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An investigation into the attitudes that exist among accounting and non-accounting business students towards innovation and creativity in the accountancy sector

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Date of Submission : **29th July 2011**

Submitted to : **Mr James Kearns**

Word Count : **16,285 Words**

This dissertation is submitted in partial fulfilment of the requirements for the Degree of MA in Accounting, Letterkenny Institute of Technology.

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ABSTRACT

This study will investigate the attitudes that exist among accounting and non-accounting business students, in Letterkenny Institute of Technology (LYIT), towards innovation and creativity in the accountancy sector. The objectives of this research were to establish a definition of innovation pertaining to the accountancy sector as well as establishing a definition for creativity relevant to the accountancy sector. This research will determine whether or not a relationship exists between the concepts of innovation and creativity with regard to the accountancy sector. The researcher also intends to uncover the attitudes that exist among accounting and non-accounting business students towards innovation and creativity in the accountancy sector. These objectives will be achieved by means of extensive reading into these areas and the measurement of the attitudes third level accounting and non-accounting business students have towards innovation and creativity in the accountancy sector. The methodology employed to carry out this research comprised of two phases. The first phase comprised of a focus group. This methodology is exploratory as the purpose and intent of the focus group is to provide an understanding of perceptions, feelings, attitudes and motivations (Edmunds, 1999). Following the focus group, a survey was developed for the researcher's sample. These two phases of primary research investigated the attitudes of third level accounting and non-accounting business students in LYIT towards innovation and creativity in the accountancy sector.

The results from this research show that the majority of the accounting and non-accounting business students in LYIT have a positive attitude towards innovation and creativity in the accountancy sector. Both groups embraced innovation and creativity as skills which the accountant should possess and as skills that are important in the accountancy sector. The researcher also established working definitions of the terms innovation and creativity relevant to the accountancy sector, which the majority of the accounting and non-accounting students supported. The literature outlined the negative relationship that exists between innovation and creativity in the accountancy sector however, the findings of this research eliminated this negative, traditional view of innovation and creativity in the accountancy sector and categorised these skills as important to the accountancy sector and the business sector as a whole.

GLOSSARY OF TERMS

- ICAI : Institute of Chartered Accountants Ireland
- CAI : Chartered Accountants Ireland
- ICPAI : Institute of Certified Public Accountants in Ireland
- CIMA : Chartered Institute of Management Accountants
- ACCA : Association of Chartered Certified Accountants
- OECD : Organisation for Economic Co-operation and Development
- HEA : Higher Education Authority
- HR : Human Resources
- PhD : Doctorate of Philosophy
- GDP : Gross Domestic Product
- CPA : Certified Public Accountant
- IFAC : International Federation of Accountants
- IT : Information Technology
- LYIT : Letterkenny Institute of Technology

Acknowledgements

Several people have been of a great help in allowing this project to be completed. I would like to take this opportunity to express my sincere gratitude to the following people:

- **Mr. James Kearns, my Supervisor, for his guidance, support and constant availability during the research and compilation of this dissertation**

- **My research lecturer, Deirdre McClay, for all her advice and guidance with the research methodology during the year**

- **The students who took the time to participate in the focus groups, their contributions were greatly appreciated**

- **The students who took the time to complete the questionnaires**

- **My parents and brothers for their encouragement and support throughout the years**

- **My boyfriend, Micheál, for his support throughout the year and for proof reading this dissertation**

- **Finally, my friends and colleagues in the master's class of 2011 for making it a memorable year**

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INTRODUCTION

In recent years, the terms innovation and creativity have emerged as vital factors in resolving many of Ireland's current financial issues. The government published its medium term economic framework in December 2008, which was designated as Building Ireland's knowledge economy. This framework contains five main areas for action, one of which involves placing Ireland as an international hub for innovation. In the Innovation Taskforce's Report, it outlines that in order to make innovation work for Ireland, an ecosystem must be developed which consists of elements which support innovation across the economy as well as society. One of the key elements for this ecosystem was the education system, and in particular, Third Level Institutions. It was agreed that in order to convert Ireland into an International Innovation Hub, it must adopt an education system which promotes liberated thought, creativity and innovation, which are all vital factors in achieving the smart economy (Innovation Taskforce Report, 2010).

This study consisted of a literature review and two phases of empirical research. The literature review is presented in chapter two and introduces the accountancy sector in Ireland, third level education in Ireland, the concepts of innovation and creativity in the accountancy sector, criticisms of accounting education and definition and interpretation of attitudes. The literature review identifies and explains a number of the key issues that are investigated by the researcher in the subsequent chapters.

Chapter three contains the outline of the research methodology which was applied. The objectives and sub-objectives of the research are demarcated in this chapter. Also, how the researcher will address these objectives is outlined. A two phase approach was adopted for the research which employed a qualitative research approach for phase one and a quantitative approach for phase two research. This chapter includes further detail of the methods used in collecting, measuring and analysing the data. Chapter four deals with the findings from the qualitative and quantitative research, the findings from this are summarised. Chapter five deals with the analysis of the research findings, while chapter six deals with the conclusions and recommendations of the research.

1.1 Prologue

The terms innovation and creativity have emerged as vital factors in resolving many of Ireland's current financial issues. In December 2008, the government published its medium term economic framework, 'Building Ireland's knowledge economy.' This framework contains five main areas for action, one of which involves positioning Ireland as an "International Innovation Hub"(Innovation Taskforce's Report). In the Innovation Taskforce's Report, it outlines that in order to make innovation work for Ireland we must develop an ecosystem which consists of elements which support innovation across the economy and society. One of the key elements of this ecosystem was the education system, and in particular, third level institutions. It was agreed that in order to transform Ireland into an international innovation hub, it must adopt an education system which fosters independent thinking, creativity and innovation, which are all vital factors in achieving the smart economy (Innovation Taskforce Report, 2010).

As the area of innovation and creativity has become topical in recent times and relevant to Ireland's changing economy, the researcher plans to identify whether accountancy students and non-accountancy students feel innovation and creativity is important in the accountancy sector and if it should be incorporated into their education. By measuring the attitudes students have to these areas, the researcher may be able to establish whether accounting students are capable or willing to be innovative and creative and whether or not the education system encourages accounting students to think in a certain way and act in a certain manner that compresses innovation and creativity. If the research establishes that accounting students as well as non-accounting business students have the same attitude towards innovation and creativity in the accountancy sector, it may outline an area in which the Irish education system needs to be revamped. In order for Ireland to establish its smart economy, innovation and creativity are essential, and if there is a place for these factors in the accountancy sector, then it should be examined and incorporated accordingly.

It is of economic importance for Ireland to become an international innovation hub in the establishment of the smart economy. The future of our economy lies in the hands of the upcoming generations, who are currently being put through the education system. In order for Ireland to compete on an international basis, it is vital that its education system produces

highly skilled and knowledgeable individuals. If accounting students were lacking skills, such as innovation and creativity, which are important for developing the smart economy, then Irish graduates may find they are lacking skills other nations have mastered or that they are not in possession of a competitive edge necessary to compete in the current climate.

There has been limited research into this sector in Ireland and if a gap was to be established in the education system now, Ireland may gain a competitive edge on accounting graduates in other countries. Ireland's objective should be to become leaders of innovation and creativity and if some of the most valuable human assets in Ireland are lacking these skills, then Ireland cannot succeed in achieving this goal. It is for these reasons that this area deserves more investigation and research.

In the decades ahead, higher education will play a central role in making Ireland a country recognised for innovation, competitive enterprise and continuing academic excellence, and an attractive place to live and work with a high quality of life, cultural vibrancy and inclusive social structure. The structure of higher education is already evolving as institutions seek to respond more effectively to Ireland's innovation requirements. These developments have the potential to create new system strength through the pooling of expertise, knowledge and resources, and through the exploitation of synergies to realise the full potential of Irish talent and innovation. This energy now needs to be harnessed to address the goals of this strategy. The Innovation Taskforce emphasised the importance of independent thinking and 'the development of creative, high-skilled graduates as well as lifelong learning, mentoring and continuous professional development'. Irish higher education will also need to deepen the quality and intensity of its relationship with enterprise and adjust its strategy regularly in response to global change. Critical thinking, adaptability and creativity will be key characteristics required of graduates in the future labour market (As Cited by the Hunt Report, 2011)

The GEM Global Report 2010 stated that economies are either factor-driven, efficiency-driven or innovation-driven. Ireland was categorised as an innovation-driven economy. This report defined an innovation driven economy as one which focuses on Research and Development, is knowledge intensive and in which the service sector is expanding. It creates an environment for innovation and entrepreneurial activity to exist.

“Innovation is more important than ever today. With fewer customers available you have to be the best to earn their business. Idea-paint has led the market with the best in class dry-erase product. We made the wise decision of committing to innovation in order to defend our market position. Our commitment has paid off and allowed us to come out with better and better products and not only remain but also take market share from our competitors.” John Goscha, Founder of IdeaPaint, USA (GEM Report 2010).

The concepts of creativity and innovation are relatively new to the business world, and are typically associated with management disciplines. However, as the role of the accountant in business has changed rapidly in the last decade and the accountant is more involved in the decision making side of the business, it is important that the accountant is equipped with the essential skills to lead, motivate and understand employees and colleagues.

1.2 Research Questions & Objectives

The Research Question for this Research is to determine what the attitudes of accounting and non-accounting business students in LYIT are towards innovation and creativity in the accountancy sector.

The research objectives are:

- To establish a definition of innovation pertaining to the accountancy sector.
- To establish a definition of creativity pertaining to the accountancy sector.
- To gain an overview of the research which has been done previously in this area.
- To investigate the relationship between the accountancy sector and the terms innovation and creativity.
- To determine the attitudes of accounting and non-accounting business students towards innovation and creativity in the accountancy sector.

1.3 Justification for the Research

The future of the Irish economy is dependent on the upcoming generations, who are currently being educated. In order for Ireland to compete on an international basis, it is vital for the education system to produce highly skilled and knowledgeable individuals. There has been

limited research into this sector in Ireland. The research that has been carried out into this sector has become out-dated and is in need of review.

