Towards an epistemology of interior design:
An introduction to its language

Ext 508 Final Project

by

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Abstract

This study is a critical inquiry into an epistemology of interior design. In full-time accredited interior design programs the learning of design occurs using a studio-based learning-instructing model. However, how do adult learners enrolled in an introductory extension course about interior design learn design in a classroom set up? Given that the essence of design education is contained within the design critique, learning from a communication perspective was explored in this case study.

The review of literature related to learning consisted primarily of social and situational orientations to learning. The research design combined the use of a demographic survey and a focused discussion of a class of adult learners enrolled in the course.

The research conducted confirms that the learning of design is an interactive and situated process. The research indicates that language plays a key role in forming basic design concepts. This study will be of interest to design educators and educators.

Introduction

Learning design requires learning its language which consists of verbal and visual symbols. When the visual symbols are linked with the verbal symbols the language is interpreted resulting in learning, understanding, and communication. Depending on the situation, the learner may 'learn about' or 'learn how to' design. There is a gap between these levels of learning. This paper is a contribution in an endeavour to bridging the gap.

The model for interior design education within the context of full time, accredited programs integrated within post secondary institutions is a studio-based instructing-learning model. Learning design in this context is contingent on interactive communication, primarily between the instructor and the student, during the 'doing' of design related assignments. The strength of this model in the learning of design is undisputable. The author acknowledges that the essence of design education is contained within the dialectically-rooted communication of the design studio critique.

However, how does the learning of interior design occur when there isn't a design studio? That is, how does learning of design occur in what can be described as a traditional classroom set-up? Furthermore, how does learning of design occur in the context of an extension course about design with adult learners of varied learning goals and backgrounds?

It is hypothesized that not unlike the learning that occurs in the design studio, the students learn design as they participate in the course activities and do the assignments. The interactions and actions provide the learners with opportunity to apply what they are learning and to discuss it. As they communicate they also begin to organize their thoughts and expectations related to the course; the classroom becomes a site of organization (Taylor & Van Every, 2000). This study is a critical inquiry into an epistemology of interior design.

The Course and Its Context

The course this study is based on is called "Introduction to Residential Interiors". It is part of the Residential Interiors Certificate program offered through the Faculty of Extension at the University of Alberta. The certificate granting program is available on a part-time basis and courses in the program are offered, for the major part, in the evening. Students registering in the program are required to have a high school diploma (minimum of 100 credits) or equivalent, including English 30 (Faculty of Extension, Liberal Studies 2006 – 2007 Course Guide). To receive the certificate students are required to successfully complete the 6 core courses (234 hours) and a minimum of 3 elective courses (117 hours) totaling to 351 instructional hours. All courses are 39 hours in length.

Overview of the Course

The course, "Introduction to Residential Interiors", provides an awareness about design with focus on interior design; the course content includes an introductory overview of interior design as a career including scopes of practice and career options; the elements and principles of design; basic drafting; assessment of client needs; an overview of the design process; and an historical overview of domestic styles. The Student Guide, developed in 1992 with minor changes made in 2003, outlines the content (Faculty of Extension, 1992).

"Introduction to Residential Interiors" is a pre-requisite to all other courses in the Residential Interiors Certificate Program. Some students successfully complete "Introduction to Residential Interiors" and choose not to continue on with the Residential Interiors Certificate Program. Department of Human Ecology students receive transfer

credits for the course; other students enrolled at the University of Alberta currently do not receive university academic credit for the course.

Assignments

Students complete four assignments; they are graded on three assignments and a final examination. Assignment 1 (Appendix A) is a research paper about the area of interior design that interests the student; the student is required to describe the responsibilities or scope of the area and the education, experience, and examination entailed to work in the area. Assignment 2 (Appendix B) requires the student to write a paper describing the elements and principles of design as recognized in a photograph of a residential interior; the student is also required to prepare a colour board which presents the colours and materials of the same residential interior. Assignment 3 requires the student to draw a floor plan and arrange furnishings in it to a scale of ¼"=1'-0" on graph paper; the students do not receive a grade for this assignment. Assignment 4 requires the student to complete a furniture arrangement, colour/materials board, and written explanation describing the selections made. The students write a final examination on the last day of the course.

Delivery

The Instructor Guide for the course, developed in 1992, outlines the course delivery. The class is held in a university classroom supplied with a computer, data projector, overhead projector, slide projector, and flip charts. The course delivery includes lecture, guest panel discussion, slide presentations, small group work, class discussion, hands-on-activity, and opportunity to interact with the instructor on a one-to-one basis. The maximum enrollment is 35 students. The course is presently being considered for electronic delivery.

Statement of the Problem

Given the context, there is a need to understand the current demographics of the learners and their learning approaches in "Introduction to Residential Interiors". This is so that teaching approaches and curriculum content are congruent with the learners' needs and preferences. The researcher, therefore, posed the following questions:

- Who are the students enrolled in "Introduction to Residential Interiors"?

- What is the nature of their learning preferences and experiences in the course?

Limitations of Study

The findings related to this study apply only to the students in the Winter 2006 class of one course, "Introduction to Residential Interiors", in the Residential Interiors Certificate Program at the Faculty of Extension, University of Alberta. The study focuses on student learning in a particular class at a particular time. The research done does not explore direct or indirect experience(s) that the students may have had that relate to interior design (e.g. a related course; being involved in their own home renovation) prior to taking this course.

Purpose of the Study

The purpose of this study is to explore learning as it pertains to this or to a similar context. It is intended that the study will provide insight into how the learning experiences of students taking the course, or a similar course, can be enhanced. The course has not been evaluated in this manner before therefore this exploratory case study is significant. The study is also significant because there is little research done on student learning of interior design in this context.

Definitions

   Design: "broadly embraces the whole orbit of man-made, visible surroundings, from simple everyday goods to the complex pattern of a whole town" (Gropius, 1970, p.30). For the purposes of this paper *design* also refers to basic design and its application to interiors.

   FIDER: The Foundation for Interior Design Education Research; a specialized accrediting agency, accrediting interior design programs at colleges and universities in North America. Its mission is to "provide excellence in the interior design profession by setting standards for education and accrediting programs that meet those standards" (www.fider.org , Retrieved August 09, 2006, p.X-4).

   Interior design: "Interior design is a multi-faceted profession in which creative and technical solutions are applied within a structure to achieve a built interior environment" (www.fider.org , p.X-9, Retrieved August 9, 2006). For the purposes of this paper interior design includes interior decorating.

   Text: For the purposes of this paper text includes interior design drawings, colour boards, and related visual presentations. Text also includes the spoken interchange that occurs during conversation when communication is occurring (Taylor, et al, 2002).

   Crit: a shortened word in the design lexicon for critique, critical review, or design critique; e.g. design crit or desk crit.

Review of Literature

The Review of Literature examined studies related to learning as well as literature related to research design and data collection. The review of literature revealed that though research has been successfully conducted on the learning of post secondary students majoring in design, similar research was not found about learners in the context of an extension or continuing education design program.   The review of literature showed that studies successfully completed on learning in the context of interior design programs had been undertaken, for the major part, in only FIDER accredited programs.

Literature Related to Learning

Design Studio-Based Learning and Instructing

The learning of design has a longstanding historical precedent of occurring within a design studio (Schon, 1988; Nutter, 2001; Dozois, 2001) which Shaffer (1999, ¶4) describes as "a coherent and powerful educational setting."   In his study at Massachusetts Institute of Technology School of Architecture and Planning, Shaffer analyzed the physical, spatial and temporal attributes of "*one particular* design studio" (1999, ¶6). He examined the relevance of how space and time are organized in the studio for learning of design to occur; he refers to the studio as "a 'media' of activity" (1999, ¶12) citing Marshall McLuhan's (1964) argument that "'the medium is the message'" (1999, ¶12).   Shaffer asserts that "the ordering of a learning environment is part of the message to students that design is a process that evolves over time rather than a series of quick answers to short problems" (1999, ¶12).

Key to the history of the studio-based learning of design is an encultured learning-teaching approach between 'experts' and students (Goldschmidt, 2003; Dozois, 2001; Nutter,

2001; Shaffer, 1999; Schon, 1988) which includes the constructive criticism of a student's work. Throughout his study, Shaffer (1999) refers to the interaction as a 'critical review' or 'desk crit'. Schon (1988) refers to the interaction as "coaching" and "reflection-in-action". Schon (1988, p.111) explains that "...in the design studio ... the coach's showing and telling are interwoven, as are the student's listening and imitating ... Through their combination, students can learn ... Each process can help to fill communication gaps inherent in the other." Shaffer (1999) also captures the essence of the iterative nature of the critiques, and like Schon (1988), recognizes that the studio is where the cycles of expression, feedback, reflection, and production occur. The significance of the studio, and its interactive activity, is conveyed in Goldschmidt's (2003, p.1) assertion: "The studio has always been the spot where expertise was meant to be forged, where knowledge was to be assimilated in practice, where experience was to be gained under the guidance of the studio master, or instructor."

Figure 1: One-to-one interaction between instructor and student
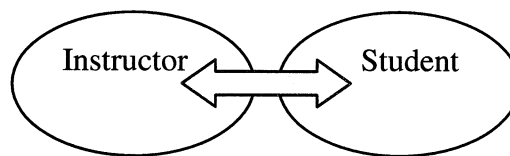
While the two-way communication of the one-to-one interaction between instructor and student, as illustrated in Figure 1, is formative to the learning of design other interactions also contribute to the learning process (Schon, 1988; Shaffer, 1999; Demirbas, 2001); for example, instructor-student-students; student-students. The interactions from critiquing may also take place during jury sessions where instructors interact with a student and instructors and a group of students interact. The jury sessions may include one or more guest crits;

Shaffer (1999) points out that resources impact the quality and quantity of expertise available for critiques and guest crits.

The studio-based approach to learning is embedded in interior design programs. This is evident by the number of studio courses in the curricula of Foundation of Interior Design Education Research accredited interior design programs (e.g. Bachelor of Applied Interior Design Program, Mount Royal College; Interior Design Program, Ryerson University). A case study of eight American undergraduate FIDER accredited interior design programs by Nutter (2001) provides a narrative comparison and analysis of the respective programs and includes survey results of the required courses in each program. Foundation of Interior Design Education Research accredited programs in Canada are listed in Appendix C. Studio courses are also central to competency-driven two and three year interior design programs; e.g. Interior Design Technology Program, Northern Alberta Institute of Technology; Interior Design Technician Program, Lakeland College. Refer to Appendix D for a list of interior design programs available in Alberta in 2006.

Learning and Interactive Communication

Schon (1988) describes the design critique as a "communicative enterprise, a dialogue of words and action" (p. 163) which can involve advice, criticism, explanations, inquiry, and descriptions but also refers to "reflective conversations" (p.78). Demirbas (2001, p. 26) cites Fischer et al (1993) who define the critical review as "a dialogue that is the interposition of a reasoned opinion about any design action that triggers further reflection on or changes to the designed artifact." Fleming (1998, p.42) refers to "the naturally-occurring conversations between student designers and their professors" and Shaffer (1999, ¶28) explains that "the

conversations in desk crits are about developing the idea." Dozois (2001), in her thesis completed in partial fulfillment towards her Master of Interior Design, *Construction through Critique: The dialogic form of design studio teaching and learning*, extensively examines dialogue in the context of design education and its culture. In this context, Dozois defines dialogue as "the communication of a vast array of words, actions, thoughts, and symbols that are meaningful to the culture of design" (2001, p.76). Baker, Jensen & Kolb (2002, p.10) explain that "Traditionally, the word *dialogue* generally is preferred by critical theorists, classicists, and others who are epistemologically oriented, those who see 'talk' primarily as an intellectual process of refining knowledge"; from their perspective the word *conversation* is used when emphasis is on human experience or is more ontological.

According to the Oxford Dictionary of English (Soanes & Stevenson, p. 480), *dialegesthai* means 'converse with' which is derived from the Greek *dia* meaning 'through' and *legein* meaning 'speak'. Dialogue is defined as "a discussion between two or more people or groups, especially one directed towards exploration of a particular subject or resolution of a problem." Conversation is defined as "a talk, especially an informal one, between two or more people, in which news and ideas are exchanged." The shared Greek derivative suggests that both are within the traditions of dialectic practice.

Incorporating interactive approaches such as dialogue, conversation, and talk to foster learning is referred to in the context of various learning environments other than that of design. For example, The National University of Singapore, in a report on students' approaches to learning, cite Biggs and Telfer (1989) who advocate interactive teaching-learning approaches to encourage deeper learning. Similarly, Baker et al (2002) suggest deep learning may result from the effective use of conversation because it contributes to clarifying

differences, examining assumptions, and recognizing prejudices. Rogoff, Matusov & White (1996, p.397) in discussing their community of learners model of learning and teaching explain, "The discourse is often conversational in the sense that people build on each other's ideas on a common topic guided by the teacher's leadership, rather than one way, with children's contributions considered to be interruptions." They advocate interactive communication intending that participation is the basis for reflection and transformation. The communicative experience of the design critique is also described as a reflective (Schon, 1988) and transformative (Dozois, 2001) process. In experiential learning (Kolb, 2002), conversation becomes the medium which contributes to reflection and, in turn, transforms subjective, concrete experiences into objective, abstract knowledge.

Adult Learning and Communication

The review of literature related to adult learning revealed that understandings of learning and communication approaches to learning-teaching varied. In a study conducted by Saljo (1979) a group of learners that included adults were asked what they understood by learning. The responses included learning as acquiring information; learning as memorizing; learning as acquiring usable facts, skills, and methods; learning as making sense or abstracting meaning; and, learning as developing a different perspective of the world through new understandings and interpretations of knowledge.

