CULTURES

Various challenges exist for emerging postgraduate disciplines in the rapidly transforming higher education landscape. The majority of design programmes offered in SA, from the 1970s to 1990s, were developed and offered by technikons and focused on vocational training and industry requirements. Design programmes such as Industrial, Interior and Fashion Design are not established at a Doctoral level and SA does not have academics currently suitably qualified in these disciplines. This phenomenon is symptomatic of programmes that were traditionally developed and offered in the previous technikon

environment, where the focus was on undergraduate offerings and technology. Although the offering of Technology degrees (at bachelor, master's and doctoral level) were introduced in 1994 throughout the country, the offering of design doctoral programmes were only permitted at identified sites of delivery in South Africa.

After 2002, events such as the transformation of the higher education landscape, the introduction of a new Higher Education Qualification Framework (SA 2007) and demand for an increase in research output; initiated drastic change for previous technikon academics in the higher education system. These changes required that academics, across all institutions and disciplines, be appropriately qualified at the minimum of a Master's level and be competent and productive in delivering research output. Conducting research and delivering research output was an activity that was mostly associated with traditional universities prior to the transformation. In 1996, the report *A Framework for Transformation*, revealed that 83 percent of research articles and 81 percent of Master's and Doctoral graduates were produced by historically white research intensive universities (Council on Higher Education 2009). Therefore, research production and postgraduate supervision skills, for the majority of academics from previous technikons, need to be developed. Dyason, Lategan and Mpako-Ntusi (2010) performed three case studies at universities of technology that focus on research capacity initiatives that are currently introduced in emergent research cultures. The study indicates that a wide range of strategies are currently introduced, which are directed at developing the capacity to deal with challenges associated with an emerging research culture at these institutions.

IN SEARCH OF GOOD AND BEST PRACTICE

Du Prè (2010) indicates that the universities of technologies in South Africa are wary of falling into the trap of adopting the culture and value system of "research universities" which can confuse the public and impact negatively on the entire education system. It is therefore not the intention of this extended abstract to create the impression that a "one-type-fits-all" approach is evident in South Africa. The purpose of the background and description of the emerging landscape is to explain that although drastic changes were implemented in South Africa, an opportunity is also created for academics and curriculum developers, to rethink and reconsider the contribution and utilisation of knowledge produced through postgraduate curriculums. Design educators, that form part of the emergent research culture and emergent postgraduate design disciplines, are given the opportunity to learn from international best practice, whilst reflecting on the requirements of government and the expectations of society.

Du Prè (2010:27) proposes that the only way to fast-track progress is to "[F]orm partnerships, learn and observe, share best and good practices, and learn (and avoid) the mistakes made by others in their development trajectories". The aim of the research is therefore to observe and document case studies that employ integrated knowledge transfer approaches in design doctoral studies during the conferences, through presenting the following research questions:

- What is the role of the PhD curriculum in relation to societal and economic development?
- Who will benefit from the research output that is produced within the doctoral studies?
- Are integrated knowledge transfer approaches evident in design doctoral studies?

It is further proposed that best practice case studies could be documented during and after the conference and presented in a formal publication.

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