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What I Wish I Knew: Interior Design Graduates Sense of Preparedness to Practice

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WHAT I WISH I KNEW:
INTERIOR DESIGN GRADUATES
SENSE OF PREPAREDNESS TO PRACTICE

By
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I dedicate this work to my husband, Dusty, and two daughters, Presley and Bristol. You are amazing and I am so blessed to have you all in my life!
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ABSTRACT

Interior design education is continuously evolving as is the profession of interior design. The Council for Interior Design Accreditation (CIDA) standards are regularly reviewed and updated to ensure that students receive the best interior design education possible and that they leave school as well prepared for professional practice as possible. It is important that college and university interior design programs continue to prepare students so they can lead the profession into the future. This study sought to gather insight into the entry-level design professional’s perspective on design education.

This study examined recent interior design graduate’s perceptions of their “preparedness to practice” by finding out “what they wish they knew” now that they are working in the design profession. It provides an in-depth look into how well prepared recent interior design graduates are for the workplace and what knowledge areas, qualities and skills they deem valuable to their professional success. This study also reported findings from interior design graduates identifying the knowledge areas and skills they feel should be further emphasized in design education based upon their experience thus far. This information can assist in the modification and enhancement of interior design curricula by identifying areas in education that need improvement, further emphasis or even less emphasis.

The survey was sent via email to 764 interior design undergraduate and first professional graduate student alumni who had completed their degrees in the last five years (2008 - 2012). They were chosen from five regionally diverse CIDA accredited interior design programs in the United States. A total of 101 responses to the on-line survey were received. In addition, eight designers, from various regions, were interviewed for “deeper insight” into their survey responses.

The survey findings reveal that, in most cases, the knowledge areas shown to be the most valuable were also the areas graduates felt most prepared for upon graduation. Similarly, those areas listed as least valuable were also areas students felt less prepared for. Overall, this indicates there is indeed a similarity with skills students are most prepared to handle and those demanded of them in the workplace. Findings show that a majority of recent interior design graduates are in agreement on the “top five” knowledge categories and/or skills they felt most prepared to perform in professional practice after graduation. These include:

1. Formulation of preliminary space plans
2. Formulation of two and three dimensional design concept studies and sketches
3. Creation of space plans and design concepts that are safe, functional and aesthetically appropriate
4. Research and analysis of client goals and requirements (programming)
5. Selection of appropriate colors, materials and finishes
Correspondingly, survey findings reveal agreement on the knowledge categories and/or skills that recent graduates felt least prepared to perform. These include:

1. The administration of contract documents, bids and negotiations as the client’s agent
2. Preparation of project budgets
3. Contract administration
4. Preparation of project schedules
5. Observing and reporting on the implementation of projects while in progress and upon completion

Study data also showed that there are knowledge areas where large variances were found between the rated level of importance and perceived preparedness. For example, the knowledge area with the greatest variance between value and preparedness is the coordination and collaboration with other allied design professionals (i.e. architects; structural, mechanical and electrical engineers, and various specialty consultants). Survey results indicated that a majority of recent interior design graduates did not feel very well prepared in this area when they first started practicing, while these same graduates rated this category as the sixth most valuable knowledge area. These findings signal a need for further emphasis in this area in design education. The four knowledge areas and/or skills with the greatest variance between value and preparedness are:

1. Coordinate and collaborate with allied design professionals
2. Encourage or include the principles of environmental sustainability into designs
   Only 16% of recent graduates felt this category was highly valuable to them in practice. In contrast, they felt this was an area they were prepared to practice following their education.
3. Preparation of construction documents to adhere to code and regulatory requirements
   While 11% of recent graduates felt this category was highly valuable to them only 27% felt adequately prepared in this area while 31% felt less than adequately prepared or poorly prepared.
4. Preparation of project budgets
   This category ranked second, at 16%, in areas respondents recommended for further emphasis in education. In addition, findings from the eight telephone interviews stressed the importance of understanding budgets even though 78% of respondents stated that they felt less than adequately prepared in this area. These findings, combined with open-ended responses throughout the survey, suggest that a greater emphasis be placed on budgets in interior design curricula.

The interviews and survey data offer a unique insight into the perceptions of the entry-level interior design professional. As mentioned earlier, college interior design program curricula and CIDA standards are continuously evolving to better meet the needs of design education. It is important that educators and practitioners consider the perspective of recent graduates as their successes and failures are oftentimes a direct result of their educational preparation.
Higher education interior design program curricula are continuously evolving, as are the standards set forth by the Council for Interior Design Accreditation (CIDA). CIDA is a voluntary accreditation of postsecondary interior design education in North America (Piotrowski, 1994). CIDA educational guidelines were developed to establish a common body of knowledge and instruction in interior design. The methods adopted by CIDA in order to create the standards have proven to be successful as they are generally accepted as the most significant measure of the quality of an interior design education (Busch, 2008). Design professionals, educators and associated industry representatives have collaborated for decades to construct the standards from both experience and research. Today, there are nearly 200 programs that have been accredited by CIDA since it was founded in 1970.

Design Education Today

“The need for higher-quality interior design graduates with a holistic knowledge base will only increase over time. Whether through multi-disciplined programs that include other design areas for collaborative opportunities and greater knowledge, or through incorporating business and marketing curriculum into interior design programs, universities must continue to meet the demand” (Stone, 2008, p. 14).

Jan Stone’s (2008) article titled Higher Learning in IIDA’s Perspective magazine focuses on the pressures that universities around the world are under to “develop business-savvy, diverse, high-quality graduates.” Stone believes that “higher learning institutions must raise the bar.” Denise Guerin, Ph.D., IIDA, ASID, FIDEC, Morse-Alumni Distinguished Professor at the University of Minnesota, quoted in Stone’s (2008) article, states that “the design and built environment today is extremely complex, and the knowledge required to design and build today is far beyond what one or even two professions can handle. We must create integrated, interdisciplinary teams, and they must start in schools” (2008, p. 8). Also quoted in the same article, Professor Lyndon Anderson, Acting Dean of the Faculty of Design and the Swinburne Institute of Technology in Melbourne, Victoria, Australia, states that “the world is a more complex environment that it used to be, and it is no longer plausible for any discipline, design or otherwise, to be taught and practiced in a silo” (2008, p. 8).

“The practice of interior design extends far beyond choosing color swatches and selecting tiles” (Bowles, 2010, pg. 32). Bowles (2010), in her article titled All the Right Pieces, reiterates the importance
of obtaining a diverse skillset which includes, but is not limited to: communication, business, management and marketing skills - all of which she states "are encompassed in the practice of interior design." Jennifer Graham, IIDA, Assoc. AIA, MBA, LEED AP and Director at M Moser Associates in New York, believes that, "a major part of being and interior designer is understanding how the business side of design impacts the business side of our clients and the end product" (2010, p. 32). Similarly, Molly Bryant, an interior design associate at Meyers + Associates Architecture in Columbus, Ohio, states that "if you can relate your ideas to clients with an understanding of their business sense, it helps clients see them in a different light" (2010, p. 32).

The opinions of the designers quoted in the articles by both Stone (2008) and Bowles (2010) stress the importance for design students and graduates to broaden their knowledge base, in turn, their employability. It is also important that students be prepared to work with clients and other design professionals. Guerin asserts that “we need to help students understand how to use their critical-thinking skills so they can apply the design process and their specialized knowledge to each project” (2008, p. 8). After all, Phyllis Markussen, Professor and Chairwoman in the Department of Family Studies and Interior Design at the University of Nebraska at Kearney reminds readers that, “clients seek the services of designers to solve differing kinds of problems and to reach a wide variety of goals through design” (2008, p. 10).

Franklin Becker, Professor and Chair of the Department of Design and Environmental Analysis at Cornell University in Ithaca, New York, deems that “today’s career path is not that clear-cut.” In an interview with Roth Foti (2004), Becker states that “design is a wide-open field in which students apply skills in a novel way. A design education, if done well, can open up opportunities” (2004, p. 14).

It is evident that interior design educators and related professionals have much to offer and share with students. The mass amounts of knowledge, information and experiences of these professionals are being channeled and molded into design curricula with the CIDA standards in place as a guide. With so many external forces influencing the way the interior design profession is evolving, how can design pedagogy keep up? Will the recent design graduate leave school with a sufficient level of readiness? Preparation is key.

As previously mentioned, college interior design program curricula and the CIDA standards, are continuously evolving to better meet the needs of the design industry. Design professionals, educators and associated industry representatives have collaborated for decades to create the standards from both experience and research. Nevertheless, is there another way to measure the actual comprehensive success of the standards? Could another tool be utilized to further enhance the results of the education process and, in turn, the outcome? Can interior design education further advance and improve the education of design students and give them a greater edge in today’s highly competitive environment? Additionally, how can educators better prepare interior design students for entry-level interior design positions? What can be added to existing program curriculums? What can be eliminated? In what subject areas is design education lacking? The development of curricula is vital to enhancing the level of
professionalism for students and graduates. The primary ambition of a design educator is to ensure that graduates are ready for the real world of interior design.

After gaining some professional experience, can the recent graduate now tell us ‘what they wish they knew’ before beginning their careers? This information could prove to be invaluable. The entry-level design professional’s perspective may well be quintessential to enhancing design education and assist educators in taking pedagogy to the next level.

Accredited programs develop their curriculum based upon the standards established by CIDA. Though standards are in place, flexibility in approach, how the requirements are met and the manner in which accreditation is achieved will vary between programs. Interior design programs may be housed in several different academic areas. The three most common areas are fine arts, home economics (or human ecology) and architecture. In turn, each program will have a different emphasis because of the mission of the institution, the department and the focus of the faculty. CIDA accredited programs suggest to students that the program meets the educational guidelines accepted and supported by the interior design profession. Even so, there are numerous programs that are not CIDA accredited.

So what does the recent interior design graduate experience between their final semester and the start of their first entry-level design position? How did the job search and interview process go? How prepared is the recent graduate now in the workplace? It is simple; questions that are not asked will remain unanswered.

**Purpose of the Study**

The interior design students in today’s classrooms are the design professionals who will lead the industry into the future. It would be mutually beneficial for educators, design professionals and the industry to know how well prepared recent graduates actually are for the workplace. The purpose of this study is to determine recent interior design graduate’s perceptions of their “preparedness to practice” by finding out “what they wish they knew” now that they are working in the design profession. This information and feedback from recent graduates can assist in enhancing interior design curricula.

**Research Questions**

**Primary Question**

How well do recent interior design graduates feel their CIDA college interior design programs prepared them for professional practice?

**Secondary Questions**

1. What aspects of interior design education have proven to be the most valuable to recent interior design graduates now in the workplace?
2. Are there areas and/or skills that should be further emphasized in design education that would positively contribute to early professional achievement?

3. What qualities, knowledge and/or skill sets must design graduates generally possess in order to allow their careers to evolve over time as they transition to other areas of the profession?

4. Do students who have participated in internships and/or career shadowing feel more prepared for the profession? Are they hired more readily and are they more likely to get the position they want? Are they better able to handle the transition from education to practice?

**Methodology**

Again, the primary goal of this study is to find out if recent interior design graduates feel that they are prepared for an entry-level interior design position. In order to perform such research, a sample of recent interior design graduates must be identified and surveyed to find out “what they wish they knew” now that they are working in the design profession. The sample for this study will consist of recent interior design undergraduates and first professional graduate students from the last five years (2008 – 2012). Participants must be graduates from a CIDA accredited interior design program and must currently be working as interior design practitioners. The sample of survey candidates will be derived from a minimum of five regionally diverse CIDA accredited universities. The accredited interior design programs that have agreed to participate in this research study will provide contact lists of their recent graduates from the previous five years. The survey will be distributed using Qualtrics and electronically mailed to all recent interior design graduates included in the provided contact lists. In addition to the online survey, eight survey participants will be interviewed for “deeper insight” into their survey responses.

The process that will be used to perform this study will include a review of literature, the development of instruments (survey and interviews), Institutional Review Board approval, the selection of the sample, the gathering of the data, analysis, and the report of findings and recommendations.

**Assumptions and Limitations**

It is assumed that the provided lists of recent interior design graduates are current and the electronic mailing addresses are correct. It will be assumed that the participants answering the survey will respond truthfully and to the best of their ability. Filling out the survey is voluntary; however, it is likely that those who have an interest in learning more about design education and the knowledge base of their professional competition will be more enthusiastic in returning the survey.
“Today’s forward-thinking interior design schools are evolving to ensure (that) graduates come armed with a knowledge base that encompasses the entire practice of design, including marketing, management, financial and communication skills” (Bowles, 2010, p. 29)

Christopher Budd, a Principal at STUDIOS Architecture, “understands that the limitations facing educators today include ever-expanding curriculum expectations, restrictive standards and declining institutional resources” (Budd, 2011, pg. xi). Even so, interior design educators are tasked with fostering the right combination of traits in their design students. Budd also states that “cultivating the ideal design student means balancing the largely prescriptive, vocationally skill-based criteria that act as a checklist of hirable traits and re-emphasizing the ability to think creatively and enhance visual awareness” (2011, pg. v). Phil Bulone, IIDA, Dean of Education for the International Academy of Design & Technology in Tampa, Florida, quoted in an article by Landry (2010), stated that “like design, knowledge is dynamic rather than static. So it’s natural for design education to respond to industry changes... Change is an inherent part of the field of design” (2010, p. 22).

This chapter presents the foundation for such research beginning with a brief history of interior design, its evolution as a profession, followed by the definition of interior design. The current state of the interior design profession will be presented, in addition to an outline of the present standing of interior designers in relation to architects and other allied design professionals. The educational standards set forth by the Council for Interior Design Accreditation will also be reviewed. This chapter will explore design education today and examine the perceived strengths and weakness of a ‘typical’ entry-level design candidate. Further, a review of previous assessments, research, surveys, documents and articles regarding the entry-level design professional in relation to education, experience and preparedness for practice will be conveyed.

**Interior Design – A History**

Interior design is an emergent profession, though the complementary occupation of interior decoration has been around since the late 1800’s. Previously, architects were responsible for the building structure, the exterior and the interior of both residential and commercial construction. As the focus of architecture grew to emphasize structure and the exterior envelope of buildings, interior decoration and interior design were born. Though similar, there are marked differences between the interior design profession and interior decoration (NCIDQ, n.d.).
Prior to the 20th century, society relied upon the expertise of architects and skilled craftsmen for the decoration of interior spaces. Prominent architects and artisans such as Thomas Jefferson, William Morris and Duncan Phyfe practiced interior decoration throughout their careers; however, it wasn't until the early 1900’s that the concept of interior decoration as a profession was evidenced.

Elsie deWolfe is credited as being the first interior decorator. In 1905, deWolf obtained her first commission as an interior decorator for the design of the Colony Club in New York City. Anne Massey writes, “This was the first public interior space to be designed by a professional interior decorator, rather than by an architect or antique dealer” (1990, p. 128). Deemed a success, she was able to secure additional commissions. DeWolfe also penned the first genuine book on interior decoration entitled *The House in Good Taste* (1913). Her achievements as a decorator encouraged women at that time to also seek entry into the profession.

Following World War I, the United States experienced a changed social and economic landscape. Interior decoration, a service previously limited to the upper class, became more attainable to the average person. Post war prosperity began to spread into the middle class, increasing both the interest in and opportunity for interior decoration as a possible occupation for women (Piotrowski, 1994). Though the military front had been centered in Europe, the conflict involved all of the world’s great powers, including the U. S. In turn, there was a serious shortage of able-bodied men, and women were required to take on many of the traditional male roles (Bryant, 2002). This led to a new view of what a woman was capable of doing. Many women, motivated by the ‘suffragette’ movement in America, struggled to gain financial independence from their husbands and fathers. Interior decoration, now considered an acceptable profession for women, became a viable option (Massey, 1990). Massey (1990) summarized the situation with the quote:

> Decorators are chiefly responsible for selecting suitable textiles, floor- and wall-coverings, furniture, lighting and an overall color-scheme for rooms which may already contain some of these elements. The interior decorator is rarely responsible for structural alterations which are the preserve of the architect (p. 124).

Department stores, furniture and appliance manufacturers and associated businesses altered their marketing strategies and began targeting women as they were the primary purchaser for home-related goods (Piotrowski, 1994). Even so, men dominated the interior design of commercial spaces through the 1920’s. Dorothy Draper (1889-1969) is credited as being the first woman interior decorator that specialized in commercial interiors (Tate and Smith, 1986). Draper, considered one of the pioneers for the profession, was untrained and had little or no formal education. Despite the fact that the New York School of Applied and Fine Arts, now known as Parsons School of Design, began offering courses in interior decoration as early as 1904, formal training was still difficult to obtain.
Interior decoration grew to be recognized as an official profession in the 1930’s as colleges and universities started to offer courses in interior decoration. Additionally, decorator clubs began to organize in larger towns and cities across the country. Massey (1990) states that “a new generation entered the profession in the 1930’s with more formal training in design and a more business-like approach” (1990, p. 141).

It was the economic depression of the 1930’s that prompted the development of the first countrywide professional organization for interior decoration (Piotrowski, 1994). Americans across the country felt the pain of the depression and only the elite appeared to be immune to its affects. The design-related industries were also hit hard, more specifically, the furniture industry. Though decorators could still purchase products from Europe for their wealthy clients; the American companies suffered as the middle class represented little or no business at all. Many furniture manufacturers were on the verge of shutting down. In response, the leaders of the Grand Rapids manufacturing center, in partnership with William R. Moore, devised a plan to attract decorators, nationwide, to the first Grand Rapids furniture show. The plan was a success. In July of 1931, the first national professional organization was formed. The American Institute of Interior Decorators (AIID) was founded and William R. Moore was elected as the first national President. In 1936, AIID underwent a name change to the American Institute of Decorators (AID). Moore and the AIID delegates developed requirements for membership early on. This movement, requiring education, training and work experience for membership, has remained a standard for professional design organizations ever since and has continuously advanced over time.

The rise in status of the interior decorator was halted for a time after the Second World War by shortages, and then aided by the emergence of the new profession of ‘interior design’. Entrants to the profession would now “rely on educational preparation rather than just having “good taste” in order to gain jobs and commissions” (Piotrowski, 1994, pg. 5). Gradually, non-residential design grew to be a significant part of the profession.

The United States underwent a transformation after World War II as industrialism and new manufacturing techniques affected product and furniture designs. Innovative construction methods were developed that changed the landscape of interior environments; the greatest impact took place in commercial spaces. Curtain walls, suspended ceiling systems and the open office floor plan had a tremendous effect on the interior design profession. In the 1950’s, modular furniture replaced interior partitions as dividers between functional spaces. “New specialists in space planning, lighting design, acoustics, and so forth, became part of the profession. These new design concepts created tension and arguments over admission and educational requirements for interior designers. A debate even ensued over the terms decorator versus designer” (Piotrowski, 1994, p. 6). NCIDQ (n. d.) sums up the debate with the following quote:

Many people use the terms "interior design" and "interior decorating" interchangeably, but these professions differ in critical ways… Interior design is the art and science of understanding people’s behavior to create functional spaces within a building. Decoration
is the furnishing or adorning of a space with fashionable or beautiful things. In short, interior designers may decorate, but decorators do not design.

In 1957, the American Institute for Decorators (AID) membership split and the National Society for Interior Designers (NSID) was created. Disagreements between qualifications, requirements and testing brought on the division. Then, in 1961, AID became the American Institute of Interior Designers. In 1975, the two organizations came full circle and joined to create one large national organization, the American Society of Interior Designers (ASID). ASID is currently the oldest and largest professional organization for interior designers. A number of other professional organizations that represent interior design have developed over the years. One such organization is the International Interior Design Association (IIDA). Founded in 1994, IIDA is the result of a merger of the Institute of Business Designers (IBD), the International Society of Interior Designers (ISID), and the Council of Federal Interior Designers (CFID).

Interior decorators and designers alike have long debated the qualifications required in order to practice; these disagreements continue today. It was not until 1974 that the National Council for Interior Design Qualification (NCIDQ) was established to create a common examination. Passage of the NCIDQ examination assists in identifying professionals that have the knowledge and experience to practice interior design (NCIDQ, n. d.). A professional interior designer is qualified by education, experience and examination to enhance the function, safety and quality of interior spaces (ASID, n. d.). In order to be eligible to apply to earn the NCIDQ certificate, a designer must have a minimum of six years of combined college-level interior design education and interior design work experience. Presently, work experience must be performed under a NCIDQ certified interior designer or a registered and/or licensed interior designer or architect. As of spring 2013, interior design graduates, regardless of work experience, can now take the first section of the multiple choice exam right after graduation. The content of this portion of the exam, called the Interior Design Fundamentals Exam (IDFX), has been reorganized so that it encompasses content that should have been learned in school. By making this change, NCIDQ will be able to establish and maintain contact with exam candidates. Once students have completed the IDFX and required work experience, they may apply to take the remaining two sections of the NCIDQ exam. Those two sections are the Interior Design Professional Exam (IDPX) and the Practicum Exam (PRAC) (NCIDQ, n. d.).

As more and more colleges and universities began offering courses in interior design and decoration, the number of faculty in design education also grew. In 1963, the Interior Design Educators Council (IDEC) was founded with the stated purpose to be “dedicated to the development and improvement of interior design education,” to establish and strengthen "lines of communication between individuals, educational institutions and organizations concerned with interior design," and to strive "to improve teaching of interior design, and through it the professional level of interior design" (IDEC, 2011). The mission of IDEC “is the advancement of interior design education, scholarship and service” (IDEC, 2011). IDEC strives to be recognized as the leading association and authority on interior design education (IDEC, 2011).
The constant expansion of interior design programs in higher education raised concerns within the profession (Piotrowski, 1994). Though it was proof positive that the profession was continuously growing in popularity and demand, there were no guidelines for curriculum. Coursework varied from program to program. In 1970, IDEC, AID and NSID worked together and formed the Foundation for Interior Design Education and Research (FIDER). FIDER was established to set the standards for excellence in interior design education. In 2006, FIDER underwent a name change and is presently known as the Council for Interior Design Accreditation (CIDA). CIDA has evaluated hundreds of interior design programs at colleges and universities throughout the United States to ensure that students are receiving a quality education at the highest level. Today, CIDA standards are generally accepted as the most significant measure of the quality of an interior design education.

Over the years, regulations, building codes, laws, technologies and advancements have altered the way in which interior design and architecture are practiced. Building codes and more stringent fire codes have been signed into law in the name of public safety. The evolution of the office environment in regards to computers and technology, the introduction of modular systems furniture, task lighting and ergonomics has given cause to rethink solutions for the workplace. The Americans with Disabilities Act (ADA) was introduced and passed in 1992. The aging population has prompted the consideration of universal design solutions to enable people to participate in and contribute to society for an extended period of time. Sustainability and energy efficiency have grown in importance as well as interior environmental and health factors. Increased costs have strained budgets and the volatility of today's economic conditions has stressed the United States and the world. Today's design professional cannot rely on 'good taste' alone (Massey, 1990). It appears to be essential that interior designers have the proper knowledge and experience in order to practice.

Interior design first became legally recognized as a profession in 1973 with the introduction of the practice and title acts in Puerto Rico. Alabama followed in 1982 and became the first state with title registration legislation for interior design. In 2013, there are 27 U.S. states and jurisdictions with some form of interior design legislation, whether it is a title act, practice act or both. Colorado currently has a permitting statute on the books. In addition to that, there are eight Canadian provinces with either, or both, title and practice act laws.

**Interior Design – Defined**

"Interior Design is the creation of environments that sustain and support human beings (to live) to the highest of their capabilities" (Globus, 2010, p. 5).

As previously stated, interior design is an emergent profession. It is often confused with interior decoration. Though similar, there are marked differences between the two. It was in 1973 that Puerto Rico became the first U. S. territory and/or state to officially recognize interior design as a profession. Interior decoration, on the other hand, has been in existence since the late 1800’s. Both interior design
and interior decoration stem from architecture and have evolved into two separate and successful professions today.