An article reviewed by Imel (1995) provided a further overview of adult learning. She outlines the three categories of adult learning cited by Cranton (1994). These categories of adult learning include subject-oriented learning, consumer-oriented adult learning, and emancipatory learning. Subject-oriented learners are described as acquiring content,

information, facts, and skills related to the subject being taught. The consumer-oriented adult learner has established learning goals, identified his/her course objectives, is selective about relevant resources, and has definite reasons for taking a course. The emancipatory adult learner is involved in learning as a process that enables a freeing of forces that may be limiting, controlling, and may be taken for granted or considered beyond the learner's control. These categories relate to the types of learning described in Saljo's (1979) findings.

Emancipatory learning, also known as transformative learning (Mezirow, 1991), occurs by learning perspectives being transformed through critical reflection. "All reflection involves a critique" (Mezirow, 1991, p.15). This is the category of learning that is considered by some to be "unique to adulthood" (Imel, ¶7, 1995).

Merriam & Caffarella (1991, p.306) indicate, "…that adult learning is best understood when the context is considered with the same attention as the teaching and learning interactions occurring within it". They explain that the context may include the experience, the work, and family responsibilities of the learners. "The experiences learners and instructors bring to the classroom have an impact on everything that happens including joint knowledge construction, voice, and dialogue" (Imel, 1999, p.4). Though such a context differentiates adults and children as learners "there are fewer differences between adults and children in the learning process" (Marriam & Caffarella, 1991, p.306).

Rogoff, Matusov & White (1998), whose theoretical perspectives are based on observations at a public elementary school, refer to learning occurring through transmission, acquisition, and transformation through participation. They observed that transformation through participation learners learn by interacting with their peers and their instructor(s). Rogoff et al (1998, p.388) refer to a "'community of learners' involving both active learners

and more skilled partners who provide leadership and guidance correspond". Though Rogoff et al's (1998) perspective is based on children learning it also applies to adult learning. This is in keeping with the standpoint that "adult education is essentially the same process as education generally (Garrison, 1994) and therefore does not require a separate teaching approach; that is, good teaching is responsive in nature" (Imel, 1995, ¶1).

Whereas some students are receptive to knowledge transmitted to them in a didactic manner, others acquire their knowledge by resourcefully accessing the instructor's knowledge base (Rogoff et al, 1998). Learners who transform through participation must engage in the process and require that the instructor play a more interactive role (Rogoff et al, 1998; Imel, 1995); for various reasons not all students or instructors are open to this (Imel, 1999). Citing the combined results of studies by Donaldson, Flannery & Ross-Gordon (1993) about student expectations about instructors teaching adults, Imel (1995) summarizes: adult learners are receptive to knowledgeable, motivating, enthusiastic instructors who present material in a clear, relevant manner and who also show concern for student learning.

Learning and organizational communications

In the context of organizational communications, interactive approaches such as conversation can also be used to prompt reflection and 'think twice'; that is, single-loop learning gives way to double-loop learning (Agyris, 1994; Morgan, 1997; Schon, 1988). Single-loop learning essentially requires a question and answer whereas double-loop learning requires an additional question-answer cycle, or possibly several such cycles; such iterations are reminiscent of the design crit (Shaffer, 1999; Schon, 1988; Fleming, 1998).

In his *Dynamic Theory of Organizational Knowledge Creation*, Nonaka (1994), after examining dialogue in the context of organizational knowledge, identified four patterns of interaction that involve tacit and explicit knowledge. He says, "Although ideas are formed in the minds of individuals, interaction between individuals typically plays a critical role in developing these ideas" (p.15). Nonaka and Takeuchi (1995) propose that as an individual engages in learning, knowledge is created in an on-going process by converting tacit knowledge to explicit knowledge which in turn is converted to tacit and then to explicit and so on. Baker et al (2002) explain that explicit knowledge, such as knowledge contained in databases, readily allows for "'knowing about'" and "'knowing that'" (Baker et al, 2002, p.4). Tacit knowledge is the uncodified knowledge that "develops along its own unique path within each person through observation, trial and error, and practice" (Baker et al, 2002, p.4) and is key to "'knowing how'". Nonaka (1994) argues that it is continuous communication or "dialogue between explicit and tacit knowledge which drives the creation of new ideas and concepts" (p.15). This is exemplified in the interactive learning processes of design: "...the desk crit, cyclical assignments, and generative feedback are all means to an end – they are the processes through which expressive learning takes place" (Shaffer, 1999, p.11).

To James Taylor and his associates, interaction and communication play an important part in organizing (Littlejohn, 2002). They theorize that organizing is a process that is dependent on cycles of conversation (interactions) and text (or messages). "*Conversation* is the action itself, or how participants behave toward one another – what words they use, their demeanor, their gestures. *Text* is what is said – the content and ideas embedded in language" (Littlejohn, 2002, p. 290). Taylor & Van Every (2002) theorize that when the two dimensions – text and conversation - intersect a space is created where communication

occurs (Figure 2). While in the space where and when the communication is occurring, the

basis through which an understanding occurs is the sharing of language.

Figure 2: Communication as the intersection of conversation and text

> *This circle represents the space within which communication takes place.*

Text Form

Conversation Form
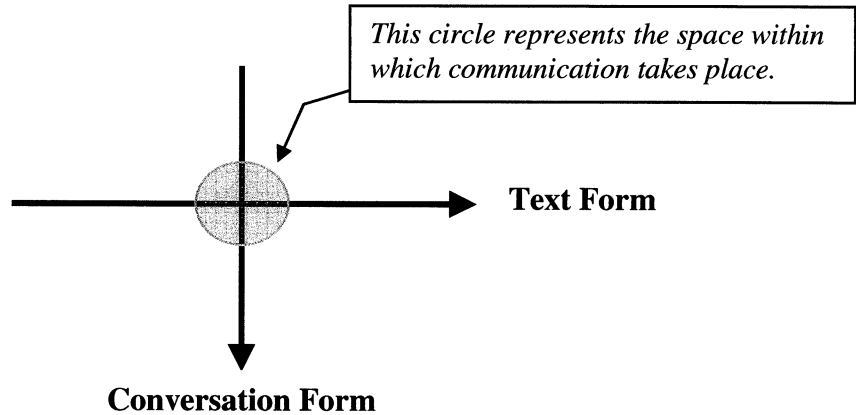
Source: Adapted from Taylor and Van Every, The Emergent Organization: communication
as its site and surface, 2000, p. 38, Mahwah, NJ: Lawrence Erlbaum Associates.

This commonality (text) is experienced by interacting (conversing) and becomes the site of

organizing. Taylor & Van Every's (2000) premise is "…the environment is constituted in

conversation through the generation of a text-world. It is the text-world thus brought into

being that creates a situation with respect to which many people can collectively and

coherently act" (p.149).   That is, the structure of organization is a property of

communication; from an interior design perspective, when the structure is given 3-

dimensions it defines interior spaces (e.g. meeting rooms) that are translated into a floor plan

or an inter-linking "flatland" (Taylor et al, 2000, p. 141) view.

Learning as Being Situated

The view of learning as being situated goes back to Dewey, the American philosopher, who advocated that "conceptions of *situation* and of *interaction* are inseparable from each other" (Dewey, 1938, p.43).   He suggested that as well as the equipment, books, the materials beings used, and the manner of the instructor, "the total *social* set-up of the situations in which a person is engaged" (Dewey, 1938, p.45) contributes to learning. He further proposed that the knowledge and skills obtained from previous situations contribute to the understanding and effective application to subsequent ones. "The methods include apprenticeships, internships, work/study programs, cooperative education, studio arts, laboratory studies, and field projects" (Kolb, 1984). Present day recognition of situated learning has been gained through the work of Lave and Wenger (1991).   In their understanding of learning, they realized that 'situated learning' is "a transitory concept, a bridge (1991, p.34)" between cognitive-based learning and the "analytical viewpoint on learning" (p. 40) which they call 'legitimate peripheral participation':

> *Situated learning activity* has been transformed into legitimate peripheral
>
> participation in communities of practice. Legitimate peripheral participation
>
> moves in centripetal direction, motivated by its location in a field of mature
>
> practice. It is motivated by the growing use value of participation, and by
>
> newcomers' desires to become full practitioners. Communities of practice
>
> have histories and developmental cycles, and reproduce themselves in such a
>
> way that the transformation of newcomers into old-timers becomes
>
> remarkably integral to the practice. (Lave & Wenger, 1991, p. 122)

The existence of communities of practice can be traced back to classical Greece where metalworkers, potters, masons, and other craftsmen shared both social practices (e.g. members participating in celebratory rituals) and business practices (e.g. members training apprentices and encouraging innovations). During the medieval era throughout Europe, guilds played a similar role (Wenger & Snyder, 2000). According to Wenger (1998), a community of practice is fundamentally a self-organizing system that can define itself along three dimensions: what it is about, how it functions, and what capability it has produced. The capability refers to "the *shared repertoire* of communal resources (routines, sensibilities, artifacts, vocabulary, styles, etc.) that members have developed over time" (1998, ¶8).

The term community is not intended to imply "a well-defined, identifiable group, or socially visible boundaries. It does imply...participants share understandings concerning what they are doing and what that means in their lives and for their communities" (Lave & Wenger, 1991, p.98). Communities of practice emphasize the learning they have done together form situations to which they relate (Wenger, 1998).

Situation cognition as a theory of instruction suggests learning is interconnected with participating in activities that are authentic to "the ordinary practices of the culture" (Brown, Collins, and Duguid, 1989, ¶21). This learning theory model is referred to as cognitive apprenticeship "whereby teachers or coaches promote learning, first by making explicit their tacit knowledge" (Brown et al, 1989, ¶66). In this model, tasks are situated such that they are within the grasp of the learner. To accomplish the tasks the student obtains feedback from the instructor (coach) or fellow students which enables the student to learn whatever it is that s/he needs to learn in order to accomplish the task, not unlike the desk crit:

… one might think of the desk crit as an instantiation of Lev Vygotsky's

idea of a zone of proximal development (Vygotsky, 1978). Vygotsky

suggests that development is a process whereby learners progressively

internalize processes they can first do only with the help of others. So, for

example, we learn to cook first by helping someone else. Then we follow

a recipe on our own (still relying on the external aid, but not needing direct

guidance). Then finally we are able to invent new dishes and improvise on

our own. The zone of proximal development is the set of things we can do

with the help of others, but not quite do on our own. (Shaffer, 1999, ¶18)

Bruner (1973) suggests curriculum should be organized in a spiral manner so that students

continually build upon what they have already learned. Gropius, describes teaching design

as "a continuing process which must grow concentrically like the annual rings of a tree"

(1970, p.49). Lave and Wenger (1991) argue that a learning curriculum is essentially situated

and is "thus characteristic of a community" and that it is "not something that can be

considered in isolation, manipulated in arbitrary, didactic forms, or analyzed apart from the

social relations that shape legitimate peripheral participation."

Piaget's investigations emphasized "Knowledge continues to develop as a process in

which the child (person) interacts with his environment" (Serulnicov, c.2000, p.17).

Influenced by Piaget's cognitive approaches, Bruner (1961) identified three modes of

learning: enactive, ionic, and symbolic (Dale, 1969). The American educationist and audio-

visual communication expert, Edgar Dale, adapted Bruner's modes of learning into a

pictorial device intended as a teaching aid; The Cone of Experience (Figure 3) was developed

to show the progression of learning experiences from direct participation, to pictorial representation, to highly abstract expression.

The base of the cone represents learning which builds the most meaningful ideas and knowledge; these occur from firsthand experiences because the senses are involved (Dale, 1969). Dale's model categorizes the next best learning as occurring from a simulation or representation; e.g. a model of a building; though activities based on simulations or representations are not truly authentic, "it is the resulting perceptions related to the activity involving the representation that are important" (Brown et al, 1989, ¶66). Similarly, participating in a presentation can impart the significant experiential perceptions.