The evidence the researcher has gathered thus far from secondary sources suggests there is a need for this research. There is a significant gap in accounting education that needs to be examined. Before a conclusion is drawn, the attitudes of students into the area must be measured and analysed in order to identify if they have the same views as the researcher. The development of Ireland's smart economy is dependent on students being innovative and creative, which means there is no better time for this research to be conducted. There is also literature available in this area, although it is not an absolute comparison, it does coincide with the intended topic, in that it looks into the attitudes that exist towards accountants and the skills they possess but there is no research that relates exactly to my intended topic of innovation and creativity in the accountancy sector and the attitudes that exist towards this.

CHAPTER 2: LITERATURE REVIEW

This section of the study will deal with literature the researcher considered relevant regarding the attitudes of third level accounting and non-accounting business students have towards innovation and creativity in the accountancy sector.

There have been a number of studies compiled measuring the attitudes of third level students towards a career in accountancy and the perceptions graduates have towards the skills necessary to become an accountant (Kavanagh et al. 2007; De Lange et al. 2006; Oswick *et al.* 1992). However, the literature fails to examine whether there is a need for innovation and creativity in the accountancy sector and what the attitudes are of third level accounting and non-accounting business students towards innovation and creativity in the accountancy sector. These topics are dealt with separately and in different contexts. This research will deal with each of these concepts and outline the relationship that exists between innovation and creativity in the accountancy sector.

2.1 An overview of the Accountancy sector in Ireland

The accounting profession today demands a new kind of professional accountant with diverse knowledge, skills and competences which are dissimilar to those skills, competences and knowledge required in previous decades (Germanou *et al.*, 2009). Perceptions of the accounting profession and the stereotypical view of the accountant is a factor which has been cited by several authors including Geiger and Oligby (2000), Marriot and Marriot (2003), Freidman and Lynne, (2000) and Cory (1992). These views expressed by all these authors examine negative perceptions that deter business students from choosing accounting as their major area of study.

Traditionally, the accounting profession has been associated with institutional fragmentation, with a collection of bodies or associations representing accountants in any one country (Anderson-Gough *et al.* 1998; McCabe and McHugh, 1992). In Ireland, four professional accountancy bodies operate. They are the Institute of Chartered Accountants Ireland (ICAI), who are now known as Chartered Accountants Ireland (CAI), the Institute of Certified Public Accountants in Ireland (ICPAI), the Chartered Institute of Management Accountants (CIMA), and the Association of Chartered Certified Accountants (ACCA). A detailed

description of the education system and training procedures of each professional body aforementioned is out of the scope of this research. It is for this reason the researcher will discuss the Chartered Accountants Ireland (Previously ICAI) system as opposed to all of them. The CAI is most appropriate for a variety of reasons. The first reason is that CAI is based and managed in Ireland, unlike CIMA and ACCA which run in Ireland as divisions of the British bodies. Secondly, ICAI received its royal charter in 1888, making it the longest established accountancy body in Ireland. ICPAI is the other Irish body and was formed in 1943. Thirdly, CAI is currently, and always has been, the largest professional accountancy body in Ireland in terms of members and students enrolled with them (Byrne et al. 2003).

The ICAI activities evolve around public practice, with the provision of audit, taxation and other services, though its members are employed outside practice at an increasing rate (ICAI, 2002a). Chartered Accountants Ireland is the largest and longest established accountancy body in Ireland. It has over 18,000 members and 6,500 students, and it is the leader of the accountancy profession in Ireland (CAI website). This demonstrates considerable growth from its foundation in 1888, when it had 42 members. However, while the professional bodies in England and Scotland flourished in the decades after their formation, ICAI has only experienced significant growth in activity and membership in the latter half of the 20th century. Indeed, ICAI had only 417 members by its jubilee year and approximately 6000 by its centenary year of 1988 (Byrne et al, 2003). This was because Ireland's economy in the 1990's was dominated by the agricultural industry. At this time, most accountants obtained their income from bankruptcy and insolvency work and from provision of debt collection as well as land agency services to absentee landlords in England (Robinson, 1983; Hanlon, 1994). The uniting of Irish accountants from North and South to establish the ICAI is somewhat surprising considering the immense political tensions that existed at the time. The reasons for the association between north and south can be put down to economic and social considerations. A number of the founding members had trained and practiced in Britain and thus they had experience of the benefits that arise from being a member of a professional body that was well organised. It was also felt at the time that the acquisition of a royal charter for a national professional organisation would enhance the status of Irish Accountants and prevent English Accountants dominating the accounting profession in Ireland (Annisette & O'Regan, 2001, cited by Byrne and Flood, 2003).

New economic policies introduced in the 1960's changed the fortunes of the Irish accounting profession. Trade barriers were taken away and foreign direct investment was incorporated

which stimulated both the development of Irish home-grown industry and an invasion of overseas companies (Byrne et al, 2003). More varied opportunities arose for accountants as a result of these developments which in turn attracted constantly increasing numbers to the profession (Byrne et al, 2003). The Irish economy experienced growth from 1994 onwards, known as the “Celtic Tiger.” Gross domestic product (GDP) increased by around 9.6 per cent per annum from 1994 to 2000 (Haughton, 2000). Other factors that were critical in this success were the growth in exports, wages and price limits, low inflation, property based tax incentives, and the low corporation tax rate (Byrne et al, 2003).

2.2 Third Level Education in Ireland

The Organisation for Economic Co-operation and Development’s (OECD) publication *Education at a Glance 2009* reported that accomplishment of Higher Level Education, whether in Universities or other Higher Level education, among 25-34 year olds in Ireland, was high at 44%, which was well above the OECD average of 34%. Higher Education or Third level Institutions in Ireland is made up of Universities, Institutes of Technology, Colleges of Education and a number of independent private colleges. The higher education system in Ireland is a binary system which is designed to ensure optimal flexibility and receptiveness to the needs of the students and to a wide variety of social and economic requirements (NUI Galway, 2011).

Despite this, the rate of growth among accounting and business programmes within higher education was considerably slow, which reflects the stagnation of the Irish economy (Byrne, 2003). The arrival of the “Celtic tiger” led to development in the Irish economy and a huge diversification in business activity. Irish businesses demanded more skilled and versatile graduates which forced the Universities and Institutes of Technology to develop their business faculties (White, 2001).

Today, all the Irish Universities and Institutes of Technology offer an accounting degree or a specialisation in accounting as part of a business degree while many of the other higher education institutions offer programmes at certificate, diploma or degree level in accounting. There were only five full-time accounting academics in education at the start of the 1970s (Robinson, 1983). The *Irish Accounting Directory 2000* (Clarke & Brabazon, 2000) has fifty seven accounting academics recorded as being employed in the seven Irish universities, forty

nine (86%) of these academics also hold a professional accountancy qualification, with the majority (71%) of these academics being members of ICAI.

The Higher Education Authority have stated that all enrolments in third level education in Irish universities totals to 188,166 students. This total is made up of the number of students across Ireland who are on undergraduate programmes in Irish universities such as diplomas, certificates, ordinary degrees and honours degrees as well as including post graduate courses such as the research and taught masters programmes and Doctorates of Philosophy (PhD). These statistics state that those students undertaking solely taxation and accounting programmes in Irish Universities total to 4,484. This implies that of the 188,166 students in third level university education, only 2.38% of them are undertaking accounting based programmes (HEA, 2011). The Institutes of Technology across Ireland have student enrolment on third level education programmes of 75,282. Of these 75,282 students, 3,368 students are studying accounting and taxation. This means that in all the IT's in Ireland, 4.47% of them are doing accounting and taxation programmes. By combining these figures, it can be demonstrated that there are 263,448 students enrolled in third level education throughout Ireland and 7,852 are enrolled in accounting and taxation programmes. That is 2.9% of all students in third level education in Ireland are participating in accounting and taxation programmes.

2.3 Towards a definition of innovation and creativity

Innovation and creativity are typically associated with the invention of new ideas and products. There are many definitions and interpretations as to the meaning of innovation in a business context. Kuczmarski *et al.* (2001) use a broad definition of innovation, describing it as a way of bringing a new perceived benefit or value to a customer, employee or shareholder. They also consider innovation to be intangible and intuitive, as being a mindset more so than a skill. An innovation is any reasonably significant change in the way an organisation operates, is administered, or defines its basic mission (Harris *et al.*, 2004). There are hundreds of variations of the term innovation, however, for the purpose of this research the researcher has chosen the following definition where innovation is the generation implementation of a new idea into a new product, process or service (Osborne *et al.*, 2003).

Creativity is the application of imaginative thought which results in innovative solutions to many problems (Mullins, 2007). Creativity has also been defined by Bessant *et al.* (2007) as the making and communicating of meaningful new connections to help us think of many possibilities; to help us think and experience in various ways and use different points of views; to help us think of new and unusual possibilities; and to guide us in generating and selecting alternatives. These new connections and possibilities must result in something of value for the individual, group, organisation or society. A more useful approach is to view creativity as the process of generating ideas whilst seeing innovation as the sifting, refining and most critically the implementation of those ideas. Innovation and creativity are terms that are normally used interchangeably. This is evident in the widely accepted definition whereby innovation equals creativity plus implementation (Stamm, 2008). To further demonstrate these understandings of innovation and creativity, Jolly (2003) stated where creativity is a process of developing and expressing novel ideas that are likely to be used while the end result of the creativity process is innovation, where innovation is the embodiment, combination, or synthesis of knowledge in novel, relevant, valued new products, processes or services. Essentially, if innovation is to occur, the creative process must be engaged. Bessant *et al.* (2007) also outlines what research tells us about the cognitive abilities which are necessary for creativity and innovation to occur. They are as follows :

- (i) *Acquisition of information and dissemination, including the ability to capture information from a range of sources, which requires attention and perception.* In CPA's 2011 vision, it was stated that CPA's possess the ability to process and integrate information among various areas of business practice as well as helping others to discover meaning and opportunities in a wide variety of information sources (CPA Vision, 2011). This demonstrates the ability to acquire and disseminate information which implies the first ability outlined by Bessant *et al.* (2007) is fulfilled.
- (ii) *Intelligence, the ability to understand, process and manipulate information in a competent manner.* In IFAC's (2003) report *Towards a Competent Accountant*, it was stated that in order for an accountant to be competent they must possess certain capabilities. One such capability is analytical and constructive cognitive skills. This includes skills such as accessing knowledge, understanding, application, analysis, synthesis and evaluation (IFAC Report, 2003, p.43) These refer to the skills in Bloom's taxonomy, which are essential for task and problem identifica-

tion, gathering information and for organization, analytical and interpretational ability. They also include critical, logical and independent thinking and judgement when it comes to decision making. This supports the cognitive ability whereby accountants are required to be intelligent, able to understand, process and manipulate information in a competent manner.

