COMPETENCIES PREFERRED BY EMPLOYERS OF INTERIOR DESIGN GRADUATES IN KENYA.

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DECLARATION

I Evelyn Ntinyari do hereby declare that this thesis for a MA in Arts and Design (Interior Design) is my original work. It has not been presented for a master's degree in any other university.

Signed……Date:……

DECLARATION OF THE SUPERVISOR

This thesis has been submitted for examination with our approval as university supervisors.

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DEDICATION

To the almighty God for taking me through this far in my academic studies. May your name be glorified. To my late mum who would have loved to see me come this far. To my family for their continued prayers and support, and to my loving son Hector Emmanuel, who endured while mum was working late. Moreover, to Cynthia Auma for looking after Hector while I was away.

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ABSTRACT

The changing nature of today's workplace has created new challenges for interior design professionals relating to the employability of recent interior design graduates. Frogner (2002, pg. 18). The pervasive influence of technology has significantly influenced the business and economic climate forcing business to change its very culture. Observing the incessant changes in the society, (Seligson, 2000) compares the categorizing of curriculum and careers to a snapshot from a moving picture. A need for graduates that are technically competent, with a broad range of skills for employability has become imminent, Frogner (2002, pg. 18).

The task of identifying the priority skills identified as competencies sought by employers for employability of interior design graduates was the focus of this study. The key research question was "*What are the preferred key skills identified as competencies that employers seek when employing new interior design graduates?").* A random sample of 70 interior design practitioners practicing in Kenya, majorly Nairobi, Mombasa and Kisumu, was selected. Data collection involved use of focus group discussions and questionnaires developed for the study. Data analysis consisted of using a two-sided t-test for significance set at 0.05 levels to identify competencies deemed important by the responding interior design practitioners. Any variable having mean of 3.00 or higher Indicated that the respondents considered the variable important in the four categories of competencies, as identified in the instrument.

Preliminary discussions with interior design employers and graduates indicated a pivotal cause for concern, regarding competencies of interior design graduates pertinent to their employability. There are consequences faced when graduates Lack competencies sought by employers. Frogner (2002 pg. 18). In Kenya, There is no study to date know to the researcher, which documents the employers' preferred competencies in interior design graduates, thus the need and the inspiration for this research. Findings will benefit the industry and prospective employees.

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1.0. INTRODUCTION

1.1. Background information

The changing trends in interior design are influencing its practices (West, 1999). When organizations are placed under the stress of change, they adapt by addressing the changes they must face (Amabile & Conti, 2000). To survive the economic challenge of succeeding in a very competitive world market, a new set of priority skills needed by employees has emerged on the forefront, (Amabile, Conti, Coon, Lazenby & Herron, 1996). Said priority skills are identified in this thesis research as competencies. Silver Platter Information Retrieval System (SPIRS, 2009) defines competencies as *"the individual's demonstrated capacity to perform, i.e. the possession of knowledge, skills and personal characteristics needed, to satisfy the special demands or requirements of a particular situation''.* The employers and clients are looking for all rounded interior designers who can not only work in interior environments but can also integrate a multidisciplinary approach to design, current technology, product development and the built environment, Frogner (2002, p. 18).

There is a skills gap from the interior design graduate in the competencies needed by employees to carry out their existing tasks (Green et al., 2008). In addition, there are skills not currently possessed by the workforce, but which an employer believes will be necessary in future, if the business is to develop (Skillsmart, 2004). These two types of skills shortages are all likely to be relevant to employment. From this research, employers of Interior designers, as well as educators, will benefit from an increased understanding of the employers expected competencies from the interior design graduate.

"Technology is changing the trends in interior design', Taute (2005 p. 24). The workload of the interior designer as well as the type of work designers perform on a daily basis is changing because of the influence of technology. It takes less time to complete a project when a project is implemented using e.g. computer technology (Senyapili & Basa,

2006). Materials are also changing the face of interior design, (Caplan, 2005). The materials have become a powerful tool and have changed designers' concepts of the way the design is produced and how it functions.

A research done by Susan Lewis of the Boston Architectural College, on Interior Design Competencies, (Susan Lewis, 2009) states that the best preparations for the future is to work closely with the those practicing and receive information on essential competencies of an interior designer and thereon inform the educators in the training institutions. This will inform graduates on their expectations and enable them to adapt to a changing world. In addition, educational philosophies and goals need to be applied in the development of a creative professional who can synthesize information, and analyze problems from many different perspectives.

Finding from the study by (Waterman and Collard, 2004) found out that Global demands are forcing business to change its very culture. At the same time, instant availability of technological knowledge and the pressure to retain a competitive edge are causing corporate hierarchy to decentralize. Employers are developing a new perspective on hiring graduates thereby changing the nature of today's employment. In the new emerging workplace, companies are focusing on employability skills identified as competencies. Under the new covenant, workers are less supervised but frequently involved in identifying problems and making critical decisions. Business strategies like collaboration and emphasis on quality demand teamwork, listening skills, and the ability to set goals, and develop and implement strategies for achieving goals. The result is a need for self-reliant workers. The company in which the skills needed to remain competition is changing at a dizzying pace (p. 88).

Based on the findings by Waterman and Collard various views were expressed expanding on the categories of skills needed by employers for employability of the graduates. One such viewpoint expressed by (Carnevale, Gainer and Meltzer 2008) relating to the findings by the American Society for Training and Development was that: Employers need employees who can think on their feet (critical thinking skills to solve problems)

and who are able to come up with innovative solutions. They need employees who have the ability to conceptualize (personal management), organize (leadership), verbalize thoughts (oral communications), resolve conflicts (interpersonal skills), and work in teams. To facilitate the understanding of the competencies required by the employers, the skills were grouped into five skill categories: -

i. Personal development,
ii. Language and information,
iii. Social cultural,
iv. Work related and
v. Technology.

Most of the categories focus on personal image, attitudes, habits, behaviors, techniques of communication, problem solving, decision-making and management and organizational processes (Lankard, 2004). The groupings of categories relating to competencies sought by employers are also summarized by S. Lewis, (2009) as indicated in the literature review. By reviewing literature on interior design training in Kenya, It has been noted that the undergraduate interior design education in most training institution in Kenya are still largely based on curriculum that emphasizes the Bauhaus (Pido, 2002) which was grounded in craft ideology and stressed intuitive solutions to design problems form, (Margolini, 2000). What emerges is thus a mismatch between the interior Design Education and the Workplace expectations. This brings to light that creating a curriculum that constantly adapts to the unpredictable technology trends and defining an absolute exit profile of the interior Design student would be tantamount to futility. It is because of this that this research looked into interior design employment Practice through an outline of common skills and requirements that employers look for in graduate interior designers.

Concerns on competencies expected by employers have been raised, (Pido, 2002) that Practicing design graduates are not well equipped with skills to perform at the workplace. In addition, some ex-students say their education did not prepare them to work. This indicates a gap between training and practice. Education should respond to changes and access policies that increase flexibility in the delivery of interior design program training.

Colleges and universities have retained, overall, their traditional approaches to instructions. Most of education training institutions in interior design continue to emphasize theoretical learning and employ direct instruction methods in studio settings. The emphasis on classroom learning and its separation from the workplace means that much that what learnt is decontextualized and it is not related directly to the outside world (Stern, 2002). Higher education is expected to offers a professional program, designed to give the students a solid foundation of concepts and expose them to the vast industry of interior design and planning. The coursework is expected to be comprehensive and allow the students to enter the workforce with a thorough knowledge and hands-on designing experience, (Taute, 2005).

In Kenya, no study has been documented showing the changing trends in the interior design practice that affects the employer-preferred competencies. It is because of this that this research was undertaken to look into interior design employer preferred competencies in interior design graduates. The research ascertains competencies that are sought by employers when employing interior design graduates in Kenya. Interior design practices were investigated with questionnaires to identify these competencies essential for optimum performance at the work place. A focus group discussion interviewed twelve graduates who share similar characteristics or common interests, in interior design practices, to establish their shortcoming and the challenges they face because of competence expectations.

1.2. Problem statement

There is a skills gap from the interior design graduate in the competencies, which employees need to carry out their existing tasks (Green et al, 2008). In addition, there are skills not currently possessed by the workforce, but which an employer believes will be necessary in future, if the business is to develop (Skillsmart, 2004b). In a research by (Lewis, 2009) on Interior Design Competencies states that the best preparations for the future is to work closely with the practioners and get information on essential competencies of an interior designer and there on inform the educators in the training

institutions. This will inform graduates on what is expected of them and enable them to adapt to a changing world.

As stated in the introduction there is no study to date, which documents the employers' preferred competencies in interior design graduates in Kenya, thus, the need for this study. The research will assist educators in understanding employers' expectations of the interior design graduate. It could also help the faculty in developing curriculum, inculcating the competencies identified in the findings. In return this could help in aligning professional expectations and student realities for the 21st century workplace to abridge the mismatch that results when the exit profile of students from training institutions fail to not only meet the demands of the industry but also, cannot be augmented into sustainable social-economic solutions.

1.3. Research aim and objective

The researcher's primary aim was to establish the employers expected competencies of an interior design graduate in Kenya.

Specifically, this research aim was to:-

i. To profile the interior design graduate.
ii. To determine the expectations of the interior design employer from the interior design graduate.
iii. To analyze the competency gap according to (I) and (II) above.
iv. To propose solutions and formulate recommendations that will help interior design graduate attain the needed competencies.

1.4. Research questions

i. What is the current profile of interior design graduate in Kenya?
ii. What are the employers expected competencies in an interior design graduate in Kenya?
iii. What is the competency gap between the interior design graduate and the employer in Kenya?
iv. How can the interior designer acquire the competency that employers need?

1.5. Justification for research

Due to changes in the work environment and infusion of technology, expectations and needs of employers have changed relating to the possession of competencies in interior design graduates, (Taute, 2005). A study of the factors relating to the employability of graduates is beneficial to practitioners and students of interior design. At the same time, the findings from this research are a good resource for present knowledge and future studies, adding to the limited availability of knowledge pertaining to the field of interior design and employment.

The concept of *'design for the client'* has been an important part of the instruction that interior design educators impart to the students, and it is equally relevant to interior design practitioners. Contemporary trends indicate a marked departure from the traditional way of conducting business, (Skillsmart, 2004). The prime objective of practitioners is to fulfill the needs of their clients. To sustain and maintain a competitive edge, the practitioner must seek graduates with requisite skills that are harmonious with the demands of the business environment. In the 2005 interview, ASID National President 'Penny Bonda' succinctly states, *"The marketplace is so competitive these days that however you can differentiate yourself is a real plus. Our clients are dealing with the issues of technology, business, etc. - and that means we need to as well"*. Therefore, the awareness of trends, enhanced by the findings from this research, will be mutually beneficial for the industry and academia.

1.6. Scope

The research focused on ascertaining those competencies currently sought by employers when hiring interior design graduates from various training institutions in Kenya. Various interior design practices in Nairobi were investigated to identify competencies essential for optimum performance at the work place. Graduate employees from university of Nairobi and Maseno were interviewed through focus group discussion establish the challenges they face while meeting the needs of the clients at work place.

1.7. Significance of the research

- Through this research, we can begin to determine the kinds of graduates employers want from higher education.
- The research will assist educators in understanding employers' expectations for students entering into the interior design profession.
- It will help to bridge the mismatch that results when the exit profiles of students from training institutions fail to meet the demands of the industry.
- This information will be relevant to Policy makers concerned with the development and the growth of the interior design and other design sectors to provide insight for further research in weaknesses and policy issues regarding training.

1.8. Limitations

- The research was limited to interior design practitioners majorly in Nairobi, Mombasa and Kisumu. Sample selected was representative of the interior design industry covering the entire country.
- Availability of knowledge pertaining to the field of interior design competencies preferred by the job market in Kenya was limited.
- The time flame required to finish the thesis research was limited.
- Finances to conduct field research were inadequate since the researcher was self-sponsored.
- Since the survey was distributed to a random sample majorly in Nairobi and others in Mombasa and Kisumu, the responses are representative of the interior design practitioner population in Kenya, belonging to these professional organizations. It is not appropriate to generalize these findings. Due to the diverse areas of specialization of the respondents and the differing geographic locations, the perceptions of the respondents may differ. As the respondents marked as

many as one to four as their area of specialization, conclusions could not be drawn as to what specific personal characteristics and skills were desirable relating to a specific area of specialization. This could be a limitation of this research. Future studies could be performed by analyzing various segments based on product/service output of the firm.

1.9. Definition of terms

The definitions of terms used in the study are listed as follows:

- **Skills:** Complex mental and/or physical behaviors that require practice to be performed proficiently (SPIRS, 1966).
- **Employability skills:** skills that enable an individual to acquire and keep a job (Saterfiel, Thomas, and McLarty, 1995, p. 1).
- **Employer:** one who employs others for wages or salary (Webster's New world dictionary).
- **Threshold competencies** - The characteristics required by a jobholder to perform a job effectively are called threshold competencies.
- **Competence-** A cluster of related abilities, commitments, knowledge, and skills that enable a person (or an organization) to act effectively in a job or situation. Competence indicates sufficiency of knowledge and skills that enable someone to act in a wide variety of situations, (www.businessdictionary.com.).
- **Attributes-** A cluster of related abilities, commitments, knowledge, and skills that enable a person (or an organization) to act effectively in a job or situation. Attributes refer to the qualities that enable you to apply knowledge in a practical way to get something done.

CHAPTER 2

2.0. LITERATURE REVIEW

2.1. Overview

The prime objective of this research focuses on evaluating what competencies interior design practitioners, relating to the employability of interior design graduates, desire. The focus of this study evolved from the pivotal cause of concern expressed by the interior design practitioners indicating that 'skills gap' exists between the employers needs and competencies and attributes required of employability of new graduates' (Vasu and Frazier, 1989).

Findings from the literature review of diverse disciplines with similar problem to this research indicate that a skills gap exists between employer needs and the competencies and attributes required for employability of new graduates (Vasu and Frazier, 2001). The problem pervades not only the interior design industry, but encompasses an entire spectrum of diverse disciplines. When graduates lack competencies and attributes sought by employers for employability, it has far-reaching consequences for both employers and graduates.

- Graduates encounter difficulties in finding a job.
- Employers have to expend valuable time and resources training the graduates so that the graduates can be productive and contribute to the business objectives.

Traditionally, interior design graduates could be hired, trained and eventually integrated into the main work force. However, the pervasive influence of technology has significantly influenced the business and economic climate forcing business to change its very culture. Observing the incessant changes in the society, (Seligson, 2010) compares the categorizing of curricula and careers to a snapshot from a moving picture. A need for graduates that are technically competent, with a broad range of skills for employability has become imminent.

2.2. Insight into academic resume

The hiring of interior design graduates by employers generally follows a basic pattern. The prospective employee first attends four years of college from an interior design program. In most of the interior design training institutions in Kenya, an undergraduate degree takes four years while a diploma goes for two to three years depending on the institution. Upon graduation, the graduate may find employment in a variety of design firms including residential design, commercial, contract, and facilities management. The employees who are integrated into the mainstream of employment are expected to be equipped with the competencies and skills pertinent to performing their various jobs, (Davis, 2000).

2.2.1. Courses in interior design

Interior design is divided into five major categories as trained in Nairobi and Maseno Universities. These Universities offer a Bachelor of Arts degree, Master's degree and PhD in careers such as:

- Interior architecture
- Furniture design
- Landscape design
- Exhibition and display and
- Soft furnishing.

Other Colleges offering interior design

- N. I. T. (Nairobi Institute of Technology)
- Evelyn's college of design
- Buruburu Institute of Fine Arts
- Elle's Design College in Nairobi.

Universities offering Interior design

- University of Nairobi
- Maseno University
- Egerton University.
- Technical University of Kenya, (former Kenya polytechnic).
- Kenyatta University (from 2014)

The decisions to hire suitable interior design graduates rest on interior design practitioners commonly referred to as *employers.* To hire the graduates and integrate them into the work force, the employers focus on key threshold competencies. Preliminary interviews with practitioners indicating a pivotal cause for concern, regarding competencies of interior design graduates pertinent to their employability, prompted this research. Findings from the literature review of diverse disciplines with similar problem to this research indicate that a skills gap exists between employer needs and the competencies required for employability of new graduates (Vasu and Frazier, 2001). Studies conducted by (Cappelli, 2002) reached similar conclusions that graduates did not possess many of the skills most relevant to jobs contributing to the widening skills gap. The problem pervades not only the interior design industry, but encompasses an entire spectrum of diverse disciplines (Harvey, 2009).

