Service-Learning in Interior Design Academic Programmes: Student Experiences and Perceptions

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Declaration

I declare that this dissertation is my own work, and has not been previously submitted to any other Institution or for any other Degree award. All references quoted or indicated are acknowledged in the reference list.

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Abstract

This study explored the participants' perceptions of their service-learning experiences in the Department of Interior Design at the Durban University of Technology (DUT), KwaZulu-Natal, South Africa. The point of departure of the study was a Community Higher Education Service Partnerships (CHESP) Pilot Project initiated by JET Education Services (JET). The study is placed in the context of Higher Education transformation, where 'community engagement' is a national imperative. In higher education such engagement includes service-learning. The key focus of the study was on how the participants perceived their experiences in terms of their academic learning, personal growth and social responsibilities. Of interest, too, were the participants' ideas of how service-learning could be improved, if indeed retained, in the interior design programme.

Data comprised of reflective reports which were completed by the participants shortly after the service experience and from semi-structured interviews conducted one year later. The qualitative research design involved my immersion in the setting, the collection and categorization of the data and a review of the findings in relation to the current literature.

This research highlights the social purpose of Higher Education and the opportunity service-learning presents to nurture the three domains of learning, namely academic, personal and social. Recommendations for future service-learning within the programme are made.

Acknowledgements

I appreciatively acknowledge the student cohort, the community and service providers who participated in the 2005 Pilot service-learning project and in particular, the participants who contributed to this study.

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A special thank you to my supervisor Ms Frances O'Brien for her thoroughness and support during the writing of this dissertation.

Foreword

The discipline of interior design is visual. I believe that without visuals the broad topic of this research cannot be fully appreciated. To this end, I have provided a Compact Disc with a short Powerpoint presentation that illustrates the transformation of the Centre for the Rehabilitation of Wildlife (C.R.O.W.) Education Centre. The presentation is not intended to be part of the research methodology, but more a slideshow that represents the process of interior design.

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CD: Powerpoint presentation titled: Transformation of C.R.O.W. Education Centre

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CHAPTER 1

INTRODUCTION

For as long as I can remember my passion has been interior design. I have traveled two distinct paths discovering and learning about interior design. I started out on the path as a professional interior designer. It was during this time I was invited to be an external examiner at the Durban University of Technology (formerly the Technikon Natal). Later, I was asked to present lectures, which over time, gradually became more frequent. And so, my path in design education began. It was during the transition from a professional interior designer to an academic that I involved myself in community work outside of design. However, my involvement in interior design and design education existed separately from my commitment to service. It was only when I made the transition from professional practice to being a full time academic in Higher Education that community work merged with my practice in interior design. I chose this research opportunity to return back to my community service roots, one of practical human and social concerns (Dey, 1996). For this reason, I decided to make my research account accessible not only to academics, but also to a wider audience that includes the communities in which I served.

In this research dissertation I have thus used the techniques of story telling. Dey (1996) described that a story, as with my dissertation, has a 'setting', 'characters' and a 'plot'. I started by clarifying interior design and placed it in the context of Higher Education. I have provided an authentic 'setting' for the plot to unfold, as I described the Durban University of Technology (DUT) environment and the community initiatives in which the academic staff and students¹ from the Department of Interior Design were involved. Specifically, I gave a more detailed account of the community setting of this research. My 'characters' were the role

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¹ The term "Students" refers to the student cohort who participated in the 2005 Pilot Service-learning Project

players² and the participants³ who contributed to my research. The 'plot' was the social interaction between the role players and participants. As the plot developed, I described the characters and their social interactions in both the Higher Education and community settings. Finally, after I traveled the journey with the characters for the duration of the research, I came to the conclusion of my story (Dey, 1996).

Interior design

Interior design is a creative process that follows a methodical approach that includes research, analysis and integration of knowledge. The end result of the process is to produce an innovative solution for an interior space that satisfies the project goals and fulfills the needs of the client. An interior designer is a person who is considered a professional in the field of interior design. The designer is responsible for original designs; refining the design direction during the design process; production of graphic communication of the design; construction documentation and supervising the installation of the interior space. Solutions are found not only to enhance the quality of life and culture of the occupants but are also designed to be functional and aesthetically pleasing to the eye within building codes and safety regulations. A distinction needs to be made between an interior designer and an interior decorator. A decorator makes aesthetic improvements, but requires no formal training or technical knowledge. To practice as a professional interior designer one is required to qualify by means of mandated academic programme, experience and examination (National Council for Interior Design Qualifications, nd).

A University of Technology

One of the programmes the Durban University of Technology (DUT) offers is a three year Diploma or a four year Bachelor of Technology Degree in Interior

^{2 &}quot;Role players" refer to the community, the service-provider and the Department of Interior Design

^{3 &}quot;Participants" refer to those who participated in this research study

Design with South African Quality Assurance (SAQA) accreditation. The DUT's Institutional Audit Portfolio report defines a University of Technology as "a special kind of university, one whose main and central academic focus is that of *technology*" (2007, p.19). In this document *technology* refers to the study of "the application of knowledge (often theory) in the light of and together with practice" and "technique, i.e., knowledge, ideas, paradigms, methods, gained from practice" (2007, p.19). These ideas are similar to those that support experiential education (DUT, 2005). In line with national policy, the DUT promotes community service and one of the institution's goals is to increase community engagement partnerships (DUT, 2005).

Interior design and community service

In 2003 the Department of Interior Design was approached by the South African Guild of Interior Designers (SAGID) to assist in the interior design upgrade of a crèche 'Bauman House' for the visually impaired. SAGID is an organisation representative of interior designers and decorators. The body upholds standards and ethics within the industry (South African Guild of Interior Designers, nd). I took on board the project because I had a personal interest in children with disabilities and in previous years, I had volunteered my time to play with the children at the same crèche. My reason for engaging in such a community project was partly to satisfy my desire to combine my own sense of social responsibility with interior design and at the same time to provide students with an experiential learning opportunity.

The community project was structured much in the same way as our hypothetical 'studio' based interior design projects. The syllabus for the three year Diploma programme comprises 5 main subjects that have theory and practice based components. A typical 'studio' project includes all the practice based subject components. Simultaneously, while engaging in the completion of a hypothetical 'studio' project, the students attend theory lectures. During the course of a year, the students are given 5-6 hypothetical 'studio' based projects to complete. As

each year progresses, the complexity of design problems the students undertake increases. The only difference in the instance of the community project was that one of the student schemes was selected for implementation. When undertaking the community project, the arrangement with SAGID included their organising donated materials and skills with the proviso that we allocated a week of students' time to assist with the physical execution of the project.

As the complexity of 'Bauman House' suited the second year level of study, the community project was included at that programme level. The 'Bauman House' project was allotted the same level of academic credit as were the hypothetical 'studio' projects. Academic credit is given for the design process within the parameters of the brief and for the graphic representations that demonstrate the students' design solutions. The criteria for selecting the interior design scheme to be executed were based on the best interpretation of the brief, in regard to both functionality and aesthetics. In this case, SAGID and members from the community chose the 'winning' scheme, which was then implemented. Although the programme is not a 'trade', the academic staff agreed to assign a week in the timetable for all the students to physically implement the chosen scheme, with assistance from SAGID members. The academic rationale for providing them with hands-on experience was not to prepare students to be 'tradesmen' but to provide insight of how the interiors they design are built and installed. The week of implementation was compulsory for all students and was credited to their Experiential Learning Module in their third year of study.

The completion of the 'Bauman House' project was considered very successful by the students, academic staff, the community and the service-provider, SAGID. We interpreted 'success' from the following:

 During a round robin discussion the students expressed their exhaustion, but exhilaration, in taking part in a 'real world' situation, and that they felt good about the fact that their efforts provided a boost for a community in need.

- The students' feelings were supported by the children and staff from the crèche who expressed their delight with the upgraded facility.
- The academic staff at the faculty implicitly believed that the students gained personal skills and improved academic knowledge from the experience.
- The Department, DUT and SAGID received positive publicity with articles in the local daily newspapers and a three page spread in a glossy magazine.

All these factors played a role in the Department accepting its next community service project in 2004. The project was 'Tennyson House', a shelter for young women. After completing the 2004 project the same feelings of 'success' were expressed by all involved. Basking in the glow of media attention and feel good sentiments the academic staff, despite a lack of hard evidence of improved student academic performance, considered making the community project a fixture in the second year academic calendar.

Community service to service-learning: the setting

In June 2004, the Higher Education Quality Committee (HEQC) released its Audit and Programme Accreditation criteria which, among other requirements, make 'community engagement' and 'service-learning' an imperative for all South African Higher Education institutions (Joint Educational Trust, nd). 'Community engagement' has particular meaning in the context of Higher Education. It can be a simple matter of students volunteering to serve food at a shelter. Alternately, that service may form part of a student's accredited learning programme (Joint Educational Trust, nd). The latter may be labeled 'service-learning' as it emphasizes equal focus on both the learning that is occurring and the service being provided (Furco, 1996). Castle & Osman (2003) reported that service-learning was not yet widely known or practiced in South Africa, but local interest was growing. They suggested that the interest was increasing as a response to

the government's insistence that Higher Education institutions be more responsive to local & national developmental needs.

With all the internal and external publicity from the 2003 and 2004 community projects, the Interior Design Department was invited in 2005, by CHESP through the DUT's CQPA and CHED departments, to participate in a service-learning pilot project. A core team was established to manage and implement the project. The team comprised the Community Higher Education Service Partnerships (CHESP) a project of JET Education Services, and members from the Centre for Quality Assurance (CQPA) and Centre for Higher Education Development (CHED) at DUT (Sattar, Cooke, Govender & Timm, 2006). The central aim of CHESP was to support Higher Education institutions in the "development of partnerships between communities, Higher Education, institutions and the service sector" (Community Higher Education Service Partnerships, nd). Since 1999 "JET/CHESP has worked closely with the National Department of Education and Higher Education Quality Committee (HEQC) of the Council of Higher Education (CHE) to advance community engagement" (JET Education Services, nd). The CHESP initiative was designed to facilitate and support "the development and research of exemplar initiatives that give expression to reconstruction and development mandate of the White Paper on Higher Education" (Lazarus, 2000, p. 1).

From the introduction of the first community service project I intrinsically believed that the experience offered students a unique 'real world' or experiential experience that would have a positive impact both on the community and on their academic learning. The community service projects could not be considered service-learning as no structured reflection, linking the coursework to the experience was included in the programme (McEwen, 1996; Hatcher, 1997; Bringle & Hatcher, 1999). Most of the literature believes reflection is the key to service-learning. These advocates of service-learning believe that reflection can be described as a learning process that allows students the opportunity to make the connection between theory and practice by critical examination of their experience (McEwen, 1996; Bringle & Hatcher, 1999; Billig, 2000; Billig & Welch, 2004). My motivation for taking the path from one of community service to

'service-learning' was to enhance the students' academic learning during community projects.

The 2005 service-learning project was structured in a similar way to previous community service projects with the addition of two components:

- (1) service-learning was introduced by a number of pre-service exercises; and
- (2) reflection was incorporated into the course during the pre-service preparation, daily service logs during site implementation, and a final reflective report.

The Interior Design Department of DUT and the service provider, SAGID, identified The Centre for the Rehabilitation of Wildlife (C.R.O.W.) as the community and their Education Centre as the interior design project. C.R.O.W. is a wildlife hospital that cares for the injured and orphaned wild animals and birds in KwaZulu-Natal. C.R.O.W. is committed to rescue, rehabilitation and release of displaced wildlife (C.R.O.W., nd). The organisation promotes action and education to protect all natural resources. The specific brief was to upgrade their education centre into a world class facility where children could attend lectures, take part in various assignments and work on projects concerning the environment. A brief was compiled for the students by the academic staff. The brief was a comprehensive document that outlined the needs of the community, the student learning outcomes and assessment criteria. The brief was handed to the students when they first visited C.R.O.W. at which time they were also introduced to the members of the C.R.O.W. community and SAGID members.

The students went back to the studio for three weeks. During this time each of the twenty-three students prepared a design solution for the C.R.O.W. Education Centre. Once the student graphic representations and documentation were complete the service-provider and community were invited to a presentation by the students of their schemes. The representatives selected a winning scheme. The winning scheme was the design solution that was to be physically implemented on the community site. Each of the three role players had committed to undertake certain aspects of the implementation. The service-provider (SAGID) agreed to arrange sponsored materials and skills needed as well as the provision

of on site assistance during build up week. The community (C.R.O.W.) was invited to provide feedback while the students were working on the project in the studio and to provide as much assistance as possible in regard to practical matters on site. The students' role after the design stage was to liaise with the service-provider and the community to arrange and physically assist in implementation of the scheme. One week was provided for the winning students to arrange the sponsorship while the balance of the class built a model as part of the course requirement. The following week was allocated on the timetable for all students to participate during the implementation week.

As the plot of the service-learning experience begins to unfold so the characters in my story come to life. The winner and runner up became the on site project managers. Together they liaised with the service-provider in regard to organizing sponsored materials and skills to physically implement the scheme. The two project managers elected to put the balance of the class of 21 students into five groups, each headed by a team leader. The project managers chose the team leaders simply on the basis of their having achieved merit awards for their design proposals. Each student group was then tasked with implementing a certain aspect of the design. The team leaders were given the responsibility to report back to the two project managers. The project managers in turn, liaised with SAGID and the community

Rationale for study and research questions

After completion of the C.R.O.W. Education Centre, similar sentiments of 'success', as described earlier in this chapter, were expressed by the students. I undertook this research to better understand 'success' and to further explore the participants' perceptions and experiences of service-learning. My research was designed to address the process and impact of the service-learning as experienced by participants. In addition, the enquiry included how the participants' believed the service-learning course should be maintained, if indeed it should be retained at all. The key questions addressed in this research were:

- 1. How is the service-learning process experienced by students of interior design?
- 2. What was the impact of participation in service-learning for the students?
- 3. How do students perceive that service-learning can be improved in the interior design programme?

A literature search revealed that there is an abundance of American research but limited South African research on outcomes of students' service-learning experiences. Billig (2000) asserts that a large body of international research has reported positive learning outcomes for service-learning. As service-learning is relatively new in South African Higher Education, there is limited evidence from local studies that substantiate positive learning outcomes for service-learning (Castle & Osman, 2003). The most extensive South African evaluation of servicelearning was reported on by Mouton & Wildschut (2005). They evaluated 60 service-learning programmes over a two year period. A total of nearly 400 student responses to their learning was part of the evaluation. Research on student outcomes in American literature covers more than a decade of research (Billig, 2000). Given the recent introduction of service-learning into South African Policy for Higher Education, Mouton & Wildschut (2005) support the need for further research on student learning outcomes, so that service-learning may be supported at institutional level. Evidence of positive learning outcomes will assist Higher Education institutions in sustaining service-learning within academic programmes (Bringle & Hatcher, 1996).

Mouton & Wildschut (2005) noted that a gap exists between mainly junior academics' enthusiasm for service-learning and support at executive level. At Government's insistence Higher Education institutions are required to participate in community engagement and service-learning (Castle & Osman, 2003). Bringle & Hatcher (1996) have reported that service-learning in America, which experienced enormous growth during the nineties, was supported by funds and technical assistance provided by organizations in the USA that promote service-learning. Similarly in South Africa, service-learning has been supported by funding which has been provided by JET Education Services for CHESP Pilot Projects (Joint Educational Trust, nd). My research will contribute to the growing

body of South African literature on students' perception of their learning and the impact of their participation in service-learning. The outcome of my research may encourage future tangible academic support and allocation of sustained funding within Higher Education institutions to maintain service-learning.