(iii) *Sense-making, being able to give meaning to information.* In CPA's 2011 Vision, it was stated that the core purpose of a CPA is to make sense of a changing world (CPA Vision, 2011, p.1). In ACCA's functional map, it outlines the purposes of certain modules in becoming an accountant. In the financial information category, it is the aim of the module to prepare students to be capable of preparing the financial statements and accounts for external use, for management use and for assisting in the development and implantation of accounting systems (IFAC Report, 2003, p.33).

(iv) *Unlearning, the process of eliminating or reducing pre-existing routines or behaviours, including discarding information.* This ability can be outlined in the CPA Mission and values statement which states that CPA's are always being innovative in that they are constantly challenging the way in which they do things, they embrace change openly and always look for different and new ways to carry out their duties. This illustrates that accountants are capable of working from a new routine and are adaptable to change.

(v) *Implementation and improvization, autonomous behaviour, experimentation, reflection and action. The ability to solve problems.* IFAC Report (2003) outlined technical skills as skills necessary for a competent accountant. These include generic skills such as literacy, numeracy and IT proficiency, as well as skills specific to accounting tasks. These skills allow an accountant to be capable of solving problems. Organisational skills are also outlined in the IFAC Report (2003) and these outline the abilities of accountants to be competent in strategic planning, project management, the management of people and resources as well as self management. These organisational skills demonstrate implementation and improvization, autonomous behaviour, experimentation, reflection and action.

The above cognitive abilities are therefore abilities that accountants possess and therefore accountants are capable of being innovative and creative. The researcher intends to ask the participators of this research whether or not they think accountants possess the aforementioned skills. This will highlight whether or not the attitudes the participator's

have towards accountants supports that they are capable of being creative and innovative. Although accountants are said to possess these skills, the researcher aims to discover if they utilise them.

In IFAC's 2003 report, "Towards competent professional accountants", it was stated that in order for accountants to be competent, they must have certain capabilities. Professional accountants need to have "capabilities," such as knowledge, skills, professional values and attitudes, to be able to demonstrate competence. Capabilities indicate potential competence that may be transferred to different situations (IFAC, 2003). In looking at the cognitive abilities outlined by Bessent *et al.* (2007) above, it is evident that many accounting bodies believe accountants to possess these abilities. IFAC has outlined the following to be skills relating to competent professional accountants:

- *Analytical and constructive cognitive skills*, for example, accessing knowledge, understanding, application, analysis, synthesis and evaluation. These refer to the skills in Bloom's taxonomy, which are necessary for problem and task identification, information gathering and organization, analysis and interpretation (including critical, logical and independent thinking and judgment/decision making).
- *Technical skills*, including generic skill such as literacy, numeracy and IT proficiency, as well as skills specific to accounting tasks.
- *Personal skills*, for example initiative, influence and self-learning.
- *Interpersonal skills*, for example oral and written communication, negotiation, leadership, team work and political acumen.
- *Organizational skills*, for example strategic planning, project management, self-management and management of people and resources (IFAC, 2003).

In CPA's 2011 vision, it was stated that CPA's possess the ability to process and integrate information among various areas of business practice as well as helping others to discover meaning and opportunities in a wide variety of information sources (CPA Vision, 2011).

From these readings it is evident that competent accountants possess the cognitive abilities necessary for innovation and creativity to occur.

2.4 Criticisms of Accounting Education

The current state of accounting education at third level is important to explore for the purposes of this research. Accounting education has been criticised for many reasons throughout the years, the most common reason for criticism is that accounting education focuses solely on fact based learning. That is to say that students spend a proportionate length of time and effort memorising accounting and auditing standards, law and tax regulations which make them experts in the technicalities of accounting (Albrecht *et al*, 2000). The study by Albrecht *et al.* (2000) is a landmark one in the areas of accounting education. Many researchers have referred back to this study when discussing accounting education (Fieldman, 2010, Crawford, 2008, Hocking 2008, Reckers, 2005). The following facts were contained in it and are of significant interest as they suggest accounting education is becoming out-dated and must be changed to adapt to the changing role of the accountant. The first point made by Albrecht *et al.*(2000) was that the number of students electing to major in accounting is decreasing significantly, as is the quality of students choosing to major in accounting. He also stated that practicing accountants as well as accounting educators, the majority of which possess an accounting degree, would not choose accounting as their major field of study they were to pursue their education again. Leaders in the accountancy sector as well as those practicing in the accountancy sector, consider accounting education to be outdated, broken and that it needs to be modified and updated significantly.

This view is further supported by Lee (2005) claiming accountants are more concerned with accounting monetary numbers than with what they represent or what they correspond. Ovalle (2006) supports this view also, claiming accounting education overloads students with static skills and knowledge and as a result students and accountants are blinded to the failings and deficiencies that are inherent to the profession.

Henderson (2001) concluded that such concentration of technical skills duplicated in both degree programmes and professional education can only serve to erode student's likelihood of developing critical thinking.

The vast amount of literature in the area of accounting education seems to suggest that accounting education incorporates a narrow spectrum and although students have an in-depth knowledge of the technical aspects of accounting, they lack other characteristics which are necessary for professionals to possess while carrying out their everyday duties. While these

arguments do have merit in that the very nature of accounting as a discipline is to be able to retain high levels of technical information as this is necessary for accountants to do their day-to-day duties. The role of the accountant is changing, and while the core skills are still essential, new skills, like those of innovation and creativity, add value to an individual as they possess a larger skill set which can adapt easily to the constant changing nature of the business world and the accountancy sector.

Literature has identified that gaps do exist in accounting education. Kavanagh et al (2008) noted that both students and employers reported that many of the necessary skills and attributes which were both non-technical and professional are not being developed and utilised properly in accounting education programmes.

2.5 Innovation & Creativity in the Accountancy Sector

Hermanson and Hermanson (1995) investigated top business students' perceptions of the accounting profession and found that the lack of creativity associated with the profession was amongst the most imperative negative perceptions that influenced a student's decision not to specialise in accounting. US Studies carried out concluded that students perceive the work of an accountant as extremely precise and thorough, which discourages creative individuals from pursuing accountancy as their major area of study (Coate *et al.*, 2003; Saeman and Crooker, 1999). Accounting educators worldwide are being urged to alter curriculum structures to produce accounting graduates with a broader set of skills and attributes, including expertise which is more than completely technical (Braun, 2004). In Australia, a survey which measured employer satisfaction with the level of new university graduates reported that there were skill deficiencies in crucial areas, such as problem solving, creativity and flair, and spoken business communication (AC Nielsen Research Services, 2000). In the CPA 2011 Report on the CPA vision, (CPA Vision Project, 2011) it was recommended that all CPA's must accept complete responsibility to guarantee vitality for generations of the profession to come as well as their own generation. CPA's are encouraged to continue to generate ideas, acquire feedback, stimulate in ourselves and others creativity, share our successes in practice, and contribute to the refining process of fulfilling the CPA Vision for the future.

2.6 Attitudes

The main objective of this research is to determine the attitudes that exist among accounting and non-accounting business students towards innovation and creativity in the accountancy sector. In order for the researcher to achieve this objective, they must first determine what exactly is meant by an attitude. The following is the Literature the researcher found in the area. Attitudes have been defined by Rollison (2008) as a mental and neural state of readiness, organised through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related. Solomon (2010) defined an attitude as a predisposition to evaluate an object or product positively or negatively. An attitude is a learned predisposition to behave in a consistently favourable or unfavourable manner with respect to a given object (Schiffman *et al.* 2008). These are the interpretations the researcher has chosen to use for the purposes of this research.

2.7 Conclusion

Investigating the attitudes that exist among accounting and non-accounting business students in LYIT towards innovation and creativity in the accountancy sector has produced a large body of research. This section has focused on the literature which relates to the area of accounting education and innovation and creativity in the accountancy sector.

From reviewing the literature, the researcher feels that there has not been research conducted which addresses this specific field of research but that each individual concept is well researched such as attitudes, innovation and creativity in the accountancy sector, the accountancy sector and accounting education. The researcher has chosen this area of study as no exact research has been done around this area before and there is a serious lack of relevant literature relating to studies conducted in Ireland. The researcher hopes to provide an insightful investigation into the attitudes that exist among accounting and non-accounting students towards innovation and creativity in the accountancy sector.

CHAPTER 3 RESEARCH METHODOLOGY AND DESIGN

3.1 Introduction

This Chapter addresses the research methodology adopted for the research. The researcher will justify their choice of research methods and highlight the customised nature of the research process used to satisfy the research objectives.

Ryan et al. (2002) define research as a universal activity undertaken to learn more about our surroundings and the impact we have on them. Collis and Hussey (2009) state that methodology depicts the overall approach to the process of research, from the underpinning of theory to the point of collection and analysis of the data.

It is evident from the above that research is the process of inquiry and investigation into a specific phenomenon, and the methodology is the overall approach to this.

The first stage in conducting research is to identify an area of interest for the researcher. The literature searches imply that what influences accounting student's attitudes towards innovation and creativity in the accountancy sector is of considerable interest to the accountancy educators and accountancy community as a whole. This is reflected in the large number of academic journal articles and reports from professional accountancy bodies and educators attempting to outline the necessary and preferable skills that accountants should possess.

3.2 Research Paradigms/Philosophies

A research paradigm is a 'perspective held by a community of researchers that is based on a set of shared assumptions, concepts, values, and practices' (Johnson and Christensen, 2010, p.31).