A survey conducted by the Economist Intelligence Unit of more than 350 executives from around the world discovered that employers are growing more concerned over the issue. Nearly two-thirds of the survey respondents say that talent shortages “are likely to affect their bottom line in the next five years. The Talent Paradox is equally challenging for workers, as it requires them to continue learning new skills and developing existing ones, New Times Magazine (2011). When graduates lack competencies sought by employers for employability, it has far-reaching consequences for both employers and graduates.

2.3. Interior design's theoretical oppositions

Interior design has a long history of trying to locate its philosophy and theory, and as a discipline is still struggling to find a balance somewhere amongst opposing philosophies, all of which encounter an interface between object, user, interior environment and building structure (Molnar & Vodvarka, 2002; Rengel, 2003). Compounding this problem is the issue that we practice with insecure assumptions about what we do and how we do it. We wrestle with our own past and with what Henry Hildebrandt, (2001, Pg. 75) noted is *'...an ambiguously defined theoretical knowledge base.* There are different and opposing views of what constitutes critical interior design. There is much philosophical debate in architecture, industrial design and the visual arts about these issues (Mitchell, 2003; Rothschild, 2006) but far less in interior design.

There is a disparity between the theories used to teach interior design and the actual act of designing. Some of these theories are ascribed as objectivist and absolute truths (Mitchell, 2003; Kruft, 2004). Notions of truth, beauty and values embedded in assumptions about what constitutes design in general, and interior design in particular, are often taken for granted (Ainley, 1998; Vaikla-Poldma, 2003). For example, design history education is often influenced by Modernism, which advocates the use of aesthetic categories and constructs that situate the architect as the visionary who determines a building vocation through the aesthetic categories of symbol and form (Molnar & Vodvarka, 2002; Mitchell, 2003). The unquestioned acceptance of these aesthetic categories as part of an interior design stance does not take into account the role of humans as subjective entities in interior spatial environmental designs (Ardener, 2001; Ainley, 2008). Rarely is the interior designer given carte-blanche to be a visionary in the Modernist sense, and design problems tend to be solved by understanding the complex social dynamics and personal needs of the users within a physical framework that is not static Vaikla-Poldma, (2003, p.19).

2.4. The practice of interior design

By contrast, the actual practice of interior design is a complex, multi-dimensional discipline situated in a context of time, space and dimension that is driven by contemporary ways of living and constant change. Interior design is considered both an art and a science. However, this changing and evolving discipline is also situated in the collaborative experience that occurs between the designer and the client (Franz, 2000). Interior designers need to simultaneously solve problems situated in the pragmatic parameters of space and in complex personal, social, cultural and dynamic relationships (Spain, 1992; Grosz, 1995; Ainley, 1998). Beginning in the 1950s, interior decoration evolved into interior design and in the process of licensure became a profession. Interior designers continued to perform the services of interior decorators, selecting all of the materials that the building occupants touch, see, or use. This transformation to interior design expanded the concerns about aesthetics to incorporate space planning. This new profession applied psychological and sociological theory to enhance the environment and to modify the behavior of end users, which allowed each end user to function at an optimal and safe level, (Abbott. A, 2008).

In order to understand the evolution of interior design, it is important to understand how the profession currently describes itself. What follows is the official definition of the practice of interior design as stated by the National Council for Interior Design Qualification (NCIDQ) retrieved from their web site in 2006:

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, (Abbott A., 2008).

A simplified definition of interior design is that interior design utilizes the theory of behavior to design spaces in a microenvironment that are both functional at a safe and efficient level for every end user and are aesthetically pleasing. Although practitioners of interior design have been in evidence in one form or another for centuries, interior designers first began working on licensing in the 1950s. Olga Guelf stated in her history of the American Society of Interior Design (ASID) in 2006 that California and New York, among other states, were some of the first jurisdictions to work toward licensing. The 1970s saw two initial steps toward the professionalization of interior design. They were the establishment of a nationwide examination by the National Council for Interior Design Qualifications (NCIDQ) and accreditation of educational programs by the Foundation for Interior Design Education and Research (FIDER). In the early 1980s, changes to the building codes stopped the ability of interior designers to submit documents for building permits. For example in 1981 the alteration section of the Building Officials & Code Administrators International, Inc. (BOCA) changed the remodeling clause to require the seal of an architect or professional engineer to submit documents for a building permit. This affected interior designers' right to practice, as stated by Building Officials & Code Administrators International, Inc. (1981). Prior to this change, interior designers had been able to submit documents for projects that did not involve a structural component and receive building permits.

Afterwards many interior designers could not submit documents to building departments and had to hire architects or engineers to seal drawings at an additional cost to their clients. This altered code inspired many independent interior designers to work for licensure in their field. During the mid-1980s, in response to the changes in the building code the quest for licensure began in earnest throughout the United States. Part of this process included the need to establish that the practice of interior design protected the health, safety, and welfare of the occupants, or there was no basis for licensure, ASID-The American Society of Interior Designers' (1987) took the position that licensure

allowed a client to select the correct professional for their project by being able to examine qualifications certified by their governmental jurisdiction. The challenges inherent in attempting to achieve legislation transformed the profession. This process made interior design an independent profession in its own right.

Allen Tate and C. Ray Smith (2006) stated that interior design is grounded in behavioral theory. An interior designer's primary concern is for the occupant of the space; the focus is on the individual and his/her need to function at an optimal level in the designed environment. Thus, the general concerns inherent in interior design include a commitment to develop an interior environment that reflects client's needs and behaviors, as well as aesthetic concerns. Interior design is a profession whose practitioners consist of many more women than men. In fact, in 2004, the ASID's statistics reports 80% of their membership were women. This feminization had its historical roots on the fact that many interior design programs developed in home economic departments, which were the almost exclusive domain of women. By the 1970s, when many home economic programs changed their names to reflect the scientific nature of the field the theoretical basis of the field had already been established. Over the years, these values have cross-pollinated with other programs located in schools of art and architecture through scholarly publications and presentations at the Interior Design Educators Council (IDEC) conferences.

2.4.1. The Changing Trends in Interior Design Practice- Technology

Technology in the field of interior design is becoming an increasingly important tool in the day-to-day tasks performed by interior designers (Custer, 2009). The past few years have seen rapid changes in the types of technology available and the influence technology has had on the interior design profession. Skill in using a particular technology or software significantly influences work performance and production. This study will help to determine employer expectations for recent interior design graduates regarding technology competencies, and to determine how interior designers' knowledge has changed because of increased use of technology.

Technology is influencing the core understanding of design. We not only rely on the internet and computer programs e.g. word processing, Archicad, AutoCAD, and other computer programs to get us through each day, but we also rely on technology as a means of design implementation, resource generation, and data gathering. Designers are using technology as a tool in problem solving (Taute, 2005). Technology becomes important in design decisions on layout and amenities. Interior designers may find that technology has the potential to make end solutions easier to determine. Additionally, finalizing presentations in a shorter amount of time that can be facilitated with computer technology. Employers are seeking for interior design graduates to be competence in this area. Designers are requires to be able to use more programs for optimum production of quality work.

As recently as ten years ago, although computers were being used as a tool for production, Computer Aided Design (CAD) e.g. Archicad, Autocard, Atlantis, 3D Max etc, were considered cutting edge (Mitton, 2004). Those designers who were working in firms ten years ago or more had a hard time difficulty adjusting to the changes that computers brought about regarding the use of hand drafting versus computer drafting. As (Taute, 2005) points out, there is an age divide in many interior design firms between young designers with knowledge of the latest software and the old guard with colored pencils and sketchbooks. The profession of interior design is continually growing and undergoing changes (Albanese, Hines, & Rainey, 2005) and a large part of this change is attributed to the role that technology plays in interior design. Gradual shift from the hand to the computer has been noticed and designers with digital knowledge are considered to have the potential to be the pioneers of new methods of designing (Catinella, 2009).

Taute, (2005, P. 24) states, **"Technology is changing the face of interior design"**. The workload of the interior designer as well as the type of work designers perform on a daily basis is changing because of the influence of technology. It takes less time to complete a project when a project is implemented using computer technology (Senyapili & Basa, 2006). Designers rely on the computer for word processing, time management, and resource generation. Product and material research is simplified as more and more

information can be found using the internet (Davidsen, 2000). Communication is faster between employees and clients, greatly reducing turn-around time. The computer has become a powerful tool and has changed designers' concepts of the way they function (Caplan, 2005). The pervasive influence of technology has significantly influenced the business and economic climate forcing business to change its very culture. Observing the incessant changes in the society, (Seligson, 2010) compares the categorizing of curriculum and careers to a snapshot from a moving picture. A need for graduates that are technically competent, with a broad range of skills for employability has become imminent. This has been stated well in the introduction.

The use of Computer Aided Design Programs (CAD) has had a positive influence by enabling interior designers to articulate ideas much faster and with detail e.g. production of drawings. This helps designers to be geared up on the CAD side and at the same time is geared up on the construction document side. A skilled use of CAD and the intended technologies enhance the ability to go straight from what you are presenting as a design to what you are producing as a document. Technology has become advanced to the point that most of the work interior designers perform each day are done using some form of technology. For example, (Mitton, 2004), stated that day-to-day reliance is pretty much on the computers for construction and doing other office work. The biggest changes has to do with designers having better understanding of space three dimensionally; to use the computer as a tool; starting to look more at the space in a three dimensional manner by taking advantage of the technology.

The speed at which designers communicate with others has been influenced by technology through the internet as well. The designer's ability to send drawings through the internet has allowed for a more prompt turn-around time in file sharing between co-workers, disciplines and clients. The use of the computer, as well as being connected via the internet, has allowed the transfer of drawings quicker and it has allowed designers to do drawings between offices, which obviously would have been more difficult 10 years ago and before that. It is imperative to graduate with above-average knowledge of technology skills to stay competitive in the job market. The accelerated use of technology

has given birth to understanding of the basic concepts of design but has also improved presentation techniques. The problem solving skills are significantly enhanced by the use of CAD related programs.

2.5. Types of Competence - (Human Resources-HR.)

Competence (or competency) is the ability of an individual to do a job properly. A competency is a set of defined behaviors that provide a structured guide enabling the identification, evaluation and development of the behaviors in individual employees. The term "competence" first appeared in an article authored by (R.W. White, 1959) as a concept for performance motivation. Later, in 1970, Craig C. Lundberg defined the concept in *"Planning the Executive Development Program".* The term gained attraction when in 1973, David McClelland, Ph.D. wrote a seminal paper entitled, *"Testing for Competence Rather than for Intelligence"*. It has since been popularized by one-time fellow McBer & Company (Currently the "Hay Group") colleague Richard Boyatzis and many others, such as (T.F. Gilbert, 2008), who used the concept in relationship to performance improvement. Its use varies widely, which leads to considerable misunderstanding. Some scholars see "competence" as a combination of knowledge, skills and behavior used to improve performance; or as the state or quality of being adequately or well qualified, having the ability to perform a specific role. For instance, management competency might include systems thinking and emotional intelligence, and skills in influence and negotiation. Competency is also used as a more general description of the requirements of human beings in organizations and communities.

Competency is sometimes, thought of as being shown in action in a situation and context that might be different the next time a person has to act. In emergencies, competent people may react to a situation following behaviors they have previously found to succeed. To be competent a person would need to be able to interpret the situation in the context and to have a repertoire of possible actions to take and have trained in the possible actions in the repertoire, if this is relevant. (Dreyfus, Stuart E.; Dreyfus, Hubert L., 1980), regardless of training, competency would grow through experience and the

extent of an individual's ability to learn and adapt. Competency has different meanings, and continues to remain one of the most diffuse terms in the management development sector, and the organizational and occupational literature. (Dreyfus & Dreyfus, 1980) introduced nomenclature for the levels of competence in competency development. The causative reasoning of such a language of levels of competency may be seen in their paper on Calculative Rationality titled, *"From Socrates to Expert Systems: The Limits and Dangers of Calculative Rationality".*

The five levels proposed by Dreyfus and Dreyfus

i. **Novice:** Rule-based behavior, strongly limited and inflexible.
ii. **Experienced Beginner:** Incorporates aspects of the situation.
iii. **Practitioner:** Acting consciously from long-term goals and plans.
iv. **Knowledgeable practitioner:** Sees the situation as a whole and acts from personal conviction.
v. **Expert:** Has an intuitive understanding of the situation and zooms in on the central aspects.

The process of competency development is a lifelong series of doing and reflecting. As competencies apply to careers as well as jobs, lifelong competency development is linked with personal development as a management concept, and it requires a special environment, where the rules are necessary in order to introduce novices, but people at a more advanced level of competency will systematically break the rules if the situation requires it. This environment is synonymously described using terms such as learning organization, knowledge creation, self-organizing and empowerment. Within a specific organization or professional community, professional competency, is frequently valued. They are usually the same competencies that must be demonstrated in a job interview, nevertheless, (Gilbert T.F, 2008). Today there is another way of looking at it: that there are general areas of occupational competency required to retain a post, or earn a promotion. For all organizations and communities, there are a set of primary tasks that competent people have to contribute to all the time. For a university student, for example,

the primary tasks could be handling theory, handling methods, handling the information of the assignment. Organizations often train their employees to offer the knowledge required to perform some tasks, especially to new trainees who lack the experience to perform.

McClelland and Occupational Competency

The Occupational Competency movement was initiated by David McClelland in the 1960s, with a view to moving away from traditional attempts to describe competency in terms of knowledge, skills and attitudes, and to focus instead on the specific self-image, values, traits, and motive dispositions, (i.e. relatively enduring characteristics of people) that are found to consistently distinguish outstanding from typical performance in a given job or role). It should be noted that different competencies predict outstanding performance in different roles, and that there is a limited number of competencies that predict outstanding performance in any given job or role. Thus, a trait that is a "competency" for one job might not predict outstanding performance in a different role. Nevertheless, as can be seen from (Raven, Stephenson, 2001), there have been important developments in research relating to the nature, development, and assessment of high-level competencies in homes, schools, and workplaces.

2.5.1. Competency identification

Competencies required for a post are identified through job analysis or task analysis, using techniques such as the ***critical incident technique, work diaries, and work sampling***, (Robinson, 2010). Individual employees' competencies are assessed through a variety of techniques. The concept of competency as a factor in recruitment, selection, hiring and employee performance evaluation has become very popular not only among HR practitioners but to the management echelons as well. Yet, in the more than three decades since it became a buzzword, still many are unfamiliar with the details of the concept. More so with its appropriate application and utility. Competency is still equated or defined as skills, ability to perform, capacity, and knowledge. As such, the term has

been used loosely. While it does not really matter much when used casually to mean physical and mental abilities, it does matter when used in job analysis to describe job requirements and performance standards. Competency takes more than skills and knowledge. It requires the right and appropriate attitude that eventually translates to behavior.

Competency is the sum total of skills, knowledge and attitudes, manifested in the employee's behavior. It is the *"means" to achieve the "ends."* A golfer for example, may have the skills to drive 300 yards, the knowledge why the golf ball fades or draws, yet he is not competent if he does not practice or if he gets easily affected by, his opponent's better shots. A computer customer service representative may be very skillful and knowledgeable in repairing computers, but if he does not arrive on an appointed time to the client, is similarly incompetent. For managers, competencies are vital if they want better performance in their employees. Whether during recruitment and selection phases or while already on board, competencies need to be identified and studied. It should always be borne in mind that the competencies required of each job position differ from one another. In the job analysis and writing of job descriptions, quick guides can make the task easier.

The following factors should be considered in determining the appropriate competencies:

1. Level of Decision-Making, Responsibilities and Authorities.
2. Level of Internal Personnel Interaction.
3. Level of Customer Contact and Interaction.
4. Level of Physical and Aptitudinal Skills and Knowledge.

Many studies have been undertaken on the subject of job competency for managerial and supervisory positions, (Mulder. M, 2001) and they are one in categorizing and lumping them into:

1. Administrative Competencies;
2. Communication Competencies;
3. Supervisory Competencies, and;
4. Cognitive Competencies.

These competencies were found to be the most important or vital for managerial and supervisory effectiveness. For the regular employees, the level of physical and aptitudinal competencies form the larger part in consideration. This is due to the lack or absence of decision-making tasks that involve significant physical and labor resources of the company. In many cases, their jobs entail routines, clerical and manual. Common to all jobs in the regular member's category are competencies that enhance inter-personal relationship, physical skills, and job knowledge. As one goes up the higher ladders of organizational positions, responsibilities widen in scope, authorities increase, and people management becomes more exacting, (Mulder, M., 2001), Consequently, competencies will have to change or the mix of it will have to be altered in order to adjust to the requirements of the job. If an accounting clerk or a bookkeeper for example, is promoted to the position of an accounting supervisor, his competencies will have to be enhanced. Aside from maintaining his technical skill in computing and bookkeeping, he would need to be skillful in coaching, mentoring, scheduling of work, monitoring, appraising staff, and team building. The same goes true for a Finance Manager who is promoted as General Manager, where the competencies would require more of weighing risks and making decisions, setting goals and standards, plotting directions, leading the organization and inspiring the employees to excellence, rather than competencies in supervision, resource management and solving specific problems. In detail, these competencies would be the following:

Administrative Competencies, Involving "management of the job".