Figure 3: Dale's cone of experience

words
_____
visual symbols
_____
recordings images
_____
video - conferencing dvd's
movies or educational telecasts
observation of activity done **on site**
observation of **exhibit** or **demonstration**
_____
participation in class **discussion** or **presentation**
_____
simulations or **representations** of authentic or **real** activities
direct purposeful real experiences that involve all the senses
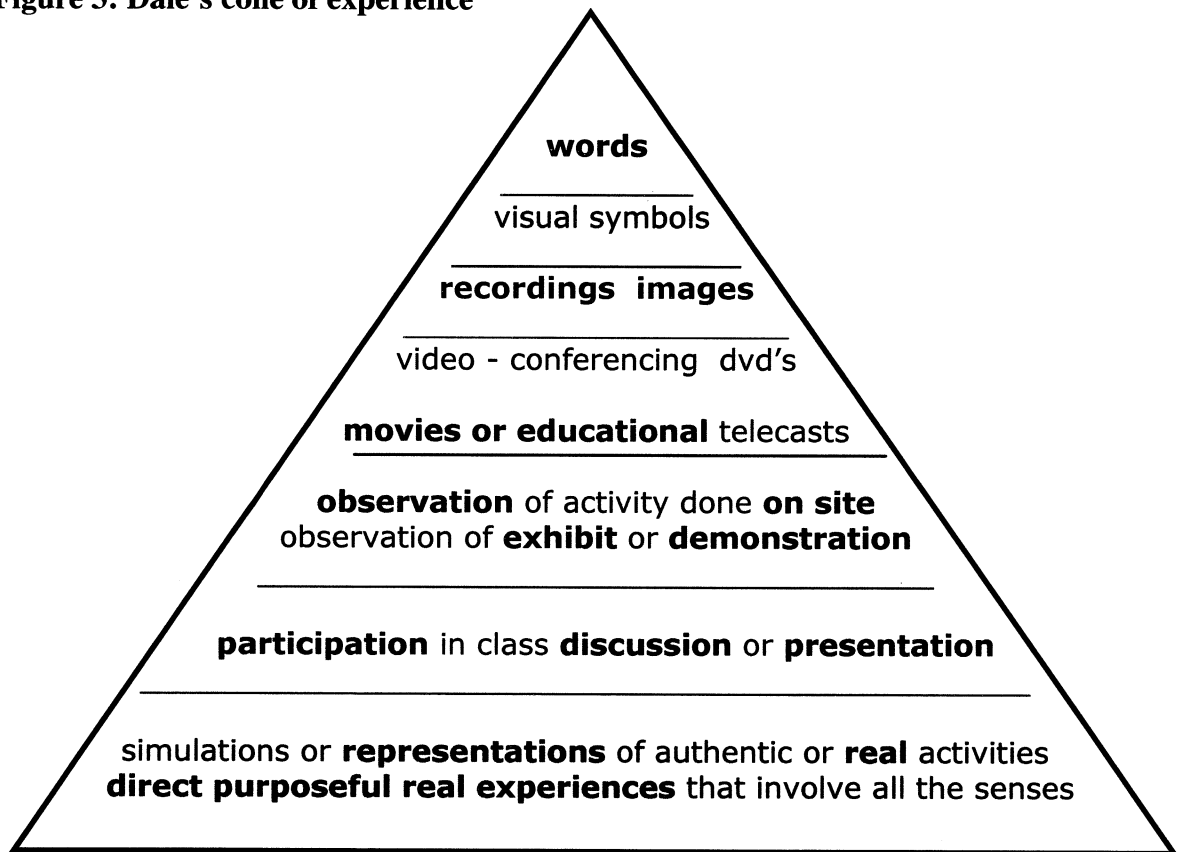
Source: Adapted from Dale, E. (1970). A truncated section of "The Cone of Experience", *Theory into Practice*, 9(2) April, p. 101

The next category of learning, which Dale refers to as *pictorial*, depends upon observation; these include demonstrations, study trips, exhibits, educational films, videos, radio, recordings, still pictures, realistic drawing. His third and final category is learning through abstraction which includes learning involving visual symbols and verbal symbols. Dale emphasizes that one's imaginative capacity is engaged when using symbols. Flat maps, diagrams, charts, architectural drawings, pictures communicate messages through visual symbols; they are "abstractions that compress rich meaning" (Dale, 1969, p.100) that help the learner visualize the idea. On the other hand, verbal symbols, i.e. words, do not look like the objects or ideas that they represent; all has been abstracted from a word except its meaning.

Learning and the language of design

A learner is engaged to some degree of abstract thinking, represented by words, in all of his/her learning experiences. When experiences are remembered or compared, these have taken them out of their original context, abstracted (Dale, 1969), and a concept formed (Bruner, 1961). One of the primary purposes of firsthand, direct experiences that involve 'doing' is "to learn the use of words as names, to develop important ideas" (Dale, 1969, p.99). Hien (1991) cites Vygotsky (1962) who recognized that the relationship between thought and word is continual or a cyclical process; that is, thought is expressed in words and also comes into existence through them.

Expressing design solution thoughts and ideas in words is only part of the design process; Schon (1987) observed that the words design students use "do not describe what is already there on paper but parallel the process by which he makes what is there. Drawing and talking are parallel ways of designing and together make up the …the language of

designing" (Schon, 1987, p.45). Shaffer similarly recognized that the task of the design students "was to develop a solution, to understand the solution, and to convey in words, diagrams and models their ideas and solution and how it met the demands of the original problem" (Shaffer, 1998, ¶27). Schaffer also observed that the desk crits which involve the use of the language of design contribute to "...an understanding about the creation of space based on a particular design problem" (Shaffer, 1998, ¶26).

Fleming (1998), a rhetorician, determined that the crits or "design talk" (p.41) of the students are dependent on the use of language and that the language used develops as the design solution unfolds. He describes the language as "dependent on a perceptually-shared material object" (Fleming, 1998, p.48) to a "constituting" (p.46) language that is used to "fix the idea" (p. 53) and "stabilize the object under discussion" (p. 53) and then as a language used for "elaborating" (p. 53) about the "material object" (p. 46). That is, parallel to the verbal language is the solution represented in visual symbols. It is the combination of the visual symbols and verbal symbols that comprise the language of design. Language helps not only to interpret and record ideas but it also furnishes the script with which ideas are constructed (Taylor & Van Every, 2000). If there is difficulty understanding or agreeing on an interpretation of a visual or verbal symbol communication is likely to be hindered (Dale, 1969). Language is the link between conversation and text (Taylor & Van Every, 2000).

Just as "...mathematics and music each have their own 'languages' composed of symbols, words" (Nissen et al, 1994, p.67), expression in design is dependent on organizing the tangible components of space, form and shape, line, texture, light, and colour. "These basic elements or tools along with the principles which guide their application, comprise the visual vocabulary of design" (Nissen et al, 1994, p.67). The vocabulary, referred to it as the

"language of vision" (Gropius, 1970, p.24), is in part based on the teachings and workings of

Lazlo Moholy-Nagy (Moholy-Nagy, 1947). Moholy-Nagy and Gropius both envisioned that

a common denominator of design was needed and advocated that it be "a common language

of visual communication" (Gropius, 1970, p. 51) because it provides a solidifying foundation

to the knowledge base of design.

Interior Design and Learning

A study by Isham (1997) reports on an experiential learning exercise that can be

incorporated into a design curriculum requiring a method of assessment and improvement of

student's visualization skills; Isham developed an interactive computerized instrument that

included animation thus allowing the learners to respond immediately if they deemed a

correction was required. In his study, Isham (1997) assessed the visualization results of

students using drawings on paper and compared them with an assessment using an interactive

computerized version of the drawings. The quantitative data was translated into bar graphs

and charts. Isham's (1997) study concluded that the computerized visual assessment

provides a very positive learning assessment experience. Only FIDER accredited interior

design programs in art, home economics, architecture schools participated in the assessment.

Watson & Thompson (2001) examined the learning styles of undergraduate students

majoring in interior design. The Gregorc Style Delineator, a self-report instrument which

identifies four categories of learning styles which include Concrete Sequential, Abstract

Random, Abstract Sequential, and Concrete Random was administered to the students. The

findings revealed diversity amongst the interior design students with 49% exhibiting

dominance in more than one style - - these results were a marked contrast to non-design

students. Watson & Thompson's (2001) findings suggest that to accommodate the diverse styles of students, the instructors should be knowledgeable about learning styles, their own learning style, and how to instruct using various styles.

In her doctoral dissertation, Demirbas (2001) conducted research to evaluate the effects of learning preferences on the performance of students in the Department of Interior Architecture and Environmental Design at Bilkent University. The analysis utilized Kolb's Experiential Learning Theory. The findings revealed that there were differences between the performance scores having different learning styles at various stages within the studio-based learning process. However, there was no difference in the performance of the students having diverse learning styles at the end of the process.

DeBates & Nussbaumer (2005) report on a project where a two-week interior design curriculum was developed for Family and Consumer Science educators. The goal of the project was to have teachers focus on teaching interior design concepts and to stimulate interest in interior design as a career option. Twelve high schools participated with 109 students completing the course. A significant difference was found between the pre- and post-test scores among the students. From these results, it was apparent that students made an improvement in their understanding of interior design.

Literature Related to Research Design and Data Collection

Quantitative Research Techniques

A longitudinal study reported on by the Centre for Development of Teaching & Learning at the National University of Singapore sought to gain insights into how their students learn and, in turn, how the students' learning could be better facilitated by their instructors. The study of the students' approaches to learning and studying began in their first year and continued through to the completion of their third year at the university. The instrument used was the Biggs' Study Process Questionnaire, a self-report survey. Because "The Centre for Development of Teaching & Learning is currently conducting the final round of surveys on the cohort, to track them at the end of their third year" (NUS, Centre for Development of Teaching and Learning, Web site last up-dated May 16, 2006, ¶20 Progress) the results of this study are unavailable. Schroeder (1993) reports on studies, some longitudinal, involving students from American colleges using instruments including the Myers-Briggs Type Indicator and Tracking Retention and Academic Integration by Learning Styles (TRAILS). The results reveal a gap between "the new students" (Schroeder, 1993, p.21) learning and faculty instructing approaches.

A quantitative study on a smaller scale which also used a self-report system, the Gregorc Style Delineator, was undertaken by Watson & Thompson (2001) of 147 interior design students within five FIDER accredited interior design programs. The purpose of the study was to determine the preferred learning style of the interior design students as per Gregorc's indicator of systems of thought. Watson & Thompson's (2001) findings revealed diversity amongst the learning styles of the interior design students with 49% exhibiting dominance in more than one style - - these results were a marked contrast to the results of

previous studies with non-design students. Demirbas (2001) as part of her doctoral dissertation in Art, Design, and Architecture at Bilkent University undertook a similar study. She evaluated the effects of learning style preferences on the performance of design students in the Department of Interior Architecture and Environmental Design. The study analyzed the design education of the students using Kolb's Experiential Learning Theory. The study revealed significant differences between the performance scores of students having different learning styles in different stages of the design studio process. However, there was no difference in performance of the design students having diverse learning styles at the end of the process. A quantitative study (Isham, 1997) of a slightly different ilk assessed the visualization skills of interior design students. Students from FIDER accredited programs were assessed using a series of orthographic and isometric drawings done on paper; a smaller sample of participants was then assessed using a computerized animated version of similar drawings. The results indicated that "the students who participated in the computerized assessment unanimously selected the computerized version as the most beneficial" (Isham, 1997, p.16).

Another study related to design education that used a quantitative data collection methodology was completed by Portillo and Dohr (1989). Thought development as part of design studies was the focus of their study. The authors explain (1989, p. 96), "Design-specific and global thought levels were related to creative experience. An instrument was constructed to measure thought positioning in design. A statistically significant difference was found between the level of thinking in design and creative experience." Also related to interior design education, DeBates and Nussbaumer (2005) oversaw the implementation of a two-week interior design curriculum that was developed for Foods and Consumer Sciences

educators in South Dakota 109 students attending twelve schools completed the course as well as a pre-and post-test. The findings indicated a significant difference between the pre- and post-test, thus making it apparent that the students' understandings of interior design improved.

Qualitative Research Techniques

In Shaffer's study of the design studio as a learning environment, he utilized a qualitative research approach. His research included observation of the overall design studio during class-time accompanied by field notes, focused observations of five students in the studio, and an in-depth observation of the learning process of one student. Shaffer also conducted detailed interviews with students and teaching staff over the semester that he participated in the observations. When Fleming conducted his study on which his article, *Design talk: Constructing the object in studio conversations* is based, he observed the faculty and staff of the Carnegie Mellon University, Department of Design during design studio sessions of a particular graphic design project. Dozois (2001) refers to conducting thirty-four interviews with design students and colleagues as part of her initial research approach to analyzing the educative complexity of the design critique though her final research approach employed content analysis of a range of literature. Schon writes that when conducting his case study about architectural education, "several participant observation studies were conducted in design studios at universities at several locations" (1987, p. 44).

In a qualitative study designed to determine "how and what interior design subjects should be introduced and integrated into K-12 grade levels" (¶4, 2005), Clemons conducted five focus groups and four in-depth interviews in various parts of the United States over a

period of eleven months. In the seventies, Saljo (1982) undertook a qualitative study which

involved a diverse group of adult students and their learning. From a larger group of

participants, six were selected as exemplars for Salyo's case study. The idea of this case

study was "to give as detailed a picture as possible of how people approach a learning task

and what they succeed in getting out of it" (p. 69). Using a semi-structured interview

technique, he asked the learners, who varied in age, experience, and level of education, what

they understood by learning. "In research on learning it is normally taken for granted that the

outcome of learning should be described in terms of extent, i.e. quantitative terms" (Saljo,

1982, p.92). The concern was not with outcomes as tabulated in a per cent but rather what is

happening when the learning is taking place.

Rogoff, Matusov, and White (1996), in their examination of their theoretical

perspective "that cast learning as a community process of *transformation of participation* in

socio-cultural activities", observed models of instruction held by parents who become

participants in a public school program that functions as a community of learners. In this

optional program, parents are required to spend three hours per week (per child) working in

the classroom. Lave's observations of tailors (Lave and Wenger, 1991) contributed to her

recognizing "the process of moving from peripheral to full participation in communities of

practice through either formal or informal apprenticeship (p. 71).

Methodology

The Research Design

The researcher decided that for this research project the method of data collection

provided an opportunity to explore a phenomenon within its actual contextual conditions. A

case study approach was an effective method for this research project because the boundaries between the phenomenon and its context are not clearly defined (Yin, 1994). Given these conditions, the inquiry could be carried out methodically and contribute to the researcher's understandings (Stake, 1978); case studies are a preferred method of research because "they may be epistemologically in harmony with the reader's experience and thus to that person's natural basis for generalization" (Stake, 1978, p.5).