There are two main categories of research paradigm, they are positivism and interpretivism. They are contrasting views regarding the development of knowledge and its acceptability through that development (Saunders *et al.* 2009). The employment of one paradigm over the other is important as it will underpin the research strategy and the methods chosen as part of that strategy.

3.2.1 Positivism and Interpretivism

Saunders *et al.* (2009) suggest that if the research philosophy reflects the principles of positivism then the researcher should adopt a philosophical stance of the natural scientist. The purpose of ‘positivism is to collect and analyse data in a way which is systematic and detached in order to uncover the rules that govern human behaviour’ (Evans *et al.*, 2006, p.137). The interpretive approach to studying society is very different to that of the positivism approach. Rather than studying the facts and developing a series of law like generalisations, interpretivism is concerned with understanding and appreciating the different constructions and meanings that people place on their experience (Easterby-Smith *et al.* 2002). Smith (2008) states that in order to do this effectively, active participation rather than detached observation, may be required. Evans *et al.* (2006) states that the essential elements of positivism are objectivity, causality, prediction and precise empirical observation as opposed to observation, understanding and interpretation which are essential elements for interpretivism.

In accordance with the above understandings and interpretations of positivism and interpretivism, the following table outlines the main features of the two paradigms as summarised by Collis and Hussy (2009) :

Figure 1: Paradigms

Positivistic Paradigm	Interpretivist Paradigm
<ul style="list-style-type: none"> • Produces Quantitative Data • Large Samples are used • Concerned with hypothesis testing • Data is highly specific and precise • Location is artificial • High level of reliability • Low level of validity • Generalises from sample to population 	<ul style="list-style-type: none"> • Tends to produce qualitative data • Uses small samples • Concerned with generating theories • Data is rich and subjective • Location is natural • Low level of reliability • High level of validity • Generalises from one setting to another

Smith (2008) and Saunders *et al.* (2009) both support the view that both positivist and interpretivist approaches are valid, with neither one being any better or worse than the other, and that much research is actually founded on a combination of the two philosophies.

3.2.2 Research Philosophy Adopted

The choice of research philosophy adopted depends on the aims and objectives of the research which have been outlined in introductory chapter of this dissertation.

In the case of this research, the researcher has used both positivism and interpretivism in the research process. Interpretivism was used at the beginning of the research process, carrying out focus groups with both the post-graduate level accounting students and the post-graduate level non-accounting students. The researcher utilised interpretivism as it is flexible and can result in various answers that the researcher may not have considered. This is necessary when designing a questionnaire to ensure that the researcher understands the various attitudes that exist before compiling the questionnaire. The focus groups allowed the researcher to gain a better understanding of the student's thoughts and opinions, thus enabling the researcher to design a more effective questionnaire. One disadvantage to this form of data collection is that it is open to observer bias but the researcher overcame this by voice recording the focus groups and transcribing them afterwards. Questionnaires also remediate observer bias, provided they are constructed correctly. Questionnaires help eliminate the threat of observer bias as they are more quantifiable in nature which eliminates biased interpretations through the use of yes/no answers and Likert rating scales.

The researcher also used positivism through the use of questionnaires which were sent to third level accounting and non-accounting business students in a North West Institute of Technology. The use of questionnaires are advantageous as they allow the researcher to interpret findings in a more quantifiable manner, because of the structured nature- the use of yes/no answers and the Likert rating scale. The use of qualitative and quantitative research allowed the researcher to be a more objective analyst. Questionnaires were also less time consuming than focus groups which allowed a greater number of students to be surveyed. Questionnaires are also easier to analyse and clearly demonstrate existing or emerging patterns and trends.

3.3 Research Focus

Saunders *et al.* (2009) states that, “the classification most used is the threefold one of exploratory, descriptive, and explanatory research”. The researcher will explain each of these methods briefly.

3.3.1 Exploratory

In accordance with Robson (2011), it was stated that exploratory studies are a valuable means of finding out what exactly is occurring, to seek new insights, to ask questions and to assess new phenomena in a different light. Through exploration the researcher can develop the research concepts more clearly, establish priority and improve on the final design of the research (Cooper *et al.* 2010). Exploratory research is useful in generating understanding and enabling clarification of your understanding of the problem (Malhotra and Birks, 2007). Saunders *et al.*(2009) concludes there are three ways of conducting exploratory research. The first such way is a search of the literature, secondly one can talk with the experts in the subject and finally one can conduct focus group interviews.

3.3.2 Explanatory

Explanatory research involves explaining why something happens, and then examining the causal relationships between variables (Grattan and Jones, 2010, Saunders et al. 2009). They also state that the emphasis of an explanatory study is on examining a situation or problem in order to explain the relationship between variables.

3.3.3 Descriptive

Robson (2011) points out that the purpose of the descriptive study is to “portray an accurate profile of persons, events or situations.” He further states that it can be used as an extension or a forerunner to exploratory research. Sekaran *et al.* (2006) identified the following as benefits from conducting descriptive research.

1. They assist in decision making.
2. Provide a basis for further research.
3. Develop an understanding of the group.

3.4. Research focus Adopted

The research focus undertaken can be classified as both descriptive and exploratory. The descriptive element of the research involved an analysis of the relevant literature and similar studies that were conducted into this area. However, the exploratory element comprises the opinions and attitudes of the students towards innovation and creativity in the accountancy sector. This part of the research was conducted with the use of focus groups and questionnaires. The great advantage of using both exploratory and descriptive research is that they are both flexible and adaptable to change.

3.5 Research Approach

The approach used to carry out research can be either deductive or inductive. The deductive approach to research is when a conceptual and theoretical structure is developed and tested by theoretical observation; therefore involves the development of theory that is subjected to rigorous test. The inductive approach to research is when theory is developed from the observation of empirical reality. It involves the collection of data and the examination of that data to develop theories that will subsequently relate to the literature (Saunders *et al.* 2009).

The inductive approach was adopted by the researcher as it was the most suitable approach as the researcher was trying to establish the attitudes that existed among accounting and non-accounting business students towards innovation and creativity in the accountancy sector. This involved the researcher collecting data from focus groups and questionnaires in order to develop the theory. In the inductive approach, the researcher is a part of the research process and should gain an insight into the meaning humans attach to events: this may not have been possible if the deductive approach was adopted.

3.6 Data Collection

There are numerous forms of data collection available to the researcher. These include case studies, observation, interviews and surveys. The type of method used depends mainly on the research objectives. The researcher chose focus groups and questionnaires as she felt this was the best method to achieve the objectives of the research. Case studies were ruled out as it would have been time consuming and wouldn't have fitted with meeting the objective of the

research. Observation was ruled out as it was also deemed to be an unsuitable method of data collection for the research objectives that were to be achieved.

3.6.1 Sampling

The objective of this research project is to obtain information about the attitudes of a population, which in this case was business students. Population has been defined by Malhotra *et al.* (2007) as the aggregate of all the elements, which share some common characteristic, that comprise the universe for the purpose of the marketing research problem. Due to the time, financial and geographical location limitations of the researcher, the population had to be limited to students in LYIT. The sample for this research project is the fourth year honours degree business classes in LYIT. Malhotra *et al.* (2007) defined a sample as a subgroup of the population selected for participation in the study.

3.6.2 Background to the Population

In the first stage of the research, the researcher conducted focus groups among the postgraduate business students in LYIT, separating the focus groups into accounting and non-accounting students. The purpose of this was to measure the attitudes that exist among each group individually and to give the researcher a greater understanding of the attitudes that existed among each group and how they differed and were similar.

The questionnaires were distributed among the fourth year Honours degree business classes in LYIT. The reason for this is that they have just completed their ordinary degree and were close to completion of their honours degree and so the attitudes they have developed and have as a result of undertaking their given courses will be fresh in their minds.

3.6.3 Interviews

Any person to person interaction between two or more individuals with a specific purpose in mind is called an interview. Interviewing is a commonly used method of collecting information from people (Kumar, 2010). There are three main types of interview: structured, semi structured and unstructured.

A structured interview is a questionnaire which is prepared and the questions are asked in a prearranged order, thus, the process is direct (Malhotra *et al*, 2007). Saunders *et al*. (2009) defines a structured interview as the interviewer reading out each question and recording the response on a standardised schedule, usually with pre-coded answers.

An unstructured interview places more emphasis on the interviewees thoughts. The researcher's role is to be as unobtrusive as possible. The interviewer introduces the topic and allows the interviewee to develop their own ideas and pursue their train of thought (Denscombe, 2007).

Semi-structured interviews have a list of themes to be covered. Questions are not required to be asked in any particular order. Additional questions can be asked where the interviewer deems it appropriate. This helps examine additional issues that arise during the interview.

The researcher conducted an exploratory interview which took the form of a focus group. A focus group is a group of eight to ten people who come together for a face-to-face discussion about a particular topic (Edmunds, 2000). This type of interview would be known as a semi-structured interview as the focus group acted as a guided discussion into the area of innovation and creativity in the accountancy sector. Although there was a theme sheet which the researcher used as a guide, the flow of conversation was also natural and often drifted to an area that was not outlined in the theme sheet. It was for this reason that the interview was semi-structure. The reason a semi-structured interview was selected by the researcher was that it increased flexibility and allowed maximum information to be gathered efficiently and effectively. Structured interviews would have been too rigid and the information gathered would have been information extracted by the researcher from the interviewees in an unnatural way. A semi-structured interview in the form of the focus group acted like a discussion and allowed participants to express their opinions freely and to explore why they had these feelings in a natural way. Unstructured interviews were not appropriate as they are time consuming and it is often difficult to analyse findings from such information.

The focus group participants were chosen based on their backgrounds. The first focus group was made up of the Masters of Arts in Accounting Students to capture the attitudes of the accounting students towards innovation and creativity in the accountancy. The second focus group was made up of non-accounting postgraduate students from the business department. The purpose of this focus group was to capture the attitudes of the non-accounting students towards innovation and creativity in the accountancy sector. Two focus groups were held as

the researcher believed responses would be uninfluenced if the accounting and non-accounting students were kept separate. The separation of the two groups ensured that maximum benefit could be derived from the focus groups.