These includes more specifically:

1. Management of Time and Priority Setting.
2. Goals and Standards Setting.
3. Work Planning and Scheduling.

Communication Competencies that comprise of:

1. Listening and Organizing.
2. Clarity of Communication.
3. Getting Objective Information.

Supervisory or Building Teams Competencies that encompasses:

1. Training, Mentoring and Delegating.
2. Evaluating Employees and Performance.
3. Advising and Disciplining.

Cognitive Competencies which involve:

1. Problem Identification and Solution.
2. Assessing Risks and Decision-Making.
3. Thinking Clearly and Analytically.

1. Management of Time and Priority Setting

Cutting across all position levels, time management is considered a required competency that must be possessed by everybody. It is the ability to manage both one's time as well as others'. It includes self-discipline, controlling interruptions by molding the behavior of others who have varying priorities, and being time-effective and time-efficient.

2. Goals and Standards Setting

Setting goals and standards are usually competencies that are required of managerial and supervisory positions. It is about the ability to determine activities and projects toward measurable goals and standards, setting these in collaboration with others so as to arrive at a clear understanding and elicit commitment.

3. Work Planning and Scheduling

Like time management, this competency must be possessed by managerial and supervisory employees and to those that are engaged in production. It is about controlling labor assignments and processes by using the major tools and techniques of management. This includes the following skills: analyzing complex tasks and breaking them into manageable units, selecting and managing resources appropriate to the tasks, using systems and techniques to plan and schedule the work, and setting checkpoints and controls for monitoring progress.

4. Listening and Organizing

Listening and organizing are communication competencies that deal with relating to people in the organization. It is about the ability to understand, organize, and analyze what one is hearing in order to decide what to think and do in response to a message. These competencies are appropriate for employees who deal with customers and those who work as a team, either as a leader or as a member. Specifically, they include skills like identifying and testing inferences and assumptions, overcoming barriers to effective listening, summarizing and reorganizing a message for recall, and withholding judgment that can bias responses to a message.

5. Clarity of Communication

Giving clear information is a competency that should be required of managerial and supervisory employees. Whether verbally or in written forms, the messages conveyed to audiences (whether internal staff or customers) should be clear and concise and should attain the objectives. The skills would consist of a) overcoming physical, psychological, and semantic barriers in interactions with others; b) keeping on target and avoiding digressions; c) using persuasion effectively; and d) maintaining a climate of mutual benefit and trust.

6. Getting Objective Information

For positions involving substantial people management, getting objective information is a critical competency requirement in order to ensure fairness. This competency is about the ability to use questions, probes, and interviewing techniques to obtain unbiased information and to interpret it appropriately. It considers such skills as: using directive, non-directive, projective and reflecting questions effectively, employing the funnel technique of probing, using probing methods to elicit additional information, recognizing latent and underlying meanings, confirming understanding and attaining agreement.

7. Training, Mentoring and Delegating

These competencies should be required of supervisors and managers as well. They involve the ability to develop people under them to attain higher levels of excellence. The

skills could consist of coaching, advising, transferring of knowledge and skills, and teaching and pinpointing employees where tasks can be transferred with trust and confidence.

8. Evaluating Employees and Performance

The ability to undertake a constructive performance evaluation involving joint assessment of past performance, agreement on future expectations are managerial and supervisory competencies. The skills would consist of ability to develop parameters of evaluation, benchmarking and face-to-face confrontation with the employees being evaluated without any bias and hesitation.

9. Advising and Disciplining

The ability to advice and counsel as well impose discipline in a positive manner are competencies required of managerial and supervisory positions that handle a large number of employees. This is to restore, within the acceptable range of standards, the employees' performance while maintaining respect and trust. It also involves the ability to impose penalties and sanctions with firmness and resolve in appropriate cases.

10. Problem Identification and Solution

Problem identification and arriving at solutions cut across organizational functions and job positions. It is about the ability to identify barriers that prevent achieving goals and standards. It also involves the application of systematic sets of procedures to eliminate and reduce the problem origins and causes. It requires skills like distinguishing between problems, symptoms and indicators, inputs and outcomes, gathering and assessing evidence relating to causes, and plotting a decision matrix and eventually choosing and recommending the best options. This competency should be required in positions that engage in evaluation, whether in managerial, supervisory, or technical job levels.

11. Assessing Risks and Decision-Making

Assessing risks and decision-making are competencies required of higher managerial positions where decision-making can involve commitment of company resources and

processes that could have company-wide implications. Like problem identification and solution competencies, assessing risks and decision-making involve the ability to construct a decision matrix that aids to identify and evaluate alternatives and options, identify limits, desirables, and risks to be considered, assign weights to each option and choose the best option to achieve the desired goals and standards.

12. Thinking Clearly and Analytically

The ability to apply clear and logical thinking is a competency required for both supervisory and managerial positions. The competencies include skills in determining valid premises and arriving at logical conclusions from them, separating fact from hearsay, unwarranted assumption and false inferences, applying inductive and deductive logic appropriately, culling of logical fallacies, invalid premises and conclusions based on insufficient information. As a basic process in determining competencies during job analysis, writing of job specifications and developing performance assessment instruments, one can easily be guided by plotting jobs against the 12 major competencies previously mentioned. Choosing which competencies and the mix should follow, with the most important competency taking precedence over the others. The degree and level of competencies that will be required will vary according to scope of responsibilities, authorities, people involvement, and decision-making powers. Putting them in a matrix could provide a visual guide that would make the tasks easier and convenient.

2.5.2. Competencies used in performance management

The following competency types are used in performance management: Values-Based Competency, Leadership Competency and Functional Competency, (Gilbert T. F, 2008).

i). Values-Based Competency (Core)

The values-based competency is based upon “the type of company you want to be” — reflecting the type of people and behaviors that are valued. This type of core competency is often designed personally by the CEO and / or select top executives.

ii). Leadership Competencies

Leadership competencies are those used to assess an individual's ability and skills to be a leader or manager. These are usually a unique set of competencies only applied to people with a certain level or certain potential.

Some examples of competencies that may be included are:

- Execution
- Energy
- Strategic decision-making
- Communication

iii). Functional Competencies

The third type of competencies used in performance management are functional competencies, or those that pertain to a particular job function. These competencies are rarely defined at an enterprise level, but rather are created at the department level since they often take the form of specific skills (e.g., "database administration") and are best managed at a group or functional level. Successful organizations focus on the competencies required for their industry at their level of maturity. When desired competencies are clearly articulated, employees can be expected to bear more responsibility for developing those competencies. One way this is done is by requiring employees to formulate development plans or goals that arise from competency-based performance reviews, (Mulder, M., 2001). The competency review process includes providing a clear and ongoing communication plan to all employees about what they are doing and why, with a focus on clear roles and accountabilities and alignment of their talent initiatives with systems such as rewards, recognition, and compensation to drive results.

2.5.3. Assessment of Graduate Competencies

There is limited uptake on developing assessment instruments for graduate competencies and attributes. This could be attributed to various reasons such as: Testing of graduate competencies in most universities is voluntary and therefore, universities are under no

obligation to use those (Ballantyne et al., 2004). Some universities assert that administering such an instrument is very expensive when the curriculums are already overcrowded (Chanock et al., 2004). Furthermore, employers are not familiar with such assessment tools and they do not utilize the assessment reports (Cleary et al., 2007). The graduate skills assessment is used to assess university students' generic skills. The test is administered upon university entry and exit. It has four specific areas*: problem solving, critical thinking, interpersonal understanding and written communication* (Cleary et al., 2007). The rationale behind the entry and exit tests is that students who sit both tests will have a measure of the value added to their skills by their university studies, and the institution will be able to identify the skills gained by their graduates (Boud & Falchikov, 2005). The test consists of a two-hour multiple-choice test (similar to that of other psychometric tests). One-hour written test. (Chanock et al. 2004) argues that this assessment has limited capacity to measure the way in which skills will be applied in the work environment.

2.5.4. Expected competency in interior design graduates.

The great concern of employers today is finding good workers who possess desired skills. The difference between the skills needed on the job and those possessed by the applicants, called *skills-gap,* is of real concern to human resource managers and business owners looking to hire competent employees, (Green et al., 2008). Creativity, once a trait avoided by employers, is now prized among employers who are trying to create the empowered, high-performance workforce needed for competitiveness in today's marketplace. Employees with these skills are in demand and are considered valuable human capital assets to companies, New Times Magazine, (2011).

The pivotal cause of concern expressed by the interior design practitioners was indicated by the survey conducted in 2004 by the Research and Policy Committee of the Committee on Economic Development Pertaining to diverse disciplines. The survey reiterated employer concerns relating to the skills gap. (Buck, Barrick and Kirby, 2007) summarizing the findings of the survey concluded:

i. Employers are looking for employees who demonstrate a sense of responsibility, self-discipline, pride, teamwork, and enthusiasm.
ii. Employers strongly value employee's ability to learn and solve problems.
iii. Employers think that schools are doing a poor job of developing these much-needed competencies, attitudes, abilities, and skills.

Supplementing the findings, the survey sponsored by the National Association of Manufacturers in 1999 found that employers want schools to take more responsibility for students' employability skill development. Employers said that they want schools to teach both general and specific employability skills. The consensus of employers in these and other similar studies remains consistent employability skills are important on the job and must be taught in the schools, (Barton and Kirsch, 2009 p. 2).

Graduate competencies or generic skills have received some attention in higher education in the past decade because it was realized that there is a mismatch between the skills students develop during their studies and the skills that employers need, Job Outlook 2012 report, (2011). Furthermore, universities have attempted to articulate the generic outcomes of the educational experiences they provide beyond the content knowledge that is taught. These attributes have become the core outcomes of higher education of which every graduate should possess (Barrie, 2006). This ensures that students develop attributes that will better equip them for the world of work as responsible members of the society. Higher learning institutions seek to renew and articulate their purpose and demonstrate the efficient achievement to generate attributes in response to calls of accountability and quality assurance processes.

There is a correlation between graduate competencies and quality assurance measures because they are the touchstone against which the university academic programs are compared and against which, the university's effectiveness can be measured (Yorke, 2006). Graduate competencies and attributes are:- *The qualities, skills and understandings a university community agrees its students should develop during their time with the institution.* These competencies include but go beyond the disciplinary

expertise or technical knowledge that has traditionally formed the core of most university courses. They are qualities that also prepare graduates as agents of social good in an unknown future (Bowden et al., 2000). Graduate competencies and attributes are the skills and knowledge that all labor market participants should possess to ensure that they have the capability of being effective in the workplace – to the benefit of themselves, their employer, community and the wider economy (Hogarth, 2007). Graduate attributes address disciplinary knowledge, values and attitudes as well as skills for lifelong learning which potential employers might find desirable.

These generic skills have attracted other names over the years such *as transferable skills, essential skills, core skills, key competencies, and key skills* depending on the national context in which they are being developed (Hager, 2006; Hager & Holland, 2006). In the United Kingdom, the emphasis has been on employability skills (Knight and Yorke, 2004), in Europe, the prominence is on competencies (Villa et al., 2008) and Australia and Scotland stress on graduate attributes.

In the Kenyan context, the emphasis is on graduate competencies. Graduate competencies and attributes are usually determined at a university level and then identified at a faculty, and discipline level through a range of approaches including consultations with employers, students and professional bodies for example, accreditation bodies. Universities work to develop graduate attributes in their students by providing academic staff with relevant support and resources, integrating these attributes into the curriculum and course design, providing students with work placements and exposure to professional settings and providing advice and guidance through career services. It should be recognized that most students concurrently develop graduate competencies through part-time employment, volunteer work and community participation. Fieldwork, industry-based learning, sandwich years, cooperative education, work placements and internships are some methods universities use to equip students with knowledge of current workplace practices. The stronger the link between universities and industry, the greater the opportunities will be to integrate and develop graduate attributes in students, (Cleary et al. 2007).

There is strong research evidence which underscores that discipline-specific knowledge is no longer sufficient for graduate employability, (Hager etal., 2002); (Treleaven & Voola, 2008). For example, a study conducted by (Garner & Duckworth, 2000) on design engineering graduates and their employers in the United Kingdom revealed a deep dissatisfaction with current graduate profiles. The employer's criticism included some of the following actions necessary for graduates to possess the qualities needed:

- Improve their listening skills;
- Improve higher-quality written, graphic, and verbal communication;
- Be critical of their own work and contributions;
- Develop a greater ability to take other people's ideas on board;

Develop an ability to muster a reasoned defense of their contribution. The aforementioned authors further suggest that graduates success in their jobs depends more on graduates' competencies than a narrow discipline-specific degree. A recent study conducted in the United States by the National Association of Colleges and Employers projected the skills that will be needed by employers, Job Outlook report (2012). The survey involved 244 organizations that hire new graduates from institutions of higher learning. Employers rated the skills on a 5-point scale, where one = not important; 2 = not very important; 3 = somewhat important and 5 = extremely important.

Employers rated the following as the top three attributes they will be looking for in new graduates:

- Ability to work in a team structure,
- Ability to verbally communicate with persons inside and outside the organization,
- The ability to make decisions, and solve problems.

The two least important attributes are the ability to create and/or edit written report and the ability to sell or influence others.

2.5.5. Key Competencies Required of Graduates

While most employers recognize the importance of graduates' personal characteristics, there is little agreement on the balance expected between these and their discipline

specific technical knowledge (Harvey, Burrows & Green, 2002). However, a review of recent literature examining generic competencies required of graduates, points to increasing emphasis on personal attributes, rather than technical skills (Liston, 1998; Meade & Andrews, 1995; Sweeney & Twomey, 1997; Stasz, 1997; Weisz, 1999). Various authors have proposed a number of competencies required or expected of graduates. For example, (Maes, Weldy and Icenogle (1997), consider oral communication, problem-solving skills and self-motivation to be the three most important competencies required of graduates. Stasz, (2007) likewise, sees problem solving, teamwork, communication skills, and personal qualities, as the most important competencies. In a survey of 280 New Zealand graduate employers, found the top ranked competencies in descending order were:

a) Willingness to learn;
b) Having a positive attitude;
c) Being motivated;
d) Having good communication skills; and,
e) Possessing the ability to work independently

Hence, the literature suggest that employers of graduates now place major emphasis on generic, behavioral competencies, both in the recruitment of graduates for employment, as well as their performance on the job (Raymond, McNabb & Matthaei, 2003; Weisz, 2009). Therefore, undergraduate courses must seek to develop these competencies in order to meet the needs of business (Haber, 2003). Weisz in his research found evidence of a link between degree programs that included work-based cooperative education and graduate employment, and found that employers expect generic competencies to be developed prior to employment. Interestingly he noted little correlation between academic achievement and levels of generic skills, suggesting that employability is not necessarily related to academic ability. Report that employers believe that educational institutions provide relevant employment experience for their business students, but remarkably, ascribe generic competencies a low level of importance. However, the level of competency expected of graduates by these employers, fell well below their perceived

level of importance, suggesting that employers expected these competencies would be developed elsewhere in the curriculum and not necessarily through industry involvement. In a survey of teaching methods to develop competencies for the workplace, found both employers and students ranked cooperative education as the most important educational method, and pointed to a critical need for student thinking and ability to learn, (Haber, 2003).

In summary, there have been a number of studies reported in the literature that point to what employers consider to be important in graduates, but there is little recent research on employers' perceptions of the level of competency that graduates bring to the workplace, especially in the field of interior design. Waterman and Conrad observed that the changing culture and decentralization caused an up scaling of skills relating to employability. Commenting on the new trends in hiring recent graduates Waterman and Conrad also found that Technology has driven workers towards increasing autonomy. Under the old workplace covenant, the workers refrained from major decisions and primarily performed repetitive tasks. The result was a dependent employee and a relatively static workforce with a set of static skills. Under the new covenant, workers are supervised less but are frequently involved in identifying problems and making critical decisions. Business strategies like collaboration and emphasis on quality demand teamwork, listening skills, and the ability to set goals, and develop and implement strategies for achieving goals.