Report organisation

In this chapter, I defined interior design and introduced the educational setting of a University of Technology. The background of community engagement within the Department of Interior design was described. I detailed the progression of service within the department to service-learning. I also noted the rationale for the key questions of this study. In Chapter 2, I introduce the characters of this research and place service-learning in the context of theory. From that departure point, in Chapter 3, I review the historical roots, definitions and reports on previous findings of service-learning research, in both American and South African literature. In Chapter 4, I explain my research methodology. Chapter 5 includes the findings and limitations of this research. Finally, I review the outcomes of my research in Chapter 6 and discuss recommendations for future research.

CHAPTER 2

CONCEPTUAL AND THEORETICAL FRAMEWORKS

This chapter focuses on the conceptual and theoretical framework for service-learning in which I review the three tier conceptual partnership model proposed by Lazarus (2000), namely, the macro, meso and micro partnership levels. Government Policy is positioned at the macro level. I positioned the role players of this research at the meso level and the 2005 service-learning project at the micro or programmatic level. At programme level, service-learning is considered a form of experiential learning (Furco, 1996). I review Kolb's (1984) theory of experiential learning and explain how the C.R.O.W. project followed in the tradition of experiential learning. Experiential education is a method of teaching and learning that prepares students for professional practice by linking theory and practice with reflection (Saltmarsh & Heffernan, 2000). I further examine the role of reflection in a student's learning experience. Students' service-learning experiences can be categorized into three domains of learning namely: academic; personal growth and social responsibility (CHE, 2006a).

Partnership and learning models for service-learning

The 2005 C.R.O.W. project maintained the same partnership model as the 2003 and 2004 community service projects. Co-incidentally, the partnership model fitted the existing CHESP three-way operational partnership model. The model, on the micro level, consisted of a three-way partnership between a service provider, a community and a Higher Education institution (Lazarus, 2000). In the case of the 2005 service-learning project, C.R.O.W. was the community partner. The established partnership with the service provider SAGID was retained. The service provider maintained their collaboration with media partner, *Garden and Home* magazine. The partners from Higher Education were the academics from

the Durban University of Technology and the then intake of second year interior design students.

The three-way partnership model arose from a critical evaluation by Bawden (2000) of the original conceptual map proposed by JET in their 1998 Final Report (Bawden, 2000). Initially the model consisted of three domains as explained in Figure 1 below:

Academic

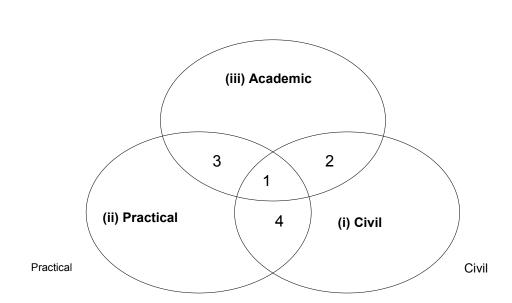


Figure 1
Original conceptual map (Bawden, 2000, p. 7)

- (i) Promoting a spirit of concerned engagement, active and democratic *citizenship*;
- (ii) Using the resources of Higher Education institutions, and particularly the intellectual resources of staff and students, to improve the lives of underprivileged communities through the provision of *practical services*;
- (iii) Infusing the *academic curriculum* with a greater sense of relevance by engaging with difficult political, economic, environmental and social problems.

The Venn diagram in Figure 1 was developed by Bawden (2000) to express the interactions between the three domains. The 'ideal' of comprehensive community service-learning is represented at *Interface 1*. Bawden (2000) in his report stated that at *Interface 1* the combination of *academic* and *civic* development with *practical services* "exemplifies 'comprehensive' service-learning or community

based service" (2000, p. 8). He went onto say that "The research shows that, in general terms, these community service programmes have an impact on student's level of social awareness and contributed to changing their values and attitudes towards their profession" (2000, p. 8). *Interface* 2 was described by Bawden (2000) as a category where students were able to develop *civic* awareness through exploration of social issues via active learning in their curriculum. Bawden (2000) suggested that at *Interface* 3 the combination of *academic* development and *practical* services was more about professional training.

Bawden (2000) believed that most programmes reviewed in the South African context fitted into *Interface 4* where "service is of a charitable nature" and "the service activities are not an integral part of the curriculum" (Bawden, 2000, p. 8). This was true of the Interior Design Department's previous community service projects. The objective for the C.R.O.W. project was to combine all three domains that would provide a 'comprehensive' service-learning experience that would fall within *Interface 1*. Perold noted in Bawden (2000) that true and 'comprehensive' service-learning occurs at *Interface 1*, "when there is a balance between learning goals and service outcomes, when the service enhances the learning and the learning enhances the service, when the benefits to the providers and the recipients are (sic) equal. However, the credit in service-learning is for the learning and not for the service" (Perold in Bawden, 2000, p.10).

Bawden (2000) proposed that the Venn diagram in Figure 2 could be interpreted another way using the CHESP acronym as Community (C), Higher Education (HE), and Service Providers (SP) with a 'discourse domain' shared at their intersection. Bawden (2000) suggested that the three domains of civic, academic and practical services are embedded in a shared global context "to which each must be responsive, and for which, all are, in part, responsible" (Bawden, 2000, p.10).

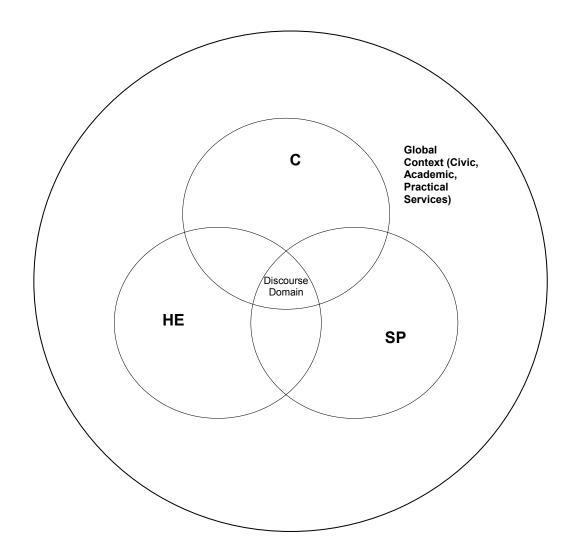


Figure 2
CHESP partnership model (Adapted from Bawden, 2000)

"Higher Education plays a central role in the social, cultural and economic development of modern societies. In South Africa today, the challenge is to redress past inequalities and to transform the Higher Education system to serve a new social order, to meet pressing national needs, and to respond to new realities and opportunities" (White Paper, 1997, p.7). The articulated goals of the White Paper (1997) are clear in that a new inclusive *discourse* is required "to promote and develop social responsibility and awareness amongst students of the role of Higher Education in social and economic development, through community programmes" (White paper, 1997, p.14). Bawden (2000) believed that communication between the three role players in the 'domain of discourse' would significantly contribute to the complex and pressing issues of contemporary South Africa. Bawden (2000) further believed that 'communicative actions' in this regard could occur at three systemically interrelated levels in the 'domains of discourse' as shown in Figure 3. "In other words, the discourse at each 'level' would be vital

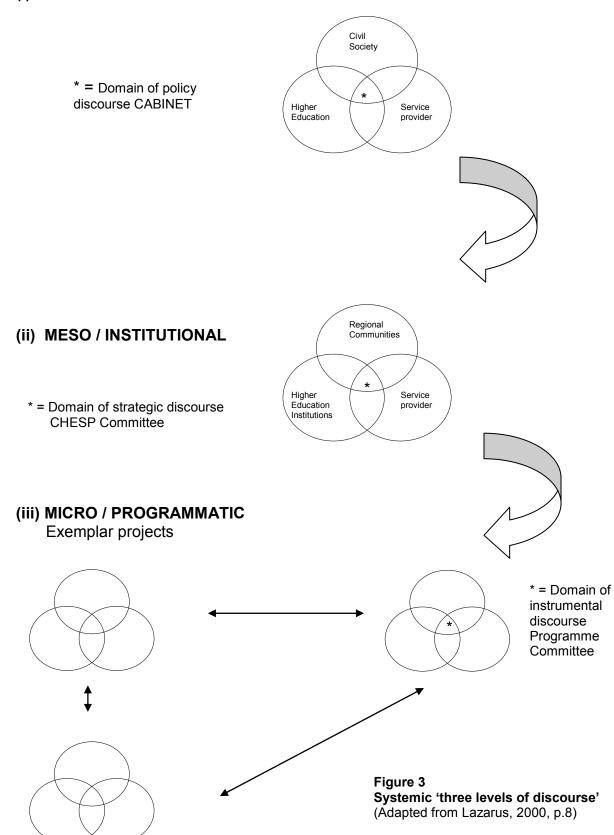
in informing the discourse at each of the other levels, and inclusivity is thus essential for this reason alone" (Bawden, 2000, p.12). The 'domains of discourse' were positioned at the (i) macro (policy level); (ii) meso (strategic level); and (iii) micro (institutional level).

Lazarus (2000) provides further detail in regard to the systemic 'three levels of discourse'. He believes that one of the key elements of "the conceptual framework is the relationships within and between each of the three levels" (Lazarus, 2000, p.7). As shown in Figure 3, "the essential systemicity of this model lies in the inter-relationships () (1) between the three sectors (C-HE-SP) within each level, (2) between the different levels (macro-meso-micro), and (3) between different 'exemplar academic programmes' at the micro level. In other words, the *discourse* at each 'level' would be vital in informing the *discourse* at each of the other levels" (Lazarus, 2000, p.7).

Lazarus (2000) further explained the discourse at each level:

- (i) The *Macro/National* level would be the domain of policy discourse which he considered to be "the national government level between civil society representatives (e.g. labour unions), Ministries responsible for legislation for civil society at large (e.g. Public sector departments), and the Higher Education sector (e.g. DoE, SAQA, CHE)" (Lazarus, 2000, p. 7). Lazarus (2000) suggests that at (ii) the *Meso/Institutional* level strategic discourse takes place between regional communities, Higher Education institutions, and service providers.
- (iii) The *Micro/Programmatic* level would be instrumental discourses between the local communities, students and academics from particular academic programmes and local service providers.

(i) MACRO / NATIONAL LEVEL



The initial focus of the CHESP initiative was to support and facilitate the development of 'exemplar academic programmes', at the micro/programmatic level. The CHESP programme was based on the belief that discourses from the emerging partnerships on the *micro/programmatic* level between service providers, students and academics would inform the meso and macro levels (Lazarus, 2000). By monitoring and evaluating the discourses generated from these programmes since 2000, CHESP has used the data generated to influence Higher Education policy and practice at the *macro/national* level. Subsequently with the input from CHESP, the HEQC incorporated 'community engagement' and 'service-learning' as a component in the HEQC Audit and Programme Accreditation Criteria (JET Education Services, nd), mentioned in Chapter 1. Consequently, the focus of the CHESP programme had shifted to disseminating information learned at the micro/programmatic level to Higher Education institutions at the meso/institutional level. The intention was to build capacity in Higher Education institutions to meet the national imperatives of community engagement and service-learning (JET Education Services, nd).

JET Education Services commissioned an independent evaluation over a period of two years on sixty CHESP initiated service-learning courses in five Higher Education institutions. Based on the evaluation report, Mouton & Wildschut (2005) wrote an article called "Service-learning in South Africa: lessons learnt through systematic evaluation". In their article they noted that on the institutional level, service-learning remains the responsibility of the institution to design, implement and maintain. Mouton & Wildschut (2005) went on to suggest that a gap existed between the executive support for service-learning and the academics (often junior) who are passionate and committed to service-learning. In support of the earlier statement made by Lazarus (2000), they stated that "service-learning will only become part and parcel of the mainstream academic work of our Higher Education institutions if it is developed, driven and nurtured from 'below' " (Mouton & Wildschut, 2005, p.148). In other words service-learning needs scholars on the micro/programmatic level "...who actively promote and implement service-learning as a viable and necessary end in itself – not merely a means to some other end" (Mouton & Wildschut, 2005, p.148).

The C.R.O.W. project was initiated at the *meso/institutional level*. Figure 4 shows the partnership between the regional community (SAGID), Higher Education (DUT) and the service provider (CHESP).

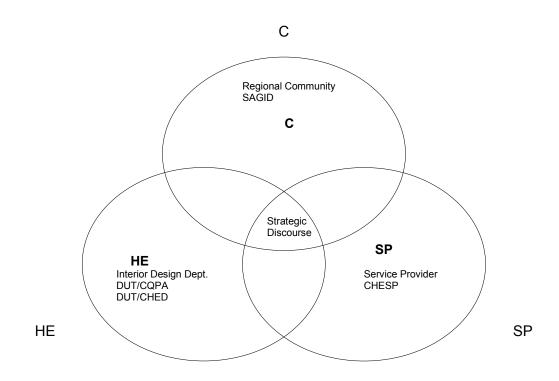


Figure 4
C.R.O.W. Project meso/institutional strategic discourse (Adapted from Lazarus, 2000)

It was in the domain of strategic discourse that the C.R.O.W. project was initiated. Communications began between the Department of Interior Design and SAGID as the partners negotiated a suitable community for the Pilot project. The CHESP programme provided funding for student transport which facilitated the selection of C.R.O.W. as the site, which was a considerable distance from the Higher Education institution. CHESP as the service provider assisted in building service-learning capacity within DUT and the DUT departments of CQPA and CHED conducted workshops to build service-learning capacity within the Department of Interior Design. They also held workshops and meetings with SAGID on service-learning. The realisation of the C.R.O.W. project was as a result of the discourse between all three partners at the strategic level. In turn, the strategic discourse informed the partnership on the *micro/programmatic* level.

Figure 5 shows the C.R.O.W. project on the *micro/programmatic level*. The partners were C.R.O.W. as the community, SAGID as the service provider and Higher Education was represented by the second year interior design students. Instrumental discourse between the partners made the project possible. C.R.O.W. communicated their needs first to SAGID and relayed the information to the students of interior design. SAGID's main role was to organise sponsorship for the project, which was conveyed to the community and the students to enable the design and physical implementation of the project. The students in turn communicated their designs and limitations to both the community and SAGID. The focus of this research was the students' perceptions and impact of their learning as well as their proposed course improvements. Student learning was one of the results of the project.