Neither the descriptive characteristics nor the learning of the students taking "Introduction to Residential Interiors" has been previously studied. In that an evaluation from this perspective has not been undertaken previously, a case study provided the researcher with a research method to explore this particular group of students' learning experiences in a scholarly and professional manner. As well, the findings of this study may result in "defining questions and hypotheses of a subsequent (not necessarily case) study or at determining the feasibility of the desired research procedures" (Yin, 1993, p.5). That is, by piloting this exploratory case study further studies may follow.

The primary data collection for the study consisted of two parts. In Part 1, the researcher conducted a demographic survey of the students enrolled in the Winter 2006 term of "Introduction to Residential Interiors" at the University of Alberta. Part 2 consisted of a small group of students from the class who voluntarily participated in a focused discussion; the participants had successfully completed the course three weeks prior to the date of the discussion. To minimize compromise in the data collection because of the relatively small number of students and the close instructor-student relationship that had developed over the course of the term, a research assistant administered the demographic survey and moderated the focused discussion.

Part 1: Demographic Survey

Based on the secondary research completed, the researcher determined that to collect descriptive data about the students enrolled in the course in a reliable manner in a brief period of time (Neuman, 2003) surveying the demographics of the students was appropriate. A demographic survey (Appendix F) consisting of twelve closed-ended questions was compiled and administered. The questions were designed to provide descriptive characteristics of the learners taking the course. The questions related to age, family, and education; employment; and reasons for taking the course. A general question introducing learning approaches was also included.

Participant sample

The participant sample for the demographic survey consisted of the 25 students in attendance in the last session of the Winter 2006 term of "Introduction to Residential Interiors". Twenty-three voluntarily participated in the demographic survey. The Faculty of Extension, University of Alberta ethics procedures were observed.

Data collection procedures

The students registered in the Winter 2006 "Introduction to Residential Interiors" course were advised in a previous session that about ten minutes of their time would be required for their voluntary participation in the survey. To minimize compromise because of the instructor / student relationship, a research assistant was trained to oversee the survey; this included the distribution and collection of the Participant Informed Consent Form

(Appendix E) and the demographic survey (Appendix F). Refer to Appendix J for Confidentiality Agreement between Researcher & Assistant.

The research assistant provided the students in attendance with the Participant Informed Consent Form (Appendix E). The research assistant reviewed the intent and purpose of the study, as well as the risks, benefits, confidentiality with the student participants prior to their signing the Consent Form. The research assistant also explained that Part 2 of the study was a focused discussion and that if they were interested in participating, they should provide their contact information in the designated place on the Consent Form. After collecting the Consent Forms, the research assistant then distributed the demographic survey. The research assistant collected the demographic surveys and the research when the participants had completed them.

Data analysis

The data was manually analyzed and compiled by the researcher to determine the characteristics of the sample; it was then graphically represented (Figures 4 - 8 and Table 1).

Part 2: Focused discussion

For the second part of the data collection, a focused group interview technique was utilized because of the potential for the participants to provide rich data while expressing different perspectives, insights, and opinions. Knowing that focused discussions may be challenging to participants if they feel polarized or restricted because of interaction or lack thereof (Neuman, 2003; Krueger, 2000), the moderator, when trained by the researcher was provided with a number of probes and prompts (Krueger, 2000). The researcher also hoped that the qualitative data from such a discussion would balance and "shed light on the

quantitative data already collected" (Krueger, 2000, p.24). The intent of the focused discussion was to provide an opportunity for the students to provide their views and share their learning experiences in "Introduction to Residential Interiors."

Participant sample

4 learners elected to participate in the focused discussion.

Data collection procedures

The researcher scheduled the focused discussion took place three weeks after the students had successfully completed the course. The focused group discussion was held in the same classroom in which the student participants had taken the course. A Letter of Introduction (Appendix G), advising the participants of the date, time, and location had been forwarded to the students who volunteered to participate; the participants were asked to bring the letter to the focused discussion as a means of making certain it was the attendees themselves who had successfully completed the course.

Prior to the focus group commencing the researcher met with the research assistant, who had assisted with Part 1 of the data collection, to train the assistant to moderate the focused discussion. The assistant had previously signed the Confidentiality Agreement between Researcher & Assistant in Appendix J; it was agreed that the conditions of the agreement also applied to this part of the study. Having finalized the confidentiality aspects of the discussion with the assistant, the classroom, equipment, and the questions, prompts, and probes outlined in Appendix I were then reviewed.

Both the researcher and the research assistant (moderator) were present to 'meet and greet' the participants. The Letter of Introduction was collected from each of the participants

and each participant signed a Participant Consent Form (Appendix H). After the participants had arrived and before the discussion began, the researcher left to minimize compromise on the focused discussion because of the student-instructor relationship.   The moderator proceeded with the discussion using the interview questions (Appendix I). The questions were developed to encourage a natural flow of discussion. With the opening and introductory questions, the participants began conversing in a comfortable manner. Transition questions about their learning were then posed; the key question, about the learning experience itself, followed. The closing questions provided opportunity for discussion about frustrations they may have experienced.   To bring further closure, the participants were requested to summarize their discussion on the flip chart.   The focused discussion, which was approximately fifty minutes in length, was tape recorded; a back-up tape was made. Upon completion of the discussion the researcher returned, de-briefed the moderator, and picked up the tapes and the participant's flip chart summary (Appendix K).

Data analysis

The tape of the discussion was then delivered to the transcriber who had previously signed the Confidentiality Agreement with Researcher & Transcriber (Appendix J). The discussion was transcribed (double-spaced between speakers with research in upper case).

The researcher reviewed the transcript to identify common themes and concepts from the words and language used to discuss the questions, ideas, and experiences. Words and phrases were colour coded to further identify the themes and concepts. The researcher then met with the researcher's advisor to discuss the themes and concepts. Using Krueger's (2000) suggested 'long table method', the coded data was organized into identifiable themes. Attention was paid to what action (activity) or interaction contributed to the learning of

interior design. The focused discussion questions and the research questions were used to structure the themes and concepts. Related key quotes were incorporated into the study to substantiate the themes.

Findings

The Demographics of the Learners

Analysis of the data collected from the demographic survey suggests that the students enrolled in "Introduction to Residential Interiors" in the Winter 2006 term were a diverse group of adult learners who varied in age, marital status, education, employment, and reasons for taking the course.   The findings for the questions asked in the demographic survey (Appendix F) are outlined below.

Q. 1   What is your age?   Gender?

The survey revealed that the learners ranged in age with the 18-24 age group being preponderant at 26.08% (6) of the participants; the age groups 25-30 and 31-40 were both represented at 21.74% (5), the age group 41-50 at 17.40% (4), and the age group 51-60 at 13.04% (3). There weren't any learners who participated that were in the 61+ age group. Of the respondents, 91.3% (21) were female and 8.7% (2) were male (Figure 4).

Q. 2   What is your current marital status?

The survey revealed that 52.2% (12) of the learners were single, never married; 39.1% (9) were married, and 8.7% (2) were divorced (Figure 4).

Q. 3   Number of dependents?

Of the 39.1% (9) of the learners who have dependents all had one dependent. Of the 39.1% (9) that have dependents, 66.67% (6) are married, 22.22% (2) are single, never married, and 11.11% (1) are divorced (Figure 4).

Q. 5   What is the highest education that you have completed?

26.08% (6) had completed high school, 26.08% (6) had completed some college or technical training, 17.4% (4) had some university, 13.04% (3) had a 2-year college or technical diploma, 8.7% (2) had a 4-year university degree, 4.35% (1) a Master degree, and 4.35% (1) had other education described as Certified Management Accountant (Figure 5).

Q. 6   What is your current employment status?

60.86% (14) of the learners who participated in the survey were employed full-time, 17.40% (4) were employed part-time, 4.35% (1) were unemployed, 8.70% (2) were full time students, 4.35% (1) were part time students, and 4.35% (1) selected the "Other" category and specified her employment status as 'Mother'. None of the participants indicated they were retired (Figure 6).

Q. 7   How would you describe your current employment position?

Of the twenty-three participants, 26.08% (6) described their employment positions as administrative, 13.04% (3) as sales positions, 8.70% (2) as technical/technologist positions, 8.70% (2) as working in design, 8.70% (2) as management positions, 4.35% (1) as a skilled

trades person, and 30.45% (7) selected the 'Other' category. Of the 30.45% (7), 4.35% (1) described their position as being in education, 4.35% (1) as a mother, 8.70% (2) as being an entrepreneur, 8.70% (2) as full time students, and 4.35% (1) as unemployed (Figure 7).

Q. 8   *What is your organizational level at your place of employment?*

13.04% (3) were employed at a directorate level, 17.40% (4) at a supervisory level, 30.45% (7) at a non-supervisory level, 26.08% (6) at a professional level; 8.70% (2) were students and 4.35% (1) were unemployed (Figure 7).

Q. 9   *Are you currently working in an area related to residential interiors?*

26.08% (6) were employed in an area related to residential interiors (Figure 7).

Q. 10   *If response to #9 is YES, which of the following best describes your employer?*

Of the 26.08% (6) employed in an area related to residential interiors, 16.67%(1) worked for a 'big box' or chain retailer, 33.33%(2) worked for a small specialty store, 33.33%(2) were self-employed, and 16.67%(1) were employed in a trade.

Q. 11   *Which of the following reasons best explains why you are taking "Introduction to Residential Interiors"?*

From the responses received for this question, the reasons for taking the course included:

For personal use and general appreciation (2/23) 8.70%

To increase my knowledge in my current job (1/23) 4.35%

To become a Residential Interior Decorator (6/23) 26.08%

To research and explore interior design as a career choice (11/23) 47.84%

To increase my employment opportunity using my current post secondary education

to advantage (2/23) 13.04%

This data for this question is represented in Figure 8: Reason for taking the course.

Q. 12 From your current awareness, RANK the following in the order (1-7) that best

describes your learning approach as it relates to the field of design and decorating.

From the nineteen responses to this question, the learning approaches ranked as follows:

Doing assignments: 1

Listening to the instructor: 2

Reading a book: 3

Class discussion: 4

Small group work with fellow students: 5

Looking at slides, overheads, etc.: 6

Research on the internet: 7

Other: 8 (The approach identified by the learner was TV.)

Refer to Table 1: Learning approaches.

The Learning Approaches and Experiences of the Learners

The following outlines the findings and related key quotes for the questions asked:

Q1.   Tell the group a little bit about yourself (e.g. job, family, background, etc.).

The four participants were female and included a university student, a teacher, speech

pathologist, and an entrepreneur. Two worked full-time and two worked part-time. One had a young child. Their ages ranged from under 25 to over 50.

Q2. ***How is it that you came to take "Introduction to Residential Interiors"?***

All four indicated an interest in design from an early age. One of the participants recollected, "... in grade 8 .. I went into Home Economics ...there was interior design involved in it..." Another described that when little she would "rearrange and rearrange". Another participant in the discussion remembered,"...tromping through some dirt and developing a floor plan when I was about 7, I think, in our backyard and getting the living room and kitchen in place." A fourth participant recalled, "...I was about 6 when I discovered the term was interior design and architecture..."

Prompt: Is there anything that particularly interests you about interior design?

▪ Not unlike the survey participants, the majority of the focused discussion participants were taking the course to research or explore interior design as a career. One of the focused discussion participants explained, "I wanted a forum to see if I had any sort of skills or if I was deluding myself with some kind of ridiculous interest..." Another participant explained, "I've been thinking of taking courses for years and years..." Another participant had experienced working in a visually oriented area and wanted additional challenge and opportunity; she described, "I...worked my way up to being a window dresser... and ...got really bored ...it just wasn't enough." One participant stated she wanted "a bit of a credential" for an anticipated second career upon retirement because "...people are asking, 'What have you done? ...What have you taken to make you professional?'"

Probe: Is there any particular area that holds your interest?

- The participants' specific interests varied and included kitchen design, interior space usage, building design, and design generally. Their comments in this regard included:

"Absolutely – kitchen design."

"...drawn to efficient use of space"

"I want to build something ... I want to build beautiful buildings."

"... what I really find amazing is the gestalt of all of the things that work together ..."

Q3. Thinking back to the beginning of "Introduction to Residential Interiors", what was one of the first things that you first recall learning about design or decoration?

- The participants agreed that the panel discussion and research related to Assignment 1 was one of their first learning experiences in the course (refer to Appendix C for Assignment 1). Two participants discussed this interaction and their learning:

P1: "The guest panel ... had different people from different areas of interior design."

P2: "...good timing too..."

P2: "A lot of people withdrew after...they didn't know enough until that."

P1: "A reality check...the different levels - whether they were recognized or not."

P2: "Doing all the research defined what the course would and wouldn't do for me."

Prompts: That first kind of 'aha' thing...and how did you learn it? type of activity?

- The participants agreed learning about the elements and principles of design were significant. One participant explained that she found it "so interesting to learn that there are components or elements and principles of design." Another expressed that learning about the elements and principles of design helped with "...how to look at things....it took it down to a

more …not such a creative level …it is analytical." Another realized that with learning about basic design, "…suddenly it clicks…I can coalesce and converge all these ideas on a theoretical basis…"

Probes: Action? Reading? Seeing? Listening? Discussing? Doing?

- Some of the participants found seeing slides of interiors helpful. One of the participants indicated, "I am a visual learner…good with slides…picture it in my mind…" Another stated, "The slide shows were really, really great."

- The participants also found reading the textbook helpful

  "I liked the book. I was surprised that I liked the book…how much I liked it…"

Q4. What was one of your most positive learning or awareness experiences?

Prompt: An activity? An assignment? Lecture? Visual presentation?