The result is a need for self-motivated workers, and a company in which the skills needed to remain competitive is changing at a dizzying pace. Based on the findings by Waterman and Collard various views were expressed expanding on the categories of skills needed by employers for employability of the graduates. One such viewpoint expressed by (Carnevale, Gainer, Meltzer, 2008) relating to the findings by the American Society for training and Development was :-

i. 'Employers need employees who can think on their feet - (critical thinking skills to solve problems)

ii. Who are able to come up with innovative solutions - (creative thinking).
iii. They need employees who have the ability to conceptualize- (personal management),
iv. Organize- (leadership),
v. verbalize thoughts- (oral communications),
vi. resolve conflicts- (interpersonal skills), *and*
vii. Work in teams'.

Nevertheless, the foundation for all these skills requires an employee to have the ability to *'know how to learn',* to have the basic skills that will allow the individual to learn new tasks to keep the company competitive.

To facilitate the understanding of the competencies required by the employers, the skills are subdivided into five skill categories:

1. Personal development and information,
2. Social and cultural,
3. Work related, and
4. Science and
5. Technology

Most of the categories focus on personal image, attitudes, habits, behaviors, techniques of communication, problem solving, decision-making and management and organizational processes (Lankard, 2000).

A grouping of categories relating to employability skills that employers seek are summarized by (Lewis. S, 2009) as follows:-

i. **Individual Competence:** Communication skills, comprehension, computation and culture.
ii. **Personal Reliability skills:** personal management, ethics and vocational maturity.
iii. **Economic adaptability skills:** problem solving, learning, employability and career development.

iv. **Group and Organizational Effectiveness Skills:** interpersonal skills: organizational skills, and skills in negotiation, creativity and leadership (p. 4).

The categories of employability skills identified above could be synonymous with the needs of the employers within the interior design industry. Strategies for Skills Development to identify and foster the development of employability skills desired by employers could be derived from strategies suggested by (Buck, Barrick and Kirby, 2007) including:

i. Identification of the desired skills
ii. Defining terms to identify characteristics and habits
iii. Devising a way to measure traits, attitudes or habits
iv. Giving frequent feedback on the development of traits
v. Concentrating on improving the desired traits
vi. Employing a meaningful monitoring, evaluation and reward system

2.5.6. Employers Preferred Competencies

What do we understand by the term 'competency'? Spencer and Spencer view competency as a characteristic of an individual, which is causally related to job performance (2003). Competencies can be accumulated within an individual and represent a capacity to perform at some future point (Boam & Sparrow, 2002; Wilson & Kolb, 2003). Essentially, these definitions relate to enduring characteristics possessed by an individual that, under normal conditions, should result in an acceptable or superior job performance. This notion is based on the premise that competencies are casually linked to individual performance outcomes (Spencer & Spencer, 2003). In a workplace context, competency is a combination of cognitive skills (technical knowledge, expertise & abilities), and personal or behavioral characteristics (principles, attitudes, values & motives), which are a function of an individual's personality. Successful performance, while dependent on a number of factors, will require the presence of both components. Spencer and Spencer, (2003) suggest that, if people with the right personal characteristics are recruited initially, then they should have the capacity to quickly acquire the relevant

(technical) knowledge and skills in order to attain their employers' performance objectives.

There is some interchange and contrasting views of like terms such as *competency and capability* in the literature. For example, (Stephenson, 1997) sees *capability* as the integration of knowledge, skills, personal qualities and the ability to learn to deal effectively with unfamiliar and familiar situations or tasks: a view similar to that of (Stephenson 1997) who states: *"Competence delivers the present based on the past, while capability imagines the future and helps to bring it about. Competence is about dealing with familiar problems in familiar situations"* (p. 9-10). (Rudman, 1995) similarly views capability as a precursor to competency, where an individual has the capability to perform a specific task because he or she possesses the necessary knowledge and skills, but may not become fully competent in the task until he or she gains some experience. In the present study, the author uses the term competency to include capability and characteristics (such as knowledge, technical skills and personal qualities) that an individual may utilize in performing tasks or actions in unfamiliar as well as familiar situations.

In the Kenyan context, most employers view competency as the ability to perform specific tasks as directed specific to certain jobs. Capability is viewed as the general abilities of an individual not necessarily related to the job assigned. This is seen from the job requirements as posted on the advertisements' in the newspapers and in websites that advertise jobs on line. Below are some examples' of job advertisements.

2.5.6.1. Example of interior design Job Advertisement

These are from the job advertising agency in the websites e.g. 'Bright Mondays' and 'Real Kenyan jobs'.

a). Interior designer

Summary:

We are Project Management & Real Estate Development arm of a group of companies with interests in Construction and Real Estate sectors in Kenya and with growing

operations in South Sudan. We offer services in turnkey project management and real estate development to property developers in ensuring projects are successful investment opportunities. Our strengths lie in all aspects related to the successful management of the real estate projects across the spectrum, right from initial project appraisal, financial analysis and procurement, design management, to post contract execution and post completion aftercare and closure of construction projects

Description of duties and responsibilities:

The jobholder is responsible for driving the company strategy to grow our brand and market share. S/he is responsible for sourcing and implementation of interior design in related construction projects. This position must handle multiple assignments and meet designated deadlines with great attention to detail and capital expenditure. Projects may include but not limited to: joint ventures, project management, new facility construction, relocation and renovation.

- Receiving & evaluating briefs from projects department
- Responsible for sourcing for interior jobs.
- Managing the design process.
- Responsible for producing working drawings & schedules.
- Responsible for collating, sourcing, assembling & presenting interior design images, visuals & materials to clients.
- Responsible for designing conceptualization & development.
- Participate in setting out of the projects in conjunction with the projects dept.
- Conducting periodic site visits to ensure the design concepts translate into actual work
- Ensuring that the quality standards on site are maintained
- Plans, designs, and furnishes interior environments of residential, commercial, and industrial buildings: Confers with client to determine architectural preferences, purpose and function of environment, budget, types of construction, equipment to be installed, and other factors, which affect planning interior environments.

- Advises client on interior design factors, such as space planning, layout and utilization of furnishings and equipment, color schemes, and color coordination.
- Responsible for client relationship management
- Formulate and implement strategic and tactical sales and marketing plans.
- New business development and direct marketing
- Suggest viable target clients and industries, sourcing relevant data as necessary.
- Approach potential clients through various channels, including cold calling and direct mail campaigns.
- Participate in events that will promote the awareness of the company.
- Preparation of economic and viability studies and reports

Requirements on Qualifications, Experience & Competencies:

- Degree in Interior Design /BA in Architecture.
- Experience in AutoCAD & ArchiCAD and rendering programs e.g. Atlantis.
- Over 5 years' experience in Interior Design or relevant field.
- Successful contract negotiation and marketing skills.
- Strong conceptual, analytical, and managerial skills.
- Excellent interpersonal skills and a team player.
- Excellent verbal and written communication skills.
- Ability to meet deadlines and work in a structured corporate environment.
- Goddess conceptualization skills.

b). Manager Furniture Designer - Island Homes Developers Ltd.

Middle level furniture & fittings Manufacturing Company is seeking for a person to fill the above-mentioned position in the field of interior design.

Key Responsibilities

- Design and quote for all kinds of furniture and fittings
- Directly co-ordinate the operations and overall responsibilities related to designing, quotation, Production and delivery of finished products.
- Implementation of the designs to customer's satisfaction.

- Implementation of the negotiated contracts between company and the clients.
- Ensure there is effective communication between the company and the stakeholders.

Minimum Qualifications

1. A Bachelor's Degree in related field or Equivalent, Interior design Degree will be an added advantage.
2. Minimum Five years' Experience in a similar position.
3. Proven good management and leadership skills.
4. Must be a computer literate and able to use AutoCAD, ArchiCAD software and other design related programs.

2.5.7. Employability of interior design graduates

Employability is a set of achievements, skills, understandings and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy. (Yorke, 2004). The concept and definition of employability of employees has been discussed for a number of years but there has been a growing interest in graduate employability over the last decade. As the interest in promoting graduate employability has increased numerous studies have produced detailed breakdowns and taxonomies of particular skills and attributes required to promote graduate employability such as **core skills:-** *key skills; common skills; transferable skills; essential skills; functional skills; skills for life; generic skills and enterprise skills.* According to (Harvey et al, 2007) cited in (Holden, Jameson, 2002), most employers are looking for graduates who are proactive, can use higher-level skills including 'analysis, critique, synthesis and multi layered communication to facilitate innovative teamwork in catalyzing the transformation of their organization'.

The National Institute of Adult Continuing Education (NIACE, 2002) argued that employability is better understood as a social construct and stressed that to see it as only

an individual issue was to miss important aspects of the concept. Therefore, NIACE believes that employability is a responsibility shared more equally between:

- Individuals who must be responsible for accepting the consequences of choices they make.

- Businesses, which in employing a workforce and serving customers, inculcate particular values and attitudes as well as shaping behaviors'. In many senses, what makes "employability", is determined by employers.

The literature indicates that employers want graduates who use their abilities and skills to evolve the organization and participate in innovative teamwork. Employers also value critical thinking (reflection) as this is required for innovation and anticipating and leading change (Little 2001 in Lees 2002; Harvey *et al,* 2007). In the research report on ***'How much does higher education enhance the employability of graduates'*** by (Mason *et al*, 2003), the concept of employability centered on the development of communication, numeracy, information technology, and learning how to learn. More recently, authors have moved towards a more complex understanding of graduate employability and proposed a number of inter-related attributes, skills and competencies that help individuals to both secure and perform well in employment, (Rothwell & Arnold, 2007). Professor Yorke. M has led a number of studies that have contributed to the concept of graduate employability, refining definitions and influencing national organizations' thinking. The Enhancing Student Employability Co-ordination Team (ESECT, 2004) in UK has adopted the concept of graduate employability developed by Yorke in 2004.

A study by (Kubler and Forbes, 2005) suggested that employability comprised certain levels of cognitive skills, generic competencies, personal capabilities, and technical ability, business /organization awareness, and critical evaluation, reflection and review abilities. Yorke and colleagues have gone on to develop their concept. In 2006 Yorke argued that, "Employability' derives from complex learning, and is a concept of wider 'angle than those of 'core' and 'key' skills". He states that, 'employability is as a collection of capacities or achievements which constitute a necessary but not sufficient

condition for the gaining of employment' (which is dependent, inter alia, on the contemporary state of the economy). It is considerably more complex than some proponents of 'core', 'key' and 'transferable' skills have suggested, and are strongly aligned with the academic valuing of good learning. Therefore, universities need to equip graduates with 'deep' intellectual capabilities and a battery of applied practical skills, which make them more 'work-ready'. (Archer & Davison (2008, p8).

2.5.8. Measuring and Addressing Competency Gaps

From the look into employers expectation of graduates and the competencies the interior design graduate have, it now becomes clearer to measure and address the competency gap. Companies realize the importance of nurturing a talented workforce. With it, everything is possible - the sky is the limit! Without it, one can count on numerous unsuccessful strategic efforts—one after another. Among the wide range of organizational processes related to retaining high-performing employees, corporate competencies have become a focal point, helping successful organizations understand where to focus resources such as incentives, coaching, and training programs. By clearly identifying the right competencies, organizations can make sure they are recruiting and managing talented people in the strategic way, putting the right people in the right jobs with the abilities to perform at their maximum potential every day, (Gilbert, T.F., 2008). In organizations utilizing best practices, a small set of core leadership and values-based competencies are established across the organization. These competencies are broadly applied to all employees and send a powerful message, reflecting the company's culture, business strategy, expectations and unique market dynamics. Measuring competency gaps within your organization and addressing them proactively allows you to focus on the areas you need most to impact your business performance, employee engagement and retention, and overall profitability, (Mulder, M., 2001).

Competency assessment is essential in the process of building an employee's career development plan, (Robinson, 2010). One of the critical elements of performance management is coaching people to develop the skills that may be holding them back from

realizing success and eventually moving up the corporate ladder. This development planning process is traditionally tied to an assessment of the individual's skills gaps – assessed against specific competencies, that the organization believes are valuable. Individuals, managers and HR. administrators can each evaluate gaps against the current job or a potential position and devise development strategies accordingly. The assessment gives the employee a sense of what is necessary to perform at a higher level, and specifically what skills and competencies are necessary to develop for success. The organization, in turn, gains a sense of the employee's fit and potential within the company as well as a clearer understanding of which competencies result in higher performance.

2.5.9. The Benefits of graduate competencies in the curriculum

We are now living in a world where "the focus is shifting to the continual production of knowledge as a commodity, positioning workers as human capital, virtually immune to obsolescence" (Butler, 2009, p. 136). In such a world, identifying and developing the important competencies required of interior design graduates is a challenging task for curriculum developers. It has been stated previously that the prime function of education programs worldwide is to prepare students for the workplace by developing generic and specific competencies that educators believe will be useful to employers (Rainsbury, Hodges, Burchell & Lay 2002). The literature review has illustrated the competencies that employers want. It has also shown how competent the interior design graduates are when they first enter the workplace. The literature in cooperative education has focused largely on the views of academia, with few reports of research into employers' views (e.g., Apostolides & Looye, 1997. It is recognized that employer support for education programs is crucial, although indications of employer loyalty can often (mistakenly) be taken as an indicator of satisfaction (Varty, 2006). As Hurd and Hendy (2007) state *"employers need data upon which to base their decisions, so it would be prudent for interior design practitioners to conduct research regularly to ensure that employer needs are in fact being met by education programs" (p. 60).* Evidence from the literature support the fact that, there are benefits obtained from integrating graduate competencies

in the curriculum, (Barrie, 2006; Holmes, 2002; Bowden et al., 2000; Hogarth, 2007; Goldsworthy, 2003; Hager & Holland, 2006). Some of the benefits include the following:

- If graduate competencies are integrated in the curriculum, the institutions of higher learning will be in a position to meet employers' needs by producing a competent workforce. These professionals will possess broad capabilities in addition to discipline-related skills.
- Students will be well grounded for the ever-changing work environment by acquiring a broad range of skills such as effective communication, problem-solving, critical thinking and teamwork skills (Nettleton et al., 2008).
- Mapping graduate competencies focuses curriculum planning, implementation and evaluation. Curriculum design, teaching and learning strategies and assessment activities will reflect a commitment to supporting students to achieve graduate attributes as well as discipline-related knowledge and skills.

The integration of the graduate competencies and attributes has led to a range of variations from teacher-centered to learner-centered approaches and the learning community engagement approaches, with the resultant differences in the quality of the learning outcomes achieved (Barrie, 2006). This change is necessitated by the fact that some generic skills are complex and interwoven aspects of human ability, which are difficult to explicitly teach or assess in the traditional way. Therefore, it is useful to develop teaching strategies that will effectively promote the development of graduate competencies and attributes (Barrie, 2006; Hager et al., 2006; Goldsworthy, 2003).

The agenda of universities has now shifted to producing students who can demonstrate disciplinary knowledge as well as generic graduate attributes. This obviously challenges the educator's role in the classroom. Do students develop such competencies independently or is there a role for educators to guide students in developing these attributes? The emphasis should be on how the competencies that can be acquired or developed by students and the role of teaching strategies used by the educators to foster such attributes. (Barrie, 2006) argues that it is important for educators to understand the

teaching and learning of such competencies that is; what is it that is taught/learnt and how is it taught/learnt? (Barrie, 2006), reports that for many educators, the idea that graduate competencies should be a focus of their teaching is not one to which they subscribe. Not because they are resistant or unaware of how to teach, but because their understanding of the nature of graduate competencies and attributes is incompatible with their understanding of what university teaching and learning is all about. (Barrie et al., 2009) further argue that despite the rhetoric of graduate competencies policy and the espoused claims of statements of course learning outcomes, the reality is that teaching in some courses has not changed from a model of transmission of factual content.

2.6. Project-Based Learning Approach

To include the desired competencies in the curriculum will help graduates to acquire the tacit skills needed in the performance. The use of learners-centered approaches in the curriculum has been used in teaching by educators to assist students to attain generic graduate competencies. For example, the Project-Based Learning (PBL) is one such learner-centered approach which enables students to connect knowledge, skills, values and attitudes and construct knowledge through a variety of learning experiences (Lam et al., 2009; Buck Institute for Education, BIE, 2003; Barron, 1998; Blumenfeld et al., 1991; Brears & O'Sullivan, 2011; Duch et al., 2001). Therefore, PBL provides the contextual environment that makes learning exciting and relevant. PBL is a systematic teaching method that engages students in learning essential knowledge and life-enhancing skills through an extended, learner-influenced inquiry process structured around complex, authentic questions and carefully designed products and tasks (BIE, 2003). Brears & O'Sullivan in 2011, state that the philosophical foundation for PBL aligns with cognitive theories argued by John Dewey of learning by doing that is, emphasizing practical experience in learning.