Each focus group was approximately one hour in duration. The participants were tape recorded by kind permission of the participants. Saunders *et al.* (2009) stated there is a need to record interviews soon after it is conducted in order to control bias and to produce reliable data. The information gathered by the researcher from the focus groups was used to design the questionnaires more accurately and to make the questionnaires as comprehensive as possible.

3.6.4 Questionnaires

Collis and Hussey (2009) describe a questionnaire as being a list of carefully structured questions with a view to obtaining reliable responses from the chosen sample. Questionnaires are difficult to construct, despite the fact that they are an extremely popular form of research technique and suggest apparent ease of construction (Easterby-Smith *et al.*, 2002). Collis and Hussey outline a number of common issues which must be considered when constructing a questionnaire. These issues include: sample size, type of questions, wording of words, cover letter, method of distribution and tests of validity and reliability.

The researcher opted to develop her own questionnaires as this was an area that had not been researched in Ireland before. The questionnaire was created based on the research objectives and the findings from the focus groups. Each question was designed to eliminate ambiguity. The questionnaire was based on the questions asked in the focus group and they were amended accordingly to include any new information missed in the initial research stage.

The final questionnaire was in a format which required participants to either tick boxes or to rate using a Likert scale. This style of questionnaire was chosen as it made the questionnaire as straight-forward as possible and encouraged people to answer all the questions. This was important given the time restraint of respondents. It also provided the information that the researcher sought. The questionnaire was distributed both by the researcher by hand and online. The reason for the online distribution was to increase the response rate as it was

difficult to get all the fourth year business classes together. A larger number of students could be surveyed by using online distribution.

The time and financial constraints of this research was the primary reasoning behind choosing questionnaires as the research techniques. Questionnaires do have their limitations however, which is namely that they have low response rates. The researcher tried to overcome this limitation by sending reminders to those e-mailed to respond.

The theme sheet and opinion sheet used in the focus group can be found in Appendix 1 while a copy of the questionnaire which was distributed can be found in Appendix 2.

3.7 Data Analysis

The data collected from the questionnaires will be analysed using Microsoft Excel. The use of tables and graphs will be used to show the results from the questionnaires. The questionnaire used a yes/no format as well as Likert scale rating questions which were useful in determining the types of attitudes people have towards innovation and creativity in the accountancy sector. The graph and table illustrations will be used as the base on which the researcher hopes to delve further into the results to bring more information or trends to light. There is guarantee that such further findings will be in existence. Graphical representation using Microsoft Excel was used as the researcher found this package the one which she had most proficient knowledge of working with.

The focus groups were recorded and the contents of these interviews were transcribed by the researcher. The focus group contributed towards the validity and reliability of the questionnaires as the information gathered from the semi-structured interviews acted as a tool for construction of a comprehensive instrument of research technique. The response rate of the questionnaires was relatively high which means the researcher is highly confident that the results of the questionnaires are also both reliable as the researcher has measured what she set out to measure, and generalizable as they are representative of the total population.

3.8 Ethical Considerations

The researcher conducted all the primary research with professional integrity and strict confidence. With regards to the focus groups, verbal permissions were obtained before the interviews were conducted to allow the conversation to be recorded. The questionnaire was accompanied with a confidentiality statement which gave respondents complete anonymity.

3.9 Conclusion

This research was carried out in order to investigate the attitudes that exist among accounting and non-accounting third level business students towards innovation and creativity in the accountancy sector. The research involved both positivism and interpretivism philosophies. The research was descriptive and exploratory in nature. The research process involved the use of semi-structured interviews in the form of focus groups as well as the circulation of questionnaires, the findings of which are discussed in Chapter 4.

CHAPTER FOUR: DATA FINDINGS

4.1 Introduction

The purpose of this chapter is to summarise the data collected during the primary research. This will involve an examination of the questionnaire responses in order to investigate the attitudes that exist among accounting and non-accounting business students towards innovation and creativity in the accountancy sector. Furthermore, this chapter will review the transcripts of the Focus Groups in order to ascertain the views of the accounting and non-accounting students towards innovation and creativity in the accountancy sector. The findings of this research are based on the results of the questionnaires distributed to the accounting and non-accounting business students doing the honours degree courses in LYIT's Department of Business Studies. As observed in Chapter Three, the questionnaire was constructed with the aid of a semi-structured interview in the form of two focus groups.

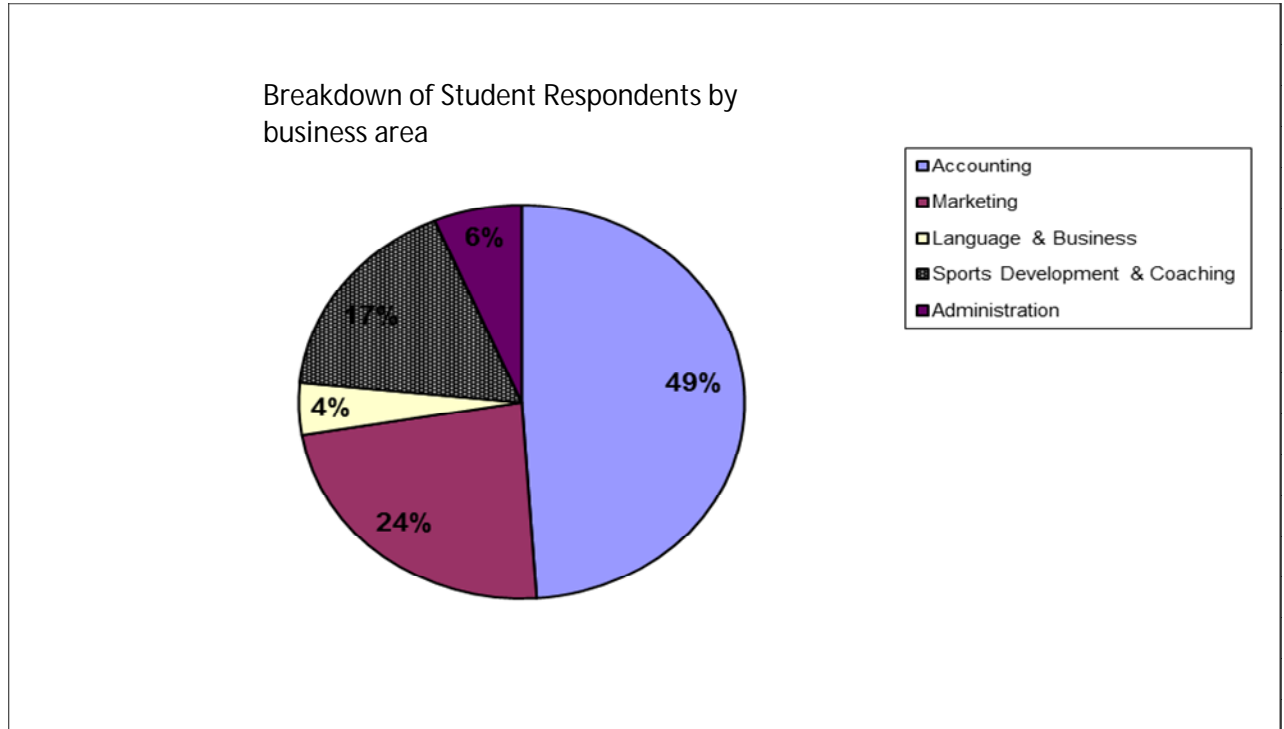
Figure 1: Summary of the Distribution and Response Rates of Questionnaires

Details	Number
Total Population	94
Relevant students out of population	94
Responses	47
Non-Responses	47
Total Completed Responses	47
Response Rate	50%

As summarised above, a total of 50% of the questionnaires were returned. The response rate of the questionnaires was pleasing to the researcher considering that the respondents were students and the questionnaires were distributed in late May and early June which was when the college term had ended and students had left for their summer holidays. It was also pleasing to note that of the 47 respondents, the accounting and non-accounting students were both represented well with 23 students from an accounting background responding, 11 from a marketing background, 2 from a Language and International Business course, 3 from Administration and 8 from Business and sports coaching courses responding. There were no respondents from the Management stream of the course. The pie chart below gives the repre-

sentation of the respondents. The response rates were quite pleasing in the sense that of the respondents, 49% were from an accounting background while 51% were non-accounting students which made for a reliable and generalizable representation of both groups.