There was consensus amongst the participants that Assignment 2 was their most positive learning experience.

Probe: A group discussion with fellow students? Class discussion? A one-to-one?

The participants cited specific actions and interactions that related to the assignment which included looking at and listening to the slide presentations, reading the text, writing the paper, observing the completed work of others, participating in the small group discussions, one-to-one interaction with the instructor and peer reviews.

- One participant "used the text heavily" and when writing the paper would "go through systematically and compare" and realized that for "the first time…like…my two sides of my brain firing together…got those juices flowing…they never did before."

- Another participant indicated that "the best part of that assignment was doing the walk-around…to see."

- Another participant said, "I liked best when we were able to get into groups…hearing the different perspectives… made me think…to keep an open mind…"

- Another recollected that her "one-on-one" interaction with the instructor was "another pivotal experience…she (the instructor) showed me a couple of things and I went, 'Oh, THAT'S why mine looks different than yours.'"

- The participants agreed the peer review, or critique, of each other's Assignment 2 was a positive learning experience. The following is a conversation amongst the participants about the experience of critiquing their peers:

    P2:"How about when we had to grade each other's assignments?"

    P2: "I found that really hard."

    P3 – "It was very hard to grade your colleague … but it was very fulfilling…"

    P2: "What would that be called?"

    P4: "Critique."

    P1: "Group critique."

    P2: "Rewarding"

    P3: "Challenging and rewarding."

- For the Participant's Summary of the Focused Discussion refer to Appendix K

Q5. Thinking back again, what was most frustrating about learning in "Intro"?

- Frustration was expressed about the overlap of learning and doing of the assignments. "I was frustrated when we would get an assignment and have three weeks or two weeks to do

it, but we were still learning during that time..."

- Another participant, expressing frustration because she experienced a role reversal, stated, "Being a teacher, all of a sudden, I had to write an essay instead of me assigning one."

- One participant commented that at the beginning of the course there was little class discussion: "...there was good discussion going on near the end – not at the beginning; nobody was talking during the beginning...".

- Additional Quotes of the Focused Discussion can be found in Appendix L.

Discussion

Part 1 Demographic Survey

The demographic survey data provided "a picture of" (Neuman, 2003, p.35) the learners taking "Introduction to Residential Interiors" in the Winter 2006 term; there was diversity amongst the learners with regard to age, education, employment, reasons for taking the course, and also their learning approaches. The following discussion addresses concerns, realizations, and questions related to the findings.

47.82% of the learners were under 30 years old; 91.3% of the learners were female; 52.2% were single, never married. The highest level of education that 26.08% had completed was high school; another 26.08% had completed some college / technical training.

The proportion of learners who were under 30 and who had completed high school or some post secondary education, indirectly raises questions about the content of the course with respect for the learner. A topic that was not discussed during the focused discussion, the design process, is the content of four sessions or twelve hours of the course. Generally speaking, this content may be of more interest to an adult learner with some life experience

(Marriam & Caffarella, 1991). The researcher suggests that a younger learner may have a difficult time relating to some of the content; for example, professional and business liability issues.   Content-oriented learners (Imel, 1995) may have difficulty with these sessions because of limited terms of reference for some of the concepts (Dale, 1969) discussed.

60.86% of the learners were employed full-time outside of the home.   The employment of the participants (Figure 7) included a cross-section of sales, technical/technology, design, a skilled trade, management, business/entrepreneurial, and administrative positions. There were also a mother, students, and an unemployed learner in the course. The learners also varied in their employment position and organizational level (Figure 7). The range suggests that interaction amongst the learners provides opportunity for them to hear, question, develop, and reflect on insights about different assumptions, beliefs, and values (Baker et al, 2002) from different perspectives.

The data revealed that in response to Question 9, 26.08% or about one quarter of the learners, described their work as related to residential interiors. 50% of this group worked in retail; the remaining 50% were either self-employed or worked in a trade (Figure 7). Data from Question 11 about the reasons that the learners were taking the course indicated that 17.40% were taking the course for work-related reasons. As well, 26.08% indicated they wanted to become a Residential Interior Decorator (Figure 7). The findings suggest that a section of the learners may be described as consumer-oriented with defined objectives (Imel, 1995). This category of adult learner may seek the instructor out as a resource (Imel, 1995).

8.70% of the learners indicated that they were taking the course for general interest and appreciation. The majority (47.84%) was taking the course to research and explore interior design as a career. Both of these sections of learners (Figure 8) are difficult to

categorize because of the general nature of their interests. Therefore, it is appropriate to look at learning approaches and preferences.

Question 12 (Appendix F) introduced the topic of learning approaches. Though this question had been included for general introductory purposes, the responses from the participants raised an interesting question. The students ranked 'Reading a book' 3/8 and ranked 'Looking at slides, overheads, etc.' 6/8. The findings for this question were surprising because it was expected that "Looking at slides, overheads, etc." would rank higher than "Reading a book" and "Listening to the instructor". A possible reason that some of the learners preferred reading the textbook is that as adult learners they have all ready formed habits (Mezirow, 1991); their learning habits may include reading and listening versus observing and listening. Another explanation may be that when watching slides the learners may feel more like spectators than participants (Schroeder, 1993; Dale, 1969).

Part 2 Focused Discussion

The findings of the focused discussion also raised some concerns and considerations which are addressed in the following discussion.

Play and Design

Participants remembered having an interest in design when young. One participant remembered that she "…used to…make couches and chairs…anything out of everything and put them in boxes and rearrange and rearrange…" Another recalled "…tromping through some dirt and developing a floor plan…" Both of these examples involve playing with shapes and/or forms to create something.

The idea of play with shapes and forms is not a new idea. For example, the work of Friedrich Wilhelm Froebel, the founder of kindergartens, emphasized the importance of playing with different shapes and forms of different textures and colours; he believed that thought and language develop through concentrated play with objects in the environment (Gutek, 2001). Montessori, early childhood educationist, devised a curriculum for children which included interactive activities that involved items such as colored rods, tablets, and boxes (Gutek, 2001). Architect, Frank Lloyd Wright, attributed his playing with Froebel's 'gifts', which included coloured strips of paper, two-dimensional geometric grids, and wooden spheres, blocks, and pyramids, as a major influence on his modular approach to architecture (Clayton, 2002). Both Gropius (1970) and Moholy-Nagy (1947) advocated that the synthesis of shapes and forms is core to understanding 3-dimensional space and communicating visual ideas.

Approaches to Learning Design

The emphasis the participants placed on their learning as it related to Assignment 2: The Basic Design Elements and Principles (Appendix B) was an unexpected finding. The researcher had anticipated that the basic drafting skills which the students experienced would have been part of the discussion; however, technical skill was neither introduced by nor discussed amongst the participants. The following discussion focuses on two learners in the focus group; their comments indicate a contrast in their learning approaches.

One of the participants referred to her "instinct of walking into a room and knowing there is something great about it"; i.e., from her direct experience (Dale, 1969) the participant could sense the elements and principles that compose the interior environment. Similarly,

Schon (1987, p.87) quotes Petra, one of the students whom he observed, 'Intuitively you look at the shape and you know it is wrong, but it's hard to get down to the reason.' The same participant in the focused discussion recognized that looking at the slides and hearing the instructor point out the elements and principles of design in the visual images, a pictorial learning experience (Dale, 1969), was helpful to her learning. A little later in the discussion, the participant also expressed that seeing the completed projects of her peers in "the walkabout" was "the best part of the assignment". Such activities contribute to abstracting summarizing an idea to develop a visual or verbal symbol (Dale, 1969). This participant also described reviewing Assignment 2 with her peers as being "Really hard" but also "Rewarding." The review, or critique, requires that the learners use the verbal language of design in their discussions; this gives them an opportunity to link their visual language with their verbal language of design. "Difficulties arise when abstractions have inadequate foundations' (Dale, 1969, p.98).

A different approach to learning is exemplified by a participant who preferred the textbook to looking at "big class pictures". This participant stated she liked the book because it will be a "good future reference"; e.g. information such as "the distance from one chair to the next...heights of lights, that sort of thing." The learner also expressed realizing "...it's not just a mystery, mysterious unavailable talent ....there were pieces I could understand in a cognitive way." Once again, relating to a verbal symbol, or abstraction, may be difficult if the learner's foundation of relevant experience is lacking because the learner does not have an adequate point of reference to identify with the symbol (Dale, 1969). This participant found the one-to-one interaction, or critique, with the instructor a "pivotal experience".

Further to the earlier discussion related to Question 12 in the demographic survey, it

was an unexpected finding that the textbook played an important part in some of the students' learning and that the textbook was preferred to looking at slides. Dale theorizes that "learning by doing" (1970, p.98) contributes to more effective learning. Some of the learners may find that the pictorial experience omits too much for them to benefit from a "relative degree of experiential concreteness" (Dale, 1970, p.98) and that they would prefer being more directly involve than observing (Dale, 1969; Schroeder, 1993); for example, some of the learners may prefer to be doing the presentation of the slides. Given that the slide presentations in are not as well received by the learners as expected, this may explain why there was little discussion at the beginning of the course, as currently slide presentations comprise a major portion of Sessions 3 and 4. Some learners may also require time to reflect (Mezirow, 1991; Kolb, 1984; Schon, 1987) on assumptions, beliefs, and new ideas. As well, some learners are in the habit (Mezirow, 1991) of highly abstracted verbal learning which they may not be used to openly discussing. Such learners may benefit from one-to-one interaction with an instructor to enable linking of verbal abstraction to visual abstraction.

Critiquing and Concept Attainment

In full time design programs, the elements and principles of design are learned-instructed in a design studio using a critiquing approach. The learning occurs through doing assignments, experiencing critiques with instructors and peers about the assignments, and reflecting on the process (Schon, 1988; Fleming, 1998; Shaffer, 1999). The combination of interacting, creating forms of text, and experiencing double-loop thinking (Argyris, 1994) provide the students with opportunity to use the verbal symbols of design to discuss their ideas (Shaffer, 1999) and the visual symbols of design to document them. The text provides opportunity for the students to apply and attain the concepts (Bruner, 1961).

The interaction applies to learners who transform through participation (Rogoff et al, 1998) and to instructors who recognize learners who thrive in a situated cognition (Brown et al, 1989) learning environment. Regardless of the learning orientation (Merriam and Caffarella, 1991) and situation, tacit knowledge is being transferred to the student so that the student's ideas become explicit. The dialectic interaction may lead to reflection about design assumptions, values, and beliefs (Schon, 1987). Such learning makes the design critique a transformative learning experience (Dozois, 2001). However, for such transformation to contribute to concept attainment there must be a curriculum with layers or levels of learning (Gropius, 1970; Bruner, 1973) that is in keeping with community needs (Lave & Wenger).

Communities of Practice

In Session 2, which relates to Assignment 1 (Appendix A) of the course, a few members from the interior design community are invited to participate in an interactive question and answer discussion with the students which the instructor moderates. The interaction provides the students with varied perspectives of practitioners. The students legitimately participate, though peripherally, with members of different communities of practice (Lave & Wenger, 1991) within the field of interior design. In this context

> Conversation can serve as an essential foundation for mutual trust and
> sharing of experiences among members of an organization. When
> organizational spaces such as communities of practice and self-organizing
> teams emerge, conversation can catalyze visions, innovations for new
> development, and learning. (Baker, Jensen & Kolb, 2002, p.4).

Conclusions and Recommendations

Learning of design is an interactive, engaging, and situated process. The interactions include individual interaction, interaction in small groups, and group interaction with panel members and instructor. Interactive approaches that depend on conversation and discussion are in direct contrast to passively receiving information to form knowledge. Although learners must decide that they want to engage interactively, the instructor must provide the opportunity for the learners (Imel, 1995).

Different students have different approaches and preferences to learning; e.g. the text book was used more by some than others; some preferred slides; some preferred discussing and listening. It is concluded that students stand to benefit from their learning experiences more if they are aware of their learning preferences.

Instructors teaching courses in interior design may benefit from taking courses about learning approaches, preferences, and styles. Dohr & Portillo (2001) point out that students learning interior design have diverse learning styles therefore both students and instructors stand to benefit if the instructors are knowledgeable about learning and teaching theory. They recommend that instructors have a repertoire of teaching methods. Though learning styles have not been the focus of this study, the researcher agrees with Dohr & Portillo's (2001) recommendation.

The advent of technology and the reality of consumer-oriented learning warrant adapting the traditional approaches to learning-instructing design. Schon states,

Designing, both in its narrower architectural sense and in the broader sense

in which all professional practice is designlike, must be learned by doing.

However much students may learn about designing from lectures or readings,

there is a substantial component of design competence – indeed the heart of it –

that they cannot learn in this way. A designlike practice is learnable but is not

teachable by classroom methods. And when students are helped to learn design,

the interventions most useful to them are more like coaching than teaching ....

(Schon, 1988, p. 157).

The findings of this case study, though not conclusive, indicate that the concept and

technique of the design critique can be adapted to teach design for general awareness

purposes in a classroom situation if the instructor is knowledgeable about

1. the critiquing process.

2. student learning approaches and preferences

3. basic design in the context of interiors.

The findings of the demographic survey strongly suggest that because approximately

half of the participants (47.82%) are under 30 years old and because almost half of the

participants indicated they are taking the course to explore interior design as a career

(47.84%) there is a need to find out if this group is interested in a full time accredited

integrated program that might be linked to other faculties and existing local programs.

Having said this, the researcher stresses that the existing Residential Interiors

Certificate Program provides a general awareness about design and provides opportunity for

learners who want to become a Residential Interior Decorator. This level of learning

provides a strong foundation upon which other levels can be structured.