In PBL students work in small collaborative groups tackling complex tasks based on challenging driving questions that are anchored in a real-world problem. Educators act as facilitators of the learning process. Students participate in design, problem-solving,

decision making or investigating activities to meaningfully address the driving question (Blumenfeld et al., 1991). On the same note, (Lam et al., 2009; BIE, 2003; Marx et al., 1994) also emphasizes that students pursue solutions to a problem by asking and refining questions, debating ideas, making predictions, designing solutions by using technology, collecting and analyzing data, drawing conclusions, communicating their findings to others, asking new questions and creating products. PBL gives students the opportunity to work relatively autonomously over an extended period and culminate in realistic products.

The PBL model proposes that students go through an extended process of inquiry in response to a complex question or problem. In implementing the model, there should be room to allow the students voice and choice in decision-making. In meticulous projects, there should be measures put in place to ensure careful planning, management and proper assessment procedures to assist students learn key academic content and practice 21st century generic skills. Project-based learning promotes self-directed and lifelong learning capabilities, increases students' motivation, equips students with transferrable knowledge and skills that are essential to the work environment, intertwines theory and practice, enable students to gain a deep understanding of concepts and allow students to solve the society's problems (Lam et al., 2009; Grant, 2002; Savage et al., 2009; Brears & O'Sullivan, 2011).

2.6.1. Project-based learning in practice

The report by (Prince & Felder, 2006) noted that a number of institutions have made PBL the focus of many or most of their design and engineering programs. This includes the universities of Aalborg and Roskilde in Denmark, Bremen, TU Berlin, Dortmund and Oldenburg in Germany, Delft and Wageningen in Netherlands, Monash and Central Queensland University in Australia and Olin College in the United States. A number of studies offer evidence that most students who experience PBL eventually come to favor it over traditional methods (Blake & Vemon 1993; Dods, 1997; Hung et al., 2003; Caplow et al., 1997). Furthermore, other scholars argue that PBL leads to positive retention outcomes, develops skills and an understanding of interconnections among concepts,

develops deep conceptual understanding, enables students to apply appropriate metacognitive and reasoning strategies, develops teamwork skills and promotes self-directed learning (Prince & Felder, 2006; Blake & Vemon 1993, 1993; Chung & Chow, 2004; Blumberg, 2000).

At the University of Queensland, (Jolly, 2009) states that 82% of the first year students who participated in the PBL challenge organized by the Engineers without Boarders (EwB) felt that the project exposed them to real-life experiences. Students were highly motivated by the opportunity to improve the lives of other human beings and they enjoyed being problem-solvers as well as the development of friendships by working together in teams. The EwB challenge is a national design project done by 26 universities across Australia and New Zealand. The project targets the first year university students to provide them with an opportunity to learn about design, sustainable development, teamwork and communication through real life and inspiring sustainable development projects. (Jolly, 2009) reports that a number of partner universities involved in the EwB project point out that this is the most successful project-based learning experience in their curriculum.

According to (Jolly, 2009), the reviewed published evaluation of the PBL in design and engineering indicates that students have a better understanding of issues of professional practice as well as demonstrate their abilities to apply their acquired learning skills to realistic problems. The outcomes for the PBL taught students could be attributed in part to their perception of greater support from their lecturers, a factor known to have a positive impact on both performance and attitudes (Prince & Felder, 2006).

2.6.2. Project based learning and the design process.

There is a symbiotic relationship between the PBL and the design process. Both approaches equip learners with knowledge, skills, values and attitudes through self-directed lifelong learning enquiry. Some researchers (Doppelt, 2009; Dym et al., 2005) posit that both processes:

- Start with a challenge or need to be solved;
- Engage students in a constructive investigation which involves design, problem-solving; decision-making, discovery, model-making processes and presentations;
- Involve students-driven projects, which are the central teaching strategy used to learn core concepts of the discipline.
- Engage students in realistic projects thus incorporating real-life challenges where the focus is on authentic problems and the solutions generated have the potential to be implemented.
- Both processes have the potential to enhance deep understanding because students need to acquire and apply information, concepts and principles.

However, the point of difference between the two approaches is that the PBL has a stage in its process, which requires students to learn and practice 21st century generic skills as illustrated in the figure below. Such skills fall under these domains: *information and communication technology, cognitive skills, inter-personal skills, self and task management skills and personal characteristics*. Under this particular stage, students need to reflect on and discuss the skills that are cultivated and reinforced in the project. Students need to be introduced to the teaching strategies essential for fostering these skills. Thereafter, students can reflect on how these skills and teaching methods relate to their own practice and experiences (Blumenfeld et al., 1991).

On the contrary, the design process does not have a specific stage, which is similar to the project-based learning, which deals with the acquiring of generic graduate attributes. It is assumed that these skills are embedded within the design process. The paper looks at the feedback students give as part of the attainment of the different graduate attributes after undertaking a design-orientated project. It reflects on the self-assessment of students' feedback about the impact of project-based learning on graduate attributes as well as lessons learnt from undertaking a client-driven project

Project-based learning model (BIE, 2003). Design process (Design Council, 2005)

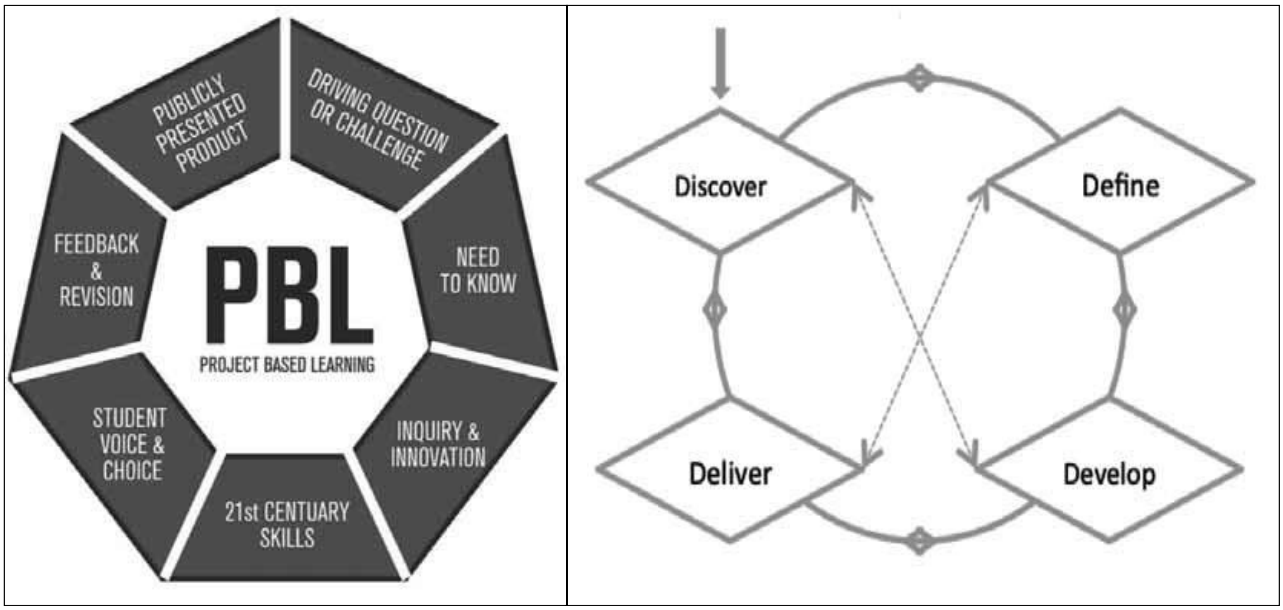

Fig. 2.0.

2.7. Linking academy and industry

Identifying the competencies desired by employers, addressing the employability skills and fostering the identified competencies and attributes concurrently with the curriculum could provide the link between academia and industry. The students can develop the desired competencies and attributes by - Addressing the development of the desired competencies and attributes in an educational context, and industry practices. When the students practice daily the desired skills, and demonstrate competencies desired by the industry, they will enhance their job performance and retention (Lankard, 2004, p. 4).

2.7.1. Industry's benefit through improved skills.

Education, training and lifelong learning foster a virtuous circle of higher productivity, more employment of better quality, income growth and development. It provides a succinct explanation of productivity, followed by an overview of the conceptual and empirical linkages between productivity and employment growth, and finally explains

how a coherent skills development policy serves both short-term adjustment and long-term development goals. The virtuous circle between productivity and employment is also fed through the investment side of the economy, when some productivity gains are reinvested by a firm in product and process innovations, improvements in plant and equipment and measures to expand into new markets, which in turn spur further output growth and productivity, (Lankard, 2004, p. 4).

The productivity of individuals may be reflected in employment rates, wage rates, stability of employment, job satisfaction or employability across jobs or industries. The productivity of enterprises, in addition to output per worker, may be measured in terms of market share and export performance. The benefits to societies from higher individual and enterprise productivity may be evident in increased competitiveness and employment or in a shift of employment from low to higher productivity sectors. In the long term, productivity is the main determinant of income growth. A low-wage, low-skill, low-productivity development strategy is unsustainable in the long term and incompatible with poverty reduction. Investment in education and skills helps to "pivot" an economy towards higher value added activities and dynamic growth sectors, (Lankard, 2004, p. 4).

Experience shows that all countries that have succeeded in linking skills with productivity have targeted their skills development policy towards three objectives:

(i) Meeting skills demand in terms of relevance and quality:

To ensure the matching of skills supply and demand, skills policies need to develop skills that are relevant, to promote lifelong learning and ensure the delivery of high levels of competences and a sufficient quantity of skilled workers. Furthermore, equality of opportunity in access to education and work is needed to meet the demand for training across all sectors of society.

(ii) Mitigating adjustment costs:

The reorganization of work in line with new demands and technologies results in some skills becoming redundant. The ready availability and affordability of training in new skills and occupations help to insure against prolonged unemployment or

underemployment and to maintain the employability of workers and the sustainability of enterprises.

(iii) Sustaining a dynamic development process:

Skills development policies need to build up capabilities and knowledge systems within the economy and society, which induce and maintain a sustainable process of economic and social development. The first two objectives of improving skills matching and mitigating adjustment costs are based on a labor market perspective; they focus on skills development as a response to technological and economic changes and are essentially short- and medium-term objectives. In contrast, the developmental objective is focused on the strategic role of education and training policies in triggering and continuously fuelling technological change, domestic and foreign investment, diversification and competitiveness. It introduces three recurrent themes of the report.

Three recurrent themes of the report.

First, skills development must be an integral part of broader employment and development strategies if it is to deliver on its substantial potential to contribute to overall productivity and employment growth. The challenge for government policy is to develop and foster institutional arrangements through which ministries; employers, workers and training institutions can *respond effectively* to changing skill and training needs and play a *strategic and forward-looking* role in facilitating and sustaining technological, economic and social advancement.

To meet this challenge, effective coordinating or mediating institutions are required at three levels:

a) Cooperation between the various providers of skills training, e.g. Universities, training colleges and enterprises, to establish coherent and consistent learning paths;

b) Coordination between skills development institutions and enterprises to match skills supply and demand; and

c) The coordination of skills development policies with industrial, investment, trade, technology and macroeconomic policies so that skills development policies are integrated

effectively into the national development strategy and policy coherence is achieved. Institutions need to encourage cooperation between different ministries, ensure the effective exchange of information and forecast skill needs.

Second, social dialogue and collective bargaining can create a broad commitment to education and training and a learning culture, strengthen support for the reform of training systems and provide channels for the ongoing communication of information between employers, workers and governments. In addition to promoting skills development, social dialogue and collective bargaining can also be instrumental in the equitable and efficient distribution of the benefits of improved productivity.

CHAPTER 3

3.0. RESEARCH METHODOLOGY

The research sought to identify the key profile competencies and attributes in interior design graduates preferred by employers in Kenya.

3.1. Research design

Descriptive survey design was used in the research. The purpose of descriptive survey design, according to (Ezeani, 2008), is to collect detailed and factual information that describes an existing phenomenon. Primary sources of data collected for this study was in the form of questionnaire responses and focus group discussion from design practitioners who are employees. Secondary method was literature review from newspapers, magazines, and from social networks i.e. Website for Kenyan jobs, LinkedIn, Brighter Monday, and my jobs.com. This involved reviewing of job advertisements that indicated the key competencies required by employers of interior design graduates.

3.2. Population and Sample

The entire group of people in a category is called a *population.* The smaller group selected for testing is called a *sample*. The sample is then used to make generalizations about the population from which it is drawn", Touliatos and Compton, (2009, p. 55). The sample consists of seventy interior design employers majorly from Nairobi, Kisumu and Mombasa. The names were obtained from the directory, magazines, e.g. Home - Expo magazines, social media sites e.g. *LinkedIn, Facebook* and from referrals by interior design friends and colleagues. The Interior design graduates interviewed were selected at random from my colleagues and friends. Twelve graduates from university of Nairobi and Maseno universities practicing within Nairobi were also selected at random to form the focus group discussion. This is because the content trained in these two universities covers the five-core area of interior design as indicated in the introduction. The analysis was based on 3 months fieldwork majorly in urban Nairobi from March to May 2013.

During this time, multiple approaches were used to uncover these skill-to-work pathways and tracer studies capturing data on graduates'.

3.3. Sampling techniques

The survey instrument was designed after conducting employer consultations and a systematic literature review. Sample sizes in qualitative research should not be too small that it is difficult to achieve data saturation, theoretical saturation, or informational redundancy (Sandelowski, 1995). At the same time, the sample should not be too large that it is difficult to undertake analysis. Selected interior design practitioners from Nairobi were interviewed by telephone to ascertain their views of industry, in relationship to the competencies they required from interior design graduates. It was a random selection, after identifying the firm's area of specialization. Information obtained from the interviews was used to form a preliminary survey instrument. Additional interior designer practitioners were then interviewed using these instruments for their views and suggestions resulting in a revised version of the survey instrument version of the instrument. The final instrument was then structured into four sections as follows:-

Table 3.1. Desired competences

i).The 1st section	It addressed the identification of competencies relating to the categories of:- *computer skills, personal characteristics, technology, communication and abilities*. Using a Likert scale of 5 to 1, with 5 being the most important and I as very unimportant, the employers were asked to indicate the magnitude of importance or unimportance of the desired competencies by circling the appropriate number.
ii).The 2nd section	It related to employer demographics: the employers ' company backgrounds: *pertaining to the type of firm, Job classification, length of time the company has been in business, number of employees in the firm*, and *type of training programs offered by the company.*

iii).The 3rd & 4th Section.	Additional information or comments from the employers, relevant to the proposed study were evaluated.

3.4. Data Collection Instruments

i). Survey with SICQ (Summable item closed questions) questionnaires:

SICQ questionnaires have items of an identical metric that are readily combined through summation to yield a composite score. The responses are structured so that the subject selects an alternative from a list of suggested answers; checks either yes or no, true or false; marks a point on a scale (e.g., I to 5 as on a Likert Scale); or ranks statements in terms of importance (Touliatos and Compton, 2009). The SlCQ questionnaire eases response coding, analysis and the relatively limited time required completing the items.

ii). Focus group discussions.

Focus group discussion (FGD) is a group interview of approximately six to twelve people who share similar characteristics or common interests, (Kitzinger 1994). Focus groups are a qualitative data collection method, meaning that the data is descriptive and cannot be measured numerically. It is a "small group discussions, addressing a specific topic, which usually involve 6-12 participants, either matched or varied on specific characteristics of interest to the researcher". (Fern, 2002; Morgan & Spanish, 2004). The sample of twelve graduate designers from the population, from Nairobi and Maseno universities formed focus group discussions. The facilitator guided the group based on predetermined set of topics. His aim was to create an environment that encouraged participants to share their perceptions and points of view. They discuss the questions with the aim of getting varying answers and receiving opinions that is not biased. Focus group has been used here to get more in-depth information on perceptions, insights, attitudes, experiences, or beliefs regarding the competencies preferred by employers of interior design graduates in Kenya.

CHAPTER 4

4.0. FINDINGS AND DATA ANALYSIS

The research was conducted to produce a list of employability skills identified, as competencies deemed important by interior design practitioners. All data collected was tabulated, and analyzed using descriptive statistics. From the analysis, data was documented in a final format (e.g.; table, graphs etc.). Statistical methods such as t-test with 95% confidence interval was conducted on the four categories of competencies and skills identified in the instrument.

4.1. Response Rate

Out of the randomly selected seventy (70) interior design practitioners who were contacted from Nairobi, Mombasa and Kisumu, usable responses were received from fifty five (55) employers for a response rate of (78%) which formed the basis for this study. Six additional respondents returned the survey indicating their preference of not participating in the study. For future studies, pre-contacting the employers might enhance the response rate. (Harvey, 1993) noted that typically it is difficult to get a high response rate involving employers. Moreover, emailing questionnaires to employers without any prior contact is an inappropriate technique as it secures very few responses for the time and energy invested.