Figure 1.1 Summary of the Distribution and Response Rates of Questionnaires

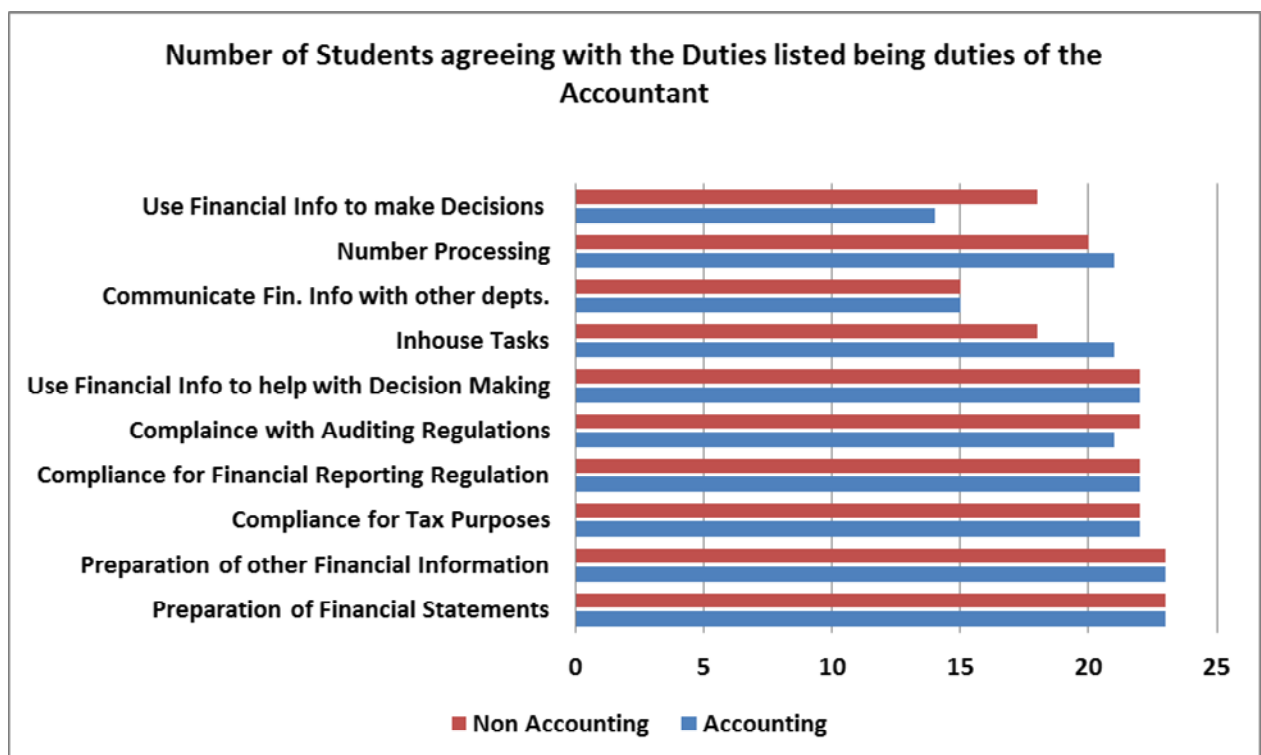


In this chapter the researcher will base the findings on the research objectives which were outlined in the introductory chapters. The objective to investigate the attitudes that exist among accounting and non-accounting students towards innovation and creativity in the accountancy sector was satisfied through the literature review and the primary research. The literature review established the skills and characteristics that have been deemed necessary for accountants to possess in the accountancy sector and the questionnaire was used as a mechanism for assessing the attitudes accounting and non-accounting business students had towards these skills and characteristics. This chapter will break down the findings of the questionnaire. The findings will be summarised using the headings of the questions which were asked in the questionnaires.

4.1.1 Question One of Questionnaire

The first question dealt with the duties of an accountant carried out in the accountancy sector on a day to day basis. These duties were established from the use of the literature review and the views and discussions outlined in the focus groups. The purpose of asking this in the questionnaire was to determine if the students had the same attitudes towards the duties of the accountant in the accountancy sector as the outlined in the focus groups. The duties were listed separately and the students had to select the duties they felt were relevant duties for accountants to carry out. This question was important in order to establish that all students being surveyed had a basic grasp of the duties carried out by an accountant in the accountancy sector. Figure 2 below illustrates the duties carried out by an accountant and the percentage of accounting and non-accounting business students who agree or disagree with the duties.

Figure 2: Duties of the Accountant



The chart above outlines the respondents responses to the duties carried out by an accountant. As demonstrated in the graph, the accounting and non-accounting business students are consistent in their responses and have the same conception of the role and duties of the accountant. Both accounting and non-accounting students had a low agreement rate with the concept that it is the role of the accountant to communicate financial information to other depart-

ments. From the accounting students, 65% of them agreed this was part of the accountants' duty with 63% of the non-accounting students agreeing.

The focus groups yielded similar results to the above. The accounting students agreed that the accountants carry out all of the above duties. The non-accounting students felt that they had a vague view of the duties of the accountant but they agreed that the above duties were the type of duties they would consider the accountant to carry out. They also felt that communicating financial information to other departments should be a duty of the accountant and that they use technical terms which are not comprehensive to non-accounting background business students. However, the questionnaire results illustrate that both the accounting and non-accounting students do not consider this to be an important duty with 65% of the accounting students agreeing and 63% of the non-accounting students agreeing. In both cases, the majority of the population agreed that all of these duties relate to the duties of the accountant.

These results are interesting as they indicate that the accounting and non-accounting business students have the same understanding and view of the duties of the accountant. It was worth noting that both groups disagreed somewhat that it was the role of the accountant to communicate financial information to other departments. This was interesting as it suggests that it is expected that non-accounting business people should have a basic grasp of accounting concepts.

These results indicate that the primary role of the accountant in the accountancy sector is the preparation of financial statements and the preparation of other financial information. This is noteworthy as it defines the attitudes the accounting and non-accounting students have towards the duties of the accountant in the accountancy sector.

4.1.2 Question Two of the Questionnaire

The next question asked in the questionnaire was based on the various skills of a competent accountant which had been established from the literature review and the focus group findings. The respondents were asked to rate the importance factor they would consider relevant to each skill. Figure 3 below illustrates the results from the questionnaires.

Figure 3: Importance of Various Skills of the Accountant

<i>Accounting</i>				<i>Non-Accounting</i>						
<i>Skills</i>	1		2		3		4		5	
	%	%	%	%	%	%	%	%	%	%
Communication	0	0	0	0	21.74	62.50	47.83	8.33	30.43	29.17
Team Work	0	4.17	0	33.33	0	29.17	56.52	4.17	43.48	29.16
Analytical	0	0	0	0	13.39	8.33	8.70	16.67	77.91	70.83
Numerical	0	0	0	0	8.70	0	0	0	91.30	100.00
Organisational	0	0	0	0	13.04	8.33	30.43	25.00	56.53	66.67
Time Management	0	0	0	0	13.04	58.33	26.09	12.50	60.87	29.17
Innovative	8.70	58.33	8.70	25.00	43.47	12.50	8.70	4.17	30.43	0
Creative	8.70	65.62	8.70	12.50	65.22	8.33	0	0	17.38	13.55

*Where 1 is not important and 5 is very important.

The chart above illustrates the percentage of each group which ranked each skill as important and unimportant.

The vast majority of the non-accounting business students rated communication to be irrelevant to the accountant, with 65.20% ranking it at 3 which is neither important nor unimportant. However, 29.17% of the non-accounting business students ranked communication as being very important. In the Focus Group discussions, the accounting students stated that communication was a very important generic skill for an accountant to possess. Communication is a key skill in a work environment, as accountants are expected to communicate concisely with clients. The non-accounting business students also stated communication as a skill an accountant should possess.

The response to team work being an important skill was very much split from the perspective of the non-accounting students, whereas, the accounting students are uniformly in agreement that team work is important for the accountant. In the focus group discussions, this attitude was the same for both groups. The accounting students considered team work important while the non-accounting students did not mention team work as a skill the accountant possesses. The view the non-accounting students had towards accountants is that they work alone.

Analytical skills were regarded as highly important from both the accounting and non-accounting students. These views were held by the focus groups as well. Organisational skills were also ranked important by both the accounting and non-accounting business students. These views are in line with discussions in the focus groups of both the accounting and non-accounting groups. .

The attitudes that the accounting and non-accounting students have towards time management differ somewhat, with 58.33% of the non-accounting business students considering it to be neither important nor unimportant whereas 60.87% of the accounting students believe time management to be very important. The non-accounting students interviewed in the focus groups, however, listed time management as a very important skill for the accountant to possess as they must manage their work load and make time to get all work taken on completed.

The attitudes towards the importance of the skills of innovation and creativity have resulted in split views from both accounting and non-accounting business students. The first skill the researcher will concentrate on is innovation. Of the 47 respondents to the survey, seven students agreed that innovation was very important. The seven students who agreed innovation was very important all came from an accounting background while none of the non-accounting students considered innovation important for accountants. However, one student from the non-accounting background deemed innovation important and two from an accounting background. The majority of the accounting students felt that it was irrelevant if an accountant was innovative or not. While the majority of the non-accounting students stated that innovation was an unimportant skill for accountants to possess. A similar result can be deduced in relation to the importance of creativity as a skill for accountants to possess. The majority of the accounting students ranked creativity as irrelevant for accountants while the majority of the non-accounting students ranked creativity as an unimportant skill for students to possess.

In the focus group discussions, the accounting students felt that innovation and creativity were important for today's accountant as we are living in difficult economic times and people need to be able to create new jobs and find new ways of earning money. The accounting students felt that non-financial measures are just as important as financial measures and innovation is important in order to keep one step ahead of your competitors. However, others felt that accountants are too restricted by rules and regulations to be freely innovative and creative and that it is the role of other departments to take risks that involve innovation and creativity. The non-accounting students were split in their attitudes towards innovation and creativity in the accountancy sector. There was a debate about why they felt accountants were/were not innovative or creative. They felt that accountants are too routine based to be innovative or creative and that these skills should be left to the marketing department

The purpose of this question was to establish if the accounting and non-accounting students agreed with the literature as to the skills that a competent accountant should possess and to assess the attitudes the students have towards the traditional and non-traditional skills of today's accountants in the accountancy sector. The results signal analytical and numerical skills are the most important skills for accountants to possess according to both the accounting and non-accounting students. This result is in correlation with the first question which outlined preparation of the financial statements and other financial information as the most prominent duty of the accountant. The analytical and numerical skills are the skills most necessitated for these duties. Communication, time management and organisational skills were considered important by both groups but these skills were not considered very important. They would be considered secondary skills to possess with analytical and numerical being the primary skills. The attitudes towards innovation and creativity were split. The majority of the non-accounting students felt innovation and creativity were unimportant. However, the accounting students ranked innovation highly. With 39.13% considering it important while 43.47% ranking it at three which is neither important nor unimportant. This is an interesting result to behold as the non-accounting students are very clearly disagreeing that accountants ought to be innovative while the accounting students consider it important with the majority being undecided as to whether it is important or unimportant. However, for creativity, the majority of both groups have rated it as unimportant.

4.1.3. Question Three of the Questionnaire

This question asked students to select the importance they would give to the characteristics of the accountant in the accountancy sector which were listed as below. The purpose of this is to establish the attitude that students have towards the characteristics of the accountant and to build up the characteristics that are a given for accountants to possess. These characteristics were established in the literature review.