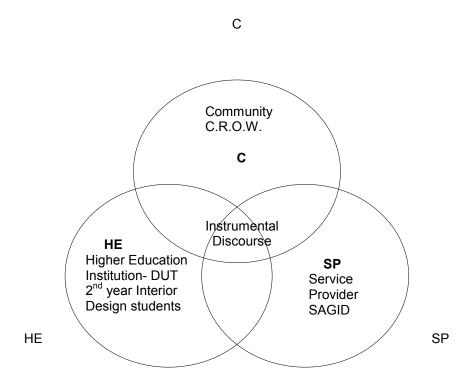


Figure 5
C.R.O.W. micro/programmatic service-learning project (Adapted from Lazarus, 2000)

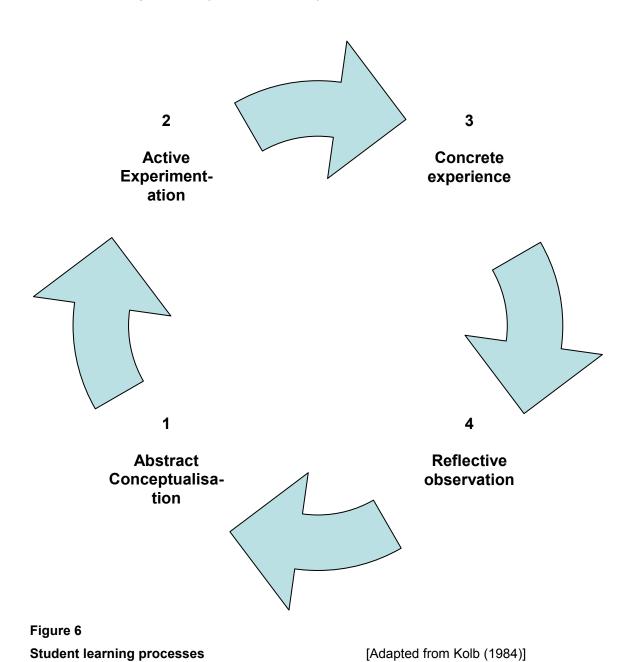
Experiential Learning: a framework to understand the processes of service-learning

To understand the processes of student learning, in the domain of instrumental discourse, I examined more closely the teaching and learning pedagogy that was used for the C.R.O.W. service-learning project. As mentioned earlier, service-learning is considered a form of experiential learning. Experiential Education is regarded as a teaching and learning strategy that integrates education, personal development and work (Kolb, 1984). Service-learning is not only considered an experiential learning experience, but also one that engages students directly in the issues and needs of the larger community (Bringle & Hatcher, 1999).

Kolb's (1984) experiential learning cycle combined with service provides for a unique blending of hands-on experience (work) and learning with reflection as the key to a deeper understanding of the students' academic learning (education), the needs of the community and for a greater sense of themselves (personal). While students work within the community applying their knowledge they are also learning from the problems in the community setting and at the same time reflecting on the experiences (McEwen, 1996; Hatcher, 1997; Bringle & Hatcher, 1999; Eyler & Giles 1999). The CHE (2006a) has used Kolb's (1984) cycle of experiential learning "...as a map to structure the environment for service-learning: giving students the opportunity to achieve appropriate knowledge, skills and attitudes; enhancing the development of Higher Education competence" (CHE, 2006a, p.18).

The four points of Kolb's experiential learning cycle are concrete experience, reflective observation, abstract conceptualisation and active experimentation. A person can enter the cycle at any of the four points (Kolb, 1984). Kolb (1984) believed that concrete experience is the basis for observations and reflection. He believed that a person would use these experiences as a foundation to build up an idea or a theory, from which new implications for action could be deduced. However, Kolb (1984) stressed that for effective learning to occur all four points in the process must be completed. He emphasised the importance of reflection in the learning process. Reflection follows directly from concrete experience and

precedes abstract conceptualisation. Placing reflection elsewhere would inhibit the learning process because the students would not have an immediate link to the concrete experience (McEwen, 1996).



I placed the entry point of the student learning at the *abstract conceptualisation* stage because this phase was the beginning of their service-learning experience. During orientation of the project students attended academic theory lectures and workshops on abstract concepts. This phase was considered by Kolb (1984) as the process whereby students searched for explanations that integrated their

concepts and observations into logically sound theories. He believed that the progression of this phase of the cycle gave meaning to the discoveries made by students, in that they could relate them to other discoveries and other forms of knowledge.

The second phase of the cycle was the *active experimentation* phase. *Active experimentation* transforms conceptualisation in that it tests the abstractions in practice (Kolb, 1984). Kolb (1984) believed that the theories would assist students to make decisions and solve future problems. In the C.R.O.W. project students were provided with an opportunity to make a connection in the real world between their learning experiences and the theoretical grounding of these experiences, in that they applied their theory to find design solutions for the C.R.O.W. Education centre.

The third phase of the student learning process was *concrete experience*. *Concrete experience* involves practical experience (Kolb 1984). Kolb (1984) suggested that students must be able to immerse themselves fully in the new experience to maximise their learning. In the C.R.O.W. service-learning project, the *concrete experience* included co-ordinating sponsors, suppliers and contractors as well as assisting in the physical implementation of the interior.

Reflective observation followed directly on from the concrete experience as the fourth stage of the learning process. Reflective observation focuses on what the experience means to the individual. The process requires observation, examination, analysis and interpretation of the impact of specific concrete experience (Kolb, 1984). Students participating in the C.R.O.W. project were required to complete daily reflection logs during implementation and a final reflective report a month later. Bringle & Hatcher (1999) and others (McEwen, 1996; Eyler & Giles, 1999) regard reflection as a crucial element in transforming concrete experience into knowledge. Reflection creates a worldview, which determines future behaviours (Bringle & Hatcher, 1999).

Reflection

In any experiential learning process, "reflection is the necessary component to assist students to (a) relate their knowledge to prior understanding, (b) understand how specific strategies might be applied to tasks and (c) understand the thinking and learning strategies they have learned" (Whitfield, 1999, p. 108). Purposefully designed reflection to enable learning to occur is considered central to the student learning experience (McEwen, 1996; Bringle & Hatcher, 1999; Eyler & Giles, 1999; CHE, 2006a). As shown in Kolb's (1984) experiential cycle, students through reflection, analyze concepts, evaluate experiences and appraise theory. "Critical reflection provides students with the opportunity to examine and question their beliefs, opinions and values; it involves observation, asking questions, and putting together facts, ideas and experiences to derive new meaning" (CHE, 2006b, p.58). Research has shown that service-learning programmes with more opportunities for reflection and those that make substantive links between course work and service have a stronger positive impact on the experiences of the student (Eyler, 2000).

Reflection is considered the connective tissue between the students' community experiences and their academic, personal and social learning (Whitfield, 1999). Reflection is a technique where a student would be given opportunities to give a topic serious thought and consecutive consideration (Bringle & Hatcher, 1999). It is widely believed that reflection must be based on experiences which:

- (1) engender a curiosity in the student;
- (2) are inherently important to the student;
- (3) stir a new interest for the student; and
- (4) are over a significant time span
- (Eyler & Giles, 1994; Bringle & Hatcher, 1999)

Reflection exercises need to ask students to reflect on their values and suggest what implications the learning had on their action and illumination of the subject matter (Eyler & Giles, 1999). Bringle & Hatcher (1999) believed that when reflection activities connect the students' discipline to service a great potential

exists for learning to broaden and deepen along personal, academic and social areas of learning.

The overall aim of the reflection component in service-learning is to assist students to recognize and articulate their learning so that they can apply it critically towards the three domains of their learning:

- (1) Improved academic learning;
- (2) personal growth beyond their service experience and
- (3) an improved sense of social responsibility (CHE, 2006b).

Evidence suggests that participation in service-learning experiences helped students to acquire academic skills and knowledge. In addition service-learning has shown to have a positive affect on students' personal development and their sense of social responsibility (Bringle & Hatcher, 1999; Eyler, 2000; Eyler, Giles & Gray, 2000; Billig, 2000; Mouton & Wildschut, 2005; Roos, Temane, Davis, Prinsloo, Kritzinger, Naude` & Wessels, 2005).

Summary

This chapter proposed a conceptual map that discussed the position of 'ideal' comprehensive service-learning. I examined the conceptual partnership model proposed by Lazarus (2000) and positioned the inception of the pilot service-learning project at the meso/institutional level. I showed the development of the C.R.O.W. project at the micro/programmatic level. I further discussed the discourses at the strategic and programme levels that informed the discourse between the two systemic levels. I positioned my study at the micro/programmatic level and showed the focus of my research on student learning. Finally, I provided a framework in which to further examine the process of student learning.

CHAPTER 3

LITERATURE REVIEW

I begin the Literature Review with a broad interpretation of 'community engagement'. I review the origins of the typology of the word 'service-learning'. I show where service-learning is positioned along a continuum of a variety 'community engagement' experiences. In addition, the different definitions, interpretations and models of service-learning are fully explored. I position the interior design service-learning programme within one of the models. Results of students' leaning outcomes in the three domains of learning, from both local and American literature, are described, so that I was able to draw comparisons in the Findings Chapter of this study. In addition, Howard's (1993) best practice principles of service-learning are reviewed for the purpose of future recommendations that I made in the conclusions in this study.

Service-learning typology

'Service-learning' and 'community engagement', as discussed in Chapter 1 have been included as a national imperative among other requirements in the HEQC's 2004 Criteria for Institutional Audits. Furco (1996) explains that service-learning is considered one of the many forms of community service. In the South African context 'community engagement' in Higher Education was described by the Council of Higher Education (CHE) as "initiatives and processes through which the expertise of the Higher Education institution in the areas of teaching and learning are applied to address issues relevant to its community. Community engagement typically finds expression in a variety of forms, ranging from informal and relatively unstructured activities to formal and structured academic programmes addressed at particular community needs" (CHE, 2006b, p. 12). Many explanations are to used express the diverse range of community experiences in Higher Education. The explanation of the typology of service-

learning offered a useful means to begin distinguishing service-learning from other forms of community service. The two key concepts that define the term are shown in Table 1 below.

Service-LEARNING	Learning goals primary; service outcomes secondary
SERVICE-learning	Service outcomes primary; learning goals secondary
Service learning	Service and learning goals completely separate
SERVICE-LEARNING	Service and learning goals of equal weight and each enhances
	the other for all participants

Table 1
Service and learning typology

(Sigmon 1994, in Furco, 1996)

Service learning, without the hyphen, can be described as a community experience that may capture a student's eagerness and curiosity. However, the student may not necessarily make a direct connection between the service experience and the academic content of the programme (Eyler & Giles, 1999). Furco's (1996) view on the hyphen in SERVICE-LEARNING is that it implies there is balance between the learning goals and the desired community service outcomes. Eyler & Giles, (1999) expanded on the assumption that servicelearning includes the balance between service to the community and student academic learning. They proposed that the hyphen could also represent reflection. They took this position because they asserted that reflection plays a central role, as discussed in Chapter 2, in student learning throughout the community experience, as demonstrated by the central position of the hyphen in the word service-learning. Research has consistently shown that structured reflection by students has enhanced the impact of the student service-learning experience (Eyler, 2000). Reflection in the context of service-learning was described as a learning process that allows students the opportunity to make the connection between theory and practice by critical examination of their servicelearning experience (Eyler & Giles, 1994; Hatcher, 1997; Bringle & Hatcher, 1999; Whitfield, 1999).

Definitions of service-learning

Multiple interpretations of service-learning exist today (CHE, 2006a; Mouton & Wildschut, 2005). Huge amounts of energy and interest have been dedicated to defining service-learning since its inception. The origins can be traced to the time, in the late eighties and early nineties, when the American education system was looking at reform of the youth and the education system (Billig, 2000). A common thread throughout the literature supports the fact that community service was embraced by practitioners in education to encourage altruism and caring in the student community. The effort was made so that students would become more active in their communities and develop a greater understanding of community needs and at the same time increase their knowledge base (Billig, 2000). "Service-learning offered a powerful pedagogical alternative that allowed students to gain greater understanding of concepts while they contributed to their communities" (Billig, 2000, p.658). In the South African context "Service-learning" is increasingly viewed as an avenue for universities to promote social engagement, responsibility and democratic awareness" (Castle & Osman, 2003, p.105).

As far back as 1990 Kendall noted 147 different definitions existed (Eyler & Giles, 1994). The debate continues today about the exact definition of service-learning. It has been agreed that the components "include active participation, thoughtfully organized experiences, focus on community needs and school/community coordination, academic curriculum integration, structured time for reflection, opportunities for application of skills and knowledge, extended learning opportunities, and development of a sense of caring for others" (Billig, 2000, p.659). The mostly widely cited definition (CHE, 2006a) of service-learning is: 'a course-based, credit bearing educational experience in which students

- (a) participate in an organised service activity that meets identified community needs and
- (b) reflect on the service activity in such a way as to gain further understanding of course content, a broader appreciation of the discipline, and an enhanced sense

of personal values and civic responsibility' (Bringle & Hatcher, 1996, p. 222). The CHE (2006b) service-learning guide described service-learning as "A balanced approach to, and an integration of, community service and student learning" (p. 16). In the HEQC's 2004 Criteria for Institutional Audits, service-learning was defined as "applied learning which is directed at specific community needs and is integrated into an academic programme and curriculum. It could be credit bearing and assessed, and may or may not take place in a work environment" (CHE, 2006b, p.16).

Furco's continuum

Despite the variety of definitions that persist today, Furco's (1996) continuum provides a useful tool in understanding where different community service programmes may fall within a range of points. Furco (1996) believed that the ability to distinguish between the different programmes would allow for a more universal definition of service-learning. As the boundaries between the different categories of 'community engagement' are often blurred, the continuum could be used to position the different models of community service for a clearer interpretation of service-learning. In an effort to position my research study I examined Furco's (1996) continuum and the CHE (2006b) interpretation of the continuum in Figure 7 below:

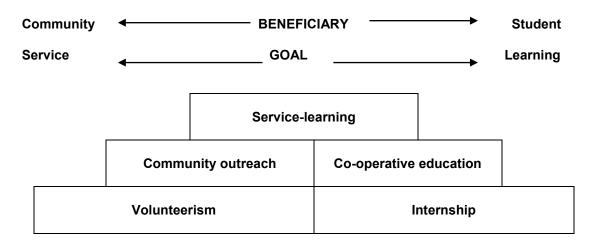


Figure 7

Distinctions among student community engagement programmes (CHE, 2006b, p.14)

Volunteerism can be described as altruistic in nature where persons, out of their own goodwill, carry out work or a service without remuneration (Furco, 1996). In the case of Higher Education it would be the students who provide the service and the beneficiary is considered solely the service recipient or the community. Very often these volunteer programmes are small and funded by outside donors or the students themselves. The programme usually has no academic credit attached and the link between the Higher Education institution and the community is usually an informal arrangement (CHE, 2006b).

Internship programmes, on the other hand, are at the other end of the continuum (Furco, 1996). These programmes usually provide students with hands-on experience that enhances the students understanding of their discipline. The student in this case would be considered the primary beneficiary. As a rule, internships are fully integrated into the curriculum and are used widely in fields such as medicine, education and psychology (Furco, 1996; CHE, 2006b). Internships may be carried out in addition to and after regular course work before a student can obtain their professional qualification in their field of study (Furco, 1996).

Furco's (1996) notion *of Community outreach* programmes is that they are similar to volunteerism, but they usually are initiated by faculty, have a greater degree of structure and are linked in some way to the academic content of the programme. However, the primary beneficiary remains the community (CHE, 2006b). "As the service activities become more integrated with academic coursework of the students, and as the student begins to engage in formal intellectual discourse about service issues, the programme moves closer to the centre of the continuum to become more like service-learning" (CHE, 2006b, p.14).

Co-operative education is very similar to internships in that the primary beneficiary is the student and the primary goal is learning. However, co-operative education is closer to the center of the continuum as the programmes usually provide opportunities that are related to the programme, but may not be fully integrated into the curriculum (CHE, 2006b). Furco (1996) refers to co-operative education as field education, which he described as the focus being on the

student experience to enhance and maximize learning in their particular field of study, but at the same time providing substantial emphasis on the service being provided.