4.2. The Findings.

Findings of this study are presented in the following order: demographic information, and desired competencies of new hires. To illustrate the findings of this study at a quick glance the data is presented in Table 4.1- Table 4.9.

4.2.1. Demographic Information of Respondents

i). job classification

Of the selected Seventy (70) interior design practitioners, usable responses were received from 55 employers for a response rate of 78 %, which are the basis for this study. The respondents were asked to indicate their titles by responding to four alternatives of: (1)

Principal Owner/CEO, (2) Business Manager, (3) Project Manager and (4) Other category. The responses of the interior design practitioners are summarized in Table I. The largest percent of respondents, 45 percent, were Principal Owner/CEO, 24 percent were Project Managers, 9 percent were Business Managers, and 22 percent specified other. These included Facility Managers, Regional Directors and Store Managers, Contract Consultants and Museum Directors. The data indicates that almost half the respondents were Owner or CEO.

Table 4.1:- job classification

Respondents' title	**N**	**%**
Principal Owner/CEO	25	45
Business Manager	5	9
Project Manager	13	24
Other	12	22
Total	**55**	**100**

Graph indicating job classification

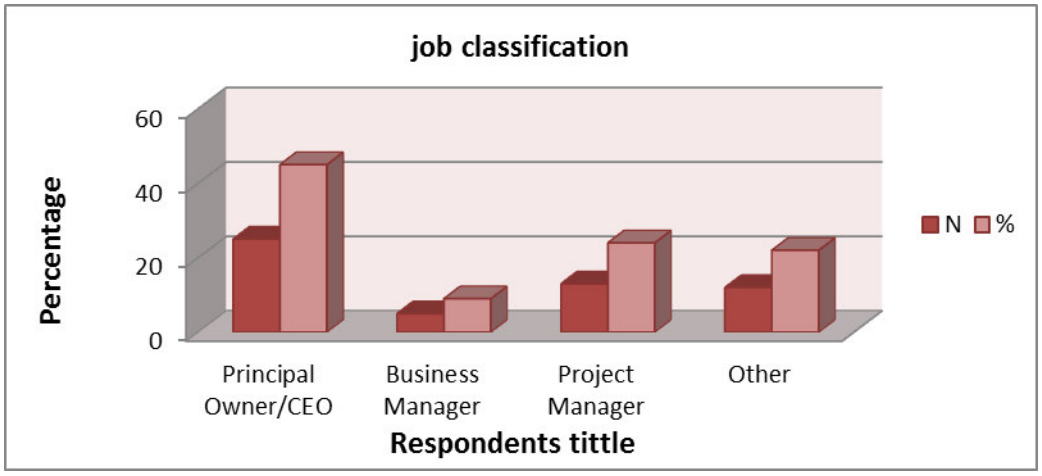

Fig. 4. 0

ii). Firms' Areas of Specialization

To determine the respondents' firms' areas of specialization from the four segments, four alternatives were provided including: Facility Management, Office Design, Hospitality,

and Healthcare. The fifth option was other, and the respondents choosing this option were asked to specify. Responses appear in Table 4.2. Twenty-two percent of the respondents specialized in Office Design, 14 percent specialized in Healthcare, 18 percent specialized in Facilities Management, and 13 percent specialized in Hospitality. Thirty-three percent of the respondents listed other as their area of specialization. This included various areas of design, specialization, which included residential, institutional, churches, retail, public places and historic preservation. In the facilities management field, area of specialization included: Banking, Communications, Telecommunications, and Insurance and Relocation management.

Table 4.2:- Firms' Areas of Specialization

Firm's Area of Specialization	NO.	%
Facility Management	10	18
Office Design	12	22
Hospitality	7	13
Healthcare	8	14
Other	18	33
Total	**50**	**100**

Graph indicating Firms' Areas of Specialization

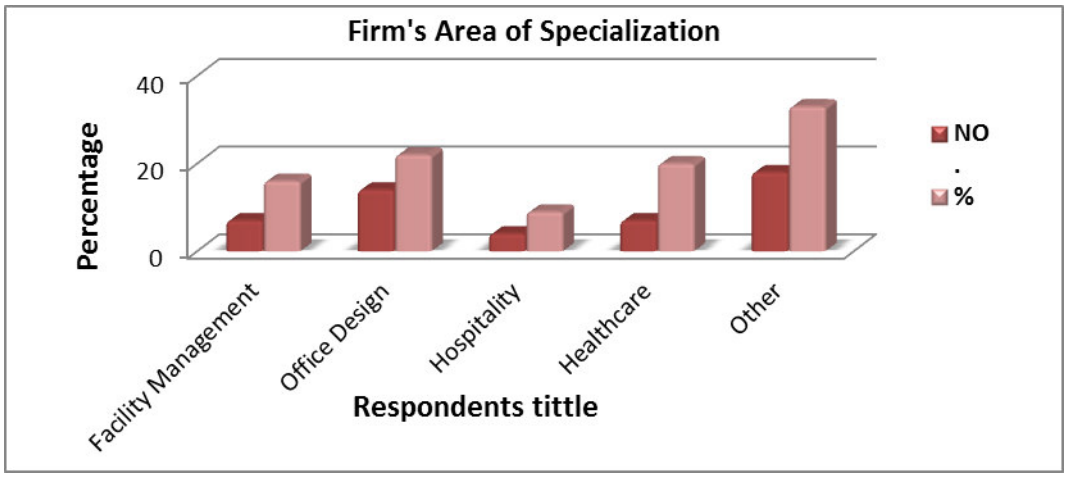

Fig. 4. 1

iii). Firms' Length of Time in Business

Responses to the number of years that the firm was in business were summarized and presented in Table 4.3. Fifty-five percent of the firms were in business over 20 years, 16 percent were in business for 11 to 15 years, 15 percent were in business for five to ten years, and nine percent were in business for 16 to 20 years. Five percent of the firms have been in business for less than 4 years. The findings indicate that the sample contains primarily firms that were in business for a long time.

Table 4.3:- Firms' Length of Time in Business

Firm's Length of Time in Business	NO	%
01-04 Years	3	5
05-10 Years	8	15
11-15 Years	9	16
16-20 Years	5	9
Over-20 Years	30	55
Total	**55**	**100**

Graph indicating Firms' Length of Time in Business

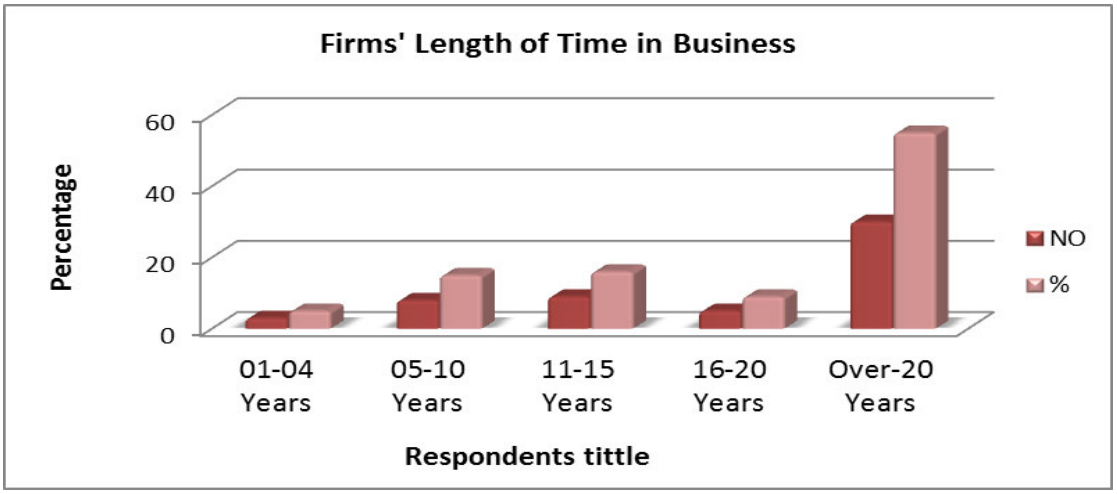

Fig. 4.2

iv). Number of Employees in the Firm

Data on the number of employees in the firm appear in Table 4.4. Forty-four percent of the firms have less than 25 employees, 29 percent of the firms have over 200 employees, while 27 percent have 25 to 200 employees. The findings indicate that slightly less than half could be characterized as small firms but almost 30% are quite large.

Table 4.4:- Number of Employees in the Firm

Number of Employees in the Firm	NO	%
Under 25	24	44
25-200	15	27
Over 200	16	29
Total	**55**	**100**

Pie Chart indicating number of Employees in the Firm

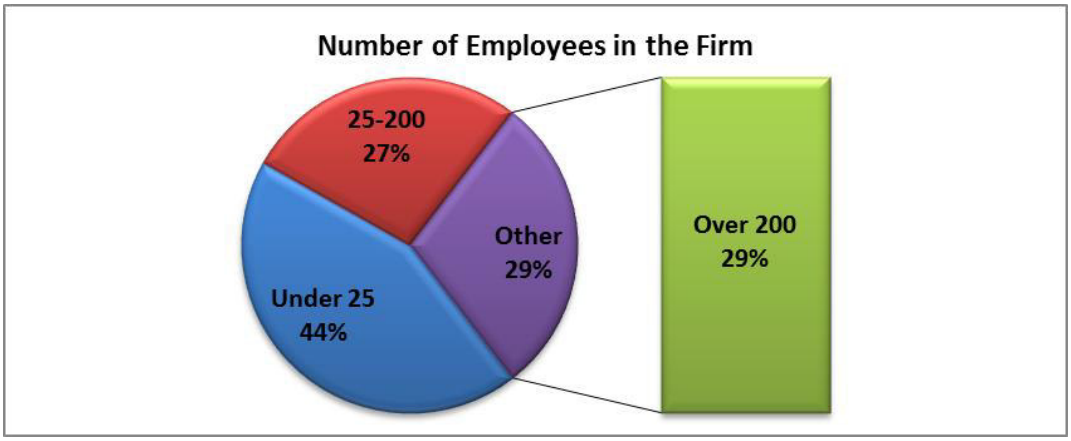

Fig. 4.3

v). Type of Employee Training Program

Data on the type of training programs firms' use on their employees appear in Table 5. Fifty- six percent of the firms had an informal training program. 18 percent had a formal training program, while 25 percent had no form of training program for the employees. It

is interesting to note that the majority of the firms (almost 74 %) have some form of training program. Formal training involves trained professionals' hired to conduct workshops that train employees. In Informal training, the employees learnt on work basis with instructions from the managers. This information reflects that training of employee's is the key to a successful productive firm. From the literature review page 19, we deduce that competency must be demonstrated in a job interview. Occupational competencies are required to retain a post, or earn a promotion. For all organizations, there are a set of primary tasks that competent people have to contribute all the time, (Gilbert T.F, 2008). Organizations often train their employees to offer the knowledge required to perform some tasks, especially to new trainees who lack the experience to perform.

Table. 4.5. Type of Employee Training Program

Type of Employee Training Program	N	%,
Formal	10	18
Informal	31	56
None	14	25
Total	**55**	**100**

Pie chart indicating - Type of Employee Training Program

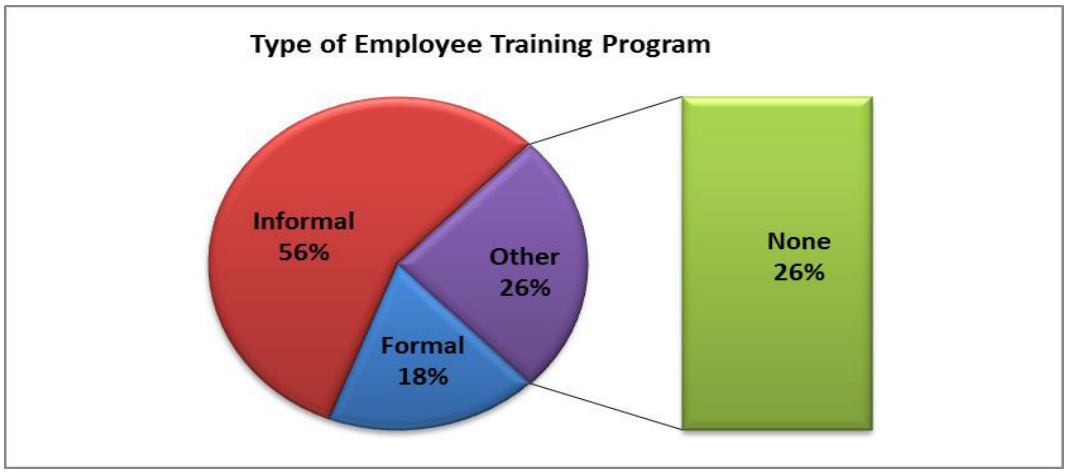

Fig. 4.4

4.2.2. Demographic summary

The data indicated that the larger the firm, the more focused their area of specialization. Only one firm out of the 24 firms with less than 25 employees indicated three areas of specialization. Two firms out of the 24 firms with less than 25 employees listed two or more as their areas of specialization. Midsize firms with 25-200 employees appeared to be more diversified with four firms out of the 15 firms specializing in three or more areas. Twenty-two firms out of the 30 firms who were in business over 20 years appeared to be more focused listing only one area as their primary area of specialization. A formal training program appeared to be prevalent in larger firms with 200 or more employees. Eight of the ten firms with formal training program, had over 200 employees, and two firms had 25-200 employees. Four medium sized firms with 25-200 employees had no training program.

4.2.3. Employer Preferred Competencies.

Findings from this research are based on the identification of competencies preferred by interior design practitioners for employability of recent interior design graduates, as informed by the literature review. To make the data easier to understand a 5-point scale was chosen from one (1) to five (5) 5, with (1) representing very unimportant, (5) very important and (3) a neutral midpoint between very important and very unimportant. The researcher tested the statistical hypothesis: $\mathbf{H_o: \mu = 3.00}$ **-Vs. -** $\mathbf{H_l: \mu \neq 3.00.}$

The competencies preferred by interior design practitioners were listed under four headings, which included:

1. Computer Skills
2. Characteristics,
3. Technology,
4. Communication.

The respondents' preferences of competencies and attributes appear in Table 4.6 to Table 4.9. Findings for the analysis are graphically illustrated via the 3-D bar charts. The statistical results indicated that the only mean score among the desired competencies below 3.00 was Internet. Mean scores for all the other variables were above 3.00. Indicating that the respondents considered the identified competencies to be important.

i). Employer Preferred Computer skills

Mean scores for the six competencies within the computer skills area are as follows, expressed in a descending order of importance: (1) Computer Aided Design, (2) Computer Graphics, (3) Word processing, (4) Spreadsheet, (5) Internet and (6) Others. The responses appear in Table 4.6. Since five of mean scores for these six variables in the computer skills category had scores above 3.00, respondents perceived these skills as important. It is interesting to note that CAD (Computer Aided Drafting) received the highest mean of 4.33, in the Computer Skills category, followed by Computer graphics.

It cannot be denied that we live in an age of technology. By ranking CAD as important, the data appear to agree with the comment by (Senyapili & Basa, 2006) stating that the computer has ushered in increased productivity potential for the design community. As indicated in the literature review page 16, to solve the designers' common dilemma, the market place dictates the rise of programs like CAD, Arch illustrator, Accurender e.g. Atlantis and other similar applications. Utilizing computer skills, designers can now conquer any task of magnitude with ease, in less time with dazzling outcomes, (Senyapili & Basa, 2006).