This study provides indication that concept formation of basic design is an active and

interactive learning process that initializes the learning of the language of design. Regardless

of their age, previous education, and experience the learners began to communicate their

visual awareness using design language; i.e. the elements and principles. The researcher emphasizes that the course that formed the basis of this study is an introductory design course; the instructor spends approximately six hours of time on the basic elements and principles of design. Therefore, though abstractions or concepts about basic design may be formulated, there is no assurance that they will be applied in actual situations (Lave & Wenger, 1991). Concept attainment requires further study in basic design with in the context of a design program (as opposed to an art program). For such learning opportunities to occur, a curriculum that recognizes the value of the design of our physical environment, its communities of practice (Lave and Wenger, 1991), accrediting bodies, and the overall community needs to be developed. Periodic curriculum evaluation would ensure this.

Consideration of Weaknesses and Validity Issues

There were three weaknesses related to the demographic survey that became apparent. Firstly, the demographic survey was conducted the last day of the term which was the day the students wrote their final examination; there may have been a slight improvement in the participation if the survey had been conducted the previous session. Secondly, the wording of Question 12 was unclear to some students; replacing the word 'rank' with 'rate' and including a scale would clarify the directions. Thirdly, an additional question in the demographic survey asking the students whether they would enroll in a full time, degree granting program would have been an appropriate follow-up to Question 11.

Directions of Future Research

Based on a review of the relevant literature and on the findings of this case study, there is a

need for further research to be conducted in a number of areas. These include:

- Conducting a study which will track the students throughout the program and

evaluate the nature and quality of their learning experiences.

- Tracking the graduates of the Residential Interiors Certificate Program to ensure the

program is meeting their needs.

- Periodic reviews of the course with other instructor(s) who have recent experience

instructing the course will ensure student needs, relevant materials, best practices, and

current standards are integrated into the course content and delivery; for example, the

proportion of content about the elements and principles of design versus the design process.

Insights from such a review may also be relevant to electronic delivery of the course.

- Periodic reviews of the program with members of the professional, business, and

academic communities, as well as the instructors, would ensure relevant materials, best

practices, current standards are coordinated and integrated into program content and delivery.

- In relation to the electronic delivery of the course it is recommended that a study

researching the implications of digital colour perception be completed.

- The research and documentation of the history of interior design and interior design

education in Alberta would provide reliable reference for future learners, educators, and

practitioners of interior design.

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Appendix A

Introduction to Residential Interiors

ASSIGNMENT 1:   AREA OF INTEREST IN INTERIORS

PURPOSE: To encourage student to explore and research their interest in a particular area of interior/residential design and the academic / training / qualifications required.

OBJECTIVE: On completion of assignment, student will demonstrate an understanding of the varying scopes of work available within the field of interior / residential design.
On completion of assignment, student will demonstrate an understanding of what education and training they require to achieve their personal/professional goal.

MATERIALS/FORMAT:
- Cover page with student name and date
- Paper to be secured together (no paper clips)
- 3 page paper (not including cover page)
- double spaced, 1" margins, 12 point easily legible font
- Bibliography including books, periodical articles, interviews, web sites.

PROCESS:
- Research roles in the field of interior design and/or decoration.
- Research areas of employment available and the relationship to related disciplines (e.g. builders, contractors, trades people, other interior designers and/or decorators, engineering support, professional engineers, architects, etc.).
- Identify the area of interior design and/or decoration interested in working in. Describe the responsibilities.
- Identify skills, traits, experiences, achievements (that student has or must acquire) that will be beneficial in this work.
- Describe the education, training/work experience, qualifications that are required to achieve this goal.

TIME: Assigned in Session 1
Due in Session 3
Returned in Session 5

EVALUATION: 10% of Final Grade

Appendix B

ASSIGNMENT 2: BASIC DESIGN ELEMENTS & PRINCIPLES

PURPOSE: This assignment introduces the elements and principles of basic design and asks the student to recognize them in a residential interior.

OBJECTIVE: On completion of this assignment, participants will demonstrate awareness of the five elements and the five principles of design in a residential interior.

MATERIALS:
- 2-3, 8.5" x 11" typed pages, double-spaced, one inch margins; point form acceptable.
- Applicable samples of colours and finishes
- Picture of a residential interior
- Two 8.5" x 11" presentation boards

PROCESS: The student will:
- Choose a photo of a residential interior and mount it on an 8.5" x 11" board.
- Identify, discuss, and describe the elements and principles as recognized in the room and how they affect the room.
- Prepare a colour and finished board based on the colours, textures, patterns, materials in that room; this includes selecting and mounting the applicable samples on another 8.5" x 11" presentation board.

POINTS TO BE CONSIDERED IN EVALUATION:
- Neatness
- Assessment of design elements and principles, colours, materials, textures, etc.
- Success of interpretation and rendition
- Consistency of presentation (unity, balance; colour of boards / paper, weight, layout; format – i.e., portrait or landscape).

TIME:
Assigned in Session 3
Due in Session 6*
Returned in Session 8

EVALUATION: 30% of Final Grade.

*Note: The students are encouraged to have their assignments completed for the beginning of Session 6. In Session 6, after a brief discussion with the class about the assignment, the students display their completed boards and walk around observing each others assignments (10 – 15 minutes). They then break into small groups (4-5 per group). They present their assignments to each and provide feedback to one another.

Appendix C
FIDER accredited programs in Canada

- Interior Design Program – Bachelor of Applied Arts in Interior Design
  Alconquin College, Ottawa, ON.
  www.alconquincollege.com

- Interior Design department - Diplome D'etudes Collegiales
  Dawson College, Westmount, PQ.
  www.dawsoncollege.qc.ca

- Interior Design Program – Diploma of Interior Design / Bachelor of Applied Arts
  School of Applied Technology
  Humber Institute of Advanced Learning & Technology
  www.humber.ca

- Interior Design Program, School of Interior Design – Diploma in Interior Design
  International Academy of Design & Technology
  Toronto, ON.
  www.iadttoronto.com

- Applied Design in Interior Design Program
  Kwantlen College, Richmond Campus, B.C.
  www.kwantlen.ca/calendar/idsnprg.html

- Department of Interior Design - Bachelor of Applied Interior Design
  Mount Royal College
  Calgary, AB.
  www.mtroyal.ab.ca/careerservices/employers/hireinteriordesign.shtml

- The School of Interior Design - Bachelor of Interior Design
  Ryerson University, Toronto, ON.
  www.ryerson.ca/programs/interior.html

- University of Manitoba - Master of Interior Design
  Faculty of Architecture, Landscape Architecture, Urban Planning
  Winnipeg, Manitoba
  www.umanitoba.ca/architecture/id

Source: FIDER website, Accredited Interior Design Programs. Retrieved September 2006.

Appendix D
Interior design programs available in Alberta in 2006

- Department of Interior Design – Bachelor of Applied interior Design
  Mount Royal College,
  Calgary, Alberta
  www.mtroyal.ab.ca/careerservices/employers/hireinteriordesign.shtml

- Interior Design Technology Program - 2 year diploma program
  Northern Alberta Institute of Technology Edmonton, Alberta
  www.nait.ab.ca/programs/IDT/

- Interior Design Technician Program – 2 year diploma program
  Lakeland College, Vermilion Campus, Vermilion, Alberta
  www.lakelandcollege.ab.ca/calendar/AY0506/InteriorDesign.html

- Interior Design and Merchandising Program – 2 year diploma program
  Lethbridge Community College, Lethbridge, Alberta
  www.lethbridgecollege.ab.ca/programs/idm.shtml

- Residential Interiors Certificate Program – 351 hour certificate program
  Faculty of Extension, University of Alberta
  www.extension.ualberta.ca/ri

Certificate programs are also offered through Mount Royal College, Metro Community College, and Lakeland College.

Appendix E
Participant Informed Consent Form – Demographic Survey

<u>**Project**</u>: **Towards an epistemology of interior design: An introduction to its language**

<u>**Researcher**</u>: Noreen E. Chibuk   (780) 482 – 5687   nechibuk@datanet.ab.ca
<u>**Advisor**</u>: Dr. Marlene Cox-Bishop (780) 492 – 2045   marlene.cox-bishop@ualberta.ca

<u>**Purpose of the Study**</u>
  "Introduction to Residential Interiors" is a core course in the Residential Interiors Certificate Program offered by The Faculty of Extension, University of Alberta; the course draws participants varying in age, experience, education, and goals. **The purpose of the study is to explore who the students who take "Introduction to Residential Interiors" are and how they construct knowledge.**
  The Demographic Survey (Appendix B) is Part 1 of the case study; it is designed to examine the demographics of the students enrolled in the current "Introduction to Residential Interiors" class.
  Part 2 of the case study is a focused discussion of a small group of learners who represent the demographic descriptions compiled from Part 1; these learners will have successfully have completed the "Introduction to Residential Interiors" course. The focused discussion will provide the students with an opportunity to express their views and share their experiences about how they construct knowledge related to interior design in "Introduction to Residential Interiors."
  The case study is intended to be used as a basis for discussion for enhancing the learning experience of students taking the course.

<u>**Overall Description of Participation**</u>
This Demographic Survey should take **10 minutes** to complete. You need only participate in the survey once, and you will not be asked to complete any other forms or questionnaires.

<u>**Benefits and Risks of Participation**</u>
There are no known personal benefits or risks from participation in this study, although your contribution may indirectly benefit your educational experience at the University of Alberta. It may be used to help shape changes, revisions and the development of new learning strategies.

<u>**Withdrawal from Study**</u>
Completion of this survey is completely voluntary and you are free to not participate in the study without penalty or question. The survey is anonymous, therefore, it will not be possible to withdraw the data once it is submitted.

<u>**Anonymity and Confidentiality**</u>
All survey responses are completely anonymous; no names or other identifying information is being collected.

Only my Advisor and I will have access to the information collected. The information collected will be kept in a locked cabinet for five (5) years to meet the requirements of the Faculty of Extension, University of Alberta.

I acknowledge that the research procedures have been explained to me, and that any questions I have been asked have been answered to my satisfaction. In addition, I know that I may contact the person designated on this form, if I have further questions either now or in the future. I have been assured that the records related to this study will be kept anonymous. I understand that I am free to withdraw from the study at any time and I will not be asked to provide a reason.

Parts, or all, of the final report may be published. Any and all publications will be handled in accordance with the University of Alberta Standards.

This study has been reviewed and approved by the Research Ethics Board of the Faculties of Education and Extension at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the Research Ethics Board at (780) 492 – 3751.

(Date)

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(Printed Name of Participant)   **(Signature of Participant)**

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(Printed Name of Researcher)   **(Signature of Researcher)**

The 8 participants for Part 2 - The Focused Discussion will be selected from the group that indicates a willingness to participate. It is possible that not all indicating interest will be asked.

- **Are you interested in participating in the focused discussion group?   YES NO**

If your response is YES, provide the following CONTACT INFORMATION:

Telephone:
E-mail:
Mailing address:

Appendix F
Demographic Survey

Please **circle**, √ (**check**), or **rate (e.g. 1-6)** the best answer to the question as it relates to you.

1. What is your age?
   18 - 24   25 - 30   31 - 40   41 -50   51 – 60   61+

2. Gender: Male   Female

1. What is your current marital status?
   ___ Single, never married   ___ Divorced
   ___ Married   ___ Widowed
   ___ Separated

4. Number of dependents: 0   1   2   3   4   5   6   More than 6

5. What is the highest level of education that you have completed?

   ___ Less than High School   ___ 4 year degree _____
   ___ High School   ___ Master's degree _____
   ___ Some college or technical training   ___ Doctoral degree _____
   ___ Some university   ___ Other _____
   ___ 2 year college or technical diploma

6. What is your current employment status?
   ___ Full time   ___ Full time student
   ___ Part time   ___ Part time student
   ___ Unemployed   ___ Retired

7. How would you describe your current employment position?
   ___ Sales   ___ Design
   ___ Administrative   ___ Management
   ___ Technical or technologist   ___ Other (explain) _____
   ___ Skilled trades person

8. What is your organizational level at your place of employment?
   ___ Directorate   ___ First-line Supervisor
   ___ Division Director   ___ Non-Supervisory
   ___ Branch Head   ___ Professional
   ___ Section Head

9. Are you currently working in an area related to residential interiors?   Yes   No

10. If response to #7 is YES, which of the following best describes your employer?

_____ 'Big box' or chain retailer   _____ Interior decorator
_____ Small specialty store   _____ Interior design firm
_____ Home builder   _____ General Contractor
_____ Real estate   _____ Trade (e.g. carpentry, upholsterer, etc.)
_____ Self-employed   _____ Other (explain)_____

11. Which of the following reasons best explains why you are taking "Introduction to Residential Interiors"?

_____ For personal use and general appreciation.
_____ To increase my knowledge in my current job.
_____ To become a Residential Interior Decorator.
_____ To research and explore interior design as a career choice.
_____ To increase my employment opportunity using my current post secondary knowledge to advantage.
_____ Other _____.

12. From your current awareness, **RANK** the following **in the order (1- 7)** that best describes **your learning approach** as it relates to the field of design and decorating.

_____ reading a book, articles, related brochures, etc.
_____ listening to the instructor talk about the various aspects of the subject.
_____ small group discussions with my fellow students.
_____ class discussions.
_____ doing the assignments.
_____ looking at slides, overheads, videos.
_____ research on the Internet.
_____ other _____.

Your participation in this survey is much appreciated.

Thank you.