"A professional interior designer is qualified by education, experience and examination to enhance the function, safety and quality of interior spaces" (ASID, n. d.). Professional interior designers combine critical and creative thinking, and knowledge of building codes, communication and technology, for the purposes of improving quality of life, increasing productivity and protecting the health, safety and welfare of those who occupy the spaces they design (ASID, n. d.). The definition of interior design, as created by the National Council for Interior Design Qualification along with members of the interior design community, reads:

Interior design is a multi-faceted profession in which creative and technical solutions are applied within a structure to achieve a built interior environment. These solutions are functional, enhance the quality of life and culture of the occupants and are aesthetically attractive. Designs are created in response to and coordinated with the building shell and acknowledge the physical location and social context of the project. Designs must adhere to code and regulatory requirements, and encourage the principles of environmental sustainability. The interior design process follows a systematic and coordinated methodology, including research, analysis and integration of knowledge into the creative process, whereby the needs and resources of the client are satisfied to produce an interior space that fulfills the project goals.

Interior design includes a scope of services performed by a professional design practitioner, qualified by means of education, experience and examination, to protect and enhance the health, life safety and welfare of the public. These services may include any or all of the following tasks:

• Research and analysis of the client's goals and requirements; and development of documents, drawings and diagrams that outline those needs
• Formulation of preliminary space plans and two and three dimensional design concept studies and sketches that integrate the client's program needs and are based on knowledge of the principles of interior design and theories of human behavior
• Confirmation that preliminary space plans and design concepts are safe, functional, aesthetically appropriate, and meet all public health, safety and welfare requirements, including code, accessibility, environmental, and sustainability guidelines
• Selection of colors, materials and finishes to appropriately convey the design concept and to meet socio-psychological, functional, maintenance, lifecycle performance, environmental, and safety requirements
• Selection and specification of furniture, fixtures, equipment and millwork, including layout drawings and detailed product description; and provision of
contract documentation to facilitate pricing, procurement and installation of furniture

• Provision of project management services, including preparation of project budgets and schedules

• Preparation of construction documents, consisting of plans, elevations, details and specifications, to illustrate non-structural and/or non-seismic partition layouts; power and communications locations; reflected ceiling plans and lighting designs; materials and finishes; and furniture layouts

• Preparation of construction documents to adhere to regional building and fire codes, municipal codes, and any other jurisdictional statutes, regulations and guidelines applicable to the interior space

• Coordination and collaboration with other allied design professionals who may be retained to provide consulting services, including but not limited to architects; structural, mechanical and electrical engineers, and various specialty consultants

• Confirmation that construction documents for non-structural and/or non-seismic construction are signed and sealed by the responsible interior designer, as applicable to jurisdictional requirements for filing with code enforcement officials

• Administration of contract documents, bids and negotiations as the client's agent

• Observation and reporting on the implementation of projects while in progress and upon completion, as a representative of and on behalf of the client; and conducting post-occupancy evaluation reports (NCIDQ, 2004).

There are several versions of the definition of interior design and many of them identify the fact that there are areas of interior design that can be considered interior decoration as the two separate, but similar occupations, have overlapping boundaries. This is also true of the boundaries between interior design and architecture. “It is widely accepted that interior design is a “child” of architecture and interior decoration – “parents” that have existed for centuries” (Martin, 2008, p. 10).

**Interior Design – Current State of the Profession**

“During the last few years, Interior Design has experienced a rapid evolution. From a focus on sustainability to an increased reliance on technology to a growing demand for enhanced professionalism, Interior Design continues to progress despite bleak economic forces that seemed primed to stunt such growth” (Landry, 2010, p. 22).

As stated earlier, interior design is an emergent profession surfacing independent of, though parallel to, both architecture and interior decoration. Now familiar with the history of the profession, its definition and the educational standards of design, the status of the profession today will be addressed.
It is clear that the economic collapse of 2008 changed the occupational outlook for graduating interior design students in the years immediately following. Prior to 2008, new construction was abundant. Renovations of existing buildings and interior spaces provided design professionals and associated trades with plentiful amounts of work and unlimited monies to be made. There did not appear to be an end in sight to the booming economy. As swiftly as the economy improved after the terrorist attacks on September 11th of 2001, it abruptly took a turn for the worse in 2008.

According to the Bureau of Labor Statistics, the unemployment rate for the United States in May of 2011 was 9.1% nationwide. That puts the number of unemployed persons at 13.9 million with a labor force at 153.7 million. The number of people working part time for financial reasons (occasionally described as involuntary part-time workers) was effectively unchanged in May [2011] at 8.5 million. Statistics indicate that these individuals were working part time largely for two reasons; first, because their hours had been cut back and second, because they were unable to find a full-time job (BLS, 2011). Employment in the construction industry has shown little or no movement on net since early 2010, after abruptly falling during the 2007-09 period. Regardless, unemployment within the construction industry was holding steady at 19.1 percent in May 2011.

According to the 2010-2011 edition of the Occupational Outlook Handbook, assembled by the United States Bureau of Labor Statistics, interior designers held about 71,700 jobs in 2008. Of those jobs, approximately 30 percent worked in specialized design service areas such as healthcare, residential or commercial design, lighting, kitchen and bath design, acoustics, ergonomics, sustainable design and so forth. Additionally, 14 percent of interior designers provided design services within the architecture and landscape architecture industries while 9 percent worked in furniture dealerships and home-furnishing stores. Furthermore, numerous interior designers performed freelance work while simultaneously employed somewhere else where the workload and salary are more stable.

On a more positive note, the 2010-11 Edition of the Occupational Outlook Handbook reported that employment of interior designers is expected to grow 19 percent from 2008 to 2018, faster than the average for all occupations. “An increasing interest in interior design and awareness of its benefits will increase demand for designers. As businesses realize the improvements that can be made to worker and customer satisfaction through good design, they will use interior designers to redesign their offices and stores” (BLS, 2011). Similar to businesses, the healthcare and hospitality industries along with residential clientele will follow suit in recognizing the value of good design as the aging population grows, technology continuously advances and homes require additions, repairs and renovations.

Though the outlook for future growth is positive, the competition will be plentiful as many creative and gifted individuals are drawn to the profession. In addition, design services are considered a luxury expense and are subject to fluctuations in the economy.
Interior Design Legislation

Legislation defines the laws and rules that are then enacted, enforced and regulated by a specified authority. Interior design legislation establishes minimum standards of qualification that must be met for a design professional to become registered in a state. The state of Florida is one such state that regulates the practice and title of interior designer. According to the Laws and Rules Booklet for the Board of Architecture and Interior Design (Chapter 481, Part I, Florida Statues Rule 61G1, Florida Administrative Code), the purpose of architecture and interior design regulation reads as follows:

“481.201 Purpose. -- The primary legislative purpose for enacting this part is to ensure that every architect practicing in this state meets minimum requirements for safe practice. It is the legislative intent that architects who fall below minimum competency or who otherwise present a danger to the public shall be prohibited from practicing in this state. The Legislature further finds that it is in the interest of the public to limit the practice of interior design to interior designers or architects who have the design education and training required by this part or to persons who are exempted from the provisions of this part.”

This same chapter also defines the meaning of interior design and calls out in the definition not only what interior design means, but also what interior design excludes:

“481.203 Definitions. – (8) “Interior design” means designs, consultation, studies, drawings, specifications, and administrations of design construction contracts relating to nonstructural interior elements of a building or a structure. “Interior design” includes, but is not limited to, reflected ceiling plans, space planning, furnishings, and the fabrication of nonstructural elements within and surrounding interior spaces of buildings. “Interior design” specifically excludes the design of or the responsibility for architectural and engineering work, except for specification of fixtures and their location within interior spaces. As used in this subsection, “architectural and engineering interior construction relating to the building systems” includes, but is not limited to, construction of structural, mechanical, plumbing, heating, air-conditioning, ventilating, electrical, or vertical transportation systems, or construction which materially affects the life safety systems pertaining to fire safety protection such as fire-rated protection of structural elements, smoke evacuation and compartmentalization, emergency ingress or egress systems, and emergency alarm systems.”

These established standards help to protect the health, safety and welfare of the public. “Professional registrations or licensure laws do not say who provides “good design” or “bad design.” This is a subjective decision that can only be made by a client. Instead, professional regulations set a minimum level of competencies required to safely practice a profession” (ASID, n. d. b.).

There are two types of legislation that regulates interior design and they are title acts and practice acts. A title act is regulated through a board and guarantees that only qualified interior designers use the
title (i.e. Registered Interior Designer, Licensed Interior Designer or Certified Interior Designer). Title acts do not prevent others from practicing interior design. This act only restricts the use of the title “registered” or “certified interior designer.” As long as the unlicensed individual does not use the regulated title, they are free to practice design as they see fit. A practice act, on the other hand, is the most restrictive type of professional regulation in that it prohibits unlicensed persons from providing commercial, or contract, interior design services. Practice acts require that interior design services be provided by a licensed professional with no exceptions.

The map below, retrieved from the International Interior Design Association website (www.iida.org), indicated where interior design is regulated and where it is not.

![Map of Interior Design Laws of North America](image)

**Figure 1.1:** States with interior design legislation in place or pending (IIDA, 2011).

Presently, there are 27 U.S. states and jurisdictions with some form of interior design legislation, whether it is a title act, practice act or both. In addition, there are eight Canadian provinces with either, or both, title and practice act laws. The state of Colorado currently has a permitting statute on the books. "A permitting statute allows qualified interior designers to submit plans for permit within their specified scope
of service” (CIDC, n.d.). The regulation map also highlights states in which regulation has been introduced.

Legislation, in general, is enacted to protect the health, safety and welfare of the public. No one argues the importance of public safety; however, the debate over the merits of interior design legislation is far from over. Public misperceptions of the interior design profession exist, and are likely detrimental to the advancement of the interior design profession (Chaney, 2007). Globus (2010) highlights one aspect of the common misperceptions of the interior design profession with the following quote:

“Our Profession has grown beyond decorating, but unfortunately its representation has reinforced its perception as decoration. There are exceptions, but for the most part, interior design is captured in print, online and in awards as uninhabited beautiful spaces with little to no explanation of what issues were addressed in the design program and what outcomes resulted. Interior design is featured as fashion” (2010, p. 4).

Enrollment at Colleges and Universities

Though times have changed, so have individual habits, goals and decisions. While unemployment is exceptionally high, enrollment at colleges, universities and vocational institutes has risen (Rigg, 2010). Lincoln Riggs’ partially credits the rise in enrollment to the recent high school graduate who, when unable to find work, decides to further their education with the potential to find a better paying job when they graduate college. Rigg also attributes the rise in enrollment to the recently laid off worker who has chosen to learn new skills in order to advance in their previous career or to learn a new vocation (Rigg, 2010). Despite a poor economic outlook, college enrollment numbers are rising. Community colleges are seeing the greatest increase, followed by public colleges. Enrollment at private universities is steady or has increased slightly. Additional financial aid is making a college education more affordable to many students. Older workers who have been laid off and are currently jobless, now have more time to go back to school. They anticipate that a degree will help them earn more money and give them an advantage over other job applicants (Rigg, 2010). So how have interior design programs fared amidst the chaos? At the IDEC 2011 Annual Conference one such analysis took place; Cynthia Mohr led a discussion entitled Critical Issues: ID Enrollment Up or Down. The primary question of the conversation asked the participants how many (programs/educators) are experiencing a drop in enrollments. The majority of 40 attendees present in the room raised their hands (Kaup & Mohr, 2011). Discussion participants indicated that they have found that both parents and students have concerns regarding salary and job opportunities for interior design graduates. Others stated that community colleges are enrolling more students and that these students expect to eventually transfer to four year institutions. In turn, four year institutions are enrolling fewer freshmen. It is evident that the present state of the economy has begun to take its toll on interior design education; this similarly holds true for architecture (2011).
During the discussion, Mohr also inquired as to whether any programs had seen an increase in graduate school applications (Kaup & Mohr, 2011). It was noted that a few hands had risen. Those participants who had indicated such suggested that some students are returning to school from practice (possibly due to job loss). A portion of the graduate school applicants were existing undergraduate students wishing to continue school post receipt of their bachelor’s degree. Some students have an interest in teaching, some wish to do further research and others are delaying entry into the slow job market.

Interior designers, educators, students and related professionals have shared the impact of today’s economic realities. Some economists say that the worst is over, yet other economists tell us that the worst is yet to come. There is no telling which economist is right. According to the 2011-2012 edition of the Occupational Outlook Handbook, interior designers who either live in higher income areas or specialize in a unique area of design will have better job prospects (BLS, 2012). “Individuals with little or no formal training in interior design, as well as those lacking creativity and perseverance, will find it very difficult to establish and maintain a career in this occupation” (BLS, 2011).

**Interior Design – Allied Professionals**

“With society changing at an unparalleled rate, no one profession will have the answers. It takes all of the built environment professionals working and partnering together to protect the public” (Gote, 2010, p. 275).

In practice collaboration among interior designers, architects, engineers and other building professionals is fundamental” (Stone, 2008, p. 14). Denise Guerin, Ph.D., IIDA, ASID, FIDEC, Morse-Alumni Distinguished Professor at the University of Minnesota, in an interview with Jan Stone (2008), states:

“The design and built environment today is extremely complex, and the knowledge required to design and build today is far beyond what one or even two professions can handle. We must create integrated, interdisciplinary teams and they must start in schools” (p. 8).

Gote (2010) asks us to “remember that we first serve the public.” The public needs the services of credentialed professionals who have a working relationship with, understand the same vocabulary, and acknowledge the responsibilities of allied practices (Sawasy, 2009).

Both interior designers and architects have competed for projects within the interiors marketplace ever since the emergence of interior design as a profession in the 1930’s (Massey, 1990). According to the findings from an American Institute of Architects (AIA) firm survey, architects are “heavily invested in interiors” (Gurel & Potthoff, 2006, p. 219). This survey revealed that 84 percent of all AIA member firms offer both interior design and space planning services, an increase from 73 percent in 1996. A previous study completed by Joy Potthoff (1996) analyzed the importance of the interiors market for architects. The survey results revealed that interior design did indeed play a significant role within architecture firms.
as interior design was found to be the second most offered service after architecture. In fact, it was found that 91% of the firms in the study offered interior design services while 57% of these firms reported employing no interior design personnel (Potthoff, 1996). Potthoff’s survey results also revealed that several firm principals who were licensed architects had stated that they were fully qualified to perform interior design work and, in turn, did not require employing interior design staff. On top of the unfavorable economic conditions today, the interiors market is more competitive than ever with architects, interior designers, decorators and associated professionals all vying for a share; a piece of the now smaller pie.

Some architects and other design professionals oppose interior design practice regulation. Groups such as the American Institute of Architects (AIA), the National Council of Architectural Registration Boards (NCARB), the National Kitchen and Bath Association (NKBA), the Institute for Justice (IJ) and the Interior Design Protection Council (IDPC) disagree with the regulation of the interior design profession. Caren Martin (2010), an associate professor of interior design at the University of Minnesota, identifies the following three “forces” as against interior design regulation in her essay entitled Don’t Bother Me with the Facts:

1. Architectural organizations that claim interior design is contained within the practice of architecture;
2. Interior decoration and residential interior design entities that claim by regulating interior design, interior designers will be stripped of their livelihood; and
3. The Institute for Justice, which claims that no profession should be licensed, i.e., let the free market prevail, public beware (2010, p. 288).

Young (2010) discusses the need for the regulation of the interior design profession when she states that “Interior design practice is one of the last professions relating to the built environment to become a regulated profession, joining allied professions of architecture, engineering, landscape architecture, and construction, in a natural and logical evolution. As all these professions incorporate knowledge of many content areas, so does interior design” (2010, p. 264). Diane Gote (2010) states that “It takes all of the built-environment professionals working and partnering together to protect the public” (2010, p. 275).

**Interior Design – Educational Standards**

In order for a profession to be successful and to continuously be valued within the industry that it represents, standards need to be set at the root of the profession beginning with the education of future interior design professionals. One such organization does just that. As mentioned above, since its inception in 1970, The Council for Interior Design Accreditation (CIDA) has evaluated hundreds of interior design programs at colleges and universities throughout the United States to ensure that students are receiving a quality education at the highest level (Busch, 2008). Today, there are nearly 200 CIDA accredited programs. CIDA, formerly known as the Foundation for Interior Design Education and Research (FIDER), has set the standard for excellence in interior design education. By partnering with
educators, design professionals, and industry representatives, CIDA has been able to create a set of professional standards that colleges and universities can utilize and build upon when developing program curricula. Though a basis for curricula has been established, CIDA does encourage and support varied educational approaches. CIDA standards are generally accepted as the most significant measure of the quality of an interior design education. “CIDA-accredited programs assure the public that interior design education prepares students to be responsible, well-informed, skilled professionals who make beautiful, safe, and comfortable spaces that also respect the earth and its resources” (CIDA, 2011).

Standards for accrediting interior design programs are defined by CIDA Standards Committee consisting of educators, practitioners and associated professionals. The Standards Committee conducts an annual review to examine relevant issues and ascertain if, when and where there is a need for immediate revision as changes in the profession, and an expanding body of knowledge, continuously influence the practice of interior design. In addition, CIDA performs a major, more comprehensive, review of the standards every eight to ten years.

Programs that wish to obtain accreditation must first provide evidence that they are located within an institution that is itself accredited by the proper higher education authority in the institution’s country of origin. In the United States this is the U.S. Department of Education; in Canada, it is the provincial Ministry of Education. Additionally, the programs must prove that students will receive a minimum of a bachelor’s degree upon completion of the curricula. It is also mandatory that students receive no less than thirty credit hours of liberal arts and science course work in order to graduate. CIDA requires that programs have graduated at least two classes from the program prior to submitting an application. Additional information may be required from programs that offer coursework through ‘alternate methods’ such as distance learning, if they offer multiple degrees, or if it is located outside of the United States and Canada.

The professional standards currently outlined by CIDA are organized to reflect the continuously evolving components of design education that lay the groundwork for successful interior design practice. The 2011 standards are comprised of sixteen criterion divided into four sections:

Section I. Mission, Goals, and Curriculum. This standard describes the context and overarching purpose and intent of the program.

1. Mission, Goals, and Curriculum

Section II. Interior Design: Critical Thinking, Professional Values, and Processes. These standards describe the framework of interior design practice.

2. Global Perspective for Design
3. Human Behavior
4. Design Process
5. Collaboration
6. Communication
7. Professionalism and Business Practice
Section III. Interior Design: Core Design and Technical Knowledge. These standards describe historical, theoretical, and technical contents of interior design practice.

8. History
9. Space and Form
10. Color and Light
11. Furniture, Fixtures, Equipment, and Finish Materials
12. Environmental Systems and Controls
13. Interior Construction and Building Systems
14. Regulations

Section IV. Program Administration. These standards describe the institutional and program systems, structures, and resources that are fundamental to an effective higher education learning environment for interior design.

15. Assessment and Accountability
16. Support and Resources

(CIDA, 2011, p. 11-7)

A program must comply, or partially comply, with all sixteen standards in order to be accredited. A program can partially comply; however, they will be required to report progress towards improvement in the areas where deficiencies were observed. An on-site review may also be required to evaluate progress. A program will not be accredited if it does not meet the standard.

**Interior Design – Education Today**

How can interior designers be successful in today’s climate? What knowledge and expertise are necessary to not only sustain, but thrive within the design industry? With the reduced workloads throughout the field of design, how can the recent graduate secure an entry-level design position while competing with both peers and experienced design professionals? What can educators do to better prepare interior design students for the real world?

Meredith Landry’s (2010) article titled *The State of Interior Design Education* in IIDA’s Perspective magazine provides “an in-depth look at how Interior Design education has evolved — and continues to evolve—from the eyes of those who know best: educators, practitioners, HR managers and recent graduates” (2010, p. 20). Landry (2010) identifies education as the heart of the profession and asks if Interior Design programs at colleges and universities have shifted accordingly. Phil Bulone, IIDA, Dean of Education for the International Academy of Design & Technology in Tampa, Florida, quoted in an article by Landry (2010), believes design programs have shifted. He states:

Like design, knowledge is dynamic rather than static. So it’s natural for design education to respond to industry changes… “Change is an inherent part of the field of design,” he says. “For example, national Interior Design education standards have gone through
multiple major changes over the last four years alone in response to changes in the
industry” (2010, p. 22).

Also in response to Landry’s (2010) question, Jill Pable, Ph.D., Associate Professor of Interior
Design at Florida State University and 2009-2010 Interior Design Educators Council (IDEC)
President, states:

But the current state of Interior Design education is not simply molded by changes in the
profession. Educators should modify how they teach based on changes in the learner…
And today’s learner, she says, is vastly different from the one of only a few years ago
(2010, p. 22).

If change is an integral part of the design industry, then should not the education the students
receive inherently reflect those changes? Change is constant; it is vital that the process of how
‘knowledge’ is obtained not be dismissed, and instead honed.

“For many Interior Design students and recent graduates, times are undeniably tough.
Thanks to ugly economic realities, entry-level jobs and even internships aren’t easy to come by. And for those fortunate enough to find work as Interior Designers upon graduation, they’re expected to hit the ground running” (Bowles, 2010, p. 29).

Ross Foti wrote in his spring 2004 IIDA Perspective Magazine article entitled Best of Class that
“It’s no longer enough to leave school with drawing and drafting skills, architectural and design
knowledge, business and interpersonal skills — you need the expertise to function in a high-tech
workplace while incorporating humanistic sensibilities” (2004, p. 12).

Accredited programs develop their curriculum based upon the sixteen standards established by
CIDA. Though standards are in place, flexibility in approach, how the requirements are met and the
manner in which accreditation is achieved will vary between programs. Interior design programs may be
housed in several different academic areas. The three most common areas are fine arts, home
economics (or human ecology) and architecture. In turn, each program will have a different emphasis
because of the mission of the institution, the department and the focus of the faculty. CIDA accredited
programs suggest to students that the program meets the educational guidelines accepted and supported
by the interior design profession. Even so, there are numerous programs that are not CIDA accredited.

So just what does the recent interior design graduate experience between their final semester
and the start of their first entry-level design position? How did the job search and interview process go?
How prepared is the recent graduate now in the workplace? Once they started working, were they given
a mentor? Will they keep in touch with their college professors and report back on how they are doing? It
is simple; questions that are not asked will remain unanswered.
**The Entry-Level Interior Designer**

**Perceived strengths and weaknesses.** What are the perceived strengths and weaknesses of the typical entry-level interior design professional? It is fair to assume that these skills and attributes will differ as does the educational background of each individual.

Shaila Williams wrote an article titled *State of Education* that was published in the spring 2005 IIDA Perspective Magazine that summarized the then current status of interior design education. In the article, she referenced the research and survey led by Greenway Consulting and Counsel House Research that looked at the state of both interior design and architecture education. This study, conducted annually by Greenway since 1999 and then published in Design Intelligence, is unique. In short, Greenway polled design partners, managing principals and human resources directors to rate schools and identify the strengths and weaknesses of design education. The survey’s methodology “suggests that the true determinant of an education’s success lies with the professionals who hire the program’s graduates... Using post-graduate career performance as a “final analysis” of sorts, perceived strengths or weaknesses can then be traced back to their educational origins” (2005, p. 36). The results of the study suggests areas where interior design and architecture education have improved and where there is still room for improvement. Based on the findings of studies such as these and the anecdotal observations of various teachers and professionals who are directly involved in or affected by design education, Williams (2005) looked at some of the broad trends and conclusions regarding the current state of interior design education. Williams then presents design education with a final grade using terms such as *Works well with others*, *Shows Potential* and *Needs Improvement*. There are two primary categories: Most Improved and Room for Improvement. These categories are then compiled and given a Final Grade. Williams concluded her article with the following evaluation marks:

**Most improved.** *Works well with others.* One of interior design education’s biggest strides is in the area of multidisciplinary collaboration” (Williams, 2005, p. 38). This is good news. According to publisher James Cramer (2006), firms are increasingly engaging in an integrated practice where projects are designed, developed and executed by interactive teams comprised of numerous disciplines. “These teams openly share information and ideas within streamlined delivery protocols fueled by a single technology platform” (Hildebrandt, 2010, p. 426).