Figure 4: Characteristics of the Accountant

<i>Accounting</i>					<i>Non-Accounting</i>					
Characteristics	1		2		3		4		5	
	%		%		%		%		%	
Logical	0	0	0	0	21.74	20.83	21.74	54.17	56.52	25.00
Competent	0	0	0	0	0	0	17.39	16.67	82.61	83.33
Knowledgeable	0	0	0	0	0	33.33	17.39	29.17	82.61	37.50

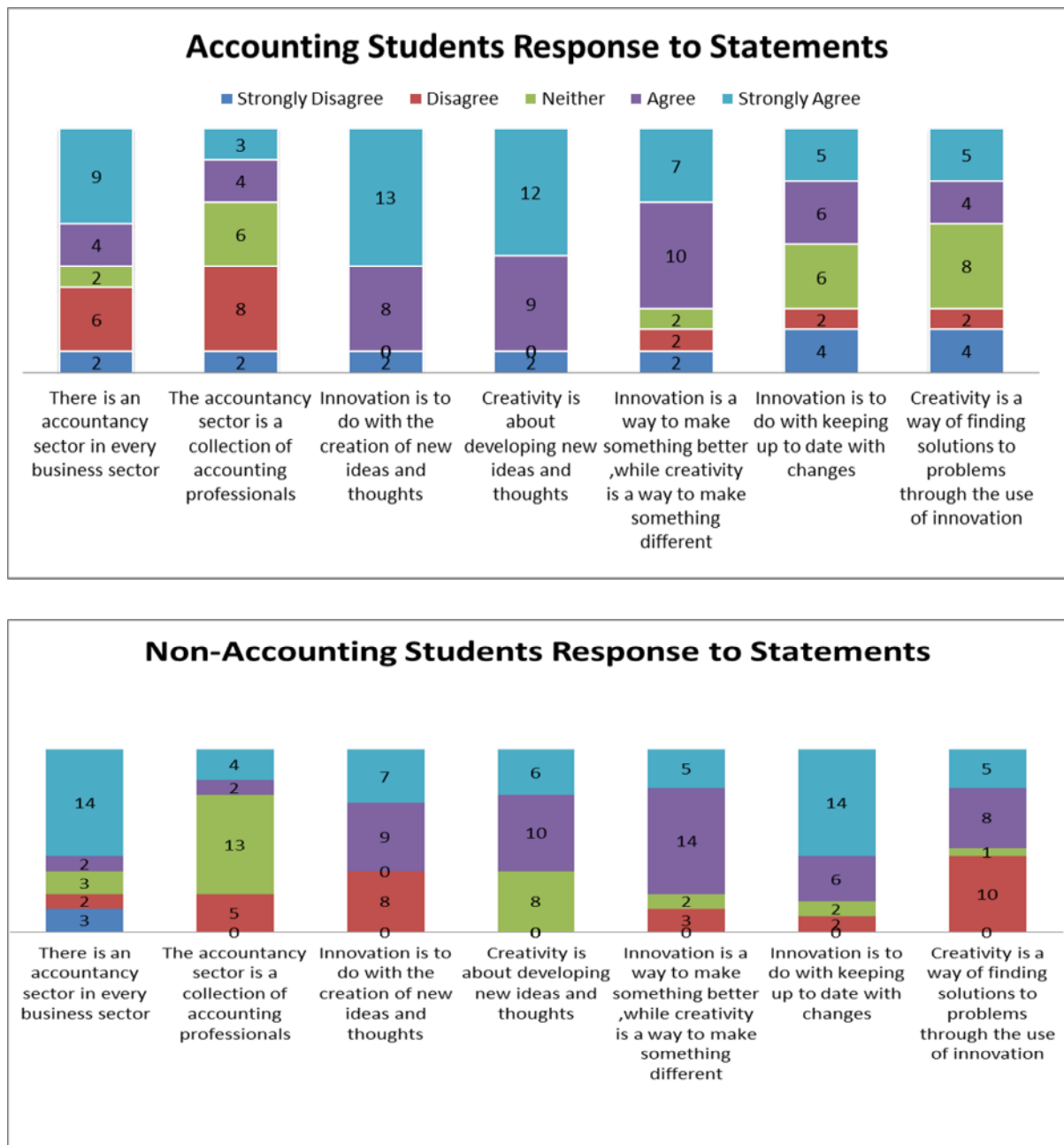
*Where 1 is not important and 5 is very important.

The findings from this question highlight to the researcher that the majority of both groups consider logic, competency and knowledge to be characteristics for accountants in the accountancy sector to possess. However, 21.74% of the accounting students and 20.83% of the non-accounting students considered logic to be an irrelevant characteristic for the accountant to possess. While 33.33% of the non-accounting business students identified knowledge as a characteristic that is neither important nor unimportant for an accountant to possess. The accounting students' focus group all agreed that these characteristics were important and necessary for the accountant in order for them to be competent. The non-accounting students' focus group agreed they are important as well.

4.2 Question Four of the Questionnaire

The following question is based on statements which were made during the focus groups and the respondents were asked to rank on the Likert Scale, to what extent they agreed or disagreed with the statements made, where one was strongly disagree and five was strongly agree.

Figure 5: Response to Statements by Students



4.2.1 There is an accountancy sector in every business sector

The majority of the accounting students agreed there is an accountancy sector in every business sector, however, a significant amount of students disagreed which shows the group is somewhat split in their agreement, with 56.52% agreeing, 34.78% disagreeing and 8.70% having no opinion on the statement. In relation to the non-accounting business students, fourteen strongly agreed, two agreed, three were indifferent, two disagreed and three strongly disagreed. These responses advise that the majority of the non-accounting students agree with the statement with 70% of the respondents agreeing.

These results show that the majority of both groups agree with the statement that there is an accountancy sector in every business sector, these findings are in correlation with the findings of the focus groups.

4.2.2 The accounting sector is a collection of accounting professionals

The accounting students were split in their responses to this question with the breakdown being highlighted in the chart above. The chart indicates that the majority of the accounting students disagreed with this statement. The non-accounting students reacted similarly to this question with the majority disagreeing with the statement. The breakdown is again seen in the chart above. This indicates that the accounting and non-accounting students both disagree with the statement which was deduced from the focus group.

4.2.3 Innovation is to do with the creation of new ideas and thoughts

This is a definition of innovation which was popular in the focus groups and which also correlates with the literature. The accounting and non-accounting students both agreed this statement to be accurate, with 91.30% of the accounting students and 66.67% of the non-accounting students agreeing with it. This result further supports the research objective of identifying a definition of innovation pertaining to the accountancy sector. This statement recounts the understanding of innovation discussed in the literature review and was also the definition that appeared as part of both focus groups as being accurate.

4.2.4 Creativity is about developing new ideas and thoughts

This statement was divulged from the focus groups while also being based on the literature review. This statement was provided in order to achieve the research objective of having a definition of creativity pertaining to the accountancy sector. The accounting students agreed with this statement in the majority, with 91.30% of the accounting respondents agreeing while the non-accounting business students agreed with the statement with 66.67% of the respondents in favour of the statement being correct.

4.2.5 Innovation is a way to make something better, while creativity is a way to make something different

This statement creates a relationship between innovation and creativity, stating that they are both to do with change but that innovation changes something to be better while creativity changes something to be different. Of the accounting students, 73.91% agreed with this statement while 79.17% of non-accounting students agreed with the statement. This illustrates to the researcher that both groups have a clear understanding of the relationship between innovation and creativity and they also understand the definitions of each term in light of the research being conducted.

4.2.6 Innovation is to do with keeping up to date with changes

This statement was deduced from the focus groups and the researcher considered it to sum up the definition of innovation as per the Literature Review quite well and in a comprehensive manner. The accounting students were split with this statement however, with 47.83% of students agreeing, 26.09% disagreeing and 26.09% having no notable opinion on it. The non-accounting business students however, agreed strongly with this statement, with 83.33% agreeing with the statement. This leads the researcher to believe that this definition is not pertaining to the accountancy sector but is rather a definition for innovation which is used more broadly in the business sector and not specific to the accountancy sector.

4.2.7 Creativity is a way of finding solutions to problems through the use of innovation

This statement was also established from the focus groups and had a mixed reaction from both groups. Of accounting students 39.13% agreed with this statement while 26.07% of the accounting respondents disagreed with the statement, with the remainder being indifferent. The non-accounting business students were also split with 54.16% agreeing with the statement while 41.67% disagreed. This illustrates that both groups were uncertain with the accuracy of this statement and the researcher concludes that the data suggests it is not an accurate definition.