Appendix G
Letter of Introduction

April 18, 2006

<u>Re:</u>   <u>Participation in a focused discussion</u>

Dear   ,

        As briefly discussed with you, I am currently doing a research study to complete a Master of Arts in Communications and Technology in the Faculty of Extension at the University of Alberta. The purpose of my research is to explore how students in "Introduction of Residential Interiors" construct knowledge and 'make sense' of interior design. The study is intended to be used as a basis of discussion for enhancing the learning experience of students taking the course. Part 1 of the study is a Demographic Survey of the students currently enrolled in "Introduction Residential Interiors" course. Part 2 of the study is a focused discussion of learners who represent these demographics.

        You are invited to participate in Part 2 – The Focused Discussion on _____, 2006 beginning at 1:00PM and finishing at 2:15PM in Room _____, Extension Centre, University of Alberta.   Participants are asked to arrive at 1:00PM. Light snacks and refreshments will be provided. The discussion is intended to hear the students' perspectives about their learning experiences about interior design in "Introduction to residential Interiors". If you agree to participate, kindly return this letter in the envelope provided with your name, signature and contact information by _____, 2006.
        Though I will be present to 'meet and greet' the participants, I will not be present during the focused discussion. The focused discussion will be moderated by _____; an assistant may also be present. Please note that the interviews will be tape recorded. In the event that a participant creates a drawing or other visual image during the focused discussion this material may be used as part of the final research paper; it is therefore important that the quotes or visual images not be identifiable. A copy of the final paper will be forwarded to you if you are interested.

        You are free to withdraw from the focused discussion without penalty or question. In the event that you do withdraw from the focused discussion the data that has been submitted remains anonymous.
        There are no known risks to your involvement and your contribution may indirectly benefit your educational experience at the University of Alberta and may be used to help shape changes, revisions and the development of new learning strategies.
        Names of the participants will not be disclosed. Your confidentiality and anonymity will be respected. It is to be noted that keeping the information from the focused discussion is a group responsibility shared between the researchers and the participants. Only my Advisor and I will have access to the information collected.
        The information that I collect will be kept for five (5) years to meet the requirements of the Faculty of Extension, University of Alberta and then destroyed. **This study was reviewed and approved by the Research Ethics Board of the Faculties of Education at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the Research Ethics Board at (780) 492 – 3751.**

Sincerely,

Noreen E. Chibuk, BID, LID
Researcher: Noreen E. Chibuk   (780) 482 – 5687   nechibuk@datanet.ab.ca
Advisor: Dr. Marlene Cox-Bishop   (780) 492 – 2045   marlene.cox-bishop@ualberta

Appendix H
Participant Consent Form – Focused Discussion

<u>**Project:**</u> **Towards an epistemology of interior design: An introduction to its language**

<u>**Researcher:**</u>
Noreen E. Chibuk   (780) 482 – 5687   nechibuk@datanet.ab.ca

<u>**Purpose of the Research Project:**</u>
The purpose of the study is to explore who the students who take "Introduction to Residential Interiors" are and how they construct knowledge related to interior design. The study is intended to provide a basis of discussion that will aid in the enhancing of the learning experience of students taking this course.

<u>**Research Process**</u>
        You are one of eight students who have been invited to participate in a focused discussion about the course. The focused discussion is intended to hear the students' views about their learning experiences about interior design in "Introduction to Residential Interiors".
        The Focused Discussion will take 45 to 60 minutes.
        The Focused Discussion will be moderated by _____; an assistant may be present to help with the equipment and set up.
        The interviews will be tape recorded.

<u>**Your Participation**</u>
There are no known risks to your participation in this study and your contribution may indirectly benefit your educational experience at the University of Alberta. In the event that you create a sketch, drawing, or other visual during the focused discussion, this material may be used as part of the final research paper, therefore it is important that such information not be identifiable. If you are interested, a copy of the final paper will be forwarded to you.

You are free to withdraw from the focused discussion at any time for any reason without penalty or question. If you have any further questions concerning matters related to this research, please call my Advisor or me; our contact information is provided at the end of this form.

<u>**Confidentiality and Anonymity**</u>
Your anonymity and confidentiality will be respected. Your name, employer, or other identifying details will not be disclosed. The focused discussion will be moderated by someone other than the researcher; the moderator and other assistant(s) will also respect your confidentiality.   Keeping the information from the focused discussion is a group responsibility shared between the researchers and the participants. Everyone participating will be asked to respect confidentiality; however, a guarantee cannot be made.

Only my Advisor and I will have access to the direct information collected. The information collected will be kept for five (5) years to meet the requirements of the Faculty of Extension,

University of Alberta. This project is being done to complete a Master of Arts in Communication & Technology. Parts, or all, of the final report may be published. Any and all publications will be handled in accordance with the University of Alberta Standards.

This study has been reviewed and approved by the Research Ethics Board of the Faculties of Education and Extension at the University of Alberta. For questions regarding participant rights and ethical conduct of research, contact the Chair of the Research Ethics Board at (780) 492 – 3751.

<u>**Consent to Participate**</u>
By signing this form, you indicate that you have understood to your satisfaction the information regarding participation in the research project and agree to participate. In no way does this waive your legal rights nor release the investigators or involved institutions from their legal and professional responsibilities.

<u>**Researcher:**</u> Noreen E. Chibuk   <u>nechibuk@datanet.ab.ca</u>   Ph. (780) 482 - 5687
<u>**Advisor:**</u> Dr. Marlene Cox-Bishop <u>marlene.cox-bishop@ualberta.ca</u>   Ph. (780) 492 - 2045

By signing this form, I am consenting to participate in the Focused Discussion for this study.

_____   _____   _____
        (Printed)   **(Signed)**   **(Date)**

Appendix I
Focused Discussion Questions

1. Tell the group your name and something about yourself (job, family, community, etc.).

2. How is it that you came to take "Introduction to Residential Interiors"?
    Probes and prompts:
    - Information   - Use in own home? Building? Re-modeling? Decorating?
    - Career   - Current career? 2nd?
    - Research   - Interior design as a career? Education?

    - How long have you had an interest in the
        - Visual world?
        - Built environment?
        - Way things are put together? Designed? Decorated?

3. Thinking back to the beginning of "Introduction to Residential Interiors", what was one of the first things that you first recall **learning** <u>about DESIGN or DECORATION</u>?
    Prompt - put this down on paper before we proceed (write, sketch, draw, note).

    Probe - How did you learn this?

4. What was one of your most positive learning or awareness experiences? Describe.
    Prompt- Was it an activity/ assignment? Lecture? Visual presentation?
    - Discussion with your fellow students? Discussion in class?

    Probe – What makes these experiences enjoyable?

5. Thinking back, what was frustrating about learning in "Intro"?
    One of your most frustrating learning experiences was …?
    Why?
    How can this be improved?

The participants will be asked to craft the session summary on a flip chart with one of the participants being the note taker.

A short oral summary of the session (2-3 minutes) will be given.

6. Is this an adequate summary? Is there anything that we have missed?
    Is there anything that you came wanting to say that you didn't have a chance to say?

Thank participants for their time and participation.

Appendix J
Confidentiality Agreement between Researcher and Assistant/Transcriber

<u>**Project:**</u>   lll

I, _____, the _____ (transcriber, assistant to moderator) have been hired to

_____

<u>I agree to –</u>

1. Keep all the research information shared with me confidential by not discussing or sharing the research information in any form or format (e.g. disks, tapes, manuscripts) with anyone other than the *Researcher*.

2. Keep all research information in any form or format (e.g. disks, tapes, transcripts) secure while it is in my possession.

3. Return all research information in any form or format (e.g. disks, tapes, transcripts) to the *Researcher* when I have completed the research tasks.

4. After consulting with the *Researcher*, erase or destroy all research information in any form or format regarding this research project that is not returnable to the Researcher (e.g. information stored on computer hard drive.)

_____   _____

_____
(Print Name)   (Signature)   (Date)

Researcher(s)

_____   _____

_____
(Print Name)   (Signature)
(Date)

Appendix K
Focused Discussion - Participant's Summary

- Panel Discussion – <u>Good</u>
  - hearing different voices / experiences was a useful learning tool.

- Assignment 2 – <u>Also good</u>
  - pivotal towards applying the concepts (of the elements and principles of design)

- Slides – <u>Really good</u>
  - helped to create a shared reference point for us all

- Text – <u>Good too</u>
  - the lectures and text were complementary.
  - also like a back-up system
  - fabulous graphs / tables / indices

- One-on-ones and group discussions

- Walkabouts (seeing others work was really helpful + eye-opening.)

- Group critique of Assignment 2 was challenging + rewarding.

- Instructor – really good also too!

Appendix L
Focused Discussion – Additional Quotes

"…I thought, 'Oh, she's not gonna be able to teach me anything, I know it all already sort of thing because I've done this before but when she taught it …it really made sense. It just wasn't a topic up here but all of a sudden I can integrate it into me. I finally understood why I made some of the decisions I did and that was sort of like 'wow'…'"

"… for me it was when I understood - - I think you are saying a similar thing. It's not just a mystery, mysterious artistic unavailable talent … but just understanding that there were pieces that I could understand in a cognitive way and that it (design) did such a good job of blending both sides of the brain….the most important thing that started my learning … was the first actual assignment about design…was probably pivotal to capturing my interest."

"… I have always had … that instinct of walking into a room and knowing there is something great about it. You know it is a beautiful room for whatever reason. Now I know why … through line and texture and the form and pattern and all of that … so that was huge because it took it down to a more…not such a creative … analytical level

"The other thing I liked about the text is that it'll really be a good future reference…I liked all the information about…the more technical side of it, the distance from one chair to the next, the height of lights and that kind of thing."

"… the second assignment was the analysis one, and that's the one we graded each other… we had fun with that …We had the older carpenter guy in our group….Anyway, he was a carpenter and he was having so much trouble. Basically, she (the instructor) said, 'Don't do a kitchen.' And, he did the kitchen because he saw a kitchen and he liked it … and it was really exciting because he came in with five Formica samples on a piece of paper and that was his colour board … and, we were supposed to mark this, right. He didn't have a written part really … so we were kind of dreading it. I am thinking, 'How are we going to do this?' … but then … in discussing it with him … he did have wood, molding, etc. samples … and, it came to pass that he actually was discovering through the assignment that he actually didn't like the kitchen … it was cold, the colour gray was too cool and it felt really antiseptic. <u>It was good because he was learning to articulate things he had never thought of before.</u> He was a carpenter so he thought. 'This will fit into this space and this is an extra $75.00/sq. ft., so don't do that, right?' Like he was very much on that side of the brain, but by the end he was … he took off all the wood samples and things and just stuck with the Formica … because he was making a statement of the coolness of it."

Figure 4: Age of participants

n = 23

■ 18-24
■ 25-30
□ 31-40
□ 41-50
■ 51-60
■ 61+

■ Age: 61+, 0
0%

■ Age: 51-60, 3
13.04%

■ Age: 18-24, 6
26.08%

□ Age: 41-50, 4
17.40%

■ Age: 25-30, 5
21.74%

□ Age: 31-40, 5
21.74%

Gender:
Male: 8.7%
Female: 91.3%

Marital Status:
Single, never married:
52.2%
Married: 39.1%
Divorced: 8.7%
Widowed: 0%

39.1% have dependents
Of the 39.1%
Married: 66.67%
Single: 22.22%
Divorced: 11.11%
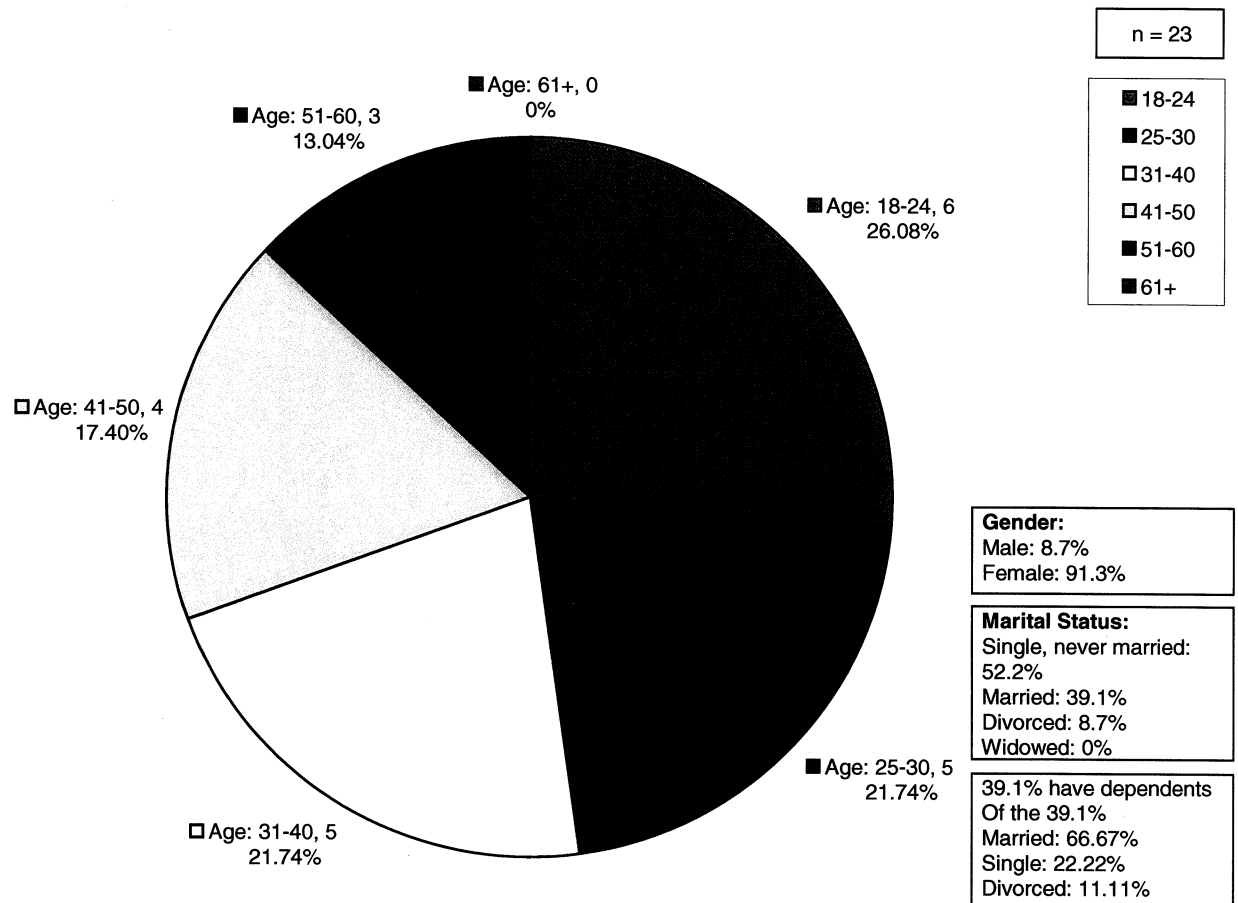
Figure 5: Highest level of education

n = 23

Legend:
- High school Incomplete
- High school
- Some College/Technica
- Some University
- 2 Year Diploma
- 4 Year Degree
- Masters
- Other *CMA*