*Shows potential.* The recognition of interior design as a major mover and shaker in academia and beyond is something the industry has struggled to earn for many years” (Williams, 2005, p. 38). Despite the progress the interior design profession has made, it is evident that there is still much respect to earn. The Council for Interior Design Accreditation has played a large role in advancing the credibility of interior design. Today, there are nearly 200 programs that have been accredited by CIDA since it was founded in 1970.

*Better school supplies.* Technological advances continue to make their mark on nearly every professional industry, but the design industry in particular appears to be in the midst of a type of technological renaissance” (Williams, 2005, p. 38). Computer aided design (CAD) is still prevalent in the
industry; however, integrated technology platforms (IP), such as building information modeling (BIM) programs, are gaining momentum across all disciplines. Not only are design industry professionals using these new tools throughout the design process; their clients have now raised their expectations for the deliverables. End users want to see ‘what they are going to get’ before signing on the dotted line. Three-dimensional models, color renderings and walk-throughs make meeting those higher expectations a reality.

**Room for improvement.** Though there have been gains, there is always ‘room for improvement.’ Shaila Williams’s (2005) article suggests that design education be “more hands-on.” Yes, technology has enabled the design industry to work at a faster pace with impressive results; however, if not careful, much can be lost… Students are not entering the workforce lacking in computer skills. It is a concern that business skills, practical knowledge, detailing and sketching abilities will be absent from the entry-level candidates’ skill-set.

“Work better with others…” Our associated disciplines, while evoking interdisciplinary thought internally, often fail to collaborate to common advantage. Turf wars and boundary disputes get in the way of our moving design forward – seeking title protection and scope legislation, while with justification – run the risk of further encouraging that fragmentation and separation” (Williams, 2005, p. 40). “The design and built environment today is extremely complex, and the knowledge required to design and build today is far beyond what one or even two professions can handle… We must create integrated, interdisciplinary teams, and they must start in schools” (Guerin, 2010, p. 8).

“More homework. The effort to advance the reputation and quality of interior design education won’t be fully complete without significant expansion in the areas of research and scholarship” (Williams, 2005, p. 40). “A growing number of interior design stakeholders believe that increased levels of research will lead to an expanded and specialized body of knowledge, professional recognition, disciplinary status, and legitimization and sustainability of the profession. These individuals believe that research will enable the profession to become recognized as being evidence-based rather than art-based” (Karpan, 2005, p. v). Williams references the Design Intelligence 2005 report where the results suggest that research is growing at a tremendous rate at some colleges and universities. Greenway survey indicates that design faculty are publishing books and peer-reviewed articles every year. Even with the advances that have been made, the absence of research relevant to practice does little to convince practitioners of the importance of research and, thus deters them from participating in research. “The lack of research relevant to practice also makes it difficult for practitioners to convince clients that design solutions are evidence-based” (Karpan, 2005, p. 220). It appears that practitioners and educators “speak different languages” (White & Dickson, 1993). Karpan (2005) states that interior design practitioners tend to rely on their education, experience, intuition and consultants as primary sources of information. Interior design practice is a service industry in which the goal is to produce, in ways that are ethical, effective, and efficient for both clients and designers, context-specific, evidence-based, uniquely creative spatial solutions to meet both client and end user needs (Karpan, 2005). If this is true, then it is imperative that interior design students leave college, at a minimum, with a familiarity of the value of research, how to
research and to participate in future research as it can prove beneficial for the advancement of the profession and the industry as a whole.

**Final grade.** Williams (2005) suggests that, overall, design education appears to be moving forward in the right direction. Though opinions may vary on the actual degree of progress made within design education; Williams (2005) proposes that most in the industry would agree that there has indeed been progress. “The true test lies with the willingness and speed at which schools and firms agree to change – a challenge that historically has proven to be one of the biggest hurdles of all” (2005, 40).

**The role of internships.** Internships provide practical experience for students in their chosen profession. Not all colleges and universities require their students to participate in internships though many do. In 2006, Amy Robinson, a writer for McClatchy Tribune Business News, interviewed three college students who were participating in summer internships. From these interviews, she learned that college internship experiences have evolved and stated that, “it’s no longer just about getting coffee, running errands and making copies for the boss… summer interns are gaining real-world experience. Many of them are in college, but they are finding out it’s never too early to start looking for a job” (2006).

Internship experiences can vary as some providers offer full-time internships while others offer part-time internships. In addition, there are both paid and un-paid internships experiences available. Many students participate in internships for credit hours toward their degrees. One of the students interviewed by Robinson (2006) stated that, “[the internship] has been eye-opening. I’m dealing with real-world issues instead of reading a textbook. It’s been the best experience.” Robinson suggests that internships pay big for both students and businesses as professional knowledge and experience is valued in the workplace.

**Interior Design – What Do We Know?**

“With such strong outside forces influencing the way the interior design profession is evolving, shouldn’t we be more critically examining what knowledge… and type of educational model will best prepare entry-level interior designers to address the future needs of the profession” (White & Dickson, 2010)?

**Required competencies and attributes of entry-level design professionals.** In the past, interior design practitioners have been surveyed to find out what attributes, characteristics, competencies and skills are needed in a candidate when hiring for an entry-level position within their firm (Baker & Sondhi, 1989; Douthitt & Hasell, 1985; Hernecheck, Rettig & Sherman, 1983; Myers, 1982 & 1993). Results from these studies change over time, meaning that the competencies and required knowledge necessary for entry-level designers has changed as the profession, technology and markets have grown.

Baker and Sondi (1989) surveyed the top two-hundred interior design firms, as listed in the *Interior Design* magazine, to determine the education, competencies and attributes needed by individuals pursuing entry-level interior design positions. With a 48.5% questionnaire return rate, their study results indicated that top design firms stressed the importance of competencies involving the analytic process of
problemsolving as being the most important competency, followed narrowly by design concept, conceptualizing, design process and programming. These skills were all rated in the top twenty on a list of ninety-two competencies. Communication skills also ranked high. More specifically, oral communication skills were rated highest in this category, followed by writing skills, graphic techniques and presentation. The results of this study confirmed the findings of previous similar research (Douthitt & Hasell, 1985; Hernecheck, Rettig & Sherman, 1983). Per the findings, it is also important to include theory in the required knowledge base for entry-level design professionals as it was stated that “all solutions must be based on sound theories of design” (1989, p. 37). Competencies involving technical knowledge were ranked lower than theory, communication skills and design.

The Baker and Sondi (1989) survey statistics reveal that a 4-year degree is the minimum, or required level of education for an entry-level employee. Questionnaire answers show that the hiring criteria of the top two-hundred interior design firms is not solely based on the possession of a 4-year degree; instead, it is based mainly on a review of the portfolio followed by education. Personal qualities do play a role in the selection process, though traits were not emphasized in the study results. Nevertheless, the top-ranked attitudes and behaviors were ranked as follows: talent, communication, technical skills, appearance, enthusiasm, maturity and commitment (1989, p. 37).

Baker and Sondi (1989) also assessed the importance of NCIDQ certification and of interior design program accreditation in this study. Thirty-eight percent of the study participants indicated that NCIDQ certification held moderate to extremely important significance for retaining employment in their firms while 62% ranked it slightly to not at all important (Baker & Sondi, 1989). These percentages have risen since the 1983 Hernecheck study which revealed that only 29% of the respondents thought NCIDQ certification essential. Similarly weighted, the importance of CIDA accreditation rose from 48% in the 1983 Hernecheck study to 68% in Baker and Sondi’s 1989 survey. It is apparent that both NCIDQ certification and CIDA accreditation have gained significance and value within the design industry and, in turn, it’s importance for the employment of entry-level design professionals.

As a result of her research, Baker found that “reciprocal communication between the interior design industry and design education is essential for keeping educators apprised of the current needs of the industry, thus producing qualified graduates able to become employed by that industry. Closing the gap between competencies needed by the industry and competent graduates provided through the educational system will strengthen the entire profession” (Baker, I. J., 1989, p. 121).

Entry-level competency assessment – residential versus non-residential. Assessments have also been conducted regarding entry-level interior design competencies by comparing and contrasting survey results from residential and non-residential designers (Hines, Albanese, Akron & Garrison, 1994). Hines et al. sent questionnaires to 340 members of the Ohio North Chapter of the American Society of Interior Designers to “determine whether residential and non-residential designers differ in the ranking of the FIDER (now CIDA) knowledge categories and the specific competencies within each category” (1994, pg. 3). With a response rate of 40% and 137 usable replies, only those who
classified themselves as residential or non-residential designers were used for the purposes of the study. In the end, with those criteria, the sample size was reduced to a total of 71 with 29 residential designers and 42 non-residential designers included in the examination of the data. Results from this study reveal that there is a general agreement between residential and non-residential designers on the ranking of the previously FIDER (now CIDA) knowledge categories but significant differences on specific competencies (Hines et al., 1994). Differences were found in thirteen of the 59 competencies.

The differences were identified as such: Non-residential designers rated three-dimensional design, barrier-free accessibility, building codes and ordinances, life safety, fire safety, drafting with CAD, graphics and computer literacy as more important than did residential designers. Residential designers rated principles of design, ceramics, weaving, lighting design and application, and styles of furniture and accessories as significantly more important than did non-residential designers (Hines et al., 1994, p. 8). These differences provide insights for developing curricula that meet the needs of both residential and non-residential designers. The findings of the study show that programs that met the 1994 CIDA guidelines prepared students for entry-level positions in both residential and non-residential interior design at that time (Hines et al., 1994).

**Occupational expectations – students versus practitioners.** Studies have also been completed comparing the occupational expectations between interior design students for an entry-level design position with the occupational expectations of interior design practitioners (Lee & Hagerty, 1996). Lee and Hagerty conducted a survey of 140 interior design students at two universities to determine their occupational expectations for an entry-level design position. Sixty one students were from a FIDER (CIDA) accredited program and 79 were from a non-accredited program. Simultaneously, 82 design practitioners were sent the same questionnaire so that student expectations could be compared and contrasted with the expectations of interior design professionals. It is interesting to point out that there were little to no differences between the accredited program and non-accredited program study participant responses; therefore, the students were separated into two groupings consisting of upper division students (juniors and seniors) and lower divisions students (freshman and sophomores).

Lee and Hagerty (1996) advocate that if differences in expectations between employers and employees were minimized, productivity and turnover situations could be improved. Results of the study indicated that, in general, upper division students had more accurate occupational expectations of an entry-level designer position than did lower division students. However, upper division students drastically differed from interior design practitioners in their expectations in three categories including working conditions, general work type and business/management. An evaluation of the data showed that the lower division students expected that they would participate in more creative work as entry-level designers that did the upper division students. The data also indicated that the surveyed interior design practitioners agreed that the responsibilities of entry-level designers would also consist of general office work such as typing, filing, paper work and updating the resource library. In addition, interior design practitioners agreed that entry-level designers would have regular or fixed schedules rather than the
perceived flexible schedule where the working hours varied from day to day. Students and practitioners likewise disagreed in the business management category as students anticipated that they would be directly involved with managerial undertakings.

Seventy nine percent of students stated that they chose interior design for their major because they believe that “interior design is creative work that they would enjoy” (Lee and Hagerty, 1996, p. 8). It was also found that salary and prestige were not key concerns for interior design students when selecting their major, whereas both salary and prestige are typically key points of interest in other fields (Lee and Hagerty, 1996). Practitioners responded similarly with 62.2% stating that they too chose interior design as their career because it is “creative work that they enjoy.” The results of this study imply that both interior design students and practitioners enjoy their field of study and that they value the creative environment in which they work. All parties collectively concurred that licensing would boost the image of interior designers. Both student groups believe that licensing will lead to better pay while the responses from practitioners varied. In general, it was agreed that entry-level designers would perform the following tasks on a regular basis: hand drafting, updating resources, making presentation boards and space planning. While computer-aided design (CAD) programs are commonplace in the industry, hand drafting skills are still very important to have and to maintain.

Lee and Hagerty (1996) reference a study completed by Davis, Kanning, Peaslee, Davis and Lile (1992) that examined an aspect of occupational expectations of interior design students and found that 34% of interior design majors indicated they had transferred into interior design from other majors. When asked how certain they were about entering the interior design profession, 85% of the students indicated that they were “very certain” or “certain” about their decision (Lee and Haggerty, 1996). Additionally, a study completed by H. W. Coles (1983) reviewed and described the educational process that students go through in realizing their majors beginning as freshman, then sophomores and so on. Coles found that most students did not graduate with the majors they had envisioned for themselves early on. Instead, students entered majors based on stereotypes and with little or false information resulting in lost time, money and effort. These situations could be avoided “by presenting occupational expectations and fallacies in introductory courses. Students in all fields, including interior design, would benefit substantially from improved introduction to their chosen fields” (Lee and Hagerty, 1996, p. 5).

Lee and Hagerty (1996) propose that students who possess more realistic occupational expectations of an entry-level designer position may adapt more easily and with greater success to their entry-level position. To gain more realistic views on their future jobs, it is suggested that educators address these issues as part of the curriculum.

**Business and communication skills preparation.** Investigations on the role of business and communication skills in interior design curricula in relation to employment of graduates in the design profession have also been conducted by Tew (1992). She asked if students who have graduated from programs with business and communication coursework incorporated into their curricula have an edge when seeking employment over others who do not. Shannon Tew devised a questionnaire for her
research that was mailed to a total of 922 interior design graduates from 17 accredited programs across the United States. The survey targeted graduates from the years 1984-1986. The questionnaire was also mailed to 300 architecture graduates for comparison. The survey was divided into four sections covering Human Characteristics (personality), Education (type), Employment (history) and General (socio-demographic information). Tew received 245 usable responses from interior design graduates (26%) and 67 from architecture graduates (22%).

It was discovered that only 67% of the interior design graduates were employed in the interior design industry while architects reported a higher rate of employment in their field at 91%. Questionnaire answers indicated that interior design graduates that were currently employed within the industry perceived that they had received a greater degree of business-related education in their curriculum than those who were not practicing. The business-related areas identified were client and trade relations, technical writing, ability to sell oneself and finding employment. The architect group results differed in that the practicing architects felt that their programs did not concentrate as much on the surveyed business and communication skills. Though these findings are interesting, due to the small number of unemployed architects, an accurate comparison between the employed and unemployed in relation to business skills could not be made. In addition, it is essential to note that the results of a survey such as this may differ now as times have changed, the industry has evolved and the field of design-related professionals has grown. It is important to mention, however, that Tew (1992) found that “when graduates learned about a business and communication skill on the job, they were more likely to express a desire to have had more exposure to that skill in their undergraduate design curriculum” (1992, p. 56).

The findings of this study suggest that programs with curricula that focus on business skills are ultimately ineffective in aiding graduates to obtain employment and that business skills were still largely gained through employment. “Other test results showed that early work experiences were statistically significant in affecting graduates’ perceptions and expectations of the field of interior design” (Tew, 1992, p. 57). Co-ops and internships can provide students with real-world perspective and insight into professional practice. Business procedures and interactions can be learned through observation and application.

Identifying influences between design education and the profession. The Department of Interior Design at the University of Florida biannually surveys its alumni to determine the progress and professional growth of their program graduates. Survey and documentation of program graduates is required by CIDA in order for a program to maintain accredited status. It is assumed that the data collected from such survey will assist schools, educators and design practitioners in better understanding the continuing changes in professional practice and to improve curriculum.

According to a 1991 IDEC conference proceedings manuscript, the department faculty at the University of Florida designed a structured questionnaire that focused on specific job competency, licensure, professional affiliation, design certification (NCIDQ certification exam) and salary (Bono-Boyette, Hasell & Nielson, 1991). This particular survey was sent to 540 alumni via mail. One-hundred
and sixty six of them were completed and returned. Responses were received from alumni that had graduated as early at 1954 though a majority was received from alumni that had graduated after 1978. Eighty-one percent of the sample were females and 19 percent were males (Bono-Boyette et al., 1991). Survey results revealed that 26 percent of the University of Florida’s interior design graduates had a license or title registration in their current state of residence. Eighty-six percent were members of a design society and 29 percent had passed the NCIDQ exam. Employment-type varied though a majority of the respondents (51 percent) stated that they were working for an interior design firm, followed by 16.3 percent who had indicated that they were working in an architectural firm. Most of the graduates either practiced residential design (31 percent) or commercial design (76 percent). The primary job duties were identified as such: developing design concepts (46 percent), project management (41 percent), creation of construction documents (35 percent), work with product representatives (34 percent), write specifications (31.4 percent), marketing designs (29.6 percent), designing custom furniture (24.7 percent), construction supervision (23.5 percent), supervise installations (21.1 percent) and counsel clients (3.6 percent).

Findings suggest that earnings vary with experience, location, type of design practiced and status of employment (part-time versus full-time employment). Further review of the University of Florida alumni responses revealed that there was no correlation between passing the NCIDQ exam and the salary of the designer (Bono-Boyette et al., 1991). It is important to note however, that at the time of this survey, interior design legislation in Florida has just been introduced; therefore, the design industry and the public at large were not yet aware of the differences between licensed and unlicensed design professionals. As Bono-Boyette et al. affirm, “Since licensing procedures were just beginning when this survey was sent to our alumni, the results reported here are inconclusive” (1991, p. 64).

The assembled questionnaire became a tool that contributed to determining the common influences between design education and the profession. The University of Florida can track the progress of their alumni, compare and contrast the results with the curriculum and, in turn, alter their program accordingly to best accommodate the desired results. The Interior Design Department at the University of Florida proposes that the “findings from these surveys be shared in order that the successes and failures of their graduates can strengthen all of our programs” (1991, p. 60).

Career development. An investigation of the career paths and patterns of interior designers over a twenty-year period (between 1977 and 1997) was completed by Marina Veronica Lommerse in 1998. The objective of the study was to record major influences and trends in the career development of interior designers (Lommerse, 1998). The research questionnaire was sent to specific classes of graduates from three universities: the University of Manitoba in Winnipeg Canada (class of 1977), RMIT in Melbourne Australia (class of 1982) and Curtin University in Perth Australia (class of 1996). Mailed in May of 1997, Lommerse achieved a 44% response rate. The survey questions focused on the following: 1) A pattern in job changes and career changes, 2) Whether the patterns of job and career changes were through self-direction or external circumstances. Did individuals plan their careers or did
circumstances/chance play the primary role? 3) What factors played a role in the development of an individual’s career? Was timing of these factors significant to the development of an individual’s career (1998, p. 33)?

After analyzing the collected responses, Lommerse identified seventeen trends in career development and confirmed the importance of the first five years of a designer’s career as they are considered the ‘building blocks’ of an individual’s profession. It is suggested that career planning and the range of career paths be included in design education. Survey results led to the following listed trends in career development:

Trend 1: **Big Picture awareness was a critical influence** on career direction.

Trend 2: **Major growth was the reason for importance** of first five years, delivered by a good mainstream Interior Design firm.

Trend 3: **A special opportunity accelerated careers**, for example, a building boom or a world event.

Trend 4: **First job accepted primarily for work experience not “fit.”**

Trend 5: **Initial job periods getting shorter.**

Trend 6: **More contract hourly positions.**

Trend 7: **Job breadth given earlier in career.** (Broadening of roles beyond designer into project manager, marketer, manager, technical expert and so on.)

Trend 8: **Multiple careers.**

Trend 9: **Mentors have the biggest influence on an individual’s career** as these people or teams of people provided expansion of knowledge.

Trend 10: **Major career turning points occur** and include “opportunity knocks”, “forced change”, the design for growth, and a change in perspective/values.

Trend 11: **Relationships and geographic preferences are leading influences on career direction**, as these parameters establish starting points.

Trend 12: **Children and extended families are influences** on mature designers.

Trend 13: **Two or more breaks over career.** Designers tend to take two or more breaks of up to two years over their careers. Main reasons are: self-directed breaks for travel, mental health and re-thinking of career/life direction, or, for lifestyle decisions, to have a child or move to a new location; and lastly, breaks caused by unemployment.

Trend 14: **Graduate or double degrees became popular.**

Trend 15: **Short-duration, further education programs are the most popular.**

Trend 16: **Broad based continuing professional development (CPD) topics are popular in Canada.**

Trend 17: **Narrower focus CPD topics are popular in Australia** (1998, p. 54).
The questionnaire responses illustrate the changes that have taken place within the design profession and industry at large since the 1970’s. Lommerse (1998) concludes “that current graduates could benefit from better career preparation for the workforce, to take best advantage of their “building block” years; and that practicing designers could use assistance in assessing and redirecting their careers” (1998, p. 57).

The study demonstrated that the first five career years were significant to designers as they were exposed to issues and mentors, and obtained a foundation of skills that took them through their careers long-term (Lommerse, 1998). Major growth takes place in the workplace and often the boundaries of a designer’s role blur and expand into other areas beyond design and into project management, manager and marketing. It is suggested that “whole programs should not be focused around the reality of today’s workplace. Rather, in preparation for a job, graduates need a grounding in what happens in the workplace so they can adequately package their special capabilities for the market. Exposure to broader possibilities in the design field to enable choices based on greater knowledge. Also, information and encouragement should be available for positions related to interior design. Graduates need to be aware of other career options, particularly if they are initially unsuccessful at finding work as an interior designer” (Lommerse, 1998, p. 52). Lommerse (1998) also submits that interior designers stop apologizing for the degree (in reference to the identity crisis) and that it is in fact a management degree.

Summary. All of the studies highlighted above assessed the opinions of interior design practitioners in relation to the needed competencies, attributes and skills of entry-level interior design professionals. Interior designers have also been surveyed with regard to what business and communication skills are preferred for potential entry-level design position candidates. Students have even been surveyed for their opinions and expectations for their future occupation. No research, study or survey has been found during the literature review that focuses primarily on these issues from the perspective of the entry-level designer and/or recent interior design graduate. Research has revealed what practitioners are looking for in an ideal entry-level design candidate. Similarly, student and practitioner expectations for an entry-level design position have been compared and contrasted. Even so, the surface of the alternate view, that of the recent interior design graduate, has yet to be scratched.
CHAPTER THREE

METHODOLOGY

Introduction

As stated in chapter two, “the limitations facing educators today include ever-expanding curriculum expectations, restrictive standards and declining institutional resources” (Budd, 2011, p. xi). Even so, interior design educators have been tasked with fostering the right combination of traits in their design students. Budd (2011) also stated that “cultivating the ideal design student means balancing the largely prescriptive, vocationally skill-based criteria that act as a checklist of hirable traits and re-emphasizing the ability to think creatively and enhance visual awareness” (Budd, 2011, p. v).

Phil Bulone stated in IIDA’s Perspective magazine “Like design, knowledge is dynamic rather than static. So it’s natural for design education to respond to industry changes” (Landry, 2010, p. 22). In order to understand how well prepared recent interior design graduates are for the entry-level interior design positions, this study proposed a survey of recent graduates to determine their perception of their level of preparedness to practice. The results of this survey will inform educators and assist in closing the knowledge gap between education and practice.

Identification of the Problem

If change is an integral part of the design industry, then should not the education the students receive inherently reflect those changes? As change is constant; it is vital that the process of how knowledge is obtained continue to be channeled and honed. Gleaned from multiple discussions with several respected design educators across the United States, Michelle Bowles (2010) reminded readers that times have been tough for numerous interior design students and recent graduates who have searched for full-time employment. She gave credit to the ugly economic realities of the early twenty-first century for the lack of entry-level jobs and internships available. Nicole Johnson, Human Resources Manager for HOK in Atlanta stated that, “our challenge hasn’t been in finding talented emerging designers, but an inability to hire them because of the realities of the current project workload. It’s very disappointing” (Landry, 2010, p. 26). So, how can interior designers be successful in today’s climate? What knowledge and expertise are necessary to not only sustain, but thrive within the design industry? With the reduced workloads throughout the field of design, how can recent graduates secure entry-level design positions while competing with both peers and experienced design professionals? What can educators do to better prepare interior design students for the real world?