Service-learning falls in the centre of the continuum. Furco (1996) asserted that service-learning programmes are distinct from the other programmes in that the there is equal benefit for the service provider and the student. The focus on the service being provided to the community is considered to be equal to that of the student learning taking place. Reciprocity was shown by the hyphen in the typology of service-learning and was considered by the CHE (2006b) as the central feature of service-learning. Reciprocity implies there is balance between the learning goals and community service outcomes "Unlike the other categories of community service described above, service-learning is entrenched in a discourse that proposes the development and transformation of Higher Education in relation to community needs" (CHE, 2006b, p.15).

Campus Compact range of 'community engagement programmes'

The service-learning experience in this research loosely fitted the service-learning model proposed by Furco (1996). To be able to more closely align my research, I investigated further models of service-learning proposed by a leading service-learning organisation, the Campus Compact. The Campus Compact (nd) proposed six models for service-learning:

"Pure"	Service internships
Discipline-based	Action research
Capstone courses	Problem based

 Table 2
 Community engagement programmes
 Adapted from the Campus Compact (nd)

Similar to *volunteerism* the central theme of a "pure" service-learning course is to send students out into the community to serve. "These courses have as their intellectual core the idea of service to communities by students, volunteers or engaged citizens" (Campus Compact, nd).

The idea of the *service internship* is to benefit the community and students equally. The students may spend up to twenty hours a week in the community. The students are expected to produce a body of work that has value to the community and is related to their discipline. They are also provided with regular ongoing reflective activities that help them analyze their new experiences (Campus Compact, nd).

In the *discipline-based* model of service-learning the course is usually for the duration of a semester. During this time the students interact with the community. The students will use their course material as the basis for understanding and analysis while completing their reflection tasks that have been designed to focus on their experiences (Campus Compact, nd).

Action research service-learning is relatively new and in general students work closely with academics to become skilled at research methodology while also serving as a support to the community (Campus Compact, nd).

Capstone courses are generally designed for final year students in particular disciplines. The students are required to use their knowledge obtained throughout their course and combine it with appropriate work within communities. The courses provide a good way for students to make the transition from student to professional (Campus Compact, nd).

In the model of *problem-based* service-learning students relate to the community in much the same way as a consultant would with a client. "This model presumed the students had some knowledge of the problem within the community and that they could make recommendations to the community or develop a solution to the problem" (Campus Compact, nd). The *problem-based* model best fits the C.R.O.W. interior design project which is the focus of this research.

Problem-based learning (PBL)

Architecture, which is closely aligned with interior design, was an example used on the Campus Compact (nd) website to illustrate PBL. Problem-based learning was regarded as a pedagogical technique that was used by academics to integrate service into the students' coursework while at the same time engaging students' thinking about the academic material (Whitfield, 1999).

In PBL the challenge is for educators to assist students to solve problems as well as provide a vehicle to help students develop the ability to apply what they learn in a variety of settings (Eyler, 2000). In the practice of PBL, students use both self directed study and the application of newly gained knowledge to solve a problem (Whitfield, 1999). Problem-based service-learning provides students with opportunities to address issues in complex and natural situations, and ideally suited to assist students to gain greater insights on their subject matter. Also, PBL service-learning helps students to gain practical knowledge and strategies for transferring knowledge and problem solving skills to new situations (Eyler, 2000). In addition, PBL in service-learning is considered a way forward for scientists to measure learning outcomes. Measuring a student's ability to transfer knowledge and their profound understanding is an issue cognitive scientists have been struggling with for some time (Eyler, 2000).

In the C.R.O.W. pilot project, as in a typical PBL service-learning project, the instructor identified an authentic learning problem in the community. This problem was identified by the community and presented to the students in the form of a brief. Consistent with a typical PBL service-learning project, the students were prepared with a variety of exercises with the intention of preparing them before being introduced to the site. Preparing the students presented opportunities for the students to develop strategies for problem-solving before they reached the 'real world' context (Whitfield, 1999). The brief summarized the problem of upgrading the C.R.O.W. Education Centre within certain parameters. The structure of the interior design problem was designed to engage the students in learning as well as to give them the responsibility of assessing the situation and

presenting a solution (Whitfield, 1999). As proposed by Whitfield (1999), there was a direct link between the elements of the problem presented by the community and the students' learning objectives of the course.

The students were tasked to actively research, question and engage in the problem. They were given the responsibility of becoming active problem solvers. Research shows that students become more engaged, because they are connected to learning concepts in a 'real' manner and that students learn skills more effectively when they are actively engaged in their own learning (Whitfield, 1999). Whitfield (1999) suggested that problem-based learning and service-learning make excellent partners. "Combining the enquiry based aspect of PBL and the service focus of service-learning can create an enhanced sense of connection to the learning objectives of the course for both students and faculty" (Whitfield, 1999, p.110).

Literature reviewed and reported learning outcomes

Literature available on service-learning and interior design was rare. My search revealed only two American articles. Sterling (2007) used a case study approach to analyze what she describes as a disciplined based experiential and service-learning experience. The brief was to design the restoration of a 95 year old library. The students provided their consulting services and reflected on those experiences using course content as the basis of their analysis. Sterling (2007) reported the outcomes of student learning using Kolb's (1984) cycle of experiential learning. She believed that the student service-learning experience perpetuated the cycle of lifelong learning through knowledge, activity and reflection, and developing the ability to create new kinds of knowledge (Sterling, 2007). I have used a similar technique in Chapter 5 to report on my findings of this research.

Abair, Wood & Schramski (2001) described a service-learning interior design project where students were tasked to design a day care intergenerational centre for both young children and dependent seniors. Student learning outcomes included increased academic learning, in that the students reported they would not have found the knowledge they gained from text books. On a personal level they felt better prepared for the workplace and all students who participated in the project felt they would contribute in future community service activities (Abair, Wood & Schramski, 2001).

Because service-learning is considered a new pedagogy in the landscape of South African Higher Education (Castle & Osman, 2003) there was limited South African literature available on service-learning, in particular, student learning outcomes from their service experiences. A number of articles on the topic of 'scholarship of engagement' were generated from the universities participating in the CHESP Pilot Projects. Only a handful of recent research articles generated from the CHESP programmes focused on student learning outcomes. The largest contribution of research on student learning was from JET Education Services who commissioned an evaluation report on the CHESP programmes between 2001 and 2002. Mouton & Wildschut (2005) wrote an article that summarised the findings of the systematic evaluation of 60 service-learning programmes at five universities with nearly 400 participating students. The findings show that the students were positive about their involvement in service-learning and that the courses helped improve student learning across a range of spheres such as the ability to make more informed career choices, personal development in term of learning about their strengths and weaknesses as well as the development of life skills such a leaderships qualities (Mouton & Wildschut, 2005).

I found an abundance of American literature on student outcomes. Two of the studies I found stood out because they reviewed research on student learning outcomes that covered a decade of research during the nineties. The findings reported in these documents were consistent with findings of smaller or individual programme researches. Eyler, Giles & Gray (2000) summarised the findings of over 40 researchers from 1993 to 1999. Billig (2000) noted that her study was a summary of a decade's worth of research on service-learning in K-12 schools. In

both these studies three main categories of student learning emerged. They were:

- (1) academic learning;
- (2) personal development and
- (3) social responsibility.

These categories of learning were generally consistent with the findings of research conducted on interior design students in America and student service-learning outcomes in South Africa.

In Chapter 1, I noted that the reason for my research was because there was limited South African literature available on students' learning from their service-learning experiences. There is even less available on interior design and service-learning. My research focuses on interior design students' perception of their learning and the impact of their participation in a service-learning experience. I have therefore reviewed students' learning in the three most commonly cited domains of learning in the literature. The CHE (2006a) has also adopted the three domains of learning to describe student learning outcomes. In addition my research covers how students perceive service-learning can be improved in the interior design programme. To address this research question I have used Howard's (1993) best practice principles, discussed later in the Chapter, as a framework to analyze my findings.

Domains of learning

I first reviewed student learning outcomes by using the CHE (2006a) descriptions of the three learning domains as follows:

(1) Academic – better understanding of both the module content and of connections between what they have read and their experiences. In doing so, students will be able to compare and contrast what theory suggests and what actually happens, which may not always be the same.

- (2) Personal growth reflection enables the students to reflect on personal characteristics: strengths and weaknesses, their sense of identity, assumptions they make, their personal beliefs and convictions as well as personal traits.
- (3) Social responsibility reflection deepens students' understanding of citizenship. This helps them to know how a particular professional can act in socially responsive ways and to understand why things are the way they are and how they may be changed. Students might consider their own personal involvement in a change orientated process.

Academic learning

It has been widely reported by students and faculty that service-learning has a positive impact on a students' academic learning (Billig, 2000; Bringle & Hatcher, 1999; Eyler, Giles & Gray, 2000; Mouton & Wildschut, 2005; Roos et al., 2005). "Investigations on student outcomes in service-learning have shown that this pedagogy of service-learning helps students to acquire academic skills and knowledge" (Billig, 2000, p. 661). Research has been conducted that shows service-learning improves a student's ability to apply what they have learned in a real world context. Students, because they are learning and applying information in complex real-world contexts, believe that the quality of their academic understanding has increased (Eyler, Giles & Gray, 2000). Continued research by Billig (2000) and others reported that students who participated in servicelearning are more engaged in their studies and more motivated to learn. When students talked about their community learning experiences, it was unmistakably apparent that they genuinely believe that they learn more from service-learning than what they would have obtained from more traditional teaching methods (Eyler, Giles & Gray, 2000).

Personal development

Investigations have revealed that service-learning has a positive effect on a student's *personal development*. After a service-learning experience students'

perceptions of themselves had altered to that of a more socially competent person (Billig, 2000). Eyler, Giles & Gray (2000) report that service-learning has a positive effect on a student's interpersonal development and the ability to work well with others and adds to a student's leadership and communication skills. The students expressed an increase in their sense of self esteem, personal identity, spiritual growth and moral development (Eyler, Giles & Gray, 2000). A large percentage of South African students surveyed also related that their service-learning had helped to improve their relationship skills, leadership skills and project planning abilities (Mouton & Wildschut, 2005). An awareness of self, a realization of the importance of collaboration, and respect for culture and language diversity, were a few of the outcomes noted by Roos *et al.*, (2005).

Social responsibility

A gradually accumulating body of evidence suggested that service-learning not only helps students to develop knowledge of community needs, but also to commit to an ethic of service that engenders a greater sense of *social responsibility* and an increased desire to continue to be active contributors in their society (Billig & Welch 2004; Mouton & Wildschut, 2005; Roos *et al.*, 2005). Billig (2000) affirmed that service-learning helps develop students' sense of civic and social responsibility and their citizenship skills. "Higher Education reform advocates have come out to a similar conclusion, often singling out service-learning as examples of how to cultivate civic and social responsibility as part of the education of citizenship" (Eyler & Giles, 1999, p. 11). In the South African context students surveyed have been mostly positive about their involvement with the community. The majority showed that they believed that their contribution was of some value to the community they served (Mouton & Wildschut, 2005).

Best practice principles

Howard (1993) devised a set of ten best practice principles that he believed would maximise the students' learning in the abovementioned domains. They are

reviewed here so that they may constitute a framework for organizing the participants' perspectives for improvements in our course.

Principle 1: Academic credit is for learning, not for service. In service-learning, credit is assigned not only for the customary academic learning, but also for the utilization of the community learning in the service of the course learning. Credit is given for the quality of academic learning and is not given for the performance or quantity/quality of the service.

Principle 2: Do not compromise academic rigor. In service-learning the curriculum construction and assessment of learning acquired should be subject to similar criteria as those used when developing curricula which do not require learning through service.

Principle 3: Set learning goals for students. All courses are accountable for establishing learning goals. Through deliberate planning of the learning goals in service-learning courses, students are provided with opportunities to synthesize theory and practice.

Principle 4: Establish criteria for the selection of community placement. Establish deliberate criteria for the selection of the service-learning site, commensurate with the course requirements. In doing so, the student learning will be enhanced.

Principle 5: Provide educationally-sound mechanisms to harvest community learning. Learning assignments that foster critical reflection and analysis of the service-learning experience are necessary. Course assignments should both develop and facilitate the student's academic learning, from the community experience.

Principle 6: Provide supports for students to learn how to harvest community learning. Howard (1993) suggested that students are largely under-prepared for their role in the community. Academics can assist in harvesting learning from the community by assisting students with acquiring skills necessary for obtaining the learning from the community.

Principle 7: Minimize the distinction between the student's community learning role and the classroom learning role. Students in their classrooms are expected to assume a largely learner-follower role. In contrast, in the community the students are expected to assume a largely learning-leader role. An effort needs to be made during the service-learning experience to make the student's learning role consistent with their role in the community for greater learning potential.

Principle 8: Re-think the educator's instructional role. Howard (1993) considered that maintaining a traditional instructor's role would hinder learning in a community setting. The academic staff role needs to shift from typical information dissemination toward a facilitation and guidance role.

Principle 9: Be prepared for uncertainty and variation in student learning outcomes. In traditional courses there is certain predictability in student learning outcomes. However, when community settings constitute the 'texts', the content of class discussions and assignments can be less predictable.

Principle 10: Maximize the community responsibility orientation of the course. One of the aims of a service-learning course is to nurture a student's sense of community. Coursework and assignments that are communal rather than individual would contribute to this objective.

Summary

In this chapter I reviewed the origins of service-learning typology. I examined a variety of service-learning definitions. From the definitions three distinct qualities that are pertinent to my research emerged. Service-learning is

- (1) based on the experience of meeting the needs of a community;
- (2) includes reflection and academic learning; and
- (3) contributes to the students' interest and awareness of community (Mouton & Wildschut, 2005).

I placed service-learning on a continuum of community engagement programmes and further positioned the C.R.O.W. project in problem-based learning. I also reported on the limited literature on interior design and service-learning as well the large body of American literature that included a wide range of positive academic, personal and social outcomes for service-learning. A gradually accumulating body of evidence shows that service-learning in the South African context report similar findings. In summary, the evidence suggested service-learning has powerful learning consequences for the students and at the same time empowered the community (Mouton & Wildschut, 2005).

CHAPTER 4

METHODOLOGY

I have only lately realised that I never aspired to be a scientist, but rather a certain kind of writer. When you talk with me about my research, do not ask me what I have found; I found nothing. Ask me what I invented, what I made up from & out of my data. But know that in asking me this, I am not confessing to telling any lies about people or events in my studies/stories. I have told the truth. The proof for you is in the things I have made - how they look in your mind's eye, whether they satisfy your sense of style & craftsmanship, whether you believe them & whether they appeal to your heart (Sandelowski, 1994, p. 61).

In this Methodology Chapter I explained my research design & the tools I used to collect the data. I set the scene for gaining insight into the experiences of the participants. The cognitive journey of comprehending, synthesizing, theorising and re-contextualising my data (Morse, 1994) is described. I address ethical issues and the credibility, confirmability and transferability of this research, as well as discussing its limitations.

The research design

My research study sits in the interpretive paradigm. As mentioned in the first chapter, the main focus of my research was to understand service-learning from the participants' points of view. Typically, in educational research the interpretive approach acknowledges that the participants are individuals and have subjective views and opinions of their experiences (Cohen, Manion & Morrison, 2005). Based on the assumption that each student would have experienced the C.R.O.W. service-learning project in a different way and that I would be the main research instrument, a qualitative study was designed. In my role as the primary research instrument I was able to generate meaning from the participants' individual perspectives which yielded new insights and understandings of their

experiences (Cohen, Manion & Morrison, 2005). The purpose of the qualitative research approach was to portray the events of the service-learning project from the viewpoint of the participants' and report on their multiple perspectives in the context of their service-learning experience.