Some College/Technical, 6
26.08%

Some University, 4
17.40%

2 Year Diploma, 3
13.04%

High school , 6
26.08%

4 Year Degree, 2
8.70%

High school Incomplete, 0
0%

Other *CMA*, 1
4.35%

Masters, 1
4.35%
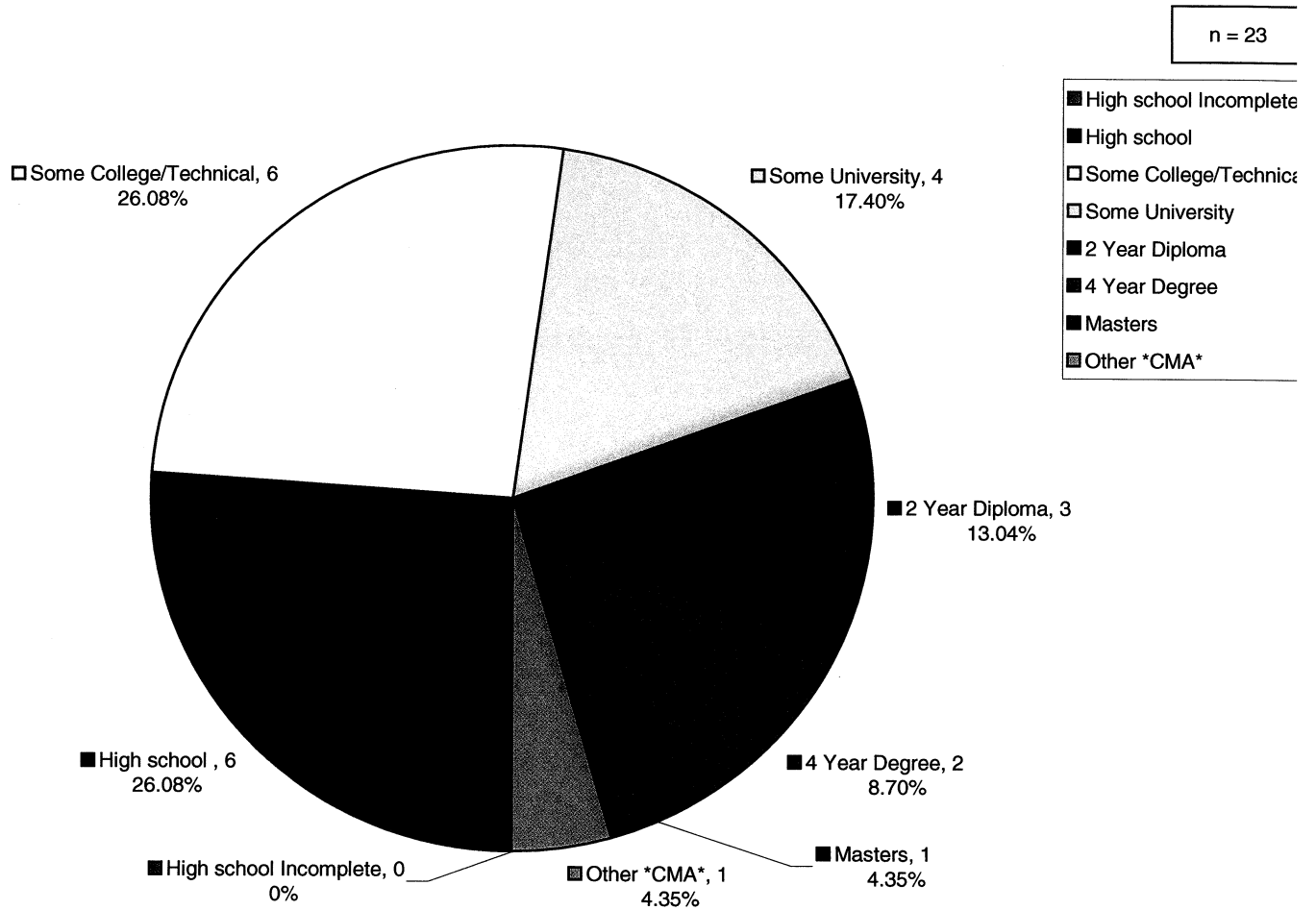
Figure 6: Current employment status

n = 23

■ Full time
■ Part time
□ Unemployed
□ Full time student
■ Part time student
■ Retired
■ Other *Mother*

■ Part time, 4
17.40%

□ Unemployed, 1
4.35%

□ Full time student, 2
8.70%

■ Part time student, 1
4.35%

■ Retired, 0
0%

■ Other *Mother*, 1
4.35%

■ Full time, 14
60.10%

Currently Working in RI: 26.08%
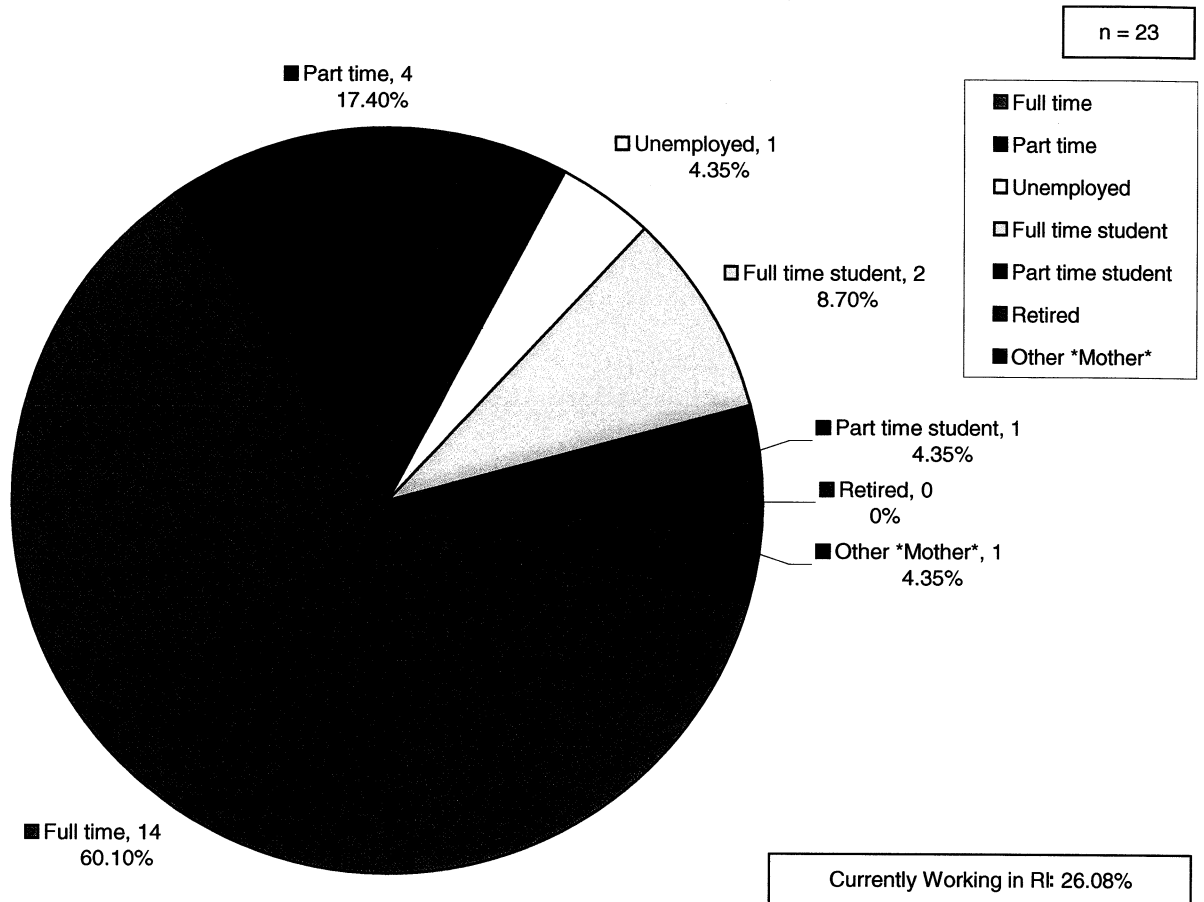
Figure 7: Description of employment position

n = 23

Design
8.70%

Skilled Trades Person
4.35%

Management
8.70%

Technical/Technologist
8.70%

Education
4.35%

Full time Student
8.70%

Other
30.45%

Mother
4.35%

Administrative
26.67%

Entrepreneur
8.70%

Unemployed
4.35%

Sales
13.04%

Organizational Level: n=23
Directorate: 13%   Professional: 26%
Supervisor: 17%   Students: 9%
Non-Supervisor: 30%   Unemployed: 4%

■ Sales
■ Administrative
□ Technical/Technolog
□ Skilled Trades Perso
■ Design
■ Management
■ Entrepreneur
▨ Mother
■ Education
■ Full time Student
□ Unemployed

Figure 8: Reasons for taking the course

n = 23

13.04%   8.70%   4.35%

26.07%

47.84%

■ For personal use and general appreciation

■ To increase my knowledge in my current job

□ To become a Residential Interior Decorator

□ To research and explore interior design as a career choice

■
  To increase my work opportunity using my current post secondary education
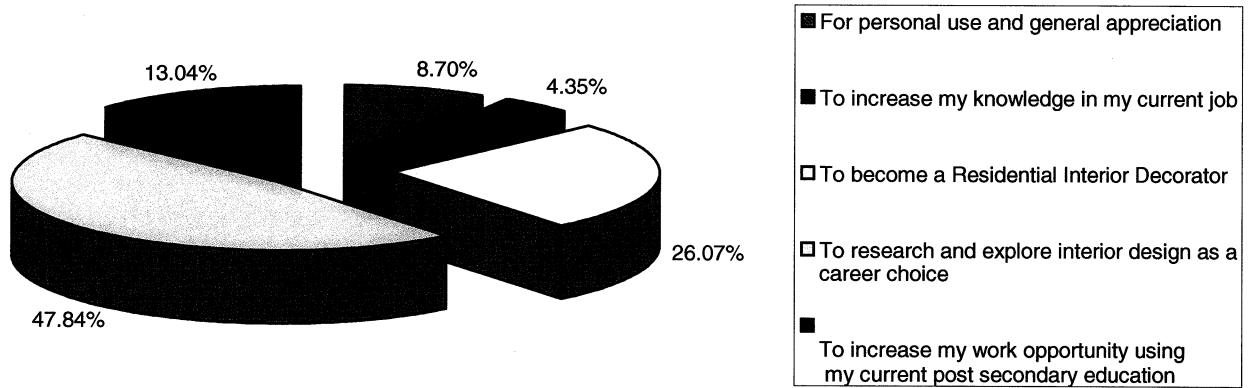
Table 1: Learning approaches

Reading A Book	Listening To The Instructor	Small Group W/Fellow Students	Class Discussion	Doing Assignments	Looking At Slides, Overheads, Etc	Research On The Internet	Other TV
3	2	7	6	1	4	5	8
5	1	3	2	4	6	7	8
7	2	3	4	5	1	6	8
2	1	5	3	4	6	7	8
7	2	4	5	1	3	6	8
3	2	4	5	1	6	7	8
5	1	4	2	3	7	6	8
5	1	4	3	2	7	6	8
3	2	5	4	6	7	1	8
2	3	6	7	1	4	5	8
1	5	4	6	2	3	7	8
3	4	5	2	1	6	7	8
2	3	5	6	1	4	7	8
1	5	6	7	3	4	2	8
6	7	2	4	3	5	1	8
3	2	5	4	1	6	7	8
7	1	6	2	4	5	3	8
7	1	3	2	4	5	6	8
4	1	6	5	2	3	7	8
Mean							
4	2.95	4.58	4.16	2.5	5.16	5.42	8
Standard Deviation							
2.081666	1.709964	1.304513	1.740471	1.574653	1.641922	2.090077	0
Ranking							
3	2	5	4	1	6	7	8