Outside the regular accreditation process performed by CIDA, how are interior design institutions determining the areas where they can and should improve? How can educators fill that void within the
current curricula if they are unaware of where the voids lie? There are hundreds, if not thousands, of recent interior design graduates currently in practice today that can provide insight if such an inquiry is posed. It is important that the perspective of the entry-level interior design professional be surveyed, documented and presented so as to further advance previous studies in relation to needed competencies, skills and attributes for entry-level design positions. The results of such a survey may prove to be beneficial to both interior design educators and students, as well as design professionals.

The studies highlighted in chapter two have assessed the opinions of interior design practitioners in relation to the needed competencies, attributes and skills of entry-level interior design professionals. Interior designers have also been surveyed in regards to the business and communication skills that are preferred for potential entry-level design position candidates. Students have even been surveyed for their opinions and expectations regarding their future occupation. No research, study or survey was found during the literature review that focused primarily on these issues from the perspective of the entry-level designer and/or recent interior design graduate. Research has revealed what practitioners are looking for in an ideal entry-level design candidate. Similarly, student and practitioner expectations for an entry-level design position have been compared and contrasted. Even so, the alternate view, that of the recent interior design graduate, had yet to be revealed.

**Purpose of the Study**

The interior design students in today’s classrooms are the design professionals who will lead the industry into the future. It would be mutually beneficial for educators, design professionals and the industry to know how well prepared recent graduates actually are for the workplace. The purpose of this study is to determine recent interior design graduate’s perceptions of their “preparedness to practice” by finding out “what they wish they knew” now that they are working in the design profession. This information and feedback from recent graduates can assist in enhancing interior design curricula.

**Research Questions**

**Primary Question**

How well do recent interior design graduates feel their CIDA accredited college interior design programs prepared them for professional practice and why?

**Secondary Questions**

1. What aspects of interior design education have proven to be the most valuable to recent interior design graduates now in the workplace?
2. Are there areas and/or skills that should be further emphasized in design education that would positively contribute to early professional achievement?
3. What qualities, knowledge and/or skill sets must design graduates generally possess in order to allow their careers to evolve over time as they transition to other areas of the profession?
4. Do students who have participated in internships and/or career shadowing feel more prepared for the profession? Are they hired more readily and are they more likely to get the position they want?

**Methodology**

The primary goal of this study was to find out if recent interior design graduates felt that they were prepared for their initial entry-level interior design position. In order to perform such research, a sample of recent interior design graduates was identified and surveyed to find out “what they wish they knew” now that they are working in the design profession. The typical survey candidate met the following criteria:

1. Recent interior design undergraduates and first professional graduate students (from the last five years, 2008 - 2012)
2. Must be a graduate from a CIDA accredited interior design program
3. Must currently be working as an interior design practitioner

The sample for this study was derived from the alumni lists of five regionally diverse CIDA accredited interior design programs in the United States. The accredited interior design programs that consented to participate in this research study provided contact lists of their recent graduates from the previous five years. Some programs offered this information via their respective alumni associations while others chose to send the survey via email on the researcher’s behalf. All survey participants have remained anonymous, as have the names of the universities. Survey results will be shared with each university in return for their participation and assistance with this research. The survey itself was distributed using Qualtrics and electronically mailed to all recent interior design graduates included in the contact lists provided by their participating alma maters. The electronically mailed survey was followed with reminders to the alumni to encourage the return of their surveys. All survey data was evaluated electronically via Qualtrics then compared and analyzed.

The CIDA knowledge areas and the definition of Interior Design, as defined by NCIDQ (2004), provided the basis for the way in which the survey was developed. The twenty knowledge areas and/or skills included in the survey were derived from these two sources in order to assist in determining the levels of preparedness of recent graduates for professional practice. These same knowledge areas and/or skills were then utilized to uncover their rated value in practice post-graduation.

In addition to the on-line survey, eight designers were interviewed for “deeper insight” into their survey responses. Telephone interviews were conducted with at least one graduate from each university, on a voluntary first come first serve basis. Interview participants were contacted via electronic mail to coordinate and schedule a suitable date and time for the conference. Each interview consisted of the same 12 questions regarding their professional practice experience (Refer to Appendix G). With
permission, the interviews were recorded using a telephone record coupler. Handwritten notes were taken as well. The combined results of the on-line survey and interviews were then analyzed and findings presented. Consequently, recommendations based upon the findings have also been made.

The process used to perform this study included a review of literature, the development of instruments (survey and interviews), Institutional Review Board approval, the selection of the sample, the gathering of the data, analysis, and the report of findings and recommendations.
CHAPTER FOUR

FINDINGS

Introduction

This chapter will present the results of a study that examined recent interior design graduate’s perceptions of their “preparedness to practice” by finding out “what they wish they knew” now that they are working in the design profession. The combined findings of the on-line survey and interviews will be presented with the intent of answering the research questions. The findings will be discussed in three different sections; the first section will include the presentation of the survey data, the second will summarize the key findings that emerged from the study and, lastly, the third section will present additional information and emergent themes.

Survey Results

The survey included closed and open-ended questions which were analyzed using descriptive statistics and qualitative methods. Survey questions were designed using multiple-choice and short answer questions as well as Likert scales. The researcher sent the survey via email to 764 interior design undergraduate and first professional graduate student alumni who had completed their degrees in the last five years. They were chosen from five regionally diverse CIDA accredited interior design programs. A total of 101 interior design alumni responded to the on-line survey.

The survey results will be presented using tables and figures. The findings will include the actual number of responses received in addition to the overall percentages. The results will be presented in the same order presented in the on-line survey.

1. (Question number one was an electronic consent to participate in the study, therefore no data was collected. One hundred and one participants offered their consent.)

2. Are you:

Table 4.1: Gender

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
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<tbody>
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</tr>
<tr>
<td>Female</td>
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</tr>
<tr>
<td>Total</td>
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</tbody>
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3. How old are you?

**Table 4.2: Age Group**

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<th>Response</th>
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</thead>
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<tr>
<td>20 - 29</td>
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<tr>
<td>50 - 59</td>
<td>2</td>
<td>2%</td>
</tr>
<tr>
<td>Over 60</td>
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</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>101</strong></td>
<td><strong>100%</strong></td>
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4. Number of years practicing interior design:

**Table 4.3: Years Practicing**

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<td>6</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>94</strong></td>
<td><strong>100%</strong></td>
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</table>
5. Are you NCIDQ certified?

**Table 4.4: NCIDQ Certification**

<table>
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<tr>
<td>No</td>
<td>85</td>
<td>93%</td>
</tr>
<tr>
<td>Total</td>
<td>91</td>
<td>100%</td>
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</table>

6. If no, do you plan on taking the NCIDQ exam in the future:

**Table 4.5: NCIDQ Plans**

<table>
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<th>Response</th>
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<td>25</td>
<td>30%</td>
</tr>
<tr>
<td>Total</td>
<td>83</td>
<td>100%</td>
</tr>
</tbody>
</table>

7. Are you a registered, certified and/or licensed interior designer?

**Table 4.6: Professional Status**

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>5</td>
<td>6%</td>
</tr>
<tr>
<td>No</td>
<td>77</td>
<td>87%</td>
</tr>
<tr>
<td>My state/province/jurisdiction does not provide the option to be registered, certified and/or licensed to practice interior design.</td>
<td>7</td>
<td>8%</td>
</tr>
<tr>
<td>Total</td>
<td>89</td>
<td>100%</td>
</tr>
</tbody>
</table>
8. If no, do you plan on becoming registered, certified and/or licensed in the future?

Table 4.7: Professional Plans

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>57</td>
<td>76%</td>
</tr>
<tr>
<td>No</td>
<td>18</td>
<td>24%</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>100%</td>
</tr>
</tbody>
</table>

9. Which design organizations are you affiliated with? (Select all that apply.)

Table 4.8: Design Organization Affiliations

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIDA (International Interior Design Association)</td>
<td>34</td>
<td>52%</td>
</tr>
<tr>
<td>USGBC (United States Green Building Council)</td>
<td>25</td>
<td>38%</td>
</tr>
<tr>
<td>ASID (American Society of Interior Designers)</td>
<td>25</td>
<td>38%</td>
</tr>
<tr>
<td>AIA (American Institute of Architects)</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>EDRA (Environmental Design Research Association)</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>IDEC (Interior Design Educators Council)</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td>IDC (Interior Designers of Canada)</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other (Specify)</td>
<td>11</td>
<td>17%</td>
</tr>
</tbody>
</table>

Table 4.9: Additional Design Organization Affiliations

<table>
<thead>
<tr>
<th>Other (Specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women in Design Kansas City</td>
</tr>
<tr>
<td>IESNA (Illuminating Engineering Society of North America)</td>
</tr>
<tr>
<td>NEWH (Network of Executive Women in Hospitality)</td>
</tr>
<tr>
<td>EDAC (Evidence Based Design Accreditation and Certification)</td>
</tr>
<tr>
<td>IALD (International Association of Lighting Designers)</td>
</tr>
<tr>
<td>Maine Interior Design Association</td>
</tr>
</tbody>
</table>
10. What computer aided design programs and presentation software training were included in your design degree curriculum? (Select all that apply.)

**Table 4.10: Computer Programs and Software Training**

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>AutoCAD</td>
<td>87</td>
<td>99%</td>
</tr>
<tr>
<td>SketchUp</td>
<td>59</td>
<td>67%</td>
</tr>
<tr>
<td>Photoshop</td>
<td>52</td>
<td>59%</td>
</tr>
<tr>
<td>PowerPoint</td>
<td>46</td>
<td>52%</td>
</tr>
<tr>
<td>Revit Architecture</td>
<td>36</td>
<td>41%</td>
</tr>
<tr>
<td>InDesign</td>
<td>36</td>
<td>41%</td>
</tr>
<tr>
<td>3DS Max</td>
<td>29</td>
<td>33%</td>
</tr>
<tr>
<td>ArchiCAD</td>
<td>1</td>
<td>1%</td>
</tr>
<tr>
<td>Other (Specify)</td>
<td>5</td>
<td>6%</td>
</tr>
</tbody>
</table>

**Table 4.11: Additional Computer Programs and Software Training**

<table>
<thead>
<tr>
<th>Other (Specify)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Illustrator</td>
<td></td>
</tr>
<tr>
<td>VIZ</td>
<td></td>
</tr>
</tbody>
</table>

11. What computer aided design programs do you use in professional practice?

**Table 4.12: Computer Programs Used in Professional Practice**

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>AutoCAD</td>
<td>60</td>
<td>73%</td>
</tr>
<tr>
<td>Photoshop</td>
<td>58</td>
<td>71%</td>
</tr>
<tr>
<td>PowerPoint</td>
<td>43</td>
<td>52%</td>
</tr>
<tr>
<td>InDesign</td>
<td>37</td>
<td>45%</td>
</tr>
<tr>
<td>Revit Architecture</td>
<td>35</td>
<td>43%</td>
</tr>
<tr>
<td>SketchUp</td>
<td>31</td>
<td>38%</td>
</tr>
</tbody>
</table>
### Table 4.12 - continued

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>3DS Max</td>
<td>7</td>
<td>9%</td>
</tr>
<tr>
<td>ArchiCAD</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Other (Specify)</td>
<td>25</td>
<td>30%</td>
</tr>
</tbody>
</table>

### Table 4.13: Additional Computer Programs Used in Professional Practice

<table>
<thead>
<tr>
<th>Other (Specify)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VectorWorks</td>
</tr>
<tr>
<td>Visual Impressions</td>
</tr>
<tr>
<td>MicroStation</td>
</tr>
<tr>
<td>Illustrator</td>
</tr>
<tr>
<td>Z-AXIS</td>
</tr>
<tr>
<td>Delta CAD</td>
</tr>
<tr>
<td>20/20 Technologies, Z-Axis, Illustrator</td>
</tr>
<tr>
<td>IceCAD, Ice, Z-Axis</td>
</tr>
<tr>
<td>Kerketheya</td>
</tr>
<tr>
<td>MicroStation, Excel</td>
</tr>
<tr>
<td>CAP, 20-20 Technologies</td>
</tr>
<tr>
<td>Corel Draw (like Illustrator)</td>
</tr>
<tr>
<td>VectorWorks, Visual Effects</td>
</tr>
</tbody>
</table>
12. What is your educational history? Please list your degree(s), date(s) of graduation and institution(s).

(Identifying data collected for question 12 will not be revealed as the names of the participants and their alma maters shall remain anonymous as promised. See Figure 4.1 for degree types included in the questions 12 responses.)

![Degree Types](image)

**Figure 4.1:** Educational History – Degree Types

13. What has been your practice experience in interior design or related areas (starting with the most recent)? Please list your position(s) and a brief statement of the type of projects you worked on for each position.

(The sixty-eight total open-ended responses to question number 13 were tallied and categorized into the eight categories shown in Figure 4.2. Many of the responses included multiple practice areas. See Appendix H to view the actual responses in their entirety.)
14. If you are not working in the field of interior design, what field are you in and why?

(The twenty-three total open-ended responses to question number 14 were tallied and listed in the categories shown in Figure 4.3. See Appendix H to view actual responses in their entirety.)
15. When you first started practicing, how well prepared did you feel to do the following:

Table 4.14: Preparedness

<table>
<thead>
<tr>
<th>Question</th>
<th>Total Responses</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formulation of preliminary space plans</td>
<td>70</td>
<td>1.79</td>
</tr>
<tr>
<td>Formulation of two and three dimensional design concept studies and sketches</td>
<td>70</td>
<td>1.90</td>
</tr>
<tr>
<td>Create space plans and design concepts that are safe, functional, aesthetically appropriate</td>
<td>70</td>
<td>1.90</td>
</tr>
<tr>
<td>Research and analyze client goals and requirements (programming)</td>
<td>71</td>
<td>2.17</td>
</tr>
</tbody>
</table>

Min Value: 1 (Very Well Prepared, Max Value: 5 (Poorly Prepared)
### Table 4.14 – continued

<table>
<thead>
<tr>
<th>Question</th>
<th>Total Responses</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selection of appropriate colors, materials and finishes</td>
<td>69</td>
<td>2.26</td>
</tr>
<tr>
<td>Encourage or include the principles of environmental sustainability into designs</td>
<td>70</td>
<td>2.50</td>
</tr>
<tr>
<td>Confirm that plans meet all public health, safety and welfare requirements (Including code, accessibility, environmental and sustainability guidelines)</td>
<td>70</td>
<td>2.53</td>
</tr>
<tr>
<td>Preparation of construction documents (consisting of plans, elevations, details and specifications, power and communication locations, reflected ceiling plans and lighting designs, material and finishes and furniture layouts)</td>
<td>70</td>
<td>2.57</td>
</tr>
<tr>
<td>Coordinate designs with existing conditions (building shell, physical locations and social context of the project)</td>
<td>70</td>
<td>2.60</td>
</tr>
<tr>
<td>Selection and specification of furniture, fixtures and equipment to facilitate pricing, procurement and installation</td>
<td>70</td>
<td>2.99</td>
</tr>
<tr>
<td>Preparation of construction documents to adhere to code and regulatory requirements</td>
<td>70</td>
<td>3.06</td>
</tr>
<tr>
<td>Selection and specification of millwork, including layout drawings and detailed descriptions</td>
<td>70</td>
<td>3.23</td>
</tr>
<tr>
<td>Project Management</td>
<td>70</td>
<td>3.31</td>
</tr>
<tr>
<td>Coordinate and collaborate with other allied design professionals (I.e. architects; structural, mechanical and electrical engineers, and various specialty consultants)</td>
<td>69</td>
<td>3.51</td>
</tr>
<tr>
<td>Conducting post-occupancy evaluation reports</td>
<td>70</td>
<td>3.74</td>
</tr>
<tr>
<td>Observing and reporting on the implementation of projects while in progress and upon completion</td>
<td>70</td>
<td>3.80</td>
</tr>
<tr>
<td>Preparation of project schedules</td>
<td>70</td>
<td>3.86</td>
</tr>
<tr>
<td>Contract Administration</td>
<td>69</td>
<td>4.01</td>
</tr>
<tr>
<td>Preparation of project budgets</td>
<td>70</td>
<td>4.14</td>
</tr>
<tr>
<td>Administration of contract documents, bids and negotiations on the client’s behalf</td>
<td>70</td>
<td>4.17</td>
</tr>
</tbody>
</table>

Min Value: 1 (Very Well Prepared, Max Value: 5 (Poorly Prepared)

16. Here are the same categories again – select ONLY the top five knowledge categories that have proven to be the most valuable to your success in professional practice thus far:
<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create space plans &amp; design concepts that are safe, functional, aesthetically appropriate</td>
<td>34</td>
<td>47%</td>
</tr>
<tr>
<td>Selection of appropriate colors, materials &amp; finishes</td>
<td>32</td>
<td>44%</td>
</tr>
<tr>
<td>Research &amp; analyze client goals &amp; requirements (programming)</td>
<td>31</td>
<td>42%</td>
</tr>
<tr>
<td>Formulation of preliminary space plans</td>
<td>31</td>
<td>42%</td>
</tr>
<tr>
<td>Formulation of two &amp; three dimensional design concept studies and sketches</td>
<td>30</td>
<td>41%</td>
</tr>
<tr>
<td>Coordinate and collaborate with other allied design professionals (i.e. architects; structural, mechanical &amp; electrical engineers, &amp; various specialty consultants)</td>
<td>23</td>
<td>32%</td>
</tr>
<tr>
<td>Coordinate designs with existing conditions (building shell, physical locations and social context of the project)</td>
<td>22</td>
<td>30%</td>
</tr>
<tr>
<td>Selection &amp; specification of furniture, fixtures &amp; equipment to facilitate pricing, procurement &amp; installation</td>
<td>22</td>
<td>30%</td>
</tr>
<tr>
<td>Preparation of construction documents (consisting of plans, elevations, details &amp; specifications, power &amp; communication locations, reflected ceiling plans &amp; lighting designs, material &amp; finishes, &amp; furniture layouts)</td>
<td>20</td>
<td>27%</td>
</tr>
<tr>
<td>Project Management</td>
<td>20</td>
<td>27%</td>
</tr>
<tr>
<td>Confirm that plans meet all public health, safety &amp; welfare requirements (Including code, accessibility, environmental and sustainability guidelines)</td>
<td>17</td>
<td>23%</td>
</tr>
<tr>
<td>Encourage or include the principles of environmental sustainability into designs</td>
<td>12</td>
<td>16%</td>
</tr>
<tr>
<td>Selection &amp; specification of millwork, including layout drawings &amp; detailed descriptions</td>
<td>10</td>
<td>14%</td>
</tr>
<tr>
<td>Preparation of project budgets</td>
<td>10</td>
<td>14%</td>
</tr>
<tr>
<td>Preparation of project schedules</td>
<td>9</td>
<td>12%</td>
</tr>
<tr>
<td>Preparation of construction documents to adhere to code and regulatory requirements</td>
<td>8</td>
<td>11%</td>
</tr>
<tr>
<td>Observing &amp; reporting on the implementation of projects while in progress &amp; upon completion</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Contract Administration</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Conducting post-occupancy evaluation reports</td>
<td>3</td>
<td>4%</td>
</tr>
<tr>
<td>Administration of contract documents, bids &amp; negotiations on the client’s behalf</td>
<td>1</td>
<td>1%</td>
</tr>
</tbody>
</table>
17. Did your degree program require an internship?

**Table 4.16: Internship Requirement**

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>48</td>
<td>66%</td>
</tr>
<tr>
<td>No</td>
<td>25</td>
<td>34%</td>
</tr>
<tr>
<td>Total</td>
<td>73</td>
<td>100%</td>
</tr>
</tbody>
</table>

18. Did you participate in an internship?

**Table 4.17: Internship Participation**

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>64</td>
<td>88%</td>
</tr>
<tr>
<td>No</td>
<td>9</td>
<td>12%</td>
</tr>
<tr>
<td>Total</td>
<td>73</td>
<td>100%</td>
</tr>
</tbody>
</table>

19. If yes, did you feel more prepared for professional practice as a result?

**Table 4.18: Perceived Value of Internships**

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>45</td>
<td>70%</td>
</tr>
<tr>
<td>Uncertain (Please provide any comments you wish on your internship experience - Optional)</td>
<td>13</td>
<td>20%</td>
</tr>
<tr>
<td>No</td>
<td>6</td>
<td>9%</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100%</td>
</tr>
</tbody>
</table>
Table 4.19: Perceived Value of Internships – Comments

<table>
<thead>
<tr>
<th>Uncertain (Please provide any comments you wish on your internship experience - Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have not obtained a job yet post internship so cannot tell yet how well it has prepared me.</td>
</tr>
<tr>
<td>My internship did not lead to a full time position. I wish I had used my time to my advantage by going to more networking and industry events with the designers in the office. I was in a sport in college and I spent too many hours doing that when I could have had more hours training to be a designer.</td>
</tr>
<tr>
<td>There are so many things that we need to know as designers. When first starting out, there is no way possible to know everything, but by being exposed to bid openings while in school (these usually happen monthly), given examples of contracts and learning an overview of responsibilities is beneficial. The management and budget portions will come with experience, but you have to have a solid knowledge of how the construction documents work together with consultant information.</td>
</tr>
<tr>
<td>The options in this town were limited as well as the jobs that the firms here get.</td>
</tr>
<tr>
<td>My specific Internship(s) was not that interesting, but I supplemented that with volunteer experiences.</td>
</tr>
<tr>
<td>Internship at the state historic preservation office</td>
</tr>
<tr>
<td>Since I left the area I didn’t make any helpful connections, which is how you get a job. I learned a lot though, so that may be helpful.</td>
</tr>
<tr>
<td>The program was very open to what internship we completed so mine was in a furniture retail store, which had very little to do with actual design.</td>
</tr>
</tbody>
</table>

20. If yes, was your internship experience full-time or part-time?

Table 4.20: Full-time and Part-time Internships

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time</td>
<td>16</td>
<td>25%</td>
</tr>
<tr>
<td>Part-time</td>
<td>48</td>
<td>75%</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100%</td>
</tr>
</tbody>
</table>
21. If yes, did your internship location hire you once your internship period was over?

Table 4.21: Internships Leading to Job Offers

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>23</td>
<td>36%</td>
</tr>
<tr>
<td>A job offer was made, but not accepted</td>
<td>6</td>
<td>9%</td>
</tr>
<tr>
<td>No</td>
<td>35</td>
<td>55%</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100%</td>
</tr>
</tbody>
</table>

22. If you answered no, did you feel less prepared for professional practice as a result of not having an internship?

Table 4.22: Perceived Preparedness without Internship Experience

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>3</td>
<td>33%</td>
</tr>
<tr>
<td>Uncertain</td>
<td>4</td>
<td>44%</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>22%</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>100%</td>
</tr>
</tbody>
</table>

23. Are there areas and/or skills that you believe should have been further emphasized in your design education that would positively contribute to your early professional development?

Table 4.23: Graduate’s Suggest That There Are Areas and/or Skills That Should Be Further Emphasized in Design Education

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>64</td>
<td>88%</td>
</tr>
<tr>
<td>No, enough is already covered in curriculum</td>
<td>9</td>
<td>12%</td>
</tr>
<tr>
<td>Total</td>
<td>73</td>
<td>100%</td>
</tr>
</tbody>
</table>
24. If there were areas or skills you wish were emphasized more, what would you recommend be further emphasized?

(The sixty-two total open-ended responses to question number 24 were tallied and divided into various categories. The top eight categories most often suggested, are shown in Figure 4.4. Additional areas and/or skills recommended to be further emphasized were also made. See Appendix H to view the actual responses in their entirety.)

![Top Areas and/or Skills to Further Emphasize](image)

**Figure 4.4:** Highest Rated Skills to Further Emphasize (n=62)

Other areas and/or skills recommended to be further emphasized in design education include: bids (8), client experience (7), proposals (6), field measurements (5), building relationships with vendors (4), furniture (4), programming (3), post-occupancy evaluations (2), residential design (2), marketing (2), quick sketching (2), branding and strategy (1), sustainable design (1), time management (1) and more individual projects versus team projects (1).
25. Is professional practice different from what you expected it to be?