Sampling

I consider my research small in scale and used my judgment when deciding on a minimum sample size of between eight to ten students (Cohen, Manion & Morrison, 2005). The entire group of twenty-three second year students was involved in and completed the 2005 service-leaning project. Twenty of these students were promoted to third year. In an effort not to place pressure from my position of power over the students, I asked for volunteers from these twenty students. Eight students volunteered to participate in my study. The research design recognised that each participant would bring his/her own perspective into an interview situation and that each would view his/her service-learning experience in a different way. Usually in qualitative studies a small sample size is considered acceptable, with the addition of corroborative data (Cohen, Manion & Morrison, 2005). I consider the principal data to be from the interviews and the corroborative data from reflective reports. As a requirement of the servicelearning project the reflection reports were completed a year prior to the interviews. Both sets of data and the time period between the two contributed to the richness and complexity of the data from which greater insight and understanding of the participants' experiences could be generated (Cohen, Manion & Morrison, 2005).

Data collection instruments

Interviews

I designed an interview guide, based on the purpose of this study. I chose a semi-structured interview to engage each of the eight participants. The advantage of using this instrument was that the responses could be compared. Furthermore, this instrument permitted other researchers to review the instrumentation used in

evaluation of my study. A weakness here could be perceived as the lack of flexibility by standardising the questions. These could have limited the naturalness of the interview. To minimise the weakness I tried to keep the questions open ended, the wording of which was determined in advance (Appendix 1). The key questions posed to the interviewees were designed to address the central questions of the research. To put minimum restraint on their answers I prepared prompts around the themes presented in Chapter 3. The prompts were used to promote further discussion or more in-depth exploration, if the need arose. Ideas from the Theoretical Framework and Literature Review were included, not to inhibit the acquisition of new data, but rather to provide a structure in which to analyse the data.

As the academic in charge of the student cohort, I did not want to influence the outcome of the research. My strategy was to stress to the interviewees that they could be as candid as they wanted without fear of reprisal. It was important that the interviews be conducted in such a way to allow for free conversation. The interview method intended not only to ensure the credibility of the study, but also to enhance the authenticity of the data. With each student, I arranged a time for the interview that was convenient to them. The interviews were conducted in a private and neutral venue on the DUT campus. I tried to establish an appropriate atmosphere so each participant could feel secure to talk freely. I had accepted their letter of informed consent before the interview started and asked their permission to record the interview. I transcribed each interview, but in an effort to avoid simply making transcriptions and to enrich my data, I wrote up qualitative notes, in which I recorded non verbal cues from the respondents (Cohen, Manion & Morrison, 2005).

Reflective reports

The corroborative data was obtained from the participants' reflection reports. During the course of the one week implementation of the service-learning project, the students were required to fill out daily reflection logs. The daily logs were collected at the end of each day. The completed daily logs were handed back to

the students' a month later when they were asked to complete, for academic credit, a reflective report on their experiences. At the same time they were given Bradley's (1995) assessment criteria for reflective writing. The reflective reports were intended to include:

- (1) A description of what happened in the service experience;
- (2) An analysis of the course content in relation to the service experience and;
- (3) An account of how the experience could be applied to their personal lives.

Assessment was measured on the three levels as proposed by Bradley (1995).

- At level one (50%-65%), the student would have given examples of learned behaviour, but provided no insight into their observations. Also they may have only focused on one aspect of a situation and not acknowledged different perspectives.
- At level two (66%-74%), the observations would have been thorough but not placed in a broader context. The student would have used both unsupported personal beliefs with some evidence to support their beliefs.
- At level three (75%-100%), the students would have demonstrated the ability to view multiple perspectives and made appropriate judgments based on reasoning and evidence.

No minimum length was stipulated in the assignment. The average report length was two and half typed pages, the longest being six typed pages. The reflective reports from the participants in this research varied across the full spectrum of the assessment level as well as in the length of the report.

Setting the scene for insight

Morse (1994) suggests that data analysis is a cognitive process that generally consists of four stages. In my case, the four processes happened sequentially, namely: comprehending; synthesising; theorising and re-contextualising (Morse, 1994).

Comprehending: I immersed myself in the topic of service-learning. I was a participant and observer in the community setting in which the service-learning experience took place. I carefully looked at the experience through the lens of the participants. Although being immersed in the literature, I kept it aside so as not to contaminate the data I gathered for this research. I read and re-read the transcripts of the interviews and the reflective reports. Through the process described above understanding was reached. I had enough data to be able to write a complete, detailed and rich description of my research. Comprehension was confirmed by the fact that I could identify different stories within the main story and I was able to identify patterns of experience within the data (Morse, 1994).

Synthesising: I allowed the process of synthesising to be inductive and to emerge from the data. I sifted through the data to understand and comprehend the common and important features of the data. I used coding as a tactic to arrange the bulk of the data. I categorised the data by bringing together codes that related to one another. I began to interpret, link and see relationships in the data. In this way I moved from the particular to the general in small steps. In doing so, several unique stories and experiences became evident. Variation of stories within the main story emerged. The composite pattern of behavior in the stories allowed me to create a metaphor to explain the results of the analysis. Thus the process of conjecture about the findings began (Morse, 1994).

Theorising: I used the conceptual framework proposed by Bawden (2000) and the three domains of learning, noted in Chapter 3, as a tool to guide further investigations of the data. I asked questions of the data which enabled me to establish micro links back to both the conceptual frame work and learning theories. The conceptual framework discussed in Chapter 2 and the theory examined in Chapter 3 gave structure to the data analysis. As my research is in the discipline of interior design I made links that where distinctive of the course programme, but could be re-contextualised to similar situations (Morse, 1994).

Re-contextualising: The established micro/programmatic CHESP conceptual framework put forward by Bawden (2000) and the three domains of learning

provided a context for my findings. Although the story may be unique to the discipline of interior design the findings may add to the advancement of both the discipline and service-learning within the programme (Morse, 1994).

Credibility, confirmablity and transferability

Credibility in this research was achieved by maintaining certain rigors of ethical conduct required of qualitative research. In my account of this research I describe and interpret service-learning from the viewpoint of the participants (Cohen, Manion & Morrison, 2005). I authentically and faithfully described the experience of the participants in their unique setting in both the collection of data and in the reporting of the events. I keep the story of my research as factual and as honest as possible so that the participants may recognise their experiences (Morse, 1994). Confirmability is determined by the rigorous methodology adhered to, such as the sampling methods chosen, the appropriate instruments used to collect data, the process of data analysis and the interpretation of findings. I persistently pursued interpretation in different ways to look for what counts and what does not count in the data collected during the research process. I made continued checks from the data source to the interpretation of the findings, with the aim of assessing the intention of the participants and to correct any obvious errors (Babbie & Mouton, 2001). I have thoroughly described the setting, the role players assumptions that were central to this research so that transferability may be made possible by another reader (Babbie & Mouton, 2001).

Ethical issues

Approvals from the University of KwaZulu-Natal (UKZN) and clearance from its Ethics Committee (Appendix 2) to conduct the study were obtained, after which the necessary permission was granted from the Executive Dean of the Faculty of Arts and the Head of our Department at DUT to carry out the research. Attached (Appendix 3) is the letter of permission I received to conduct my study. I asked

the student cohort, now in their third year or exit level of study, to volunteer to participate in my research project. In the discussion with them I clearly outlined the nature of my study and went through the consent letter (Appendix 4) that I had prepared beforehand, which included the undertaking of confidentiality and anonymity of the participants in my research report. I asked them to think the matter over and stressed the point that not volunteering would in no way prejudice my further interactions with them.

Analysis of data

To make sense of the data I used coding as a tactic to generate meaning from the transcribed interviews and reflective reports. Using the computer programme Nvivo I re-arranged the bulk of my data into codes. I grouped the codes I had created from the respondents' interviews and their reflective reports into categories for the purpose of analysis. I categorised by bringing codes that related to one another together (Coffey & Atkinson, 1996). I went through the data several times to check for consistency, for refinement and modification. As the categories started to take shape I grouped them into domains symbolic of the research. I sifted through the data to understand and comprehend the common and important features of the data. I reviewed the categories to see how they fitted into domains and I reviewed the domains to see if any new categories were generated (Cohen, Manion & Morrison, 2005).

Limitations of this research

The scope of this study was limited to interior design students only. The limitations of the methodology were the small group of participants who randomly volunteered to participate in the research and the instruments used to collect the data. Given the nature of qualitative research, the trustworthiness of this research depended on my interpretations of the data collected from the participants, the results of which are founded on my interpretations which are not entirely

objective. The analysis and conclusions of this research are also limited to my understanding of service-learning.

Summary

In Chapter 5, I began theorising by interpreting the data, establishing links and seeing relationships between the domains (Morse, 1994). The conceptual framework discussed in Chapter 2 and the theory examined in Chapter 3 gave structure to the data analysis. I used the three domains of learning, from Chapter 3, as a tool to guide further investigations of the data. In the next Chapter I review the plot in which the domains are embedded and interpret the participants' responses within each domain. I also find links that emerged from the data and explain how I interpreted meaning from these links.

CHAPTER 5

FINDINGS

The story plot of the 2005 service-learning project was outlined in Chapter 1. In Chapter 2, I examined the CHESP operational and conceptual framework that described the discourse between the three systemic levels. The service-learning pilot project was initiated at the second level or meso/institutional level in the domain of strategic discourse. At this level the partnership consisted of members from DUT (Higher Institution), SAGID (Regional Community) and the CHESP Committee (Service Provider). The C.R.O.W. service-learning project was positioned at the micro/programmatic level. The partnership at this level consisted of C.R.O.W. (Community), SAGID (Service Provider) and the 2005 second year interior design student cohort (Higher Education). I subsequently examined experiential learning as a framework to understand the learning processes of the pilot project.

In the Literature Review I explored the origins of service-learning typology and positioned service-learning along Furco's (1996) continuum of experiential learning. I further examined different models of service-learning and situated the C.R.O.W. project in problem-based leaning. I reviewed learning outcomes using findings from previous studies on service-learning. The Methodology Chapter explained the methods I used for this research. And now, I present another view of the characters and their experiences in this chapter.

The characters' roles within 'The Plot'

I identified three different character roles from the main storyline of the servicelearning project. Each had one of three types of experiences as either a project manager, a team leader or a team member. Having identified these three roles, I sought a metaphor that best explained the phenomenon of the three roles. I chose a honey bee colony because the colony has three types of members each with distinctive roles. The members are the queen bee, the drones and the worker bees. In a single honey bee colony there is only one queen bee (Great Plains Nature Centre, nd). In the case of the participants only one project manager participated in the study. I will call her the queen bee. Drones usually make up a small percentage of the colony and as there were only two team leaders in the group of research participants they became the drones. The balance of the participants, who were team members, became the worker bees.

Each member of the honey bee colony has specific roles. The queen bee reigns over the nest, surrounded by the drones and worker bees that perform crucial tasks in the colony. In the C.R.O.W. service-learning experience, the project manager became the queen bee. Her role was to oversee the work carried out by the team leaders and team members. The role of the team leaders was similar to that of a drone, who attends to the needs of the project manager or queen bee. The team members were responsible for the building of the interior of the education centre, not unlike the workers bees that construct and maintain the hive.

Orientation

Initially, the *honey bee colony* shared the same experiences at the start of the project. They all participated in the service-learning orientation which included pre-service preparation, the brief, studio work and the presentation to the community and service provider. Only when the winning scheme was chosen did the roles start to diverge.

Sponsorship and model building

During the sponsorship week the *queen bee* was responsible for liaising with the service-provider and the sponsors to arrange and co-ordinate sponsored materials and skills that were required for the week of implementation. In addition,

the *queen bee* kept in contact with the community to finalise the design. During the sponsorship week the *queen bee* made the decision to have drones and worker bees. The *drones and the worker bees* during the sponsorship week built a model of their own scheme that fulfilled a course requirement.

Site implementation

During the site implementation week, the *queen bee* acted in the role of project manager. At the start of the week the *drones* were given their leadership tasks by the *queen bee*. The *drones* had to participate in the implementation of the work and overseeing the *worker bees* participation. *The drones* acted as team leaders and reported to the *queen bee* in regard to all site progress. The *worker bees* took instruction from the drones. Each team of *worker bees* was responsible for one aspect of the design. Their role was to specifically build and implement the scheme using the donated materials and skills.

Site handover

Completion of a building or interior is recognised with a ceremony such as a handing over of 'keys' or simply a 'site handover' celebration. All the *honey bees* participated in this tradition of architecture and interior design. In some cases it is attended by dignitaries and the media. In the case of the C.R.O.W. project, the dignitaries were members from the C.R.O.W. board, DUT management and members from SAGID. The media was Independent Newspapers and SAGID's media partner the *Garden and Home* magazine. In summary, the service-learning course was conducted over a period of five weeks.

The site handover was one month later. Although site implementation made up only one week of the five week project, the data reflected that the participants placed the most emphasis on their experiences during this week. This emphasis may have been due, in part, to the daily reflection logs they were required to complete during this week, the product of which was the final reflective report. Although it was not the intention of the service experience or of this research to

focus on the implementation week, the data demonstrates the significance of this single week in the participants' service experience. Table 3 summarises the characters, the plot and the timeframe of the C.R.O.W. project.

Characters	The Plot	Time frame	
Bee Colony	Orientation Completed pre-service exercises Received brief Completed studio work Presented work to C.R.O.W. and SAGID	Week 1-3	
Queen Bee	Sponsorship and model building Liaised with community, service provider and sponsors Planned implementation week	Week 4	
Drones and Worker Bees	Built a model as part of course requirement		
Queen Bee	Site Implementation • Supervised drones, sponsors, contractors and suppliers • Completed daily reflection logs	Week 5	
Drones	Liaised with queen bee during site implementation	on	
Drones and Worker Bees	Implemented 'the works' on siteCompleted daily reflection logs		
Bee Colony	Site Handover Attended hand over ceremony Completed reflective report	1 month later	

Table 3
Summary of the characters, plot and time frame

During the course of synthesising the data it became evident that each of the participants' learning experiences took place in a common setting, which I have referred to as *The Plot*. The setting was determined by the structure of the course. Within *The Plot* each member of the bee colony had different experiences. The statement by a honey bee below supports the finding that each

member of the honey bee colony had different experiences within the context of the C.R.O.W. project.

"We got to share the same experience, each slightly different but very much the same..."

(Honey bee)

The characters of *The Plot* were the gueen bee, the drones and the worker bees.

The plot

Orientation: pre-service; brief; studio work and client presentation

Mostly the honey bee colony felt the first introductory lesson to service-learning useful. However, only a couple of honey bees felt that the pre-service exercises that followed were an important part of the service experience. Largely the honey bees believed that the pre-service exercises were of no benefit. They did not find discussing their feelings on racism and prejudices comfortable. They felt the exercises were too abstract and a few mentioned that the exercises were too generic. They would have preferred role plays on issues specific to the course. They believed that participation in activities such as role playing, pertinent to the service experience would have better prepared them for interactions with the client, sponsors and contractors on site.