Supporting the view expressed by Senyapili & Basa, in summing the advantages of the alliance of technology and design businesses found that leading software like Autocad brings breakthrough features to the everyday task of 2D drafting. 3-D models can be built dynamically, viewed with multiple scenarios for exploring design possibilities in minutes using programs e.g. Archicad. Revisions and changes can be made in any mode. Photorealistic images complete with animation, light, shadows' and special effects can be rendered in designated surroundings' with greater dimensioning and accuracy. With Photorealistic images of the space in front of them, so many clients who have so much difficulty- in visualizing the finished interior, can accurately consider the ~ design. When situations demand a cutting edge on competitive bids, designers can quickly revise estimates and bid job costs with profit producing proposal to the client. Thus, the design is submitted on time or under budget and satisfies the client's needs compatible with the

design concept. One practitioner reiterated the importance of computer skills by indicating that "the graduates need to be well rounded willing to embrace technological and other changes". The skill perceived to be the least important was the Internet. The reason could possibly be attributed to the Internet being relatively very common and widely used by the respondents

Table 4.6; - Employer Preferred Computer Competencies

Employer Preferred Computer Competencies					
Computer Skills	**No.**	**Mean**	**Std Dev**	**t**	**Prob> I t I**
Computer Aided Design	55	4.33	0.9241	10.6523	0.0001
Computer Graphics	55	4.05	0.9892	7.9064	0.0001
Word Processing	55	3.75	0.8214	6.7303	0.0001
Spreadsheet	55	3.53	0.8575	4.5600	0.0001
Internet	55	3.49	0.9403	3.8718	0.0003
Others	55	2.80	0.7303	-2.0310	0.0472

Graph indicating employer Preferred Computer Competencies

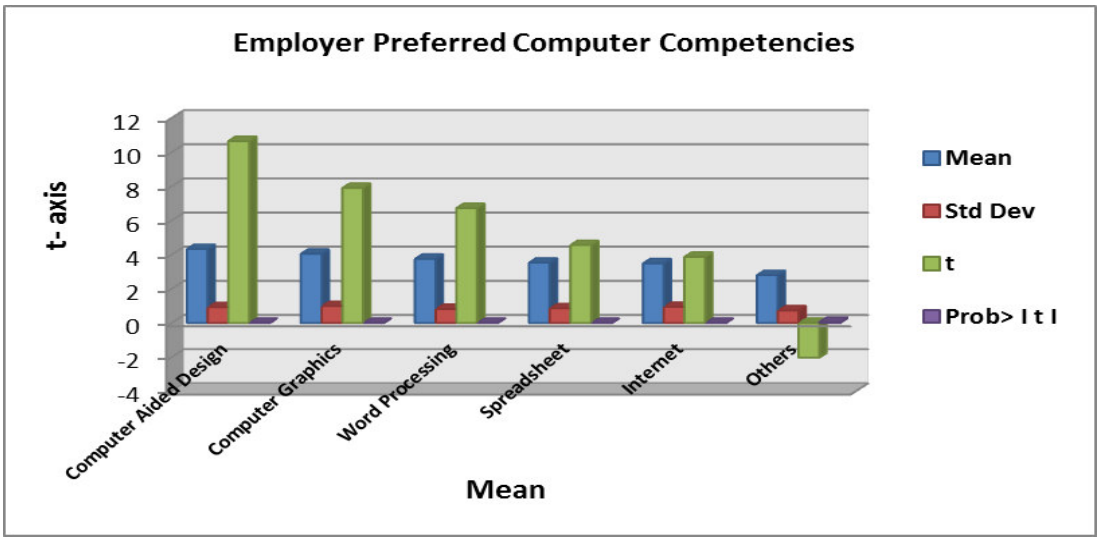

Fig. 4.5.

ii). Employer Preferred Characteristics

The perceived importance of nine personal characteristics was obtained with this section of the questionnaire. The mean scores appear in Table 4.7. The characteristics were as following based on ordering the mean scores in descending order of importance:

1) Ethical
2) Organized
3) Self-Motivated
4) Team Player
5) Resourceful
6) Flexible
7) Decision Making
8) Self-Confident and
9) Leadership

As shown in Table 4.7 the means of all of the nine personal characteristics were above 4.00. These results demonstrate that this sample of employers strongly and uniformly considered these characteristics very important and desirable in new hires. The findings parallel the emphasis on characteristics by employers from diverse disciplines as observed by (Gainer, 2008). Gainer found that the study conducted by the American Society for Training and Development concluded that employer's need employees who are flexible, resourceful, organized, can work in teams, think critically, and creatively solve problems'. An interesting perspective appears to be that regardless of disciplines or diverse area of specialization of the respondents, all the employers unanimously place high emphasis on these identified personal characteristics.

In addition, the respondents desired new graduates to have: personality, character, enthusiasm political/sociological impact, good memorizing ability to remember names of furniture/fabric lines, showrooms procedures etc., commitment to life-long learning, problem solving abilities, common sense, awareness of technological and other changes, sincere desire and eagerness to learn, good people skills, and responsible attitude.

Table 4.7:- Employer Preferred Characteristics Characteristics

Employer Preferred Characteristics					
Characteristics	**n**	**Mean**	**Std Dev.**	**t**	**Prob > I t I**
Ethical	55	4.93	0.2621	54.5366	0.0001
Organized	55	4.82	0.3892	34.6410	0.0001
Self-Motivated	55	4.80	0.4037	33.0681	0.0001
Team Player	55	4.76	0.4700	27.8302	0.0001
Resourceful	55	4.64	0.5222	23.2379	0.0001
Flexible	55	4.62	0.5267	22.7836	0.0001
Decision Making	55	4.45	0.6890	15.6559	0.0001
Self-Confident	55	4.44	0.6601	16.1383	0.0001
Leadership	55	4.11	0.7858	10.4671	0.0001

Graph indicating Employer Preferred Characteristics

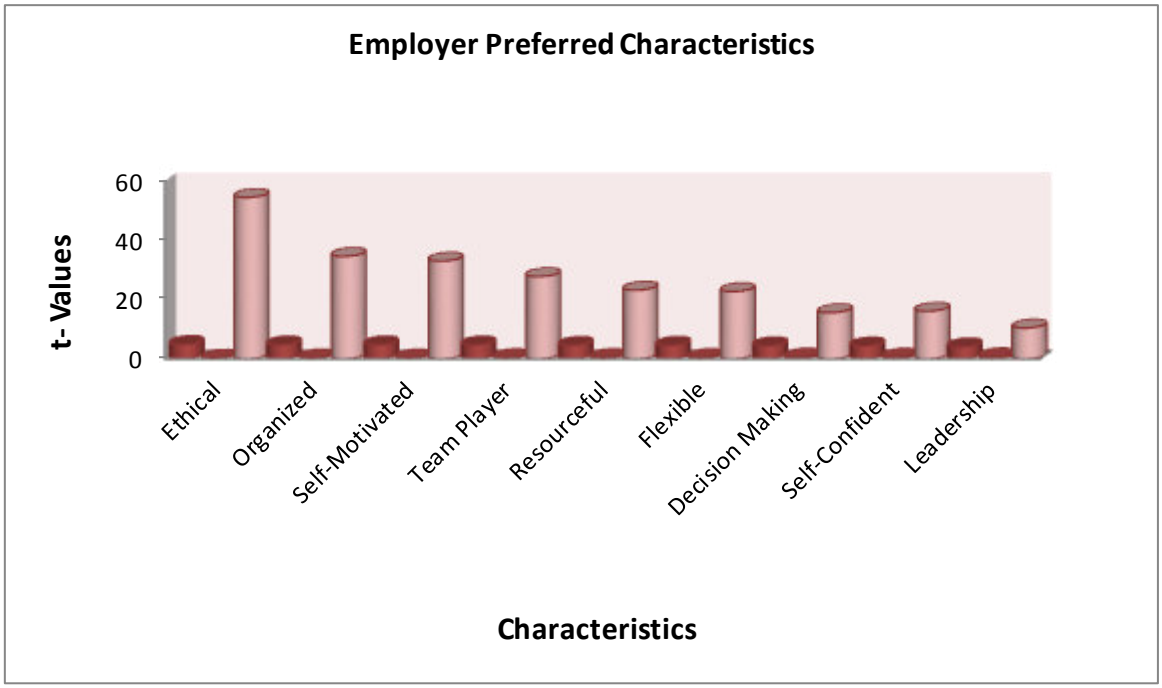

Fig. 4.6

Pie Chart indicating Employer Preferred Characteristics

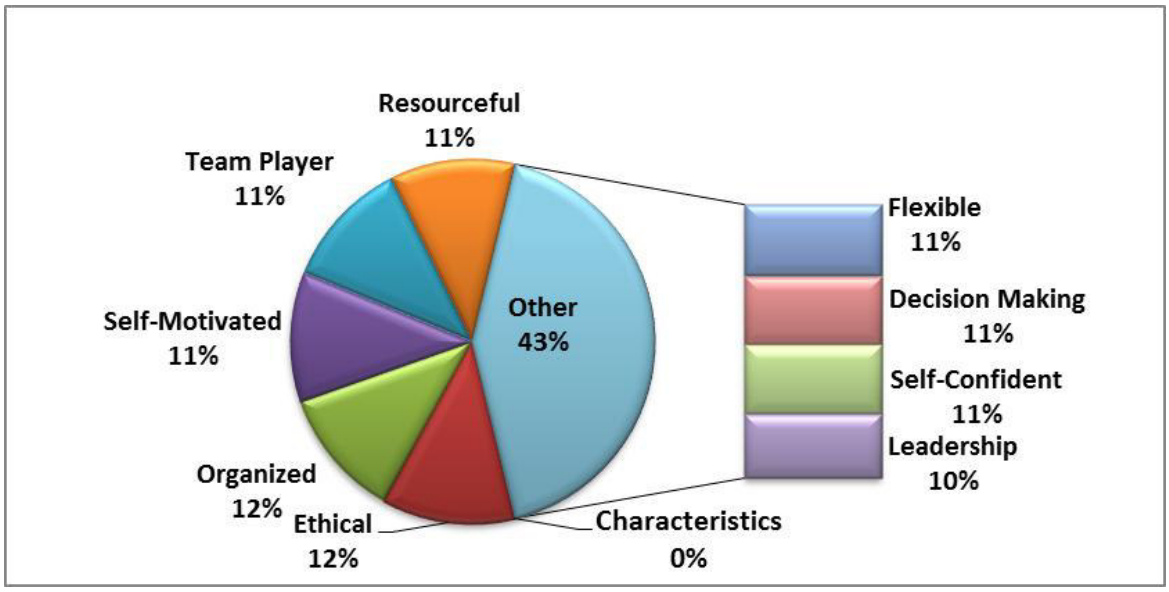

Fig. 4.7

iii). Employer Preferred Technological skills

Ten competencies related to technology were specified including: (1) Design Vocabulary, (2) Construction Knowledge, (3) Resource Knowledge, (4) Code Knowledge, (5) Work Experience, (6) Business Practices, (7) Math Skills, (8) Internship Experience, (9) Lighting Knowledge, and (10) Marketing Knowledge. The data is summarized in Table 4.8. In the changing workplace, technology is of prime importance as affirmed by the response of the interior design practitioners. Reflecting on the needs of the interior design industry one respondent indicated that. "If basic skills were acquired in school technology related skills can be learnt on the job". The study by Barton and Kirseh, (2009) as indicated in the literature review page 29 concluded that the employers want schools to teach both general and specific employability skills. (Greenburg, Canzoneri, and Straker, 2004), further emphasized that "growing number of employers are emphasizing foundational skills, primarily in reading and mathematics, prior to hiring. This could he caused by the increasing demand for these skills on the job and the employer dissatisfaction with the levels of those skills demonstrated by the graduates" (p. 135).

Notice that all of the technology skills have a mean of above 3.00 as shown in Table 4.8. However, these means indicate a wider variation in the respondents' perceived degree of importance placed on each. The range varied somewhat from 3.25 to 4.24. The varying degree of importance by' the respondents could possibly be attributed to the diversity of the profession.

In addition, the respondents desired new graduates to have: *Excellent hand drafting and sketching skills* to convey ideas quickly to a client, general knowledge of fabrics, furniture and Production work, general knowledge of materials and finishes, cost estimating, general office skills, business and financial management furniture specifying ability, specifically Systems Furniture and Case good application, basic knowledge of electrical and cabling systems. This research identified employer expectations of interior design graduates regarding technology competencies. Significant expectations regarding technology that employers identified as preferred skills and knowledge from graduates were a proficient use of CAD programs for two-dimensional design, awareness of advanced programs for three-dimensional design and a basic understanding of technology as it relates to the design process. Additionally, graduates were expected to demonstrate the ability to hand draft and possess a basic understanding of design as stated above.

This research has revealed that employers are expecting graduates to have more than basic skills of CAD programs for two-dimensional design. There is little doubt that technology has influenced the field of interior design just as it has almost any profession. The expectation of graduates having the skills to use the computer for more than a drafting tool is a fundamental matter. Most directors noted that they expected interior design graduates to be proficient with various types of technology, especially two-dimensional CAD programs. One employer stated the following: '*we generally are going to expect them to have some knowledge of computers when they come in. They absolutely have to have a good understanding of using AutoCAD, ArchiCAD, and other rendering programs. We look for many computer skills; they absolutely have to have a good understanding of using CAD. Everyone has their own PC, and is expected to know word processing software, Excel, and at least, one drafting software'.* Not only is CAD a

requirement, but a general knowledge of various programs such as Adobe Photoshop, Illustrator, Microsoft Office products, and three-dimensional rendering programs is also encouraged if not expected.

Employers' comments supporting these expectations include: '*There is a certain expectation for graduates to use Microsoft Word, Excel, Photoshop, Illustrator and understanding AutoCAD, ArchiCAD, Atlantis, plus other drafting and rendering programs, and if they bring more to the table, we'd probably look at them more seriously as opposed to somebody else'.*

Table 4.8:- Employer Preferred Technological Skills

Employer Preferred Competencies					
Technological Skills	**n**	**Mean**	**Std Dev**	**t**	**Prob > I t I**
Design Vocabulary	55	4.24	0.7445	12.3166	0.0001
Construction Knowledge	55	4.20	0.6777	13.1321	0.0001 .
Resource Knowledge	55	4.07	0.7163	11.1060	0.0001
Code Knowledge	55	4.02	0.8049	9.3817	0.0001
Work Experience	55	3.93	0.6341	10.8459	0.0001
Business Practices	55	3.89	0.7619	8.6721	0.0001
Math Skills	55	3.85	0.7060	8.9898	0.0001
Internship Experience	55	3.64	0.7543	6.2564	0.0001
Lighting Knowledge	55	3.44	0.7641	4.2353	0.0001
Marketing Knowledge	55	3.25	0.6727	2.8062	0,0070

Graph indicating Employer Preferred Technological Skills

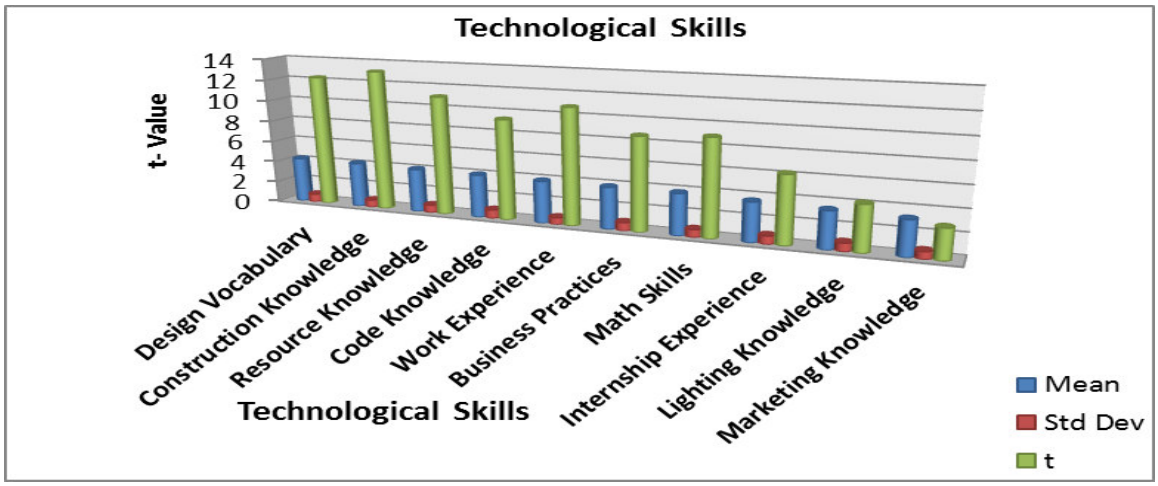

Fig. 4.8

iv). Employer Preferred Communication Skills

Four communication attributes were specified. The responses are given in table 4.9. These included: (I) Listening and Retention, (2) Oral, (3) Written and (4) Visual Presentation. As given in Table 4.9, all the attributes in the category of Communication skills have a mean above 4.00 indicating the identified skills were considered to be of considerable importance to the respondents. Similar to personal characteristics, the employers strongly placed a high degree of importance on communication skills and desired them in new hires irrespective of the diverse areas of specialization of the respondents.

The results are analogous to the recent study by (Mulder, M. 2001) indicating that design practitioners considered oral communication skills. The data clearly indicate that the respondents deem communication essential as all four variables have means ranging from 4.36 to 4.89. As one respondent succinctly sums up, "communication is vital. Designers must be able to communicate their ideas very quickly to a client". Another respondent stressed the importance of communication by indicating, "graduates must be able to write a coherent concise paragraph legibly''. Reverberations of the same theme appeared in

another respondent's response indicating that they "did not mind graduates if they had less design ability, as long as they had excellent communication abilities ".