Table 4.24: Professional Practice Expectations

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes (Please elaborate - Optional)</td>
<td>40</td>
<td>63%</td>
</tr>
<tr>
<td>No (Please elaborate - Optional)</td>
<td>24</td>
<td>38%</td>
</tr>
<tr>
<td>Total</td>
<td>64</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 4.25: Professional Practice Expectations – Respondents Who Answered “Yes”

Yes (Please elaborate - Optional)

Yes and no. It isn’t always glamorous like we think while in college. You may never see the space you are working on, but when you do its exciting. The programs you use are the tools that you need to get things built; this is how your design gets implemented. Conceptual is great, but you need to know how it works. By working in both Architecture and Interior Design it has allowed me to learn all aspects of the built environment thus far with a lot more to go!

Yes - I’ve worked in a large New York City corporate design firm and now and the senior designer at a small firm in Denver, CO. Both experiences are very different from each other. I interned at several places before I started graduate school to help me determine what type of company I wanted to go work for. Those included a home furnishing company (with in-store interior design services), an interior designer that worked by herself, and a larger corporate-style architecture and interior design firm that worked on commercial projects. I think it is beneficial for students to work/intern at as many types of companies as possible, so as to have a better understanding of what kind of job they want to pursue.

Yes, my first job I wish I knew more about the business side of design; my current job is similar to how school was.

Working on large-scale projects often means only working on one portion or phase of the project. In school, everything was small and we saw things from start to finish. That hasn't happened during my years working.

There is much more collaboration with vendors and much more outsourcing to other professionals than I expected.

There is a niche for every type of personality! Also, in the practice, there is more back-and-forth communication and help from other disciplines to complete a project. In school you get a daunting feeling that all detail and research rests on one person's shoulders.

There’s more paperwork and business involved than design.

Much more creative and fun.

Less of choosing finishes and making boards/pretty presentations like in school, more cranking out plans and ordering products quickly and accurately.

less money for projects, less pay, less time

Learning a lot of information while in school is great but was never really explained on how it would be applied as a professional.

lack of jobs and understanding of what we do and why it is important
Table 4.25 – continued

<table>
<thead>
<tr>
<th>Yes (Please elaborate - Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would have wished my unbiased ideas and solutions to be utilized a lot more than they were at the first firm. I grew a thick skin while at college, I wasn't however prepared for the saying &quot;thrown into the fire&quot; to become a reality so quickly into the infancy of my career. I'm overly thankful for the opportunity and experiences I've gained as a result. However, I wouldn’t have continued in this field had it not been for the amazing men and women I worked by while at my first firm. I was fortunate to work with some of the most talented people in the business. It is a lot more various tasks, spend more time working on specifications, working with contractors and purchasing than I do actually designing. Which makes the job a lot more interesting and enjoyable.</td>
</tr>
<tr>
<td>I thought I would be in the commercial industry not in residential.</td>
</tr>
<tr>
<td>I thought I would be an interior designer at an architecture firm but instead I’m a shop at home flooring sales associate.</td>
</tr>
<tr>
<td>It's a lot more fun than homework; and no one ever really talked about how you fix inevitable problems from installations. When we finished a studio project, it was done. In the real world, you have to fix unforeseen problems which can arise at any time.</td>
</tr>
<tr>
<td>I never expected to have to work so hard to make people get along and complete a project. Working with installers proved to be a nightmare and when I found to chance to do something else I did. I still dabble- but will never be licensed because I won't do more than minor consultations.</td>
</tr>
<tr>
<td>I have learned so much more getting to work on &quot;real-life&quot; projects then I did in school. It is faster paced and you must realize the affect that budget has on design; that is a major difference. Value engineering is a common practice here.</td>
</tr>
<tr>
<td>I feel able to personalize/customize my job description more than I expected, because I work in a very small, local practice. I am only given projects that I (and my mentor) agree that I excel in.</td>
</tr>
<tr>
<td>Every project has a life of its own and how you communicate can mean the life or death of the design.</td>
</tr>
<tr>
<td>And no. I love it and I think it is a really hard profession to prepare someone for.</td>
</tr>
<tr>
<td>A lot of details and Budgets, and Construction knowledge that I have no idea about.</td>
</tr>
<tr>
<td>Administrative duties are more time consuming than anticipated, as is self-marketing. Actual design work is miniscule.</td>
</tr>
</tbody>
</table>

Table 4.26: Professional Practice Expectations – Respondents Who Answered “No”

<table>
<thead>
<tr>
<th>No (Please elaborate - Optional)</th>
</tr>
</thead>
<tbody>
<tr>
<td>But I don't think that many people would succeed, needed more training and interaction with actual projects before a real job was found.</td>
</tr>
<tr>
<td>I selected a firm that aligned with my ideas for practice. My internship with this same firm also allowed me to have an understanding of what practice would be like.</td>
</tr>
<tr>
<td>I think the internship I took helped prepare me for what the professional practice is like.</td>
</tr>
</tbody>
</table>
No (Please elaborate - Optional)

My father works in construction, so I had a pretty good idea of what I was getting into when I started.

No, I was told throughout school by professionals that it is a lot of multi-tasking and that was true and more than fine. I think there is a lack of autonomy often times given to young design professional these days, which I think, if changed would only help make the profession more stable for the future, so that "all" of the people with experience don't retire together and that there is more ownership and interest in projects for young designers.

Only because my role as a residential designer has not changed- I went into education unexpectedly so have not worked in any other capacity than what was already familiar.

still in graduate school

26. What is your annual salary?

Table 4.27: Annual Salaries

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
</table>
| 0 - 20,000      | 14       | 20%
| 20,000 - 40,000 | 32       | 46%
| 40,000 - 60,000 | 18       | 26%
| 60,000 - 80,000 | 3        | 4%
| 80,000 - 100,000| 2        | 3%
| Over 100,000    | 0        | 0%
| Total           | 69       | 100%

27. Would you be willing to be interviewed to talk more about this subject?

Table 4.28: Volunteer-Rate for Phone Interview

<table>
<thead>
<tr>
<th>Answer</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
</table>
| Yes    | 31       | 44%
| No     | 40       | 56%
| Total  | 71       | 100%
Summary of Findings

This study examined recent interior design graduate’s perceptions of their “preparedness to practice” by finding out “what they wish they knew” now that they are working in the design profession. Findings presented here were gathered via an online survey and through telephone interviews.

The sample for this study consisted of recent interior design graduates in CIDA accredited programs who graduated between 2008 and 2012. The sample was derived from five geographically different CIDA accredited university’s alumni lists. Respondents completed a survey and follow-up interviews were conducted with eight designers.

Survey Participant Information

Of the 101 interior designers who took the online survey, 96% of them were female. A majority of the recent interior design graduates who took the survey were in their twenties (76%), while 20% were in their thirties and the remainder were either in their forties or fifties. Fifty-one percent of survey participants indicated that they had been practicing for one year, 19% for two years, 12% for three years, 6% for four years and 5% for five years. The remaining 6% indicated that they have been practicing for six years or more. Survey participants who indicated that they had been practicing for six-plus years were not able to continue with the survey as the sample identified for this survey had to meet the following criteria:

1. Must be a recent interior design undergraduate or first professional graduate student (from the last five years, 2008 - 2012)
2. Must be a graduate from a CIDA accredited interior design program
3. Must currently be working as an interior design practitioner

When asked if they were NCIDQ certified, 93% of the recent interior design graduates stated that they were not certified. This can be explained by their limited years of practice. However, it is worth noting that 70% indicated that they do plan on taking the NCIDQ exam in the future. Six percent of the survey participants identified themselves as registered, certified and/or licensed interior designers. Though a small percentage are registered, certified and/or licensed, 76% indicated that they plan on becoming registered, certified and/or licensed in the future. These results show that recent interior design graduates feel that NCIDQ certification is important and that there is value in obtaining certification and, potentially, becoming a registered and/or licensed interior design professional.

Key Findings

Preparedness for professional practice. The survey findings reveal that, in most cases, the knowledge areas shown to be the most valuable were also the areas graduates felt most prepared for upon graduation. Similarly, those areas listed as least valuable were also areas students felt less
prepared for. Overall, this indicates there is indeed a connection with skills students are most prepared to handle and those demanded of them in the workplace.

The findings from the on-line survey show that a majority of recent interior design graduates are in agreement on the “top five” knowledge categories and/or skills they felt most prepared to perform in professional practice after graduation. The top five knowledge categories and/or skills identified are:

1. Formulation of preliminary space plans
2. Formulation of two and three dimensional design concept studies and sketches
3. Creation of space plans and design concepts that are safe, functional and aesthetically appropriate
4. Research and analysis of client goals and requirements (programming)
5. Selection of appropriate colors, materials and finishes

Correspondingly, survey findings reveal agreement on the “bottom five” knowledge categories and/or skills. Beginning with those the respondents felt least prepared to perform, the categories and/or skills are as follows:

1. Administration of contract documents, bids and negotiations as the client’s agent
2. Preparation of project budgets
3. Contract Administration
4. Preparation of project schedules
5. Observing and reporting on the implementation of projects while in progress and upon completion

Study data also showed that there are knowledge areas where large variances were found between the rate level of importance and perceived preparedness. For example, the knowledge area with the greatest variance between value and preparedness is the coordination and collaboration with other allied design professionals (i.e. architects; structural, mechanical and electrical engineers, and various specialty consultants). Survey results indicated that a majority of recent interior design graduates did not feel very well prepared in this area when they first started practicing, while these same graduates rated this category as the sixth most valuable knowledge area. These findings signal a need for further emphasis in this area in design education.

**Most valuable knowledge areas and skills.** The results of this study show that, in general, the knowledge areas shown to be most valuable were also the areas graduates felt most prepared for upon graduation (although not in the same order). The five most valuable knowledge areas and skills identified, beginning with the most valuable, were:

1. Creation of space plans and design concepts that are safe, functional and aesthetically appropriate
2. Selection of appropriate colors, materials and finishes
3. Research and analysis of client goals and requirements (programming)
4. Formulation of preliminary space plans
5. Formulation of two and three dimensional design concept studies and sketches

Similarly, those areas listed as least valuable were also areas students felt less prepared for. Overall, this indicates that the skills recent interior design graduates are most prepared to handle correspond with those demanded of them in the workplace. The five knowledge areas and skills revealed to be the least valuable, beginning with the least valuable, were:

1. Administration of contract documents, bids and negotiations as the client’s agent
2. Conducting post-occupancy evaluation reports
3. Contract administration
4. Observing and reporting on the implementation of projects while in progress and upon completion
5. Preparation of construction documents to adhere to code and regulatory requirements

These findings suggest that recent interior design graduates value the knowledge areas and/or skills they use most in practice.

**Required qualities, knowledge and skills.** Findings from the eight telephone interviews with recent interior design graduates provided insight into the knowledge and skills recent graduates feel they must have for professional success. Computer software and technical skills was again one of the primary skill sets most often mentioned as being an imperative skill to have. The interviews revealed that recent grads are using various computer programs to produce construction documents, renderings and photo-realistic visuals throughout the design process and for presentations. This coincides with the survey results as computer software skills were also found to be the most highly recommended skill for further emphasis in design education.

Critical thinking skills and effective communication skills were also stated to be highly desirable abilities for recent graduates to possess. Included under the umbrella of “critical thinking and effective communication skills” is having the ability to analyze information, assess situations, find solutions to problems and make decisions. Recent graduates interviewed also stressed the importance of having good writing skills in addition to listening skills as these are integral components to being an effective communicator.

Those interviewed also touched on the importance of having the ability to do research and programming. Discussions with two interview participants specifically revealed the need for recent graduates to be able to perform research. They both reported that they conduct research in their current positions. In addition, these two recent graduates stated that they felt they had an “edge” over other applicants when going through the interview process because of their research experience. They also felt confident throughout the job search because they had evidence of research and programming from their college research. In fact, one of the recent graduates directly credits her programming knowledge to landing her first (and current) interior design position. She also added that programming is her primary responsibility.
The above mentioned qualities, knowledge and skill sets were deemed valuable by the recent interior design graduates who participated in the interviews and from survey data. Fresh in the minds of these entry-level interior design professionals, the need for and possession of these skills and attributes can prove to be advantageous. The interviews and survey data offer a unique insight into the perceptions of the entry-level interior design professional.

Knowledge areas and skills to further emphasize. Findings of this study show that a large majority of recent interior design graduates indicated that there are knowledge areas and skills that could be further emphasized in design education and most of them offered suggestions. The area most often suggested for further emphasis was the category of software programs. This category is broad and covers a variety of software programs and skills capabilities; however, the software most often mentioned in the survey was Revit. It is worth noting, that many interior design programs have added Revit to the curriculum in the last 3-5 years, which could mean some of these graduates may not have had the opportunity to take such a class before graduation. Recent interior design graduates also recommended that further emphasis be placed on the preparation of budgets, knowledge of construction documents, specifications and textiles, and project management. Graduates that were interviewed suggested that students learn how to create a budget, design to a budget and how to monitor a budget throughout the design process. With regard to construction documents, interview participants stressed that more emphasis should be placed on obtaining the ability to read and review documents, creating documents and coordinating the design with allied professionals (architects and engineers). It was also suggested that additional weight should be placed on written specifications for construction documents as this requires students to go beyond the basics, do research and have the ability to define, explain and/or defend the selections they make.

Value of internships. The results from this study show that a majority of recent interior design graduates who have participated in an internship feel more prepared for professional practice than those who did not. Additionally, nearly half of those graduates were given job offers at their internship location upon graduation. More than a third of recent graduates who did not participate in an internship indicated that they felt less prepared for practice. This again supports and reinforces the value of internships prior to graduation. Findings also indicate that students with practice experience and professional references are hired more quickly after graduation.

Telephone interview results complement the survey findings as all eight designers interviewed recommend that students participate in and internship before entering professional practice. In fact, several recent graduates said that their internship experiences helped them determine what type of design they wanted to practice after graduation. It was also suggested that students participate in multiple internships if possible and at different locations for variety in experience.

Limitations. There appears to be a relationship between the skills valued by new designers and their perceived preparedness in professional practice. Findings imply that recent interior design
graduates value the knowledge areas and/or skills they use most in practice. One of the limitations of this study is not knowing whether recent graduates are typically tasked with assignments that fit their level of preparedness until more experience is gained and their knowledgebase expands. Until then, their scope of work may be limited to their current skill set. These findings and preliminary hypotheses offer avenues for potential future research into skills preparedness and perceived value of these knowledge categories.

Additional Information

This final section of chapter four identifies and addresses the additional information and emergent themes that were found beyond the scope of the research questions. These supplemental findings were gleaned from survey results, open-ended responses and interviews. The information included in this section consists of five parts: 1) recommendations of knowledge areas and skills that have proven to be most beneficial to recent interior design graduates in professional practice, 2) the ratio of interior designers to other professionals on staff, 3) known reasons for being hired, 4) internship availability and 5) professional practice expectations.

Knowledge and Skills Proven Most Beneficial in Practice

The eight telephone interviews offered supplemental information to the on-line survey. In addition to the commonly mentioned knowledge category of computer software skills; recent interior design graduates felt they benefited most from having the ability to ascertain knowledge and information from as-built documents. Having the ability to read and review electrical, mechanical and structural documents is an imperative skill to have or to obtain. Also important is to be able to take criticism and using it to your advantage to become a better designer.

Number of Interior Designers on Staff

During the telephone interviews, recent interior design graduates were asked how many interior designers were on staff at their current places of employment. They were also asked what other related professionals their company employed and how many of each. The size of firms in which the interviewees practiced varied between large, small and medium size firms. One interviewee stated that she works independently and started her own business. Regardless of size, the ratio of interior designers to other professionals on staff proved interesting. For instance, Firm A has five design teams with a ratio of one interior designer to every four architects, one CAD manager and one engineer. Primarily an engineering company, Firm B has only two interior designers on a staff of an estimated 100 employees. Firm C is a large architecture practice with an estimated 300 architects on staff world-wide and 50 interior designers. Firm D is a small architecture firm of five employees including one architect, one draftsperson, one project manager, one business manager and one interior designer. Firm E, primarily an interior design firm, has seven interior designers, one architect, four CAD operators and three administrators. Firm F, a commercial furniture dealership, has three interior designers on a staff of eight and Firm G has
two interior designers on a staff of ten, including four architects. Finally, Firm H is a private practice with one employee, where the owner is the interior designer.

**Known Reasons for Being Hired**

During the interviews, graduates were asked if they knew the primary reason they had been hired. One graduate said, without hesitation, that she knew that she had been hired because of her previous internship experience and great references. Another graduate also credited her internship experience to landing her first job. Other reasons given included resume and leadership skills. Two recent graduates credited specific work experiences that enabled them to stand out when applying for jobs; those two skills were programming and experience working in facilities design. The graduate that had the facilities background said that her experience in facilities is considered non-traditional for interior designers and it brought added value to her repertoire. The graduate with programming experience explained that she had been hired because the firm where she had applied had a specific need for someone with that “specialized” skill for their design development work.

**Internship Availability**

Of the eight designers interviewed, all but one said that their company offers internships to interior design students. The one company that no longer offers internships explained that it was due to budget cuts they felt were necessary because of the new healthcare law, stating that by law they will have to pay for insurance for all employees and cannot employ any unpaid staff. Since their internships were unpaid, they would no longer be able to offer them. However, when looking at most other firms, internships were widely offered. A majority of internships were part-time, though from time to time, a student might elect to work full-time for one semester. When asked if their companies had ever hired an intern, all but one said yes. Most stated that interns are often hired because we know their strengths and we know that they are “good.”

**Practice Expectations**

Findings show that 63% of recent interior design graduates feel that professional practice is different from what they had expected it to be. Table 4.24 illustrates these percentages while Tables 4.25 and 4.26 include the optional open-ended responses provided by recent graduates. The open-ended responses highlighted the personal experiences behind their answers. It is interesting to see how the responses given by recent graduates also reflect the findings from other survey questions, specifically the survey findings regarding preparedness and the suggested knowledge areas and skills they feel should be further emphasized in design curricula.

The recent interior design graduates that indicated they had different expectations for professional practice suggested that there is a lot more paperwork and administrative duties involved in practice than they had anticipated. Several of these graduates also stated that there is a lot more
communication and collaboration with contractors, allied professionals and vendors than expected. Also mentioned were budgets and value engineering, in addition to the need for having greater construction knowledge. One graduate said, "It isn’t always glamorous like we think in college. You many never see the space you are working on [designing in school], but when you do it’s exciting.” Another graduate said, “[practice] is a lot more various tasks, [you] spend more time working on specifications, working with contractors and purchasing than actually designing which makes the job a lot more interesting and enjoyable.”

Recent graduates that felt their expectations for professional practice were met did not expand upon their answers as often. However, more than one graduate, that did elaborate, gave credit to their internship experiences as one of the reasons they felt more prepared for professional practice and said that it gave them a better idea of what it would be like. It is important to note that these responses are based upon varying professional experiences; even so, they offer insight into the early experiences and perceptions of recent interior design graduates.

In conclusion, these additional findings and emergent themes reveal aspects of this research that could be expanded in the future in order to gain more definitive information. For instance, it would be interesting to learn if there are indeed trends and/or similarities in the knowledge areas and skills that have proven to be most valuable to recent interior design graduates now in the workplace. More data and statistics could be found regarding the ratio of interior designers to other related professionals on staff in practice and perhaps the reasons why could be discovered. Further investigation into why recent interior design graduates feel they are hired, retained and/or let go could also prove to garner useful information. The availability, variety and value of internships can also be expanded upon in addition to the expectations of recent interior design graduates for professional practice. All of these “supplemental” findings, if researched further, could provide the interior design profession with valuable data that may be utilized in numerous ways.
CHAPTER FIVE

SUMMARY AND CONCLUSIONS

Introduction

This chapter provides an analysis of the findings found in chapter four, in addition to suggestions for future research and recommendations for interior design educators. Information is organized into three sections; the first section will report the findings as they relate to answering the research questions, the second section will make recommendations for interior design educators and the third will offer suggestions for further research.

Research Questions

The findings of the online survey, supplemented with information gathered from the phone interviews, will be presented with the intent of answering the research questions of this study. Discussion will begin with the presentation of findings related to the research sub-questions, followed by the overarching research question. Subsequently, additional information and emergent themes beyond the scope of the research questions will be identified and addressed in the final section of this chapter.

Secondary Questions

Secondary Question 1: What aspects of interior design education have proven to be the most valuable to recent interior design graduates now in the workplace?

Interestingly, in most cases, the knowledge areas shown to be most valuable were also the areas graduates felt most prepared for upon graduation. Similarly, those areas listed as least valuable were also areas students felt less prepared for. Overall, this indicates there is a good match with skills students are most prepared to handle and those demanded of them in the workplace.

Specifically, the findings from the survey indicated that 47% of interior design graduates felt that the creation of space plans and design concepts that are safe, functional and aesthetically appropriate is the most valued knowledge category to have in professional practice with 34 out of 73 total graduates responding as such. The second most valuable knowledge category, chosen by 44% of respondents, is the selection of appropriate colors, materials and finishes. The third and fourth most valuable aspects of interior design education, selected by 42% of interior design graduates, were research and analysis of client goals and requirements (programming) and the formulation of preliminary space plans. Following closely behind in fifth place, was the formulation of two and three dimensional design concept studies and sketches with 41% of graduates indicating as such. Table 4.15 illustrates the full responses to question
16 which show how graduates value the 20 listed knowledge categories. It is interesting to note that these top five most valuable knowledge categories were also revealed to be the skills graduates felt most prepared to perform in professional practice (although not in the same order). Refer to Table 4.14 to see an illustration of the knowledge categories and rated preparedness.

The knowledge category shown to be the least valuable was the administration of contract documents, bids and negotiations as the client’s agent. Ranked lowest, this same category was found to be the area that graduates felt the least prepared to execute in professional practice. Similarly, only 4% of interior design graduates felt that conducting post-occupancy evaluation reports and contract administration were highly valuable to them. In addition, only three graduates considered the observation of and reporting on the implementation of projects while in progress and upon completion to be valuable. The last knowledge category to complete the bottom five was the preparation of construction documents to adhere to code and regulatory requirements, with 8 total responses equaling 11% of graduates. It is interesting to note that three of the five least-valued knowledge categories were also found to be in the bottom five categories graduates felt the least prepared to do in practice. Those three knowledge areas are: 1) the administration of contract documents, bids and negotiations as the client’s agent, 2) contract administration and 3) the observation of and reporting on the implementation of projects while in progress and upon completion.

**Secondary Question 2:** Are there areas and/or skills that should be further emphasized in design education that would positively contribute to early professional achievement?

Findings from the survey show that 88% of recent interior design graduates indicated that there are knowledge areas and skills that could be further emphasized in design education. Sixty-two respondents offered suggestions on knowledge areas that should be further emphasized. These responses were categorized and combined into common themes. Figure 4.4 illustrates the eight categories most often suggested by recent grads. The knowledge area most frequently recommended for further study, mentioned by 18% of respondents, was more emphasis on software programs. The specific software programs recommended include: Revit (10), Photoshop (6), InDesign (5), Illustrator (3), Adobe Creative Suite (2), 3D Studio Max (2) and SketchUp (2). Others listed were CAP/CET Designer (1), Excel (1) and general computer rendering skills. The second knowledge area suggested for further emphasis was budgets at 16%. Several recent graduates stated in their open-ended responses that a greater emphasis on budgets, both creating a budget and designing to a budget, would be helpful for professional practice. More knowledge of construction documents was suggested by 13% of respondents followed by specifications and textiles (12%) and project management (12%).