"The pre-service, quite honestly, wasn't beneficial at the time" (Worker Bee)

"I think it was too abstract, if that make sense" (Worker Bee)

"I don't feel like it really related" (Worker Bee)

The bee colony was introduced to members from the C.R.O.W. community at the briefing stage. The honey bees felt that having received a brief from a genuine client made the project seem more 'real'. At this time they were given a guided tour of the facilities. The honey bees expressed very little connection to the animals themselves as they were wild animals which could not be socialised with

humans, because they are later released back into the wild. However, they felt privy to the work that members of C.R.O.W. undertake.

Very little mention was made of the time spent in the 'studio' by the honey bees. A few mentioned that a 'real' project had created a 'buzz' in the studio. However, the data from both the final reflective reports and the interviews suggested that the emphasis of service-learning experience began when the participants presented their concept designs to the 'real' client. Mostly the honey bees expressed that they felt anxious beforehand, but were very pleased they had had the experience.

Sponsorship and model building

During the week that was set aside for the queen bee to co-ordinate sponsors the drones and worker bees built a three dimensional cardboard model of their interior scheme. The model fulfilled a course requirement for which the queen bee was condoned. Unanimously, the drones and worker bees noted that building a model was a "waste of time". Most would have preferred to be either involved in the sponsorship or to build a model that was more relevant to the design scheme that was implemented.

"We could spend the first week preparing and finding sponsors instead of building our model"

(Worker Bee)

"It would be nice if part of the class could develop parts of that person who was chosen, their models or his/her model"

(Worker Bee)

Unanimously, all the honey bees wanted some involvement with sponsorship. Some even suggested obtaining their own sponsorship rather than relying on the service provider. They experienced delays in regard to sponsorship delivery and expressed this as the reason they would prefer not to be reliant on another party. Also, they conveyed their desire to be more involved in the process with all aspects of the sponsorship and implementation. The drones and the worker bees

expressed disappointment at being left out of the management process. Suggestions such as learning how to run meetings and take minutes were made. They also believed that by being more involved in the sponsorship they would have been afforded more opportunities to build relationships with the community and service provider.

"I think if maybe we had more responsibility like getting our own sponsors, dealing with people in then industry, stuff like that, then it might have been more beneficial" (Worker Bee)

Site implementation

Although the students were very aware that the physical implementation of the interior scheme was not part of their profession, without exception the honey bees were pleased to have the experience. They expressed delight in learning how to use power tools as they considered these skills to be important life skills. They expressly did not want to reduce future students' exposure to the experience. The honey bees however, would have preferred to have training beforehand from a skilled workshop technician and to have the technician on site to assist in the manual side of the installation as well to enforce safety measures.

"I enjoyed it because we got to do it ourselves and it was fine". (Worker Bee)

"It was quite exciting because some of the tools I haven't used and I actually learned how to use them and what paint you'd be able to use for certain materials" (Worker Bee)

"This was one of my highlights about this experience, as I was using all the things my Father had taught me about carpentry" (Drone)

Initially, the honey bees' perception of the involvement of the service provider was that of hands-on participation during the implementation week. Unanimously, the drones and the worker bees expressed that they felt let down that SAGID was not involved in this way during the implementation week. They expressed disappointment in the contributions of SAGID at this time and generally felt dissatisfied with the lack of contact between themselves and the service provider.

On the periphery of their perception was an awareness of behind the scenes dealings, but as they had no direct communication with SAGID they were unclear of their role. The honey bees mostly expressed their disheartedness because they did not have the opportunity to work more closely with members from SAGID so that they could build relationships for future employment opportunities.

"I thought they would be there helping us more" (Worker Bee)

Site handover

All the honey bees, with the exception of the queen bee, felt they did not have quality interaction with members from C.R.O.W. Mostly the honey bees were aware that the community was around during the implementation week making positive affirmations of work well done. However, the honey bees became more aware of the members of C.R.O.W. at the site handover, when the community expressed their thanks for their participation. The site handover was a turning point for all the honey bees as they felt a sense of achievement at the handover when they realised their small parts played a role in achieving a final outcome, in which the community expressed delight.

"Just this emotion expressed by them touched me and showed me how I can use my passion for what I do to better the lives of others" (Worker Bee)

"They were just so happy and ecstatic" (Worker Bee)

"As a group we accomplished a lot, in that each of us doing our own relatively small jobs, together we accomplished a very big job" (Worker Bee)

Table 4 summarises the experiences of each of the characters in *The Plot*:

The Plot	Queen Bee	Drone	Worker Bee
Orientation Pre-service	Felt the pre-service reflections were of no benefit	Not directly related to interior design service- experience	Not helpful in understanding diversity and stereotyping
Brief and Studio work	Felt that working with a real client was 'overwhelming' because aspects such as budgets needed to be realistic	The fact that it was a real world project created a 'buzz' of excitement in the studio	 Felt working for an actual client made the project more real
Presentation to C.R.O.W. and SAGID	Felt grateful to have this opportunity to have a real world experience of interacting with the client	Felt nervous at presentation, but an excellent experience	Felt anxious at presentation, but a good experience
Sponsorship and model building	 Felt stressed by all the responsibility of sponsorship Felt glad to have first hand interactions with the a 'real' client Felt well prepared for site 	 Felt uninvolved in sponsorship Felt building a model a 'waste of time' Felt they would have had more control of service delivery if involved in sponsorship 	 Expressed that they did not feel totally connected because did not know how materials arrived on site. Would like to have been more involved in sponsorship
Site Implementation	Felt than no amount of planning prepared her for site supervision Her greatest lesson was to be prepared for the unexpected Expected more assistance from SAGID	 Felt honored to be made team leaders. Felt as if they developed hidden leadership qualities Found the experience challenging but 'worth every second' Felt the work experience on site not always applicable to the profession Would prefer to supervise an entire project 	 Felt good to be adding a personal touch Everything was done as a team. Took pride in their work. Found working with the power tools exciting. Mostly resolved conflict within teams Would have like more involvement with C.R.O.W. and SAGID. Not a good leadership experience
Site Handover	Service Provider was there for 'the glory' during the hand over	Felt proud of completed project and to be part of the team	 Expressed awareness how grateful and appreciative the community was

Table 4 Summary of the characters views on the plot

Learning domains

The learning of the participants' experiences was mostly consistent with the three domains of learning reviewed in Chapter 3. My inspiration for the model (Figure 9) below came from Bawden's (2000) original JET/CHESP conceptual operational model. I replaced the practical domain with the personal growth domain. Together with the academic domain and the social responsibility domain these are the three categories often referred to in the literature, when service-learning outcomes are discussed. For example, when Billig (2000) reviewed the evidence on service-learning outcomes, she organised her findings in similar broad categories as did Eyler, Giles & Gray (2000) in their research.

As the characters' learning was not experienced in a vacuum, but rather in a context of the course structure, I embedded the three learning domains in *The Plot*. When I reviewed the data clear *Links* between the *Domains* surfaced. The *Links* did not seem to fit a template, but rather emerged from the data.

A Venn diagram best illustrated *The Plot*, the *Domains* and the *Links* between the *Domains*. The *Links* seem to be a combination of both project specific and generic service-learning experiences. I placed reflection in the overlap of all three domains as the process of reflection was often referred to in the literature as the connective tissue of students' learning experiences (Kolb, 1984; McEwen, 1996; Bringle & Hatcher, 1999; Whitfield, 1999; Billig, 2000; Eyler, Giles & Gray, 2000).

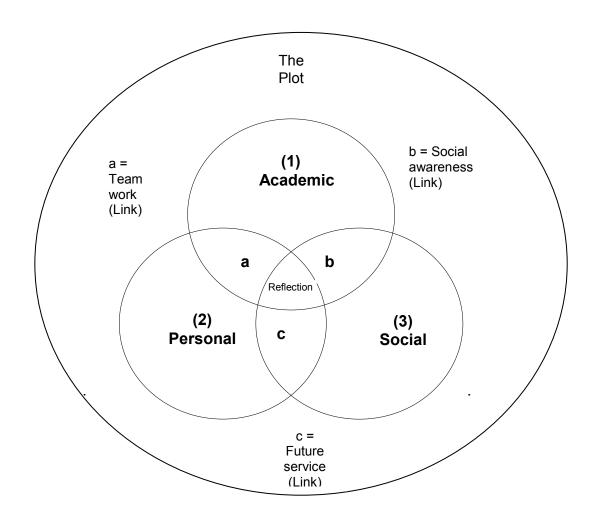


Figure 9 Illustration of learning domains and links between domains

Central overlapping domain - reflection

Reflection in all the literature reviewed was perceived as the heart of a students learning experience. The 2005 C.R.O.W. service-learning project was no exception. However, the honey bees mostly expressed that they did not like the way reflection was integrated into the course. The words used to describe the daily reflection logs during the week of implementation were "monotonous", "tedious", and "irritating". The overall impression of the honey bees was that the daily logs dampened the site experience. Mostly the honey bees would have preferred a personal journal and then the final reflective report. Only a couple of

the worker bees felt that the daily logs provided an opportunity to analyse and apply what they had learned.

The data collected from the participants' reflections in their final reflective reports show that connections were made in all three domains of learning. The strongest learning associations were made in the personal and social responsibility domains. However, learning was limited in the academic domain. Links that were made between academic theory and application were not fully realised as the participants did not elaborate much further on the course content than the statements below indicate.

"... I believe that we have learnt many key concepts to help us understand events that occur from the different stages of work, to various materials and specifications needed for a project such as this" (Worker Bee)

"...to be able to see a design come to life has given me a full view of what I am studying..."

(Drone)

Although the honey bees expressed a dislike for the way reflection was integrated into the service-learning experience, the research data indicates that reflection was the catalyst for the learning that took place in all three domains. The data from the reflective reports demonstrated that learning in the academic domain was limited, but was enhanced over a period of time when the participants were interviewed a year later. The data from both the reflective reports and the interviews showed that the greatest learning took place in the domains of personal awareness and social responsibility. The one year period between the data collected from the reflective reports and data from the interviews illustrated that personal reflection has continued to impact on the participants learning across all three domains.

"I think it's great that you are doing these interviews a year later because it's given us time to reflect and think about what we learned" (Queen Bee)

"I think now I realise how much I learned, but at the time I didn't find it beneficial to me, learning anything really" (Worker Bee)

Domain 1 - Academic learning

When asked if they believed they were prepared academically, the bee colony on the whole felt prepared, but noted in class they often "brushed off" the lectures. They articulated that, after completing the service-learning project, they could make more sense of the theory covered in lectures. On linking the theory of the coursework to the service-learning experience, they expressed a greater learning curve. The connection was mostly made from physically doing the work themselves onsite. An often cited example in the data was one on materials such as paint. For example, one cannot use water-based paint over an enamel based paint or visa versa. The participants' articulated that when they made mistakes such as these they learned from the experience. They noted that, in future, they would consider materials' specifications more carefully. Another example was construction theory. The honey bees reflected that having to build items themselves made them realise that construction details are important. Overall, the honey bees felt that, although it was a physical experience and one they would not normally do as a practising professional interior designer, it was a learning experience that equipped them with valuable life skills.

"It was a glimpse of the future as one could say and it's not that pretty, it's hard work and stressful" (Worker Bee)

Domain 2 - Personal development

The honey bees described the service-learning experience as "amazing". They "enjoyed" helping others. The participants, on the whole, were very positive about their involvement with the community in that they mentioned it was a "good" experience on a number of occasions. The experience of personal growth appeared to be of particular value to the participants. This featured prominently when discussing their overall experience. The respondents most often referred to their personal growth as the building of their confidence, their self esteem and their sense of self worth. They expressed that they discovered new aspects of themselves, such as how hardworking they are, and how positive their attitudes

were toward helping others. Bonding within the colony was also mentioned as a "good" experience. The respondents also spoke of "rediscovering" their morals and values.

"The experience reminded me what my values are" (Drone)

"...and by doing this, we help ourselves because we are learning human values" (Worker Bee)

The experience of the bee colony seemed to further improve personal qualities such as patience. The honey bees believed learning patience enhanced their ability to listen, thereby improving their people skills. Many of the honey bees experienced the feeling of pride in what they had achieved. Many felt the experience was "rewarding", especially at the site handover ceremony when C.R.O.W. expressed their gratitude towards all the contributions made by the entire colony. All the honey bees spoke of witnessing first hand the "joy" and "pride" that the community expressed at the site handover of their new facility. At this point all honey bees felt a sense of achievement and the handover was the turning point in realising their small parts played a role in achieving the final celebrated outcome.

"I leant a lot of patience both with people and just with getting things done" (Drone)

It's built my self esteem, working together as a class was a self building project" (Worker Bee)

It helped my social skills, communicating and speaking to others and in crowds" (Worker Bee)

A strong theme of feeling grateful for the experience emerged in the bee colony. The honey bees felt as if they had found a place for community contributions within their chosen discipline of interior design. They realised from the service-learning experience that interior design could be applied to many different communities.

"I was grateful for having been presented with this opportunity and to have had some form of practical work experience in the design world as a student" (Queen Bee)

Different feelings amongst the members of the bee colony in regard to their contributions emerged. The queen bee expressed that her most meaningful experience was one of "giving", but tempered with that she felt that responsibility of the management and sponsorship was "overwhelming". The drones on the other hand felt they had a little more input than the worker bees and expressed that the experience was "life changing". The worker bees initially perceived their contribution as small, but on the whole, as the project neared completion they saw the greater contribution in the team effort. Their perceptions were supported by the following statements:

"It was a joint class design in terms of us adding our little flare" (Drone)

I am proud to say that I was part of the group that changed a disastrous half empty shed into an amazing sophisticated educational facility" (Worker Bee)

Domain 3 - Social responsibility

"I don't think you can ask for things from the universe or from people if you don't give back to it and I really stand by that" (Queen Bee)

The above statement supports the unanimous belief of the bee colony that contributing to the community was in some way beneficial to them personally. Most honey bees had some previous community experience of working in communities, either through their schooling or through their place of worship. The service-learning experience highlighted the need for community work and the honey bees felt it re-introduced them to the communities in need. The greatest impact of the experience was that almost all the honey bees expressed that they wanted to help in future service. Although most of the honey bees did not feel obligated they wanted to make a difference to the lives of others "in need" by future contributions. One honey bee was thinking along the lines of a television show similar to the American "Extreme Home Make Over" show and another was committed to environment education. The statements below capture the participants' sense of social responsibility:

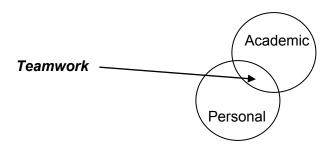
"Because communities such as C.R.O.W. are so grateful for our assistance I have gained a sense of responsibility towards society and hope to offer my assistance in the future"

(Worker Bee)

"From this one experience I am waiting in great anticipation and eagerness to step into the world to see what difference I personally will be able to make in both my business capacity and in volunteer work" (Worker Bee)

"I always knew it was out there, but this experience showed me more about it. It introduced me more so and prepared me for it, which was quite nice" (Worker Bee)

Links between the domains



Mostly the worker bees discussed their experiences in communicating with their peers as "fun". Some suggested that more group work should be incorporated into the interior design academic programme. Overall the honey bees expressed that they "bonded" with each other as a group. Conflict did arise and solutions were sought to resolve disputes. Despite the conflict or because of it, the honey bees expressed they felt closer to each other. The following statements support the point:

"It was nice to get to know everyone in the class. You get closer by doing, by helping each other, which was nice" (Worker Bee)

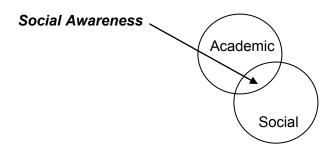
"Working together as a class has really brought us all closer together and we all helped each other in any way" (Worker bee)

In the diagram above, I defined the intersection as teamwork. I placed teamwork between the academic and personal domains, because the participants viewed working in a team as a bonding experience that encouraged their own personal growth. From the academic perspective the participants' experiences in their team centered on finding solutions to their design problems in a 'real' situation. Under the shared context of the plot, the honey bees expressed their understanding that working together was a co-operative group effort that required conflict resolution skills. They articulated discoveries of problem solving techniques that were very different to the usual experiences of an independent student. Some suggested "rationalisation", "negotiation" and a "friendly manner" with "compromise" being the result. The honey bees did concur that compromise was difficult in some cases. The statements below best articulate the link between the academic and personal domains:

"I learned to accomplish tasks in new and different ways, such as talking through with your team and combining everyone's ideas together which in turns build a relationship with them" (Worker bee)

"It was nice to get to know everyone in the class. You get closer by doing, by helping each other, which was nice" (Worker Bee)

Within the experiences of bonding and learning how to resolve conflict subtle different experiences were expressed by the bee colony members. The queen bee experienced her role in the team quite differently to the other honey bees. She felt she had too much responsibility as leader of the honey bees. Ultimately she welcomed the role and rose to the challenge, but felt bad for the worker bees. As mentioned earlier she believed they should have shared in some of her experiences with sponsorship, the community and the contractors on site. The drones also expressed another view. They mostly felt as if they discovered latent leadership qualities. The worker bees on the other hand felt they did not get the chance at all to participate in a leadership role. A few believed if they been delegated more of the sponsorship role, they would have had an opportunity to share in the responsibilities that came with leadership.