In addition, the respondents desired new graduates to have: The ability to write concisely, spell accurately, think logically, understand and convey good design process skills and design ideas succinctly, understand cultural diversity and language variations.

Table 4.9:- Employer Preferred Communication Skills

Employer Preferred Competencies					
Communication Skills	**n**	**Mean**	**Std Dcv**	**t**	**Prob> I t I**
Listening & Retention	55	4.89	0.3 146	44.5714	0.0001
Oral	55	4.62	0.5267	22.7836	0.0001
Written	55	4.51	0.0545	22. 1827	0.0001
Visual Presentation	55	4.36	0.6487	15.5885	0.0001

Graph indicating Employer Preferred Communication Skills

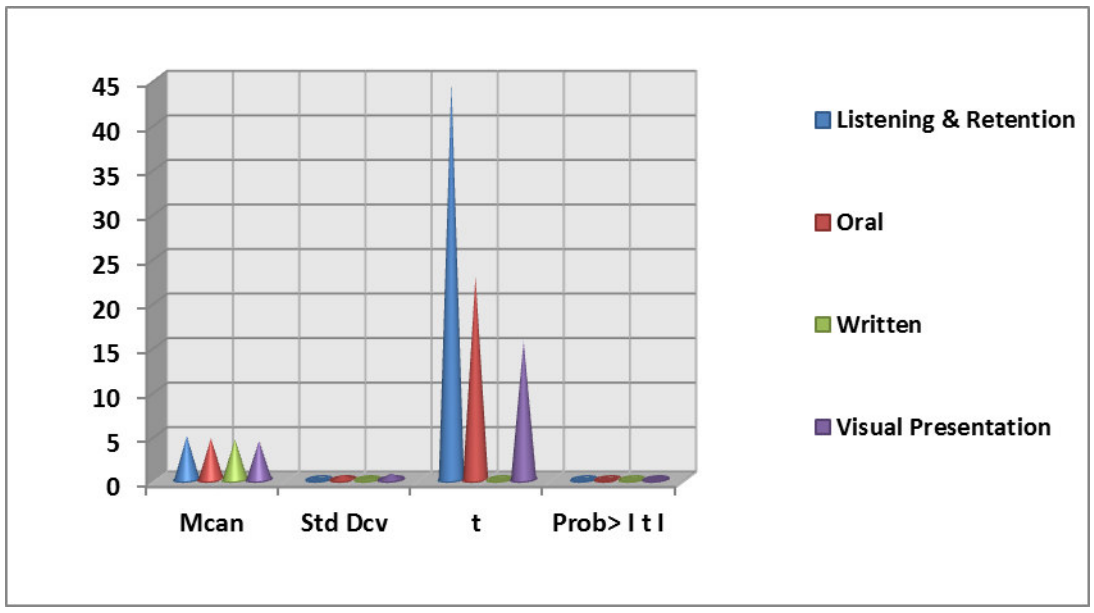

Fig. 4.9

CHAPTER 5

5.0. CONCLUSIONS

The researcher's primary aim was to establish the employers expected competencies of an interior design graduate in Kenya.
Specifically, this research aim was to:-

1. To profile the interior design graduates.

The interior design graduates selected for this research were from Maseno and Nairobi, This is because the content taught in these two universities cover the five-core area of interior design e.g., interior architecture, Furniture design, Landscape design, Exhibition and display and Soft furnishing. Findings from this research indicate that a skills gap exists between employer needs and the competencies and attributes required for employability of new graduates. When graduates lack competencies and attributes sought by employers for employability, it has far-reaching consequences for both employers and graduates. Graduates encounter difficulties in finding a job. In addition, Employers have to expend valuable time and resources training the graduates so that the graduates can be productive and contribute to the business objectives. Findings from the literature review of diverse disciplines with similar problem to this research indicate that a skills gap exists between employer needs and the competencies and attributes required for employability of new graduates (Vasu and Frazier, 2001).

2. To determine the expectations of the interior design employer from the interior design graduate.

Employers preferred Competencies Summary:-

a). *Personal characteristics*

After analyzing the data, an interesting pattern emerged. An overwhelming majority of practitioners identified *personal characteristics* as very important as evidenced by the range of mean scores for these items from 4.11 to 4.93 on a 5-point response scale. The

findings from the data analysis parallel the emphatic significance of personal characteristics by employers from non-design professions. Dillon, (2002) concluded that regardless of the discipline or area of specialization, employers need and want employees who are ethical, flexible, resourceful, organized, can communicate, think critically and creatively solve problems.

b). *Communication skills*

The results from this study point out that degree of importance of- *communication skills* and *characteristics* appear to be the same. Good communication skills are vitally important as the design profession involves conveying ideas quickly and succinctly through technical layouts and graphic presentations to clientele without design training. The importance of good communication skills are supported by the findings in the study by (Lee and Hagerty, 1996) reporting that the findings of (Mulder, M. 2001). and (Waterman, Collard, 2004) also stated that communication skills were consistently ranked high by the practitioners. Among the communication skills, Listening and Retention with a mean of 4.89 were perceived as very important. The respondents reiterated the importance of communication. This was exemplified by their responses by expressing that, ‘‘they did not mind graduates if they had less design ability, as long as they had excellent communication skills". Characteristics such as being ethical and being a good listener are inherent traits. They are learned as a part of family values or behavior, the study found that the employers want to hire graduates with these traits.

The data suggests that the two categories of personal characteristics and communication skills are clearly seen as very important by the majority of tile respondents, irrespective of the demographics for the individual or firm. The findings from diverse disciplines in the literature review support the findings of this study conveying that employers irrespective of the demographics or discipline commonly shared the emphasis on personal characteristics and communication skills. (Saterfiel, Thomas, and McLarty, 2005) expounded the same theme by observing that the identified characteristics and communication skills are more valued by employers from diverse disciplines because

they apply to many jobs and can support common preparation to meet the needs of many diverse and different occupations. (Saterfiel, Thomas, and McLarty, 2005) further reiterated and supported the findings of this study, by observing that relating to employability, current thinking has been broadened by emphasizing not only foundational academic skills, but also including variety of attitudes and characteristics.

c). Computer skills

The findings enunciate that employers emphasized personal characteristics and communication skills more important than computer and technical skills in recent interior design graduates. Although the practitioners also considered technical skills important, the responses were not as consistent. The emphasis on computer and technical skills varied somewhat. In the computer skills category the mean ranged from 2.80 to 4.33. In the technology skills, the mean ranged from 3.25 to 4.24. Perhaps the reason for the difference could possibly be attributed to the diverse areas of specialization in the interior design profession.

Some practitioners had more than one area as their focus of specialization. Without specific data describing the type of businesses that the sample of employers represented, and the relationship of business type to the degree of importance placed on these items, an analysis could not be made relating the type of firm to the skills desired.

d). Technological skills.

Design Vocabulary with a mean of 4.23 appears to be more important to the sampled respondents than *marketing knowledge* with a mean of 3.25. Though all of the skills in this survey had a mean above 3.00, the degree of importance placed on these various items varies. At the inception of the study, it was anticipated that the firms ' area of specialization might influence respondents' responses, thus suggesting that analysis could be done to analyze if significant differences occurred in firms' by areas of specialization for desired characteristics and skills.

5.1. RECOMMENDATIONS

- The data show that trainable skills were important for employability of new graduates. Interestingly, the essence of the person that is, personal characteristics that are not easy to teach in a college classroom, emerged as being of more importance than trained in skills. The graduates are recommended to pay attention to these attributes alongside the job performance competencies.

- Interior design education needs to be reviewed to equip graduates with adequate skills that can allow them to fair favorably in the 21st century workplace. The workplace demands now require an all-rounded individual who is creative, has a multi-disciplinary approach to work that informs their design, can work in diverse media, can conceive ideas rapidly on paper and is well versed with the parallel literacies that affect design.

- Subsequently, design education must not be limited to what the industry requires of graduates, but rather should be greatly informed and influenced by the industry expectations.

- The graduates should enhance the desired competencies. Based on the findings from this study, imminent need appears to make the graduates become more aware of competencies and attributes preferred by interior design practitioners. The graduates in the context of the curriculum could further enhance personal characteristics such as organized, self-motivation, ethical, resourceful and good decision maker.

- As suggested by (Lankard, 2004), addressing the desired competencies and skills and teaching it concurrently with the curriculum could provide the link between the academia and industry. To illustrate, the graduates could enhance communication skills through opportunities in the curriculum, such as writing a thesis, a proposal, an executive summary, a concept statement and making oral and visual presentations.

- Another avenue for students to enhance their skills and develop the desired characteristics and skills while gaining actual work experience could be achieved through business partnering, co-ops and internship programs for interior design graduates.

- Programs such as internships, business collaborating and co-ops, now part of the curriculum in many universities have been effective alternatives. (Martin, 2003) noted, "Actual work experience was found to be very important for development of many of these personality traits and for building on technical skills. Internships are becoming more and more important. That's when students learn the soft skills of working in a corporate environment" (p. 14). To implement additional experiences within a 4- year college, existing curriculum might have to be compromised or the timeline of the degree might have to be extended.

- With the added expense of an expanded curriculum, the employers of recent graduates may have to review the current practice of paying apprenticeship level salaries. Enhanced attributes and increased skill levels should provide a benefit to graduates competing for entry-level interior design positions. Educators, employers and employees in the interior design field can use this study to help understand the characteristics and skills currently desired by employers of interior design graduates.

- Integration of the findings into interior design curriculum will require a continued dialog between university level faculty and the principals in the interior design, architectural and facility management firms who hire their graduates.

- The findings of this research support the study of (Dickson, White, 2003) advocating that discussions must be held between leaders in interior design education, practice and industry.

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APPENDICES

APPENDIX I: - Proposed time Schedule

Activities	March-September 2012	Oct 2012	Nov 2012	Dec 2012	Jan-Feb 2013	Mar-April 2013
Initial preparation • Refining research topic • Literature search • Problem analysis • Interview schedule design • Contacting prospective interviewees • Consultations with supervisor/s						
Field Work • Interviewing employers • FGDs recruiting • Organizing discussions • Analysis of collected data from recording • Analysis of interview schedule data						
Analysis • Evaluation of results • Writing of draft report						
Final Phase • Finalizing of research report • Presentation of final research report						

APPENDIX II: Estimated research budget.

Sn.	Item	
1	**Personnel**	
	Per-diem for data gathering estimated 60 days@ 1000	60,000
	Purchase of essential books, journals and magazines	20,000
	Internet services @1000 per month 24 months	24,000
2	**Stationery**	
	Printing paper 10 rims @1000 Kshs	10,000
	Printing Ink Cartridges 10 pcs of Black @ Kshs 1200/=	12,000
	Printing Ink Cartridges 5 pcs Tri color @ Kshs 1000/=	5,000
3	**Equipment**	
	Laptop -HP	45,000
	HP printer Desk Jet 5150 series	10,000
	Scanner	15,000
	Digital camera 8.5 mega pixel and 2 GB memory	18,000
	Camera carrying bag	1000
	Battery charger plus rechargeable batteries	2,000
	Data collection	
4	Organizing FGD- Recruiting participants	20,000
	Refreshments - Beverages, cookies, chips, and other snacks.	15,000
	Other compensation e.g. Transport.	25,000
	Airtime-Airtel and Safaricom credit cards @ 2500	5,000
	Sub Total	**287,000**
5	**Miscellaneous expenses**	
	At 10% of the sub-total above	28,700
	Grand Total	**Kshs. 315,700**

APPENDIX III: Letter to interior design practitioners

Evelyn Ntinyari
Masters student at the University of Nairobi,
P.O. Box 48370-00100.
Cell: 0720703033/ 0739 266301,
Nairobi.

Dear Design Practitioner/ employer,

RE: A RESEARCH ON COMPETENCIES PREFERRED BY EMPLOYERS OF INTERIOR DESIGN GRADUATES IN KENYA.

Your assistance in this research related to competencies preferred by Employers in Interior Design graduates will be immensely appreciated. Data analysis from this research will be used to provide the linkage between curriculum and compatible industry competencies. Therefore, a few moments of your valuable time to complete the survey would be extremely important and helpful.

Please answer the questions by circling the number, which best matches, your answer. There is no right or wrong answers. Your responses will remain confidential.

If you have any questions related to the survey, you can contact me. The contacts have been provided.

Thank you in advance for your valuable time and assistance.

Sincerely yours,

.....	.....
Evelyn Ntinyari,	Dr. Lilac Osanjo,
Masters graduate Student.	Supervisor, University of Nairobi.

APPENDIX IV: - QUESTIONNAIRE.

Topic of research: - Competencies preferred by employers of interior design graduates in Kenya.

Name: **Date:** **Phone No:**

Firm Name: **Address:**

Please circle the number which best matches your answer,

CATEGORY	VERY IMPORTANT	IMPORTANT	NEUTRAL	UNIMPORTANT	VERY UNIMPORTANT.
COMPUTER SKILLS.					
(1-1) Computer Aided Design (CAD	5	4	3	2	I
(1-2) Computer Graphics	5	4	3	2	I
(1-3) Word Processing	5	4	3	2	I
(1-4) Photoshop/Illustrator	5	4	3	2	I
(1-5) Spreadsheet	5	4	3	2	I
(1-6) Internet	5	4	3	2	I
(1-7) Other.	5	4	3	2	I
CHARACTERISTICS.					
(2-1) Team Player	5	4	3	2	I
(2-2) Organized	5	4	3	2	I
(2-3) Self Motivated	5	4	3	2	I
(2-4) leadership,	5	4	3	2	I
(2-5) Decision Maker	5	4	3	2	I
(2-6) Integrity	5	4	3	2	I
(2-7) Flexible	5	4	3	2	I
(2-8) Self Confident	5	4	3	2	I
(2-9) Resourceful	5	4	3	2	I
(2-10) Others	5	4	3	2	I
	VERY IMPORTANT	IMPORTANT	NEUTRAL	UNIMPORTANT	VERY UNIMPORTANT.

CATEGORY

TECHNOLOGY

(3-1). Construction Knowledge	**5**	**4**	**3**	**2**	**I**
(3-2. Design Vocabulary	**5**	**4**	**3**	**2**	**I**
(3-3).Code Knowledge	**5**	**4**	**3**	**2**	**I**
(3-4). Resource Knowledge	**5**	**4**	**3**	**2**	**I**
(3-5).Business Practices	**5**	**4**	**3**	**2**	**I**
(3-6). Word Processing	**5**	**4**	**3**	**2**	**I**
(3-7). Internship	**5**	**4**	**3**	**2**	**I**
(3-8). Lighting Knowledge	**5**	**4**	**3**	**2**	**I**
(3-9). Marketing Tools	**5**	**4**	**3**	**2**	**I**
(3-10). Math Skill	**5**	**4**	**3**	**2**	**I**
(3-11). Others	**5**	**4**	**3**	**2**	**I**

COMMUNICATION

(4-1). Listening & Retention	**5**	**4**	**3**	**2**	**I**
(4-2). Oral	**5**	**4**	**3**	**2**	**I**
(4-3). Written	**5**	**4**	**3**	**2**	**I**
(4-4). Visual Presentation	**5**	**4**	**3**	**2**	**I**
(4-5). Others	**5**	**4**	**3**	**2**	**I**

Which best describes your job classification? .(Please check one only)

(5-1). Principal Owner CEO

(5-2). Business Manager

(5-3). Project Manager

(5-4). Visual Presenter

(5-5). Others **(Specify)**

CATEGORY	**VERY IMPORTANT**	**IMPORTANT**	**NEUTRAL**	**UNIMPORTANT**	**VERY UNIMPORTANT.**

Which best describes your firm's area of specialization?

(6-1). Facility Management **5**
(6-2). Office Design **4**
(6-3). Hospitality **3**
(6-4). Healthcare **2**
(6-5). Other **(Specify) _____ _** **1**

How long has the firm been in business?

(7-1). 1 -04 Years **5**
(7-2). 05-10 Years **4**
(7-3). 11 -15 Years **3**
(7-4). 16 -20 Years **2**
(7-5). Over 20 Years **(Specify) _____ _** **1**

About how many employees are in your firm?

(8-1). Under 25 **5**
(8-2). 25-200 **4**
(8-3). Over 200 **3**

Does the firm have a training program?

(9-1) Formal **5**
(9-2) Informal **4**
(9-3) None **3**

COMMENTS

Is there anything else that you would like to add or see included in this survey')

……
……
……

THANK YOU FOR YOUR TIME IN COMPLETING THIS SURVEY.

Evelyn Ntinyari. (Cell: 0720-703 033/ 0731–703 033).

Kindly attach your business card, if you would like a summary of the survey results.

APPENDIX: IV- Pictures taken during the Focus Group Discussion.