Telephone interviews supplemented these findings and shed further light on areas that recent graduates feel need more focus in school. All of the interviewees agreed that there are areas and skills that should be further emphasized in design education to improve the readiness of recent graduates in the workplace. Every one of the eight graduates interviewed felt that software knowledge and skills are
necessary in order to obtain an interview and to secure a job offer. It was suggested that the software knowledge “category” not be limited to rendering programs, but also for the creation of construction documents and programming. Similarly, project planning, more specifically budgets, were frequently mentioned. One of the graduates interviewed stated that, “budgets are a primary component of the project in the design development and programming phases… the behind the scenes [work] is actually most of the job.” A second interviewee said, “[that] it would have been helpful to know how to prepare a budget, write a budget and how to monitor a budget throughout all phases of the design process through to completion.”

Construction documents also topped the list of skills to further emphasize in curricula. Three of the interviewed design graduates, in summary, said, “Students not only need to know how to read and review construction documents, but they also need to know how to create construction documents… [working in conjunction with]… electrical and mechanical engineers and other allied professionals.” Two interviewees proposed that the addition of written specifications for construction documents would be highly beneficial if added to interior design curricula. They suggested written specifications be incorporated into a construction documents class and that students learn how to edit master specifications and/or short form specs as required per the defined project requirements. Likewise, a greater emphasis in the area of textiles in particular was mentioned by one interviewee as she stated that, “it would have been helpful to have had more emphasis on textiles and textile applications for both furniture and finish specifications as it is a large percentage of our business and I struggle in this area.”

The fifth most recommended area to emphasize was project management. Four of the 8 interviewees mentioned project management as an area that should be further emphasized in design education. Project management encompasses several skills all into one primary responsibility, which is to act on behalf of the client as their representative throughout the design and construction process. One interviewee stated, “[that] students need to know how to critically think and analyze [situations].” This same interviewee also said, “[that] project management is about being a good communicator and that you need to be able to share knowledge, discuss ideas, provide solutions and make decisions [at times] on the fly.” Figure 4.4 illustrates the areas and/or skills recommended to be further emphasized. See Appendix H to view the open-ended responses to question 24 in their entirety.

**Secondary Question 3:** What qualities, knowledge and/or skill sets must design graduates generally possess in order to allow their careers to evolve over time as they transition to other areas of the profession?

Telephone interviews of eight recent interior design graduates assisted in clarifying those qualities, knowledge areas and skills they felt design graduates must generally have in order to do well in the profession. Of the 8 graduates interviewed, 6 said that computer software and technical skills was one of the primary skill sets that interior design graduates must possess for success in practice. Software skills include proficiency with AutoCAD, Revit and Adobe Suite. During an interview, one graduate
stated, “[that] these software programs are so highly valued because they are the tools most commonly used [today] to produce construction documents that include the details and information required to essentially construct the design.” This software is also strategic in the production of renderings and/or photo-realistic visuals used as a communication tool in presentations, for clients, contractors and other allied professionals as a way of conveying the proposed design and/or scope of work.

Critical thinking, in conjunction with effective communication skills, was often mentioned as one of the qualities and skill sets design graduates must possess for professional success. One interviewee insisted that “graduates must be able to analyze and assess a situation [a problem or design issue, etc.] to find a solution or to make a decision… all while keeping an open mind.” A second interviewee stated that, “design graduates must be able to communicate professionally [both verbally and in written form]” and that, “being a good writer is extremely important.” Good communication skills include having the ability to listen and understand or, as one graduate put it, “having the ability to filter through [everything] to find [the useful] information that you really need.”

Having the ability to engage in research and programming was also found to be highly desirable skill set. Two interview participants specifically acknowledged that research is in large part one of the ways they solve design-related problems, both existing and new, on a regular basis. One interviewee stated that, “knowing how to research is imperative to the design process.” Another recent graduate tied together research and programming when she discussed the procedures in place at the design firm where she works. She stated that, “before we even begin programming - surveying and interviewing our clients, we first do research and try to learn all we can about them so that we ask all the right questions… to get useful answers.” The respondent emphasized, the information gathered during the research and programming phases of the design process will affect the design and, in turn, the success (or failure) of the final outcome.

Three other knowledge areas and skill sets were also recommended by recent interior design graduates and they include: 1) the ability to work in groups, 2) knowing how to space plan and 3) knowledge of codes. Working in groups was specifically mentioned in relation to the collaboration with allied professionals such as architects, engineers, contractors and manufacturers. The importance of space planning has been mentioned and stressed several times earlier in this chapter, reinforcing its importance again. Finally, building codes were also highly emphasized with the Americans with Disabilities Act (ADA), fire code and egress codes being cited specifically.

Secondary Question 4: Do students who have participated in internships and/or career shadowing feel more prepared for the profession? Are they hired more readily and are they more likely to get the position they want?

Findings indicate that a majority of recent interior design graduates who had participated in an internship felt more prepared for professional practice than those who did not. In addition, many of those graduates were offered jobs at their internship location upon graduation. The fact that a large portion of
the graduates who did not participate in an internship felt less prepared for practice supports and reinforces the importance of internships prior to graduation. Findings also indicate that students with practice experience and professional references are hired more promptly post-graduation.

When asked if their interior design programs required an internship, 66% of respondents answered yes (Refer to Table 4.16.). Realizing that some students might participate in an internship even though it may not be a program requirement, survey findings show that 88% of all recent graduates did in fact participate in an internship. As a result, 70% of those who were interns felt that they were more prepared for professional practice, while only 9% indicated that they did not feel any more prepared for practice, and 20% were uncertain. Tables 4.18 and 4.19 illustrate the perceived value of internships. Thirty-three percent of those who did not participate in an internship indicated that they felt less prepared for professional practice as a result.

Findings show that 25% of internships were full-time and that a majority (75%) were part-time. Interestingly, it was also found that 36% of interns were offered a position once their internship period was over. An additional 9% indicated that their internship locations made them a job offer that they did not accept. Table 4.21 illustrates the percentages of internships leading to job offers.

The eight telephone interviews supplemented these findings. All eight interviewees participated in an internship and they all recommend that students partake in an internship before entering professional practice. Five of the 8 recent graduates that were interviewed were also hired by their internship locations upon graduation. When asked if they knew why they were hired, various reasons were given, though all stated yes. Some of the reasons given for why they felt they were hired include: 1) quote, “I was good and they knew what they were ‘getting,’” 2) my resume, 3) high grade point average, 4) leadership skills, 5) great references from previous internships, 6) programming experience, 7) quote, “I am a quick learner,” 8) work well in groups, and 9) the firm needed another full-time interior designer. One interviewee said that she had volunteered to work for free for three months and then was eventually given a contract.

It is also interesting to note that several recent graduates, when interviewed, advised that their internships also helped them determine what type of design they wanted to practice after graduation. One interviewee recommended that students participate in multiple internships if possible and at different locations for variety in experience. For example, an internship experience at a residential interior design firm can and will vary from an internship at a commercial furniture dealership or architecture firm and so on.

**Primary Question**

**Primary Question:** How well do recent interior design graduates feel their CIDA accredited college interior design programs prepared them for professional practice and why?

Findings have revealed that a majority of the recent interior design graduates, who responded to the on-line survey, are in agreement on the “top five” knowledge categories and/or skills they felt most
prepared to perform in professional practice immediately following graduation. Of the twenty knowledge
categories, survey participants indicated that the formulation of preliminary space plans and the creation
of two and three dimensional design concept studies and sketches were the two skill sets obtained while
in college that they felt most ready to use in professional practice. The creation of space plans and
design concepts that are safe, functional and aesthetically appropriate was the third highest-rated
knowledge category. The fourth ranked knowledge area was programming, and that was followed by the
selection of appropriate colors, materials and finishes in fifth.

Similarly, agreement on the “bottom five” knowledge categories and/or skills was found. Recent
interior design graduates felt the least prepared to act on behalf of the client, as their “agent,” during the
administration of contract documents, bids and negotiations. The preparation of project budgets and
contract administration were also revealed as areas where graduates felt they could have been better
equipped. Survey results show the preparation of project schedules was lacking in design program
curricula. Also in the bottom five was the implementation of projects while in progress and upon
completion.

Interestingly, in most cases, the knowledge areas shown to be most valuable in practice were
also the areas graduates felt most prepared for upon graduation. Similarly, those areas listed as least
valuable where also areas students felt less prepared for. Overall, this indicates there is a good match
with skills students are most prepared to handle and those demanded of them in the workplace.

In between the “top five” and “bottom five” knowledge areas and skills identified above, there are
ten additional knowledge categories and skill sets that were also rated. Figure 4.15 presents the full
rankings of these categories. Although there were consistencies in the bottom and top regarding
knowledge and skills learned in school and those used in practice, there were also several knowledge
areas that revealed large variances between actual rated importance and perceived preparedness. The
first of these categories, with the greatest variance between perceived value in practice and levels of
preparedness, is the ability to coordinate and collaborate with other allied design professionals (i.e.
architects; structural, mechanical and electrical engineers, and various specialty consultants). Only 15%
of recent interior design graduates indicated that they felt more than adequately prepared in this area
while 57% felt less than adequately prepared or poorly prepared. These same graduates rated this
category as the sixth most valuable knowledge area with 32% indicating as such. Essentially, these
findings indicated this is an important area in practice that is not being well covered in education.

The second knowledge area with the greatest variance between value and preparedness is
environmental sustainability. Only 16% of recent interior design graduates felt this category was highly
valuable to them in practice. In contrast, they felt this was an area they were prepared to practice
following their education. In fact, sustainability was ranked the sixth highest in terms of their perception of
their level of preparedness. The third knowledge area with the greatest difference between value and
readiness to practice was that of the preparation of construction documents to adhere to code and
regulatory requirements. While 11% of recent interior design graduates felt this category was highly

65
valuable to them only 27% felt adequately prepared in this area while 31% felt less than adequately prepared or poorly prepared.

The fourth category is the preparation of project budgets. While this knowledge category was ranked second, at 16%, in areas respondents recommended for further emphasis in education, it was also found that seventy-eight percent responded that they felt less than adequately prepared in this area. Although budgeting was listed as an area requiring more attention in education, only 14% of recent interior design graduates indicated this knowledge area to be highly valuable to them. In addition, findings from the eight telephone interviews stressed the importance of understanding budgets. These results could mean that practitioners new to the design field (which this study surveyed) are often not given responsibility in this area until they have more experience in practice. These findings, combined with open-ended responses throughout the survey, suggest that a greater emphasis be placed on budgets in interior design curricula.

Findings imply that recent interior design graduates value the knowledge areas and/or skills they use most in practice. One of the limitations of this study is that it is not known whether recent graduates are typically tasked with assignments that fit their level of preparedness until more experience is gained and their knowledge base expands. Until then, their scope of work may be limited. These findings and preliminary hypotheses offer avenues for potential future research into skills preparedness and perceived value of these knowledge categories.

**Recommendations for Interior Design Educators**

Interior design education and curricula are continuously evolving as is the profession. CIDA accreditation standards are regularly reviewed and updated to ensure that students receive the best interior design education possible and that they leave school as well prepared for professional practice as possible. Recommendations, revisions and improvements to interior design curricula have the potential to enhance future requirements. The recommendations below are a result of the findings from this study.

**Areas to Further Emphasize**

The first recommendation for interior design educators is to place greater emphasis on the knowledge areas and skills that respondents indicated needed more attention. The top five areas identified were:

1. Software programs

   It is recommended that the software programs most often used in professional practice be incorporated into multiple course syllabi so that students obtain better retention of the software. The top two programs mentioned by respondents as needing more attention in academia were Revit and PhotoShop. Software programs like Revit and Photoshop can supplement assignments in a variety of class types such as construction documents and/or construction systems, studios, technical design and drafting classes, design fundamentals classes and so forth.
Elective workshops, outside of core curricula, can be offered by faculty, graduate students and/or local design professionals from the surrounding area(s). If this approach were taken, then multiple workshops that cover several areas of focus within a software-type can and should be offered. However, elective workshops themselves can be limiting as oftentimes, a percentage of students get left out. In order to improve upon the existing level of software program training in design curricula, it is imperative that all students gain experience using the software in required coursework.

2. Budgeting

It is suggested that more weight be placed on budgets; both creating a budget and designing within a budget, as this knowledge and experience is valuable in professional practice. Students can be exposed to budgets by incorporating them into a design studio course. Designing a space within an identified budget would require students to make informed design decisions. Similarly, requiring students to value engineer a space they have previously designed would also prove to be a useful and realistic learning experience. Another option is to ask students to create an estimate for budgetary purposes as interior designers are often tasked with developing a budget for their clients in order to define the scope of work to be performed. This can be achieved through small group (or individual) exercises in class. Students can price furniture for an office suite or residence including labor, delivery, freight and contract discounting. Students can perform take-offs of a small space and reference cost data in a construction estimating book, website or database. These exercises can prove to be beneficial to students.

3. Construction Documents

Also recommended is further emphasis of construction documents. It is essential that students understand how to read, review and create construction documents. They should be able to ascertain information from as-built documents and have the ability to plan and coordinate with existing conditions and work with other design professionals. These skills can be incorporated into a construction documents class or construction systems class, among others. For instance, students may be asked to renovate an existing space of manageable size. It would be beneficial for students to be required to field measure the space in order to verify that the as-built drawings are correct and that they accurately represent existing conditions. Students can then model the space and, based on the project requirements, they shall determine what views, sections, details, schedules, specifications and notes must be included in the construction documents they are about to create. They can then use a drawing sheet template to do a preliminary layout of the required “views” and details per sheet. These exercises, among others, lay the foundation for them to then being the creation of the construction documents.

4. Specifications and Textiles

The results from this study advise that there be greater emphasis placed on specifications and textiles. Some recent graduates suggest incorporating written specifications into a studio or construction documents class and having students learn how to edit master specifications and/or short form specs, as needed, per the defined project requirements. Similarly, it was recommended that additional instruction be offered regarding textiles.
Concerning textiles, interior design educators can include in assigned coursework instruction regarding appropriate textile applications, how to determine required yardage for upholstery, drapery and so forth. As a group project and/or exercise, students can be tasked with creating textile specification documents for various types of spaces such as an assisted living facility or movie theater. Students may be required to identify where textiles can be applied in each space and then refer to the building codes in order to determine what type of material can and should be used for each instance (i.e. dining chairs, textile wall covering, acoustic wall panels, theater curtains, etc.). Students can then go through the process of searching for textiles that meet or exceed not only code requirements, but also the aesthetic requirements per the given space type(s). Taking it a step further, students can be tasked with determining the required yardage for all or some of the components within each space.

5. Project management

Project management is the fifth area most recommended for further emphasis in design education. Project management, as described in the study, is the responsibility of acting on behalf of the client as their representative throughout the design and construction process. Information gleaned from the study results suggest that students become more familiar with the responsibilities involved with project management. Interior design educators, in conjunction with visiting design professionals, can share their knowledge of project management with students. Examples and discussions of real world challenges interior designers face and the methods used to find solutions can be given. Career shadowing and internships are other ways for students to gain more experience in this area.

Offer Opportunities for Collaboration

A second recommendation for interior design educators is to incorporate opportunities for design students to work with allied professionals. The results of this study identified this as an area of weakness in design education as recent graduates indicated that they felt less that adequately prepared to work with related design professionals when they first started practicing. Findings also show that recent graduates place significant value on the knowledge and experience obtained while collaborating and coordinating with architects, engineers and contractors in professional practice.

Recommendations for Further Research

The primary goal of this study was to find out if recent interior design graduates felt that they were prepared for their initial entry-level interior design position. Findings from the on-line survey and telephone interviews have provided useful information and much that beckons further investigation. This study has only scratched the surface of the perceived level of preparedness of recent interior design graduates. It has however, offered insight into the experiences, recommendations and expectations of entry-level interior design professionals. Even so, data was gleaned from a small sample of professionals. It is recommended that similar surveys be sent out to a larger sample in addition to telephone interviews to further supplement the findings. It is also recommended that this survey or one
similar to this, be sent to interior designers that primarily practice residential design and to designers that primarily practice commercial design in order to compare and contrast their responses. The experiences of residential designers and commercial designers can vary and the findings from such a study could prove to be interesting and informative.

Likewise, individual survey questions could be expanded upon and developed into separate studies. For example, a more in-depth look into the value of NCIDQ certification, registration and licensure could be both valuable and interesting. Perhaps a correlation between program curricula, faculty backgrounds, location and/or practice experience and perceived NCIDQ value could be found? What is the average length of time before a design professional takes the NCIDQ exam and why? Is there a correlation between practice experience and NCIDQ certification? (i.e. Hypothetically: Commercial design and certification versus residential design and no certification?)

Other potential avenues for further research include gender. The statistics alone in this study show that 96% of the participants were female. Why does such a large gender gap exist? It might also be interesting to look into and compare gender enrollment percentages of college interior design students by region, program locations within universities (i.e. Visual Arts, Human Sciences, Home Economics or Architecture), department accreditation(s) and program curricula foci to determine if there are relationships between gender enrollment and certain interior design program characteristics. Likewise, is there a relationship between gender and degree program choice (i.e. interior design versus architecture, interior architecture or interior decoration)? An investigation into finding out why current students chose interior design for their degree major could also prove to be interesting. Similarly, an in-depth look into student’s initial perceptions and expectations of what an interior design degree program of study consists of and what potential career opportunities they feel may be available to them upon graduation.

One could also look into internships and the student/mentor relationship. What makes an internship successful and how can students make the most of an internship experience? What can academic institutions do to provide more and better opportunities for students to intern? A study can also be performed that investigates internships from the practitioner’s perspective. Perhaps there is a correlation between the advisors internship experience(s) and how meaningful and involved the experience is they provide for their students now? What ingredients produce a successful internship for both the student and the internship location?

An investigation into professional practice expectations could also be done. This could include a survey of design students prior to an internship experience, followed by a second survey, post internship. It would be interesting to compare and contrast student expectations for professional practice once they have gained some experience in a professional setting. Similarly, a study could be performed looking at student’s practice expectations prior to graduation then comparing those results to their actual practice experiences post-graduation.

The potential for future research in the above mentioned areas is only limited by the constraints a researcher places upon him/herself. This study has offered insight into the experiences, recommendations and expectations of entry-level interior design professionals. Additional studies can be
conducted to further explore recent interior design graduates perceptions of their preparedness to practice. Interior design education and curricula are continuously evolving as is the profession. It is imperative that the standards continue to be reviewed and updated in order to maintain and heighten the level of interior design preparation for professional practice long into the future.

In conclusion, it is hoped that the findings from this study prove to be beneficial to interior design education and to the profession at large. The results from this study indicate that interior design curricula is evolving parallel to technology, the changing times and the profession; however, there will always be room for improvement. Continued research, such as this, can assist in advancing the profession of interior design.
APPENDIX A

HUMAN SUBJECTS APPROVAL FORM NO. 1

Office of the Vice President for Research
Human Subjects Committee
Tallahassee, Florida 32306-2742
(850) 644-8673 · FAX (850) 644-4392
APPROVAL MEMORANDUM

Date: 01/08/2013
To: Elizabeth Tarver
Address: **** ****** **** **, Tallahassee, Florida
Dept.: INTERIOR DESIGN

From: Thomas L. Jacobson, Chair
Re: Use of Human Subjects in Research
What I Wish I Knew... Interior Design Graduates "Sense of Preparedness" to Practice

The application that you submitted to this office in regard to the use of human subjects in the proposal referenced above have been reviewed by the Secretary, the Chair, and two members of the Human Subjects Committee. Your project is determined to be Expedited per 45 CFR § 46.110(7) and has been approved by an expedited review process.

The Human Subjects Committee has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval does not replace any departmental or other approvals, which may be required.

If you submitted a proposed consent form with your application, the approved stamped consent form is attached to this approval notice. Only the stamped version of the consent form may be used in recruiting research subjects.

If the project has not been completed by 01/02/2014 you must request a renewal of approval for continuation of the project. As a courtesy, a renewal notice will be sent to you prior to your expiration
date; however, it is your responsibility as the Principal Investigator to timely request renewal of your approval from the Committee.

You are advised that any change in protocol for this project must be reviewed and approved by the Committee prior to implementation of the proposed change in the protocol. A protocol change/amendment form is required to be submitted for approval by the Committee. In addition, federal regulations require that the Principal Investigator promptly report, in writing any unanticipated problems or adverse events involving risks to research subjects or others.

By copy of this memorandum, the chairman of your department and/or your major professor is reminded that he/she is responsible for being informed concerning research projects involving human subjects in the department, and should review protocols as often as needed to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

This institution has an Assurance on file with the Office for Human Research Protection. The Assurance Number is IRB00000446.

Cc: Lisa Waxman, Chair
HSC No. 2012.9291
APPENDIX B

HUMAN SUBJECTS APPROVAL FORM NO. 2

Internal Review Board: ***** College
Decision Form

<table>
<thead>
<tr>
<th>Principal Investigator:</th>
<th>Elizabeth Tarver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Address:</td>
<td>*****@my.fsu.edu</td>
</tr>
<tr>
<td>Phone Number:</td>
<td>(**<em>-</em>)****</td>
</tr>
<tr>
<td>Co-Investigators:</td>
<td></td>
</tr>
<tr>
<td>Project Title:</td>
<td>What I Wish I Knew… Interior Design Graduates “Sense of Preparedness” to Practice</td>
</tr>
<tr>
<td>Faculty Sponsor:</td>
<td>Dr. Lisa K. Waxman, Florida State University Interior Design Professor and Department Chair</td>
</tr>
<tr>
<td>New/Continuing Project:</td>
<td>New</td>
</tr>
<tr>
<td>Date of Submission:</td>
<td>2/4/2013</td>
</tr>
<tr>
<td>Date of Resubmission (if applicable):</td>
<td>N/A</td>
</tr>
</tbody>
</table>

For Official Use Only

Reference Number: 
IRB process:  
□ Exempt  
□ Expedited Review  
X Full Review  
IRB Recommendation  
X Approved  
□ Not Approved  
□ Revise and Resubmit  
Comments: (attach additional sheets as necessary)  The committee unanimously approved this proposal. Good luck with the project!

-ADA

***** ****** 3/1/13
IRB chair Date
Dear Design Professional:

I am an MFA student in interior design at Florida State University working under the direction of Dr. Lisa Waxman, Ph.D. My thesis research will look at recent interior design graduate’s perceptions of their “preparedness to practice” by exploring “what they wish they knew” now that they are practicing professionals. The link below will take you to the survey seeking information about your professional interior design practice experience thus far. The information gathered from the following survey will then be compared, analyzed and findings presented. Consequently, recommendations based upon the findings will also be made. The research conducted and information gathered will be used to inform interior design educators, recent graduates and design professionals of where, if any, gaps lie between education and practice. Survey results will be shared with each university in return for their participation and assistance with this research, although the names of respondents will never be revealed. In addition, the final thesis research will be published and available through the Florida State University library system. All survey participants will remain anonymous, as will the names of the universities. Your participation in this survey will be greatly appreciated.

The project has received Institutional Review Board (IRB) approval from the university. I have included the consent form and survey link below. It should take about 10 – 15 minutes to complete. I hope that you can find time to help me with this project.

Kind Regards,

Elizabeth M. Tarver, FSU Interior Design MFA Candidate

The following is my FSU IRB approved consent form. It details the procedure and informs the reader of his/her rights in taking the survey. If there are questions or concerns please contact me, my major professor and/or the IRB office. Please read the consent form before proceeding with the survey.

**FSU Consent Form for On-line Survey**

*What I Wish I Knew… Interior Design Graduates Sense of Preparedness to Practice*

You are invited to participate in a research study titled *What I Wish I Knew… Interior Design Graduates Sense of Preparedness to Practice*. You were selected as a possible participant because you are a recent graduate of a CIDA accredited interior design program. We ask that you read this form and ask
any questions you may have before agreeing to participate in this study. This study is being conducted by Elizabeth M. Tarver, Florida State University Interior Design MFA Candidate under the guidance of Dr. Lisa Waxman, FSU Interior Design Professor and Department Chair.