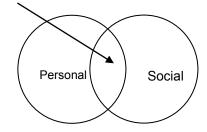
In the case of this research I made the link between academic and the social responsibility domain because all the honey bees clearly articulated that their service-experiences made them more aware of communities in need. They found a place where they could contribute using their academic knowledge of interior design, a consideration that the honey bees had previously not considered. The honey bees expressed that the connection they made between the academic course work and service gave them a sense of social responsibility and commitment to future service in the field of interior design.

"This whole project made me more aware of other less fortunate than myself and how I could use interior design in different communities" (Worker Bee)

"It's a process of giving back a service and using the knowledge of what we know and what we have learnt to help others" (Worker Bee)

"....showed me how I can use my passion for what I do to better the lives of others" (Worker Bee)

Future Service



I interpreted the link between the personal and social responsibility domains as one of responsibility to future service because the honey bees responded on more than a few occasions, how they believed the service experience had benefited them personally. They expressed that the service activities they participated in fed into their personal growth. Through their personal growth they developed a sense of social responsibility toward future service.

"In my personal capacity, I've started to do construction drawings for my church"

(Queen Bee)

"I definitely would like to help the community when I am out there" (Worker Bee)

"In the future, as a professional career person I would like to participate and be involved in the implementation of community projects such as this" (Worker Bee)

Participants' recommendations for future service-learning projects

Despite the consideration that the site experience was not one the honey bees would have during the course of their profession, they unanimously agreed the service-learning experience, including the implementation week, should remain in the programme, with some improvements. The honey bees believed that although the site experience did not directly relate to the profession, the experience taught them life skills and in addition demonstrated some links between their learning and the service-learning experience. This assertion is supported by many of their statements:

"As the existence of service-learning projects has become known, more and more potential clients have approached the interior design programme with suggestions for other projects. For example..." (Queen Bee)

"I think it's actually an incredible programme and I think if you carry on with this there's so much growth in the programme, I really think its brilliant (Queen Bee)

"I definitely think it should be keep as part of the syllabus because it is very beneficial"

(Worker Bee)

"Its vital to experience a service learning project, not only in theory but also in reality because it allows us to understand fully the importance of a community project's success"

(Worker Bee)

Summary

In summary, the focus of this chapter was to capture and interpret the perceptions and process of service-learning, as experienced by the participants. Despite the existence of many definitions and models of service-learning described in Chapter 3, it was evident from this study that the student experiences centered around three main criteria:

- (1) meeting the needs of the community;
- (2) reflection and academic learning; and
- (3) students' awareness of community (Mouton & Wildschut, 2005).

Within those criteria, the participants' experiences, without predetermination in the data analysis, fell quite naturally into the three domains of learning. Although I examined the three domains separately, the evidence of the links suggest that the service-learning experience was a connected view of discovery in that the respondents made connections quite naturally between their personal and academic development (Eyler & Giles, 1999). Also, as the participants' academic and awareness of self grew so did their sense of social awareness (Eyler & Giles, 1999; Billig, 2005; Mouton & Wildschut, 2005).

CHAPTER 6

DISCUSSION AND RECOMMENDATIONS

In Chapter 5, I described the participants' perceptions of their C.R.O.W. service-learning experience. Integration of service with the academic course work of the interior design programme and my subsequent research has revealed valuable insights into the participants' learning. The findings gave clarity to those vague feelings of 'success' mentioned in the first chapter. I have discussed the participants' processes of learning using Kolb's (1984) theory of experiential learning. In addition, I have reported on the impact of the participants' service-learning experience under the three domains of learning, which I covered in the Literature Review. With fresh insight, I now make recommendations for the improvement of future service-learning within the interior design programme at DUT. I use Howard's (1993) principles for best practice in service-learning in which to structure these suggestions. Finally, I propose topics for future service-learning research.

The process of learning experienced by the participants

In Chapter 2, I used Kolb's (1984) four phase experiential learning cycle, as a framework to explain the students' learning experiences. Kolb (1984) believed that a student can enter the cycle at any of the four points, but needs to complete the cycle for the learning to be effective. To explain the participants' learning processes within Kolb's (1984) cycle I have followed the sequence of *The Plot.* I have positioned the entry point at the orientation stage. The second phase was the time the participants spent in the studio preparing their concept designs. Following on from that was the third phase or implementation of the project. In the fourth stage the participants were required to consciously reflect on the

experience in a final reflective report. My findings suggested that the learning was ongoing after the fourth stage. For this reason I have added to the cycle to create a spiral that explains the participants' continued learning from the C.R.O.W. project.

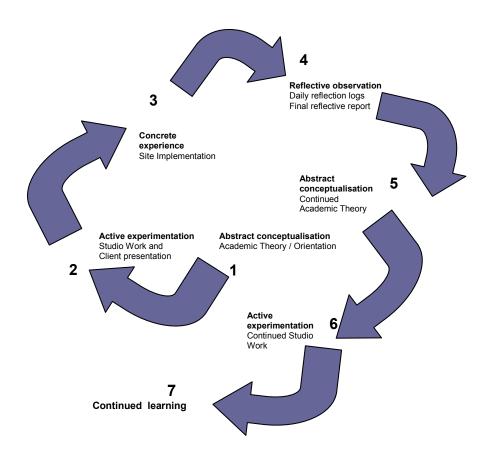


Figure 10
Participants' learning processes
Adapted from Kolb (1984)

Phase 1 - Abstract conceptualization

The participants entered Kolb's (1984) cycle at abstract conceptualisation level by attending interior design theory lectures as well as service-learning orientation workshops. During the pre-service workshops they were introduced to concepts such as diversity, values and beliefs. Written and practical assignments as well as class discussions were conducted to provide opportunities to apply these abstract concepts to the C.R.O.W. service-learning project. The findings revealed that the participants believed that the pre-service workshops were too abstract. In future more course specific orientation exercises will be required to enhance students' learning during this phase of the cycle. The appropriate combination of academic

theory and assignments will provide a platform for the participants' learning in the active experimentation phase of the cycle. The research evidence also showed that the participants placed very little emphasis on their learning while moving from orientation to active experimentation in the studio.

Phase 2 – Active experimentation

During the *active experimentation* phase it was evident that the students made connections between the real world and academic theory in that all students presented a graphic design solution for C.R.O.W. The students tested their recently acquired theoretical assumptions in a new situation by applying their theory to find a design solution for the C.R.O.W. Education Centre. However, the findings from this research revealed very little articulated evidence from the participants of the learning processes they experienced during their time in the 'studio'.

Most of the participants articulated that they did not make immediate direct links between academic design theory and their experiences of working in the 'studio'. The findings showed that the participants believed that their 'learning' began when they presented their concept designs to the client. Thus, it is evident that in order for greater learning to take place during this phase of the project, more definitive links between both the academic theory and abstract concepts need to be included in the studio work. Inclusion of the students in setting up the brief alongside the community and the service provider may provide a greater sense of active participation for the students. In addition, structured involvement with the community and service provider during 'studio' time will further enhance student learning during this phase of learning.

Phase 3 – Concrete experience

From active experimentation in the studio the participants moved onto the concrete experience phase of Kolb's (1984) learning cycle. This phase consisted

of arranging sponsorship and the physical implementation of the work onsite. From the findings it is evident that the participants had different concrete experiences, as not all shared sponsorship and leadership roles. However, the findings are consistent with literature in that all the participants learning was enhanced during the *concrete experience* phase of the cycle (Bringle & Hatcher, 1999; Whitfield, 1999; Billig & Welch, 2004).

Phase 4 – Reflective observation

After the concrete experience the students moved onto the reflective observation stage of Kolb's (1984) cycle. Reflective observation focuses on what the experience means to the individual. The process requires observation, examination, analysis and interpretation of the impact of a specific concrete experience (Kolb, 1984). It is evident from the findings of this research that opportunities for reflective observations, although incorporated into the service-learning project, were limited to the daily reflection logs during implementation and the final reflective report. The findings showed the strengths of the participants' reflective learning were focused in the domains of personal development and social responsibility, while the weakness of the participants' learning was in the academic domain.

The evidence further demonstrated that the participants regarded their reflection logs during the implementation week as merely a recording of the physical experience rather than a means of viewing their experiences from multiple perspectives. The participants' perceptions may be, in part, due to the fact that the reflection activities were focused on the implementation week rather than for the duration of the experience. In addition the reflection exercises in the participants' view were repetitive. Evidence of other researchers in service-learning, such as Eyler & Giles (1994), Bringle & Hatcher (1999) and Whitfield (1999), have suggested that ongoing reflection for the extent of the course strengthens the integration of service into the academic course work and that such reflection is the crucial element that would transform the concrete experience into knowledge. Designing better reflection opportunities for the

duration of the experience is discussed later in this chapter under course improvements.

Phase 5/6/7 - Continued learning - academic theory/studio work

I have added phases five, six and seven as the findings showed that the participants, after completing the final reflective report, continued to learn from ongoing personal reflections on the C.R.O.W. project. It was evident from the data that after a year had elapsed between the reflective reports and interviews the participants continued making connections in and between the three domains of learning and their current academic theory and studio projects. In other words, the participants articulated in their interviews that their service-learning experience had placed them in a stronger position to make clear links between the C.R.O.W. concrete experience and the continued academic programme. Some participants also expressed that their perceptions of working in the 'real' world had changed and that they now felt better prepared for those experiences. In essence, gaining experience from the C.R.O.W. project had altered the to participants' attitudes the current academic programme (abstract conceptualisation) thereby impacting on future studio work (active experimentation), which in turn may influence their next concrete experience. In this way I have viewed the participants' learning processes as a continued spiral rather than a finite cycle.

The impact of service-learning participation

The C.R.O.W. service-learning experience provided students with not only an experiential learning experience, but one that also met the needs of a community (Furco, 1996). Ample evidence from the participants' viewpoints suggested that the community needs were met. The community expressed their satisfaction and gratitude for work completed directly to the students and academic staff at the

'site handover'. Bringle & Hatcher (1999), Billig (2000), Eyler, Giles & Gray (2000), Billig & Welch (2004) and Roos *et al.*, (2005) have all reported service-learning outcomes for students in terms of their academic, personal and social development. This research has shown that service-learning presented opportunities to nurture the personal awareness, the academic and the social responsibility domains of learning (Billig, 2000). This study has revealed that the greatest impact on the participants was a commitment to future service in their discipline of interior design as well ardent support for service-learning, with a few adjustments in the academic programme.

In the domain of academic learning the participants reported that the service-learning experience had impacted more positively in terms of their subsequent learning rather than their immediate learning. The participants believed that the 'real world' experience had contributed to their ability to make more sense of academic theory as they progressed in the programme, and that it had also improved their aptitude to apply the theory in more real terms. The findings reflected that "Learners were able to show evidence of a deeper understanding and better application of subject matter and were able to develop problem solving skills that promote life long teaching" (Roos et al., 2005, p.704). However, the academic link was not immediately made; rather, the participants' perceptions of their improved ability to apply theory to practice had developed in the year since the service-learning experience. This finding is consistent with other research such as those conducted by Eyler, Giles & Gray (2000) and Billig & Welch (2004).

In the domain of *personal learning* this study found that the respondents expressed an increased sense of self confidence and self esteem. In addition, and as concluded by other researchers, the participants articulated development of personal qualities. (Bringle & Hatcher, 1999; Billig, 2000; Eyler, Giles & Gray, 2000; Van Wyk & Daniels, 2004; Roos *et al.*, 2005; Mouton & Wildschut, 2005). In the case of this study, qualities such as improved patience and communication skills stood out the most. These qualities seemed to be a positive response from their participating in teams while working on site. While resolving conflict in their groups, participants perceived they had developed their ability to negotiate outcomes and in some cases they believed their experiences added to their

leadership skills. The findings of this study are congruent with those in the evaluation of the CHESP service-learning pilot programmes and other studies that have shown that service learning has helped improve relationship and leadership skills (Eyler, Giles & Gray, 2000; Billig & Welch, 2004; Mouton & Wildschut, 2005; Roos *et al.*, 2005).

The most prominent outcome from the service-learning experience was in the learning domain of *social responsibility*. This study concurs with other researchers (Bringle & Hatcher, 1999; Billig, 2000; Eyler, Giles & Gray, 2000; Van Wyk & Daniels, 2004; Roos *et al.*, 2005) that the participants' experience of service-learning had engendered a greater sense of social responsibility and that it has increased their desire to be active contributors in their society. The participants of this research believed that their contribution was of value to the community, in the same way that was experienced by the South African CHESP evaluation conducted by Mouton & Wildschut (2005) and Eyler, Giles & Gray (2000). The greatest impact was that the respondents were committed to future service (Billig, 2000; Eyler, Giles & Gray, 2000; Roos *et al.*, 2005).

Participants' suggestions for course improvements

From the findings of this research I have concluded that a few shortfalls in 'The Plot' of the service-learning experience existed. I have addressed those shortfalls using Howard's (1993) suggested best practice guide for service-learning. According to Howard (1998), service-learning in a tertiary education context is the intentional integration of academic content with relevant community experience. However, research has suggested that there is limited empirical evidence for defining and identifying best practices that lead to purposeful and sustained student outcomes (Butin, 2003). Howard (1993) believed that by subscribing to a set of 10 pedagogical principles educators would find that that students' learning from their service would be optimally utilized and that they would provide learning-informed service to the community. Later in this chapter I discuss

appropriate reflection activities based on the findings in this research. For the purpose of presenting future recommendations Howard's (1993) principles of good practice provided a framework to reflect on the C.R.O.W. project:

(1) Academic credit is for learning, not for service.