The purpose of this study is to determine recent interior design graduate’s perceptions of their “preparedness to practice” by finding out “what they wish they knew” now that they are working in the design profession. As design curricula evolves, so too does the knowledge base of the future design professionals. In effect, the development of curricula is vital to enhancing the level of professionalism for students and graduates. It is proposed that the results of this survey will assist in the advancement of the interior design profession. The entry-level design professional’s perspective may well be quintessential to enhancing design education and assist educators in taking pedagogy to the next level.

If you agree to participate in this study, we ask you to do the following:

- Participate in taking a short on-line survey, which can be completed between 10 and 15 minutes.

In addition to the on-line survey, two survey respondents from each CIDA region (ten total) will be interviewed for “deeper insight” into their survey responses. You may voluntarily choose to participate in a phone interview by indicating as such at the end of the on-line survey. The telephone interview participants will be contacted via electronic mail to coordinate and schedule a suitable date and time for the conference. Interview participants will be asked a maximum of 15 questions. The questions asked will supplement prior survey responses. It is anticipated that the interview will last no more than twenty minutes. With permission, the interviews will be recorded using a telephone record coupler. Handwritten notes will be taken as well. The combined results of the on-line survey and interviews will then be analyzed and findings presented. Consequently, recommendations based upon the findings will also be made.

The risks of this study are minimal and are no greater than experienced in typical daily activities. This is an anonymous survey and all gathered information will remain confidential to the extent allowed by law. Research records will be kept in digital format on a personal desktop computer only accessible by password and will be deleted after the thesis work is completed. Telephone interview tape recordings will be stored securely in a locked cabinet in the researcher’s home office and tapes will be destroyed upon completion of this project.

Participation in this study is voluntary and there is no penalty for non-participation. If you choose to participate, you are free to not answer any question or withdraw at any time.

The researcher conducting this study is Elizabeth M. Tarver. You may ask questions at any time. Should a question arise at a later time, you are encouraged to contact Elizabeth at (***) ***-**** or ******@my.fsu.edu. The researcher’s advisor is Dr. Lisa Waxman, who can be contacted at (***) ***-**** or ******@fsu.edu.
If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, please contact the FSU IRB at 2010 Levy Street, Research Building B, Suite 276, Tallahassee, FL 32310, or (850) 644-7900 or by email at humansubjects@magnet.fsu.edu.

I have read the above information. I consent to participate in the study. I hereby consent to participate in this study by proceeding to take the following on-line survey: www.linktosurvey.com
Dear Design Professional:

I am an MFA student in interior design at Florida State University working under the direction of Dr. Lisa Waxman, Ph.D. My thesis research will look at recent interior design graduate’s perceptions of their “preparedness to practice” by exploring “what they wish they knew” now that they are practicing professionals. The link below will take you to the survey seeking information about your professional interior design practice experience thus far. The information gathered from the following survey will then be compared, analyzed and findings presented. Consequently, recommendations based upon the findings will also be made. The research conducted and information gathered will be used to inform interior design educators, recent graduates and design professionals of where, if any, gaps lie between education and practice. Survey results will be shared with each university in return for their participation and assistance with this research, although the names of respondents will never be revealed. In addition, the final thesis research will be published and available through the Florida State University library system. All survey participants will remain anonymous, as will the names of the universities. Your participation in this survey will be greatly appreciated.

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I have read the above information. I consent to participate in the study. I hereby consent to participate in this study by proceeding to take the following on-line survey: www.linktosurvey.com
APPENDIX E

PHONE INTERVIEW CONSENT LETTER

RE: Survey Participation Consent Form for Telephone Interview

What I Wish I Knew… Interior Design Graduates Sense of Preparedness to Practice

You are invited to participate in a research study titled What I Wish I Knew… Interior Design Graduates Sense of Preparedness to Practice. You were selected as a possible participant because you are a recent graduate of a CIDA accredited interior design program. We ask that you read this form and ask any questions you may have before agreeing to participate in this study. This study is being conducted by Elizabeth M. Tarver, Florida State University Interior Design MFA Candidate under the guidance of Dr. Lisa Waxman, FSU Interior Design Professor and Department Chair.

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If you agree to participate in this study, we ask you to do the following:

Participate in an interview, which should last between 15 and 20 minutes, while being audio taped.

Interview participants will be asked a maximum of 15 questions. The questions asked will supplement prior survey responses. It is anticipated that the interview will last no more than twenty minutes. With permission, the interviews will be recorded using a telephone record coupler. Handwritten notes will be taken as well. The combined results of the on-line survey and interviews will then be analyzed and findings presented. Consequently, recommendations based upon the findings will also be made. The risks of this study are minimal and are no greater than experienced in typical daily activities. This is an anonymous study and all gathered information will remain confidential to the extent allowed by law. Research records will be kept in digital format on a personal desktop computer only accessible by password and will be deleted after the thesis work is completed. Telephone interview tape recordings will
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Participation in this study is voluntary and there is no penalty for non-participation. If you choose to participate, you are free to not answer any question or withdraw at any time.

The researcher conducting this study is Elizabeth M. Tarver. You may ask questions at any time. Should a question arise at a later time, you are encouraged to contact Elizabeth at (***)-***-**** or ******@my.fsu.edu. The researcher’s advisor is Dr. Lisa Waxman, who can be contacted at (***)-***-**** or ******@fsu.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, please contact the FSU IRB at 2010 Levy Street, Research Building B, Suite 276, Tallahassee, FL 32310, or (850) 644-7900 or by email at humansubjects@magnet.fsu.edu.

I have read the above information. I consent to participate in the study.

Please email your consent to ******@my.fsu.edu.
APPENDIX F

QUALTRICS ON-LINE SURVEY FORMAT

Interior Design: Education to Practice Survey

Q1  The purpose of this study is to determine recent interior design graduates perceptions of their preparedness to practice by finding out what they wish they knew now that they are working in the design profession. If you agree to participate in this study, we ask you to do the following:

Participate in taking a short on-line survey, which can be completed between 10 and 15 minutes.

This study has no risk to you.

This is an anonymous survey and all gathered information will remain confidential. Research records will be kept in digital format on a personal desktop computer accessible by password and will be deleted after thesis work is completed. Participation in this study is voluntary. If you choose to participate, you are free to not answer any question or withdraw at any time.

The researcher conducting this study is Elizabeth M. Tarver. You may ask questions at any time. Should a question arise at a later time, you are encouraged to contact Elizabeth at (***) ***-**** or ******@my.fsu.edu. The researcher’s adviser is Dr. Lisa Waxman, who can be contacted at (***) ***-**** or ******@fsu.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, please contact the FSU IRB at 2010 Levy Street, Research Building B, Suite 276, Tallahassee, FL 32310, or (850) 644-8673 or by email at ******@fsu.edu.

I have read the above information. I consent to participate in the study. I hereby consent to participate in this study by proceeding to take the following on-line survey.

ELECTRIC CONSENT: Please select your choice below. Clicking on the agree button below indicates that:
- you have read the above information
- you voluntarily agree to participate
- you are at least 18 years of age

If you do not wish to participate in the research study, please decline participation by clicking on the disagree button.

☐ Agree (1)
☐ Disagree (2)

If Disagree Is Selected, Then Skip To End of Survey
Q1 Are you:
- Male (1)
- Female (2)

Q2 How old are you?
- Under 20 (1)
- 20 - 29 (2)
- 30 - 39 (3)
- 40 - 49 (4)
- 50 - 59 (5)
- Over 60 (6)

Q3 Number of years practicing interior design:
- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 (5)
- 6+ (6)

If 6+ Is Selected, Then Skip To End of Survey

Q4 Are you NCIDQ certified?
- Yes (1)
- No (2)

Answer If Are you NCIDQ certified? No Is Selected

Q5 Do you plan on taking the NCIDQ exam in the future?
- Yes (1)
- No (2)

Q6 Are you a registered, certified and/or licensed interior designer?
- Yes (1)
- No (2)
- My state/province/jurisdiction does not provide the option to be registered, certified and/or licensed to practice interior design. (3)
Q7 Do you plan on becoming registered, certified and/or licensed in the future?

☐ Yes (1)
☐ No (2)

Q8 Which design organizations are you affiliated with? (Select all that apply.)

☐ IIDA (International Interior Design Association) (1)
☐ ASID (American Society of Interior Designers) (2)
☐ IDEC (Interior Design Educators Council) (3)
☐ IDC (Interior Designers of Canada) (4)
☐ USGBC (United States Green Building Council) (5)
☐ EDRA (Environmental Design Research Association) (6)
☐ AIA (American Institute of Architects) (7)
☐ Other (Specify) (8) ____________________

Q9 What computer aided design programs and presentation software training were included in your design degree curriculum? (Select all that apply.)

☐ AutoCAD (1)
☐ Revit Architecture (2)
☐ Photoshop (3)
☐ InDesign (4)
☐ SketchUp (5)
☐ ArchiCAD (6)
☐ PowerPoint (7)
☐ 3DS Max (8)
☐ Other (Specify) (9) ____________________

Q10 What computer aided design programs do you use in professional practice?

☐ AutoCAD (1)
☐ Revit Architecture (2)
☐ Photoshop (3)
☐ InDesign (4)
☐ SketchUp (5)
☐ ArchiCAD (6)
☐ PowerPoint (7)
☐ 3DS Max (8)
☐ Other (Specify) (9) ____________________
Q11 What is your educational history? Please list your degree(s), date of graduation and institution(s).

Degree (1) (1)
Degree (2) (2)
Degree (3) (3)

Q12 What has been your practice experience in interior design or related areas (starting with the most recent)? Please list your position(s) and a brief statement of the type of projects you worked on for each position.

Q13 If you are not working in the field of interior design, what field are you in and why?

Q14 When you first started practicing, how well prepared did you feel to do the following:

<table>
<thead>
<tr>
<th>Research and analyze client goals and requirements (programming)</th>
<th>Very Well Prepared (1)</th>
<th>More Than Adequately Prepared (2)</th>
<th>Adequately Prepared (3)</th>
<th>Less Than Adequately Prepared (4)</th>
<th>Poorly Prepared (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formulation of preliminary space plans</td>
<td></td>
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<tr>
<td>Formulation of two and three dimensional design concept studies and sketches</td>
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<tr>
<td>Coordinate designs with existing conditions</td>
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</table>

85
(building shell, physical locations and social context of the project)

Encourage or include the principles of environmental sustainability into designs

Create space plans and design concepts that are safe, functional, aesthetically appropriate

Confirm that plans meet all public health, safety and welfare requirements (Including code, accessibility, environmental & sustainability guidelines)

Selection of appropriate
## Selection and Specification

<table>
<thead>
<tr>
<th>Colors, materials and finishes</th>
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<tbody>
<tr>
<td>Selection and specification of furniture, fixtures and equipment to facilitate pricing, procurement and installation</td>
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<tr>
<td>Selection and specification of millwork, including layout drawings and detailed descriptions</td>
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<tr>
<td>Project Management</td>
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<tr>
<td>Preparation of project budgets</td>
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<tr>
<td>Preparation of project schedules</td>
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<tr>
<td>Preparation of construction documents (consisting of</td>
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<tr>
<td>Plans, elevations, details and specifications, power and communication locations, reflected ceiling plans and lighting designs, material and finishes and furniture layouts)</td>
<td>Preparation of construction documents to adhere to code and regulatory requirements</td>
<td>Contract Administration</td>
<td>Coordinate and collaborate with other allied design professionals (i.e. architects; structural, mechanical and electrical engineers, and various</td>
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<tr>
<td>specialty consultants)</td>
<td>Administration of contract documents, bids and negotiations as the client's agent</td>
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<tr>
<td>Observing and reporting on the implementation of projects while in progress &amp; upon completion</td>
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<tr>
<td>Conducting post-occupancy evaluation reports</td>
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</tbody>
</table>
Q15 Here are the same categories again - select ONLY the top five knowledge categories that have proven to be the most valuable to your success in professional practice thus far:

- Research & analyze client goals & requirements (programming) (1)
- Formulation of preliminary space plans (2)
- Formulation of two & three dimensional design concept studies and sketches (3)
- Coordinate designs with existing conditions (building shell, physical locations and social context of the project) (4)
- Encourage or include the principles of environmental sustainability into designs (5)
- Create space plans & design concepts that are safe, functional, aesthetically appropriate (6)
- Confirm that plans meet all public health, safety & welfare requirements (Including code, accessibility, environmental and sustainability guidelines) (7)
- Selection of appropriate colors, materials & finishes (8)
- Selection & specification of furniture, fixtures & equipment to facilitate pricing, procurement & installation (9)
- Selection & specification of millwork, including layout drawings & detailed descriptions (10)
- Project Management (11)
- Preparation of project budgets (12)
- Preparation of project schedules (13)
- Preparation of construction documents (consisting of plans, elevations, details & specifications, power & communication locations, reflected ceiling plans & lighting designs, material & finishes, & furniture layouts (14)
- Preparation of construction documents to adhere to code and regulatory requirements (15)
- Contract Administration (16)
- Coordinate and collaborate with other allied design professionals (I.e. architects; structural, mechanical & electrical engineers, & various specialty consultants (17)
- Administration of contract documents, bids & negotiations as the client's agent (18)
- Observing & reporting on the implementation of projects while in progress & upon completion (19)
- Conducting post-occupancy evaluation reports (20)

Q16 Did your degree program require an internship?
- Yes (1)
- No (2)

Q17 Did you participate in an internship?
- Yes (1)
- No (2)
Q18 Did you feel more prepared for professional practice as a result?
   ☑ Yes (1)
   ☑ Uncertain (Please provide any comments you wish on your internship experience - Optional) (2)
   ☑ No (3)

Q19 Was your internship experience full-time or part-time?
   ☑ Full-time (1)
   ☑ Part-time (2)

Q20 Did your internship location hire you once your internship period was over?
   ☑ Yes (1)
   ☑ A job offer was made, but not accepted. (2)
   ☑ No (3)

Q21 Did you feel less prepared for professional practice as a result?
   ☑ Yes (1)
   ☑ Uncertain (2)
   ☑ No (3)

Q22 Are there areas and/or skills that you believe should have been further emphasized in your design education that would positively contribute to your early professional development?
   ☑ Yes (1)
   ☑ No, enough is already covered in curriculum. (2)

Q23 What areas and/or skills would you recommend be further emphasized?

Q24 Is professional practice different from what you expected it to be?
   ☑ Yes (Please elaborate - Optional) (1) ______________________
   ☑ No (Please elaborate - Optional) (2) ______________________
Q25 What is your annual salary?
- 0 - 20,000 (1)
- 20,000 - 40,000 (2)
- 40,000 - 60,000 (3)
- 60,000 - 80,000 (4)
- 80,000 - 100,000 (5)
- Over 100,000 (6)

Q26 Would you be willing to be interviewed to talk more about this subject?
- Yes (1)
- No (2)

Answer If Would you like to be interviewed to talk more about this ... Yes Is Selected

Q27 Please provide your name and a phone number where you can be reached:
- First Name (1)
- Last Name (2)
- Phone Number (Please Include Area Code) (3)
- Email (4)
APPENDIX G

TELEPHONE INTERVIEW QUESTIONS

1 – In your opinion, what do you perceive the general purpose of this study to be?
2 – What role will you play as a subject in this research?
3 – Can you identify any general risks associated with this research?
4 – Can you identify any general benefits associated with this research?

1. What is the title of the professional position you currently hold and how long have you been in this role?
2. What are your primary job functions?
3. Have you worked in any other design-related positions prior to your present situation? If so, briefly describe the position(s) you held and for how long you held each position.
4. Does the company you currently work for and/or own primarily offer interior design or architecture services?
5. How many interior designers are on staff at your current place of employment?
6. What other related professionals does your company employ? (I.e. architects, engineers, production staff, etc.) How many of each?
7. Does your current place of employment provide internship experiences for interior design students? If so, what is the typical length of the internship?
   a. Has your company ever hired a previous intern? If so, do you have knowledge of the reasons why an offer was made?
8. Do you know why you were hired for your first entry-level design position post-graduation? (I.e. portfolio, resume, internship experience, professional connections, etc.)
9. What knowledge, skills and/or experiences do you have that you feel you have benefited from the most professionally?
   a. Where and/or how did you gain this knowledge and/or skillset(s)?
10. Looking back, after gaining some professional practice experience, are there knowledge areas or skills you feel you were lacking that could have been further emphasized in your interior design education prior to graduation?
    a. How do you suggest these areas and/or skills be incorporated into design curricula?
11. What aspects of your interior design education do you feel has proven to be the most valuable to your success in the workplace?
12. Name the top three skills and/or knowledge areas you feel entry-level interior designers must possess in order to be hired and valued in the workplace?
## APPENDIX H

### OPEN-ENDED RESPONSES TO SURVEY QUESTIONS

**Table H.1: Professional Practice Experience**

<table>
<thead>
<tr>
<th>Text Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior Designer - worked on civic, healthcare, and education projects at a small commercial firm for all three years</td>
</tr>
<tr>
<td>Currently-working in sales for a commercial furniture manufacturing company</td>
</tr>
<tr>
<td>Interior Designer at Modern Business Interiors. I design commercial office furniture for my company that distributes office furniture.</td>
</tr>
<tr>
<td>Interior Designer: Design government buildings including office buildings, barracks, chapels, etc.</td>
</tr>
<tr>
<td>Architectural Professional in Interiors: large-scale commercial work for corporate clients; all phases of the design process with an emphasis on programming, space planning, schematic design and design development</td>
</tr>
<tr>
<td>I have found more opportunities in the construction and real estate development markets than Interior Design positions. Project Manager of a student housing real estate development group.</td>
</tr>
<tr>
<td>Interior Designer 1 at A+D firm, Marketing and Interiors Intern at A+D firm, Graphics Intern for interior design professor, Tile and Stone Sales Rep Intern, Residential Interior Design Intern, Office Assistant at A+D Firm</td>
</tr>
<tr>
<td>Still in graduate school.</td>
</tr>
<tr>
<td>Still currently looking for employment after graduating.</td>
</tr>
<tr>
<td>in my undergraduate years I worked for 2 years in a furniture store as store designer/organizer I also worked for 1.5 years as a wedding and event planer/designer</td>
</tr>
<tr>
<td>Intern; worked on residential projects</td>
</tr>
<tr>
<td>Interior Design Assistant at a design firm. I work on high-end residential and some commercial office projects.</td>
</tr>
<tr>
<td>Designer- Multi Family and high end residential  Design Coordinator- High end residential</td>
</tr>
<tr>
<td>Visual Merchandiser, created retail displays in a home goods &amp; accessories store - Designer at a design + build firm specializing in custom furniture design, cabinetry and millwork packages for multi-family and single family residences.</td>
</tr>
<tr>
<td>Consultant at a design firm (a locally-owned firm of 20+ years practicing both residential and contract design): my experience to date has been primarily residential design (from schematic design to construction documents), esp. bathroom renovations, but also has involved a law firm, a municipal utilities building, and the Florida Governor’s mansion. On the non-residential projects I primarily performed computer drafting and presentation board development, but on residential projects I have been involved with client meetings and design development as well.</td>
</tr>
<tr>
<td>Store Planning for a major retailer, planning store remodels and testing new strategies</td>
</tr>
<tr>
<td>Interior Designer, Healthcare Team - healthcare interior furniture including hospitals &amp; clinics clinical settings such as labs, pharmacies, nurse stations, ORs and EDs administrative &amp; public settings such as check ins, offices, etc.</td>
</tr>
</tbody>
</table>
### Table H.1 – continued

<table>
<thead>
<tr>
<th>Text Response</th>
</tr>
</thead>
</table>
| I was the assistant to the Interior Designer at the Office of Classroom Management at the university I attended. I re-designed classrooms and study spaces including space planning, furnishings, and finishes. These were some of my tasks:  
  • Produced spatial plans for future classroom re-design projects to amplify function and comfort using AutoCAD  
  • Specified and researched materials and finishes suitable for educational environments to keep up-to-date information on education design  
  • Interfaced with product representatives to discuss current product trends and technology  
  • Monitored University classrooms and study spaces to ensure the spaces are properly maintained, functioning, and code compliant |

| Interior Design Assistant. High-end residential projects from major remodels to new construction. Furniture Sales. Sales and restoration of Mid-Century Modern Scandinavian furniture, Design Services for customers. Showroom Intern. |

| Interior Planner Corporate Real Estate at Target Corporate - June 2011 to Present: Plan office floor relays and organizational restacks for Target HQ. Program and design HQ expansions and remodels. Specify furniture, fixtures, equipment and finishes that maintain the Target headquarters aesthetics and brand. Social Media Marketing at a furniture dealership - April 2011 to June 2011: Continue to develop and maintain a consistent marketing approach to social media that has been recognized by Herman Miller as a best practice with the use of Facebook, Twitter, Linked In, You Tube, and Blogs. Interior Designer at a commercial furniture dealership - May 2008 to June 2011: Develop office systems furniture typicals and space plans that effectively support the customer’s work flow using AutoCAD, CAP and Herman Miller Z-Axis software. Interior Design Intern at a commercial furniture dealership - June 2007 to May 2008: Updated Herman Miller and ancillary literature and textiles. Organized binders, file drawers and memo shelves. Assisted designers with CAD redlines and plotting. Assembled presentation boards and binders. Kitchen Planner at IKEA - August 2006 to January 2007: Assisted customers in kitchen planning process and taught them how to use the kitchen design program. Occasionally helped with color and hardware choices and often closed and booked kitchen orders. |

| Intern: Knoll Textiles, Intern: Architecture firm, Production Designer for the Healthcare Team: while at the Herman Miller furniture dealership, DIRT Designer: also at the Herman Miller furniture dealership Currently I’m an Interior Designer at a commercial design firm. Projects I’ve worked on include educational, offices spaces, municipal, and dormitories. |

| Interior Design Intern - Tenant Improvement, Residential Flooring Sales - All types of flooring, consult on color, style and functionality. Sample Dept. Associate - Crafted tile sample boards for use in resource libraries and floor stores. Showroom Associate - Helped customers select tile, countertops, flooring, paint colors, etc. *I graduated May 2008 and have never been able to get an official interior designer job |

| -commercial interiors | architecture firm, Hospitality Design Assistant, multi-unit housing, senior living, hotels, some corporate -large international commercial interior design and architecture firm, Interior Designer, casinos, K-12, higher ed., corporate, government -same location) Interior Design Intern, library management, presentation boards |
**Text Response**

1.) Interior Design Intern  
   a. I worked as an associate to the lead interior designer of a one person retail design firm. I was privileged to work on a number of projects that had me heavily involved in all phases of design. My duties included the following: program development, schematic design, material exploration, material specification, volume exploration, client and phase meetings, design development, contract/construction documents, fit planning, rendering, and construction administration.

2.) Interior Designer  
   a. The first interior design position I had allowed me to work on multi-faceted project backgrounds in corporate, retail, higher-education, and pro bono projects. My project integration and involvement included: the pre-design phase, field verification, concept development through construction documentation and construction administration. There I gained comprehensive knowledge on current product development, application, and integration into appropriate projects and programs. With my up-to-date AutoCAD experience I worked on a multitude of; block plans, studies, fit-planning, floor plans, reflected ceiling plans, finish plans, elevations/details, and specifications. I was also fully involved in the IIDA student mentorship day representing “the first 5 years” professional board.

3.) Executive Designer  
   a. I had an opportunity to become a part-time Executive Designer for a small event planning company while I was working as a designer at the previous described firm. It was there that I was in charge of conceptualizing spatial solutions for client presentations based on programmatic and budget guidelines. It was my responsibility to correspond with the client, vendor, technicians, and installers throughout the entire design and construction process. I also worked on spatial layouts, fixture design, product placement, construction, and installation. Finally, I managed all hired employees throughout the assembly, and installation aspects of every project.