In the C.R.O.W. project academic credit was given for a research assignment during orientation and for the work produced in the 'studio'. In addition the week on the service site was credited to their experiential learning module. Academic credit was also awarded for the final reflective report a month later. Against Howard's (1993) principle the student cohort was given academic credit for participation and not only for their academic learning. Following Howard's (1993) suggestion that no credit be given for quality or quantity of the service, a means to introduce academic credit commensurate with academic learning during the implementation week needs to be integrated into the programme. I have reviewed this topic in greater detail under future recommendations.

(2) Do not compromise academic rigor.

Howard (1993) warned against lowering academic standards because a service component was introduced into a programme. However, the findings showed that because the participants were designing for a 'real' client they aimed for a very high standard of graphic presentation for which appropriate academic credit was awarded. Howard (1993) suggested that mastering academic material combined with community experience were challenging and intellectual activities in themselves and he proposed that this combination may alone be considered an appropriate academic standard.

(3) Set learning goals for students.

Learning goals remained consistent with 'studio projects' and were not specifically geared for an experiential service-learning course. This may have accounted for the participants viewing the learning emphasis of the course as the 'implementation week'. With new insight from the findings of this research and the deliberate setting of clear learning goals for each stage of the service-learning course, students will be provided with more opportunities to synthesize theory and practice throughout the course.

(4) Establish criteria for the selection of community placement.

Previous community projects gave the Department a rough selection criteria guide for C.R.O.W. The criteria are vague and need to be deliberately established in consultation with other academics in the department. As Howard (1993) suggested, the following aspects need to be considered:

- (a) the range of placements: A wide range of sites exist, but criteria on the size and the appropriate complexity needs to be established;
- (b) duration of the service: a four to five week project is the academic norm for second level of study. From the view of the participants the timespan was described as adequate to design and implement a scheme;
- (c) course relevant learning: the findings revealed that the participants wanted a more relevant management experience as well as physically installing the project. Their suggestion to manage their own sponsors with appropriate academic credit during this phase of the project would fulfil this criterion.
- (5) Provide educationally sound mechanisms to harvest community learning. Howard (1993) suggested that experience alone does not consummate learning, nor does a simple written description of one's experiences constitute academic learning. The findings showed that although the C.R.O.W. service-learning project was an experiential learning experience the participants made insufficient academic connections because the course relied on students' learning from the physical implementation and written observations of those experiences. In future, by providing sound learning goals and a mix of learning assignments throughout, the service experience will facilitate students' learning (Howard, 1993). Incorporating more discussions, verbal and visual presentations as well as journal assignments, will provide the stimulus for analysis of the student learning experiences for the duration of the course.

(6) Provide supports for the students to harvest community learning.

Howard (1993) maintains that students are largely under-prepared to meet the community and suggested that academics can assist students with the necessary skills to learn from the community. The findings showed that most of the participants felt under prepared for meeting the community and that they did not sufficiently interact with community. I have suggested that in future, roleplaying

during orientation will be a way to better prepare the students for meeting the community. Also, involving students in extracting a brief from the community and with the academic staff facilitating community and studio interactions will further support harvesting learning from the community.

(7) Minimize the distinction between the student community learning role and the classroom learning role.

The participants' responses to the orientation phase of the project suggested the exercise was wholly inadequate for their site experiences. As Howard (1993) suggests, the students in the studio are expected to assume largely learner-follower role. In contrast, in the community, the students are expected to assume a largely learning-leader role. Better pre-service planning for the roles they will assume in the project needs to be incorporated from the early stages. Facilitation of the interaction between the students, the community and the service provider could be a way to address the changing learning roles of the student. Continued interaction from the briefing stages, studio work and implementation with the community, service provider and sponsors, would also better realize the students' learning potential.

(8) Re-think the educator's instructional role.

Very little mention was made by the participants in regard to the academics' role in the service-learning project. Howard (1993) believes that using the traditional instructional role as an educator would obstruct learning in a community setting. Suggestions that have been made to improve the course centre on the educator taking on more of a facilitation role rather than that of information dissemination. Howard (1993) believed that with facilitation the students would be better prepared for the shift from learning-follower role to a learning-leader role.

(9) Be prepared for uncertainty and variation in student learning outcomes. Howard (1993) cautioned to expect less predictable and homogenous outcomes in service-learning projects than in usual coursework. The results of this research have shown that indeed a wide variety of student outcomes were experienced during the C.R.O.W. project. The findings also show that the learning outcomes for each participant were different in that there were three distinctive sets of

experiences. Although homogeneity of outcomes is not a necessity, comparable outcomes can be achieved by creating a service-learning project where all students have a similar experience. For example, in future projects all students can be included in the sponsorship and management of the project.

(10) Maximize the community responsibility orientation of the course.

The project from inception was done on an individual basis and teams were established onsite. One of the outcomes of a community service-learning course is to cultivate a student's sense of community (Howard, 1993). The findings show that the participants thrived working in teams. In future courses I would now approach a communal rather than individual learning experience which would contribute to this objective.

Recommendations

Based on the findings of this study I have presented strategies to maximise students' learning for future service-learning projects, within the Department of Interior Design. I have made my recommendations based on my discussions on the participants' perceptions of their learning using Kolb's (1984) cycle and Howard's (1993) best practice principles. I have arranged the strategies in order of the critical stages of the service-learning programme.

Orientation: pre-service exercises

At the beginning of this stage I would give the students the course outline and assessment criteria. In addition, using appropriate pre-service exercises, I would prepare students beforehand by giving an overview of service-learning. Roleplaying, as one of the participants suggested, could possibly be a way to introduce the service-learning project. At this stage, I would keep the research assignment on the relevant community for academic credit. To encourage the

student learning-leader role I would further include peer facilitated group discussions on the community and 'appropriate reflection activities' for academic credit. I would thereafter facilitate the introduction of the community and service provider partners. In future service-learning, each community and service-provider may be different and I believe that the forum, with facilitation, would provide an opportunity to negotiate with all involved, the roles and responsibilities of each so as to avoid misperceptions at later stages. As strongly favoured by the participants and as advocated by Howard (1993) I would start the service experience in groups. To conclude this stage a brief for the upgrade of the service site could be drawn up by the students for academic credit.

The reflection contributions at this stage would be individual. Rather than reflection logs only during the build up week, I suggest that a double-entry journal be included as one of the reflection activities from the outset of the project. In a double-entry journal, students are asked to write two one page entries each week. Students describe their personal thought and reactions to the service experience on the left page of the journal and write about key issues from discussions on the right hand side of the journal. Students are then asked to draw arrows indicating relationships between their personal experience and course content. In this way the students could make more immediate connections to theory. This would be in preparation for a more formal reflective paper (Bringle & Hatcher, 1999).

Orientation: studio work and client presentation

As part of the 'studio work', ongoing interaction with the service-provider and the community would be facilitated and encouraged in order to foster relationships that the participants felt was lacking in the C.R.O.W experience. During this phase they could be required to continue with their double entry journal at least once a week so that more direct links between the academic content and the service-experience could be made. Structured reflection sessions can facilitate this process. Role playing, for preparation of the presentation may reduce some of the anxiety the participants felt before their presentation. In addition, academic

credit would be awarded for the verbal presentation as well for the graphic two dimensional and three dimensional representations which illustrate the students' interior design schemes.

Sponsorship

Rather than students building a model as a separate assignment, academic credit could be awarded for demonstration of the students' ability to manage their own sponsorship and trades through an appropriate academic assignment. To keep all students involved as to each others' progress regarding sponsorship, a bulletin board could be maintained for which academic credit would be awarded. Structured class discussions and the double entry journal log would remain ongoing.

Implementation

An alternative to the repetitive daily logs could be a 'photo essay'. As an option for awarding academic credit for the physical implementation, students could be asked to produce a 'photo essay'. The 'photo essay' could be a visual representation of the service site experience with personal reflections under each picture. In this way the students can record key events in a visual format (Bringle & Hatcher, 1999).

Site Handover

After the 'site handover' a final reflective essay for academic credit on their experiences that focused on the academic connections of the experience to course content could complete the project. The double-entry journal would form the basis of the essay. It is important to present students with the assessment criteria prior to the reflection activities so that the expectations for the reflective

essay are clear. The students could also be asked to assess their own reflection essay to provide an opportunity for self evaluation. (Bringle & Hatcher, 1999)

Conclusion

The value of service-learning is that it offers students an opportunity to master knowledge and skills in a meaningful way. From the findings of this research it became clear that the strength of the C.R.O.W. service-learning experience lay in the opportunities it provided to enhance student learning in the three domains of learning. It is, however, important to note that students need to combine their experiential experiences (Kolb, 1984; McEwen, 1996; Bringle & Hatcher, 1999; Whitfield, 1999) with appropriate reflection of the course content. The overriding impact of the service-learning project was the commitment of many of the participants to future service.

Future research

In South Africa, the uptake of service-learning is, in large part, a response to the Government's insistence that universities are more responsive to local and national developmental needs and that they engage in partnerships with other agencies to address problems of poverty, unemployment, sickness and crime in their surrounding community and regions.

(Castle & Osman, 2003, p.105)

As academics we are urged by Government and university policies, to pursue 'community engagement' and 'service-learning' as a teaching and learning model that integrates practical experiences with theoretical knowledge and at the same time provides support for communities (Castle & Osman, 2003). From my experience, including service-learning in an academic programme is hard work for which there is very little support and acknowledgement from executive level.

Although Government policy is now in place, Mouton & Wildschut (2005) noted that a gap existed between the executive support for service-learning and the often junior academics who were passionate about it. I believe that future research demonstrating student outcomes across a broad spectrum of disciplines at the programme level may motivate and encourage institutions to award academic incentives and allocate student funding to sustain quality service-learning programmes.

In addition there is limited research on the voices from the community and service providers. Mouton & Wildschut (2005) stressed in their article "Service-learning in South Africa: lessons learnt through systematic evaluation", that "Structured reflection is supposed to form an integral element of all service-learning courses" and that "partners need to reflect on the courses separately as well as jointly" (p. 139). Their evaluation showed that student reflection formed a vital part of the service-learning courses but that joint reflection between the partners took place infrequently. Mouton & Wildschut (2005) suggested that despite the large volume of narrative evidence obtained from their research there is a lack of primary evidence that demonstrates a sense of ongoing systematic (self) reflection on the part of the various partners involved in service-learning courses.

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APPENDIX 1

RESEARCH OFFICE (GOVAN MBEKI CENTRE) WESTVILLE CAMPUS TELEPHONE NO.: 031 – 2603587 EMAIL: ximbap@ukzn.ac.za

4 SEPTEMBER 2006

MRS. C DU TOIT (205525509) EDUCATION

Dear Mrs. du Toit

ETHICAL CLEARANCE APPROVAL NUMBER: HSS/06298A

I wish to confirm that ethical clearance has been granted for the following project:

"Service learning in interior design academic programmes: Students experiences and perceptions"

Yours faithfully

MS. PHUMELELE XIMBA RESEARCH OFFICE

PS: The following general condition is applicable to all projects that have been granted ethical clearance:

THE RELEVANT AUTHORITIES SHOULD BE CONTACTED IN ORDER TO OBTAIN THE NECESSARY APPROVAL SHOULD THE RESEARCH INVOLVE UTILIZATION OF SPACE AND/OR FACILITIES AT OTHER INSTITUTIONS/ORGANISATIONS. WHERE QUESTIONNAIRES ARE USED IN THE PROJECT, THE RESEARCHER SHOULD ENSURE THAT THE QUESTIONNAIRE INCLUDES A SECTION AT THE END WHICH SHOULD BE COMPLETED BY THE PARTICIPANT (PRIOR TO THE COMPLETION OF THE QUESTIONNAIRE) INDICATING THAT HE/SHE WAS INFORMED OF THE NATURE AND PURPOSE OF THE PROJECT AND THAT THE INFORMATION GIVEN WILL BE KEPT CONFIDENTIAL.

cc. Faculty Research Office (Derek Buchler)

cc. Supervisor (Frances O'Brien)

Founding Campuses: Edgewood Howard College Medical School Pietermaritzburg Westville



APPENDIX 2

23 February 2006

TO WHOM IT MAY CONCERN

Permission to conduct research study at Durban Institute of Technology
Proposed research title: The impact of service-learning on students on Interior
Design

I write to confirm that Carolanda du Toit, an academic staff member of DIT, has my permission to conduct her research study in regard to the impact of service-learning at the Durban Institute of Technology, in fulfillment of her Masters in Education Degree.

She has my permission to interview students and academic staff with their consent and in line with the appropriate codes of ethics.

Yours faithfully

Dr K Netshiombo

DEAN: FACULTY OF ARTS

Dean : Faculty of Arts
City Campus - P O Box 1334, Durban 4000
Tel. 031-2036516 Fax. 031-2036518

PROFORMA LETTER REQUESTING CONSENT FROM STUDENT

Carolanda du Toit PostNet Suite 158 Private Bag X04 DALBRIDGE 4014

Date

Dear Student

PARTICIPATION IN STUDY: - SERVICE LEARNING IN INTERIOR DESIGN ACADEMIC PROGRAMMES: STUDENT EXPERIENCES AND PERCEPTIONS

I identified the abovementioned topic for my research because I would like to have a better understanding of how service-learning impacts on students. The study forms part of the required submission for a Masters in Higher Education qualification, which I am currently completing at the University of KwaZulu-Natal. The Dean at the Faculty of Arts at DUT and the relevant committees of UKZN have approved the research.

I ask the following:-

- An opportunity to interview you for 30 minutes in regard to your C.R.O.W service-learning experience in 2005.
- Your permission to use your C.R.O.W. reflective report prepared in 2005 in my study.
- Your consent to use the comments you share in the interview in my research.

Your participation is voluntary. Your comments in both the reflective report and those you share in the interview will remain confidential. Your responses will not be judged right or wrong, but will be considered valid interpretations of your experiences. Your anonymity will be retained in the final dissertation and in any written documents or in any published article.

I will request an interview with you at a time and place that is convenient to you. I anticipate conducting the interviews in July and August 2006. The writing up of the dissertation will probably take place in March and April 2007. All data I collect will be kept securely and destroyed after five years. A completed copy of the dissertation once examined and approved will be kept at a UKZN library for future reference.

Please complete the attached Consent Form. If you need any further clarity with regard to the above please ask me or you may contact my supervisor Frances O'Brien at UKZN on (031) 2603086.

Yours Sincerely CAROLANDA DU TOIT

PROFORMA CONSENT FORM

Consent to participate in the study:- The impact of service-learning on students of interior design			
I			
I understand that I may withdraw my consent at any time and that such a withdrawal will not disadvantage me in any way.			
I expect no benefits, payments or otherwise to be made to me.			
I agree that my anonymity will be retained and that my name will not be used in the study or in any written documents in connection with the study.			
Signature of participant:			
Date:			

Appendix 5 SEMI-STRUCTURED INTERVIEW SCHEDULE

Service-Learning in Interior Design Academic Programmes: Student Experiences and Perceptions

Proposed Key questions		Prompts if necessary
1.	Tell me about how you	Preparation for service-learning
	experienced the service-	Working as a team with your peers
	learning project last year?	immersion in the community
2.	Do you think you benefited	Planning and problem solving
	from the service-learning	Application of theory lectures
	project? If not why? If so	The real world context
	How?	
3.	What do you think as a future	Why
	interior designer you have to	Skills
	offer to other communities in	Community
	need?	
4.	What would you recommend	Planning of the project (DUT)
	we change in future service-	The role of the Agency (SAGID)
	learning projects?	The Community