4.) Interior Designer  
   a. Moving to a new city in the fall of 2012 has me working at a new commercial design firm specializing in corporate design. I now work on more intimate aspects of the design process; managing, designing, and administrating all aspects of design as a member of an intimate design team.

| Equipment Planner/Interior Designer-2012 to current; Interior Designer-2010 to 2012; OPS Interior Designer-2010 |
| Interior designer at large multi-disciplinary firm. I work on a variety of project types, including corporate, healthcare, arts, community and higher education. I have experience with all steps of the design process, including pre-design surveys, program development, space planning, concept and finish development, construction documents, construction administration and post-occupancy survey development and analysis. In addition, I work as a design researcher, writing research plans, conducting literature reviews, surveys, observations, interviews, analyzing data and writing research reports. While I was still in school, I worked at the same firm as an intern, performing the same tasks and working in the interiors library. |

<p>| Interior Design assistant at high end residential design firm. All office responsibilities including creating meeting agendas and putting together binders of all items for clients that are proposed and approved. Creating concept drawings and rough CAD drawings along with floor plans and furniture layouts. Budget proposals and purchasing of items. Ordering samples and memo-ing out options for client staging. Daily maintenance/update emails to clients and manufacturers. Interior Design Sales Associate - oversaw and helped with opening and layout of new high end retail furniture. Took inventory of new items and worked on visual merchandising of the store. Helped daily clients with design ideas and incorporating new furniture and antiques into their homes. Also offered interior design consults in clients’ homes. Personal design services. Working with local clients and clients with vacations homes to select materials and execute furniture plans and ordering. Walking clients through the entire process from beginning to end. |</p>
<table>
<thead>
<tr>
<th>Text Response</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Store Planning Contractor:</strong> store layouts for new stores, remodels &amp; retrofit projects. BOM Assurance, collaborate on unique fixture needs</td>
</tr>
<tr>
<td><strong>Interior Design Intern:</strong> resource library activities, field verifications</td>
</tr>
<tr>
<td>Intern for a residential firm.</td>
</tr>
<tr>
<td><strong>Mid-size architecture firm - Interior Designer (March 2011-current).</strong> Working mainly on skilled care senior living, some assisted living. Also working on healthcare projects, clinics, medical office buildings and the like. Some corporate office work as well. Small architecture/design-build firm - Interior Design Assistant (August 2007 - March 2011). Worked mainly on skilled care senior living projects. Some assisted living and few hospital and clinic projects as well.</td>
</tr>
<tr>
<td><strong>Interior Design Associate, Studio Design (1 year).</strong> Create 3d models/renderings for clients, construction documents, purchasing and coordinating installation. Mostly residential some healthcare. <strong>Interior Design Associate at an Architecture firm (1 year).</strong> Create construction drawings, more architectural in nature (i.e. wall sections, building sections, foundation plans) Some specifications. Work on call to bidders documentation and meetings with contractors. Residential and Commercial. <strong>Art Institute of Jacksonville (3 years) Taught Revit, AutoCAD and 3ds Max as an adjunct.</strong></td>
</tr>
<tr>
<td><strong>Chair, Interior Design – at a private college.</strong> Event planning, exhibit planning and installation. Director of Strategy and Interior Environments for a marketing and branding firm (strategy, website, collateral, product development, interior renovations). <strong>Facilities Designer, at a large state university in minor projects - renovations under $1m</strong></td>
</tr>
<tr>
<td><strong>Project Designer (position obtained directly after college)- Workplace and healthcare solutions for a variety of clients (bid projects, government projects, international companies, local business). This includes space planning, site visits, furniture specifications, research, pricing, coordination installation, etc.</strong></td>
</tr>
<tr>
<td><strong>Project Designer, 2011 to present - various tenant spaces for corporate office medical interiors using Revit, higher education using Revit. Intern Architect, 2005-2008 - international projects coordinating all aspects of given sections of project various retail developments</strong></td>
</tr>
</tbody>
</table>
**2. Resource Librarian - Managed library, met with local reps weekly to learn about new product to put in the library. Planned and organized monthly rep expo lunches, organized CEU lunches, worked with interior’s group to accomplish project specific tasks. Selected appropriate finishes for multiple projects. Created material boards. Ordered and tracked samples for 4 Interior Designers.**  
**3. Interior’s Intern at an architecture firm - Created material boards and Client Binders, worked directly with interior’s group to accomplish daily tasks. Managed library. Met with local reps weekly regarding new products, assisted in organizing rep lunches and events.** |
| I currently work at a furniture store with in-house design services. I primarily sell furniture, work with vendors, and do residential design. I mainly do space planning by hand and product specification. I previously worked for a home-based interior design firm for three years. There I worked with vendors placing orders, space planned by hand, and specified products. |
| **Designer, Gensler January 2012-present**  
**Interior Designer, Sasaki Associates June 2008-January 2012**  
**College Instructor, August 2010-December 2011**  
**Store Planning Intern, Target Corporation June 2007-August 2007**  
**Interior Design Intern at an architecture firm, March 2007-May 2007**  
**Interior Design Intern, Wells Fargo Corporate Properties June 2006-February 2007** |
I teach interior design at the University level and have been since graduation. I teach residential studios and foundations courses. Prior to earning my degree I worked in residential design for 3+ years, during which time I worked for a prominent full service furniture company and had private clients on the side.

Interior Designer at a design and architecture firm - Interior design, Cad, ADA expert witnessing in lawsuits. Complete remodel of restaurant into medical suites, remodels (new kitchen, cabinetry in class rooms, new flooring, new room dividers), Space planning of new construction apartment building and unit floor plans, Remodel of golf club into charter school, Shopping plaza facade design on Revit, model of new construction church in Revit. Intern and part time at architecture and design firm - Taught principal architect Revit and helped him transfer projects over from CAD, helped in design of new construction and remodels. 3-story beach home, agricultural company's offices/labs, apartments in Israel. Intern at a small residential interiors firm- Residential projects. CAD, floor plans, material selection, admin


Interior Design Assistant: All of the projects I have worked on since joining the field of Interior Design have all been in the high end private residential category. Several of the projects have been model homes while the others have been for clients looking to retire or have a vacation home in Florida. For these projects, I have been my boss’s assistant through it all. I am in creating purchase orders and calling upon each vendor to makes sure what we need get to where we need it to be on time. I have also gone to DCOTA to spec fabrics, wall coverings and furniture for several clients. I have been able to use the skills I acquired in AutoCAD for my boss when designing the tile lay outs for the projects as well as some furniture plans.


My practice experience includes my internship completed between my junior and senior year of the Interior Design program. My title was an 'Interior Design Intern', and I worked under the lead designer and owner of a small company with 3 other designers. At the time, they were working on a few remodels as well as two main projects helping design and shape the interiors of new home construction for specific clients. I went on a walk through and attended a few client meetings for both of these types of projects. My duties included: taking notes during meetings, kept projects organized to meet deadlines, and helped search for lighting and specific pieces of furniture for various projects. My other projects as an intern included: organizing all their tile/stonework/textile samples, updating her library of catalogs for furniture and finish selections, and running general office errands.

Designer/Project Assistant in the Design Department of a General Contractor's Firm

I currently work for an exhibit company in which I spent 2 years in project management and recently transitioned into sales. We create structures for trade shows, events, and commercial interiors. My previous job was for a non-profit independent living center in which I ran a home remodel for people with disabilities. I designed and project managed the projects.
Table H.1 – continued

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<thead>
<tr>
<th>Text Response</th>
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<tbody>
<tr>
<td><strong>Commercial:</strong> clinics/hospitals, senior living, apartments/condos, higher ed., mental health.</td>
</tr>
<tr>
<td>I have yet to practice as an interior designer.</td>
</tr>
<tr>
<td>I am not employed in the interior design profession and have had no professional experience since graduating.</td>
</tr>
<tr>
<td>Interior Designer I @ an Architecture Firm/ basically learning the industry/ products/ reps/ drawing up plans etc. Intern @ Showroom/ managing the library Drafter @ Residential firm/ implementing redlines/ site measuring Intern @ Residential Office/ sample returns/ filing/ office maintenance</td>
</tr>
<tr>
<td>Design intern and then full-time designer, retail solutions design firm, graphics, retail display, and space planning for grocery, specialty, and other retail store environments. Develop rendered floor plans, rendered elevations, and graphic perspectives for client presentation, as well as specify material selection. Drafter for an on-demand CADD company - Drafted construction documents (via AutoCAD) for commercial and residential projects with team, redline and quality control.</td>
</tr>
<tr>
<td>None, not working in Interior Design. No jobs at graduation, now in non-profit work.</td>
</tr>
<tr>
<td>Architectural/Engineering/Interior Design Firm. Healthcare and Senior Living Territory Manager for Stone-Systems. COSENTINO USA- Silestone Quartz, Sensa Granite, &amp; ECO Countertops July 2012 to Present -Manage the start and finish of order processing while researching, identify and resolve any client concerns for 53 Regional Home Depot Stores and 18 Lowes Stores in Minnesota, Wisconsin, Iowa, Nebraska, South Dakota, North Dakota and Illinois territory -Quality assurance for process orders via phone, fax, email, and online systems. -Product knowledge including installation and design specifications for countertop projects -Relationship building with Home Depot kitchen designers and expeditors -Education customers with current sales and options so they can properly price and market Silestone, Sensa, &amp; Eco countertop projects while keeping the brand -Schedule installations, manage measure technicians, and resolve customer complaints Showroom Manager/Interior Designer, COSENTINO USA- Silestone Quartz, Sensa Granite, &amp; ECO Countertops September 2011-July 2012 -Interior design coordination, lead generating, follow-up, and problem solving for retail customers -Implement in-house sales to move product, maintain and create displays. Schedule installations, manage measure technicians, and work trade shows -Relationship building, sales negotiation, and quoting while securing design specifications from design centers, contractors and individual customers according to their personal value and promotional sales -Product knowledge including installation, project management, support, report tracking, &amp; staffing</td>
</tr>
<tr>
<td>I graduated with my Bachelor’s Degree in May and began my Master’s degree in August. I have not had and professional experience yet.</td>
</tr>
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</table>
Most recently, I assisted in the design, planning and execution of a major remodel of the retail food concept I presently manage on campus.

None. I've redone rooms in my own house, but that's it.

Independent consulting, mostly residential kitchen remodels

I can't find a job because I lack the software experience.

Freelance Designer

Interior Designer, Healthcare  Interior Designer, Hospitality

Healthcare design - designer drafter I/II. Pediatric intensive care unit, women's imaging center, radiology renovations

Design assistant - take site findings and implement them into a 3D model via sketch up, residential design projects.

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I am currently not working wall attending graduate school. My graduate degree will be in the same field, and I am pursuing this degree with the intention of returning to practice and eventually furthering the profession by teaching at the university level.

Sales-Furniture Manufacture

I'm a graduate researcher now

My interior design position was temporary and ended 3 months ago. I am unemployed and still looking for work in the Interior Design field every day.

Flooring sales. I didn’t start searching for a job early enough senior year so I decided to stay in school one more year and moved to Chicago to attend Archeworks. A recruiter in Chicago mentioned to me that I should be in sales. Also I felt my portfolio wasn't good enough and only had one real interview for an interior designer position.

Architecture, working as an architect would allow me to design for the interior exterior and take into account urban context.

I went directly into education so the following questions do not pertain to my situation on a large scale. I only keep a small number of residential clients outside my teaching responsibilities.

student

I am currently working for a home building company as an Office Manager. The company builds starter spec homes and sells them so fast that they do not invest in creating model homes. While my position is more administrative and does not directly relate to interior design, I do keep the paper work/builder packs organized for our home sales and available lots. These packs include full sets of CD’s, which I need to communicate to appraisers, title and mortgage companies. This type of position allows me to stay connected to the interior design realm (residential building), but I have the flexibility to use my other skills and interests which is a freedom I enjoy. It makes me enjoy my work more, since I don’t feel so restricted to interior design work only.

I am not in the interior design field because when I left my previous job (due to relocation on my part) I could not find a job in the industry (summer 2010). I use my degree in a related field (exhibits and events).
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<tr>
<td>Coaching-- I was an athlete throughout high school and got the opportunity to coach full time. Also, the design industry is really hard to get into right now in my state. I'm also planning to go for my masters in Architecture in Fall 2013, so I wanted a year break.</td>
</tr>
<tr>
<td>I work in retail. It is a job I've had since I was in college. I haven't had much luck finding any jobs in the interior design field since graduating. I applied to the few design-related jobs I could find but was never contacted about any of the positions after applying.</td>
</tr>
<tr>
<td>Continuing education in Cultural and Creative Industries in London. Pursuing career in Events Management/Planning. Wasn't completely happy with the idea of interior design as a career and wanted to explore other options.</td>
</tr>
<tr>
<td>Non-profit Housing Counselor. There were no jobs at graduation in my town.</td>
</tr>
<tr>
<td>I am in a related field as a Product rep. Unfortunately there are not many jobs due to the economy in the area and I cannot move.</td>
</tr>
<tr>
<td>I'm in Retail Food Management at the college. I'm in this field because there were no jobs in interior design when I graduated.</td>
</tr>
<tr>
<td>I have not found employment in the field since graduation. I have moved to an area that has a small population (200,000) and the job market for designers is bleak, however I am not in a position to leave due to extenuating circumstances. I've been a server in a restaurant for the last three years and have taken courses to become a Master Gardener and Permaculture Designer with the hopes that I can integrate that with my Interior Design and Housing degrees into some sort of profession for myself. I will answer the following questions based upon how prepared I felt at graduation.</td>
</tr>
<tr>
<td>Full-time pharmacy technician, which is what I did to support my family during my studies. Not much available in my area for interior design and I do not want to move until my children are done with their education.</td>
</tr>
<tr>
<td>I am no longer practicing because it was very hard to keep a job. For this reason and others I have moved towards public policy, but working on environmental issues as I did as a designer. I definitely feel that something I would have liked to have known more about while in school was how fickle the design industry can be. There needs to be ways to help students prepare for this and be more in touch with local market saturation or areas where there is demand for their services if not locally.</td>
</tr>
<tr>
<td>I am working at a veterinary clinic because I could not afford to move to a bigger area where there would be opportunities to practice interior design. I have always been interested by animal health care and there was an opportunity at the local clinic with on the job training.</td>
</tr>
<tr>
<td>Exercise Science: There is always a need for personal trainers. The job market is more open because having the generic knowledge and skills can get you started anywhere.</td>
</tr>
<tr>
<td>Sales and Marketing. There were not design jobs available upon graduation and post-graduation there was some disappointment with the program and level of creativity allowed. The jobs and careers the college pushed graduates towards did not align with my personal goals. Pay and benefits of a design job were not as accommodating as alternate field. The job I hold now allows creativity, a strong group and experience in skills I would not have developed based in design. I continue to freelance as well as own my own company designing and refurbishing furniture and other small items.</td>
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Sales
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<tr>
<td>Project management and post occupancy skills could be greater emphasized.</td>
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<tr>
<td>None I felt very prepared for the job I am currently in.</td>
</tr>
<tr>
<td>Though I understand the need to teach concepts and how to think about design during school, I wish I had learned more of the software programs that I use every day.</td>
</tr>
<tr>
<td>Better computer rendering skills as well as quick, versatile hand sketching. I would like to see more budget oriented design problems in class.</td>
</tr>
<tr>
<td>More &quot;real world&quot; experiences, teaching more programs in depth like: Revit, Photoshop, InDesign.</td>
</tr>
<tr>
<td>Specification and construction documents, Project management, Sustainable Design Principles</td>
</tr>
<tr>
<td>Codes, budget, building relationships and how to work with vendors, and programming.</td>
</tr>
<tr>
<td>Budget and programming, project management, interaction with architects etc.</td>
</tr>
<tr>
<td>More training in computer programs like 3D Studio Max, Revit, etc. Most job postings prefer applicants to already be trained in these programs.</td>
</tr>
<tr>
<td>Adobe Creative Suite, creation of selection schedules, budgeting</td>
</tr>
<tr>
<td>Conceptual drawing and sketching - more emphasis on quick and loose, less on perfect hand renderings.</td>
</tr>
<tr>
<td>Collaboration with the partners in our field - architects, engineers, contractors, millwork professionals.</td>
</tr>
<tr>
<td>Revit, InDesign and Photoshop basics, conducting client meetings, determining the business end of our profession I.e.: budgets, contracts, billable time, etc.</td>
</tr>
<tr>
<td>Construction management, project budget, contract documents, bids, transmittals, proposals, marketing, etc.</td>
</tr>
<tr>
<td>PORTFOLIO!!! Learning Revit. Collaborating with architecture students on a project. Too many team projects - do a few individual ones to let talent shine through in final portfolio.</td>
</tr>
<tr>
<td>Presentation skills, Intimate product knowledge with vendors we will be working with in our field, Understanding of live construction documents – showing all aspects of a complete set, Fundamental knowledge of additional programs i.e. Photoshop, Illustrator, InDesign, Revit, SketchUp.</td>
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**Table H.3 – continued**

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<tr>
<td>project budgeting; project management</td>
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We were barely taught SketchUp and InDesign, which are both essential to my work. In addition, we did not learn Revit or Photoshop at all. The only program that we were adequately taught was AutoCAD, but part of the reason I was successful as an intern was that I had taught myself SketchUp, Revit, InDesign, Photoshop and Illustrator, so was able to be involved in more projects because of my skill set.

<table>
<thead>
<tr>
<th>Contract with clients</th>
<th>Writing projects bids</th>
<th>Scope of projects and pricing</th>
<th>Working with budgets</th>
<th>What type of projects require architects sign off</th>
<th>professional writing and verbiage of contracts</th>
</tr>
</thead>
</table>

Computer skills: Strong Adobe Photoshop & Illustrator skills are expected by all employers and should be part of core curriculum - our CAD professor didn't know Photoshop so our class didn't learn it. 3D rendering programs should be offered as an elective.

| Fabric was not covered in any classes I took. Where I currently work drapery is a large percentage of our business and I struggle in this area. As I prepare for the NCIDQ a lot of questions I struggle with are regarding fabric/drapery. Getting measurements from sites is another area that I feel could have been touched on. There are so many gadgets and tools to help you get site measurements I had no idea about until after a year of struggling to measure a site by myself. The firms I have worked for have two people working so both cannot go to a site at the same time. It may be a good exercise to have measured a site alone once while being in school. |

| Branding and strategy (why how we are trained to think is a valuable part of a team) |
| Technical for custom objects, x-refs for documents - easier for multiple people to work on different aspects of the drawings. |

<table>
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<tr>
<th>Preparation of Construction Documents</th>
<th>Working within Budgets</th>
<th>Time Management.</th>
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Since jobs with commercial firms and architects are so hard to come by at an entry level position, I feel that it would have been helpful to learn more about residential design (drapery calculations, installation requirements etc.).

<table>
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<tr>
<th>Revit, Adobe software, Pricing, Adobe software, overall how to project manage, scheduling</th>
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Actually measuring a space, and learning how to measure once so you don't have to do it again.

| I went to work at an architectural lighting firm upon graduation, and I felt like I had a lot to learn once I started working there. Our graduate school curriculum only included one lighting class, so I took it upon myself to learn as much about lighting as I could through my final research project. That was helpful and very beneficial for me getting a job, as it showed my future employer how much I was interested and dedicated to working in the lighting field. |

| Real Situation Design and issues and budget. |
| More emphasis on residential design and less on commercial, so they are equally represented. Better knowledge of current upholstery and case good manufacturers. |

<table>
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<tr>
<th>Contracts/Bidding, CAP Studio, CET Designer</th>
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Post-Occupancy Evaluations, Interaction/possible scenarios with clients, contractors and architects, How to create a merchant account, receive large shipments, round up a presentable crew, and deliver goods to high-end clientele.

| We only had 1 semester of AutoCAD, after that, we were totally on our own. Most of our professors didn't know how to use that or any other digital programs so we had to rely on each other and the internet for training. |

| 103 |
Greater focus on the technical aspects and real-life applications rather than just mostly concept-driven classes. We were directed to design completely out of the box and over the top in order to exercise our creativity, but we also should have been allowed to design for reality so we would have been better prepared for real-life client expectations and budgets. For example, we had a project in which we had to design a home for a low-income community that was culturally sensitive. In reality, low-income housing is simple and basic, not tailored to specific cultures.

More field observation and projects centered around actual tangible existing conditions. More computer rendering skills, less hand rendering skills emphasized (hand rendering is a skill you either have or you don't, computer rendering is something you had the time/money to invest in or didn't, for the cost of tuition and technology fees, a U of M student should have these skills). Budgeting, project managing, marketing, project timelines (whose role starts/stops at what time in the process). Roles and responsibilities of all involved in the design process well defined so the student understands where interior designers obligation starts and stops.

Emphasis on budgets, construction docs/specs, and on 3D rendering and computer drafting programs other than AutoCAD and SketchUp

Product knowledge: specifically the differences between various products that can be used for similar applications, and the pros/cons for each.

Revit, 3DS and other rendering programs. Administration skills- Budgets, Contracts etc.

Computer-aided design skills should have been more emphasized. I learn a lot on my own out of class, but many of my classmates failed to understand the basics of programs such as AutoCAD, and therefore, were not prepared, or qualified, to work in many design related fields after graduation.

project management, budgeting, presentation skills, excel class

I think Revit is an absolute necessity, and that was not a part of my curriculum. In a small firm, it thankfully did not hinder my job offer, but there were many jobs I could not even apply for because the only Revit knowledge I had was a 4-hour seminar I took outside of the classroom. I think it would be very helpful to discuss the business aspect of projects more as well- contracts, bid documents, etc.

REVIT, Photoshop,

A better understanding of the project management and construction administration services in hand with a better understanding of construction documentation and process would have prepared me better.

Setting up and running a design business. What contacts you need to make to finish a job (contractor, electrician, plumber, seamstress, tile setter, etc.)

Contracts and administration of contracts Project management

I don't know enough about the business side of things - I wouldn't feel comfortable attempting to manage a project on my own. That ability would be very helpful, because then I could start my own business. However, I don't feel confident attempting that because I don't know enough about project management, product sourcing, budgeting, client relations, or codes. I think the program at OSU was focused on getting you a job as a CADmonkey at a large firm and letting you work your way up. They weren't focused on giving graduates the tools to function independently in the field.

Self-promotional skills such as portfolio building. More exposure to a variety of computer programs that are relevant to the market. Project management skill building exercises.

I think value engineering, bidding, exposure to government contracts, contract administration, formal addendum processes have been the main things that were missed, but it would be hard to include them all. I think contract administration and bidding would be the most helpful of these.
There should have been more courses or focus on contracts. We had one class about them and it was a writing intensive course that focused more on our writing abilities than understanding how to make bids and agreements for designs.

Meeting Codes for counties and state, working with others: architects, construction crew, etc., Following the process from start to finish and how to program this, More work with 3D rendering programs. We had a lot of the colors and fabrics and pretty stuff but very little construction experience (architecture). There was no emphasis on millwork.

Furniture selection, millwork drawings

Creativity. Everyone in the program ended up with the same final result due to existing space conditions, teachers directing the student to the same conclusion. Program was too rigid, for lack of a better term. Many student were able to conform, however, I believe this showed lack of creativity. The students thinking outside the box has poor reception.

Budget constraints, and working with existing layouts and materials.

Coordination with MEP, casework detailing, coordinating existing conditions with renovation work, project management

Budgeting

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REFERENCES


Elizabeth (Liz) M. Tarver received a bachelor’s of science degree in interior design from Florida State University (FSU) in 2001 and a master’s of fine arts degree, also in interior design at FSU, in 2013. Her interior design practice experience consists of commercial design and tenant development as a Junior Design Associate while at the Interior Design Group, Ltd. in Glenn Ellyn, Illinois. She then practiced design at DOCS Business Interiors, a Herman Miller furniture dealership, for six years in Tallahassee, Florida until 2008. While at DOCS, she worked in both sales and design and traveled to international furniture markets as a buyer for their two showroom locations. In June of 2008, Liz continued her career as the interior designer in Facilities Design at Florida State University. Liz is a NCIDQ certificate holder and a licensed interior designer in the State of Florida.

Liz is happily married and has two beautiful daughters. She would like to pursue a teaching career in higher education and to share her knowledge, experiences and passion for good design with future design professionals. She is looking forward to enjoying more time with her family, friends, good books and the outdoors.