4.3 Question Five of the Questionnaire

Figure 5.1: Cognitive Abilities for Innovation and Creativity to occur

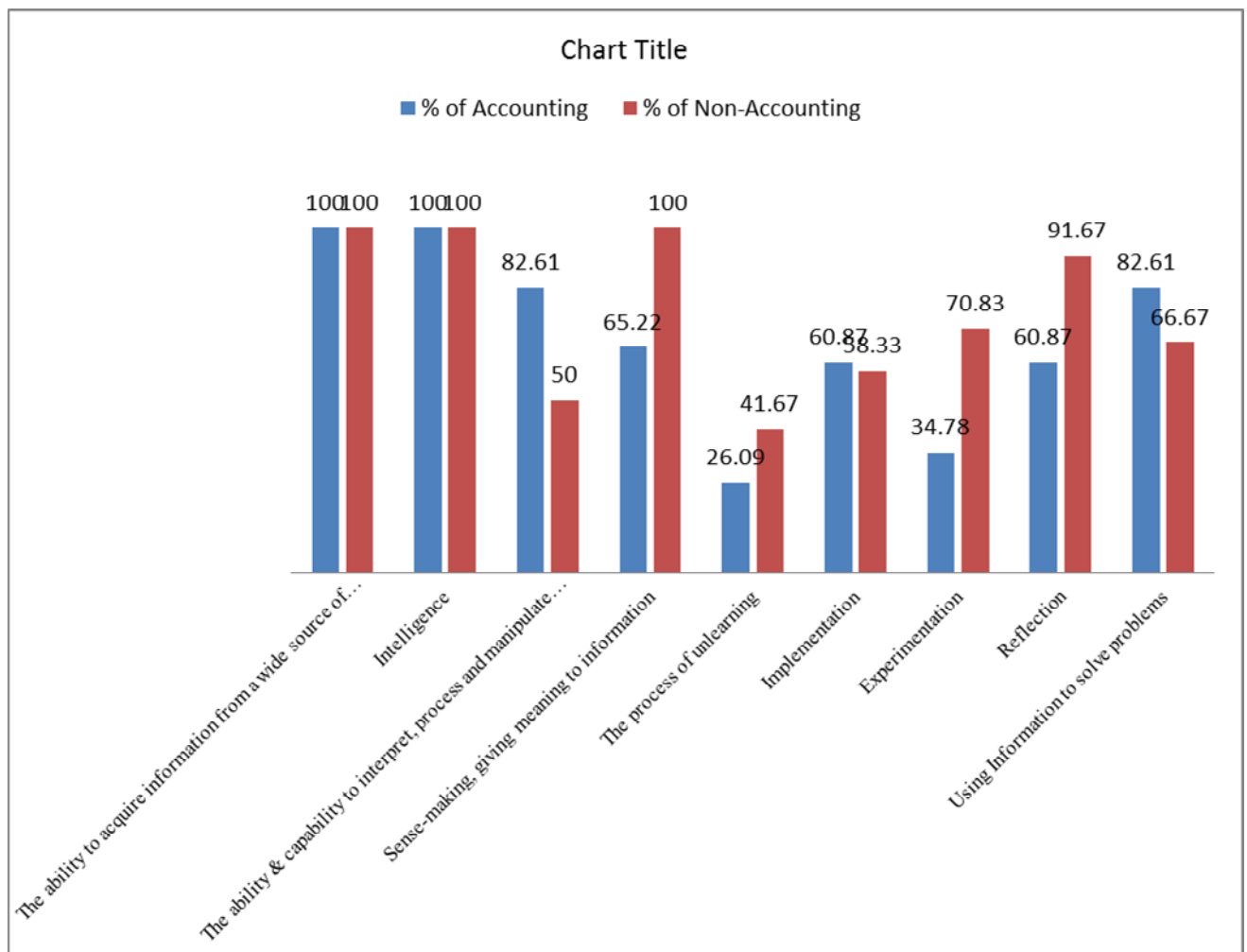


Figure 5 above highlights the skills which are necessary for creativity and innovation to occur. Thus far the researcher has developed the skills that the accountant possesses from the point of view of the accounting and non-accounting business students. The researcher included this question as it is of particular significance to establish if the accounting and non-accounting students consider the accountants to have these skills, then it is said they have the skills which are necessary for innovation and creativity to occur.

The first skill is the ability to acquire information from a wide range of sources requiring perception and attention while the second skill was intelligence. Both the accounting and non-accounting students agreed that accountants in the accountancy sector possess these skills. There was 100% agreement with the first two questions from both groups. The third ability was the ability and capability to interpret, process and manipulate information. 82.61% of the accounting students considered the accountants in the accountancy sector to possess this skill as opposed to the 50% agreement rate amongst the non-accounting students. 65.22% of the accounting students believe accountants to have the ability to give meaning to information while 100% of non-accounting business students assign this skill to accountants. The process of unlearning ranked lowly with 26.09% of accounting students assigning it as a skill and 41.67% of non-accounting students agreeing with it. Implementation was rated by 60.87% of the accounting students' population to be a skill while 58.33% of the non-accounting students held it to be a skill of the accountant. Experimentation ranked lowly among the accounting students at 34.78% and 70.83% of non-accounting students while the use of information to solve problems ranked highly from both groups. These results are consistent with the findings in the focus groups, with the low rate of agreement towards the process of unlearning being attributable to the limitations surrounding accountants as a result of the rules and regulations that they are subjected to. The lack of experimentation was also attributed to the many routines and systems the accountant must obey and thus limits experimentation.

4.4 Question Six of the Questionnaire

4.4.1. Do you think accountants are capable of thinking (i) Creatively (ii) Innovatively?

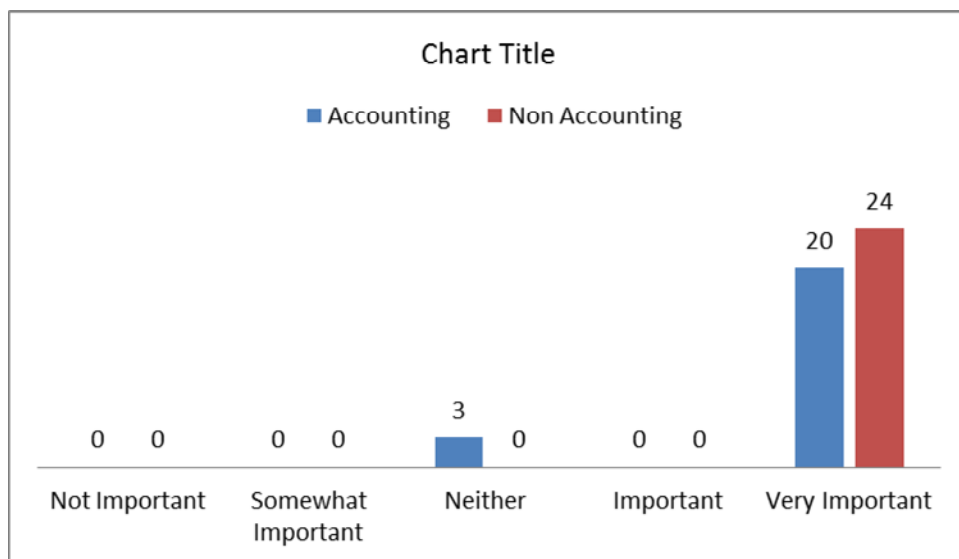
Of the forty seven students surveyed, forty seven agreed that accountants are capable of thinking creatively. That is to say that 100% of the population agreed accountants are capable of thinking creatively. Of the total population, forty five agreed they are capable of thinking innovatively. These results are noteworthy as all groups agree that accountants are capable of these skills but they are split in whether or not accountants should utilise these skills.

The focus group participants from an accounting background all agreed that the accountants are capable of thinking innovatively and creatively, however, a fraction of the participants in the non-accounting students' focus groups did not believe accountants were capable of being innovative and creative while still being accountants. Innovation and creativity are not a part of an accountants' natural skills set according to a member of the non-accounting focus group and they are geared purely towards numerical and analytical skills.

4.5 Question Seven of the Questionnaire

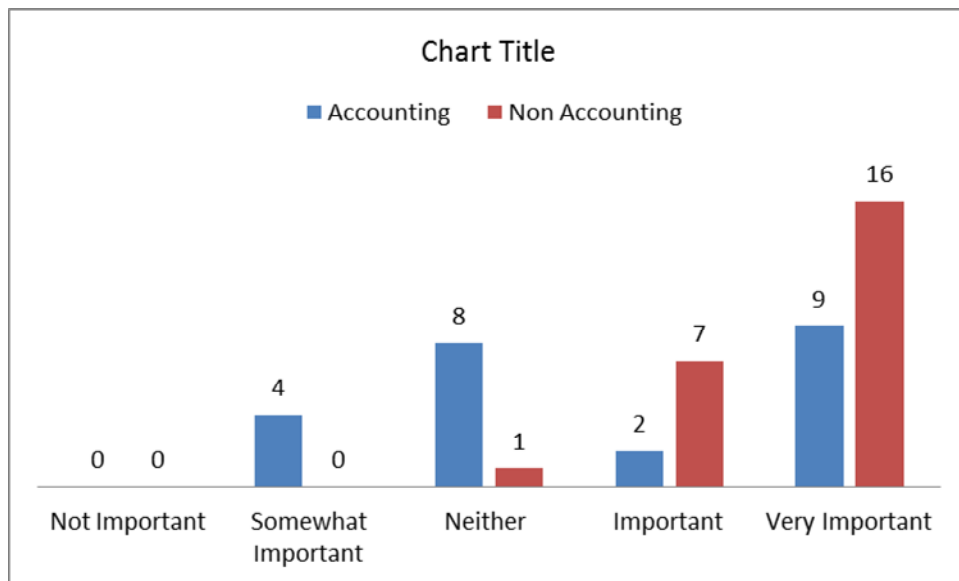
4.5.1 Business Sector

Figure 6.1 Innovation & Creativity in the Business Sector



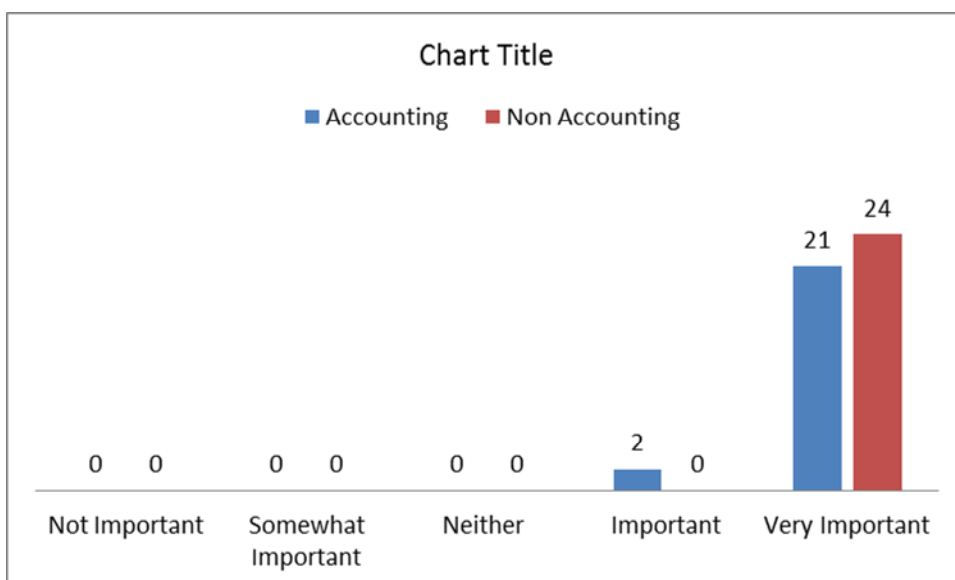
4.5.2 Accountancy Sector

Figure 6.2 Innovation & Creativity in the Accountancy Sector



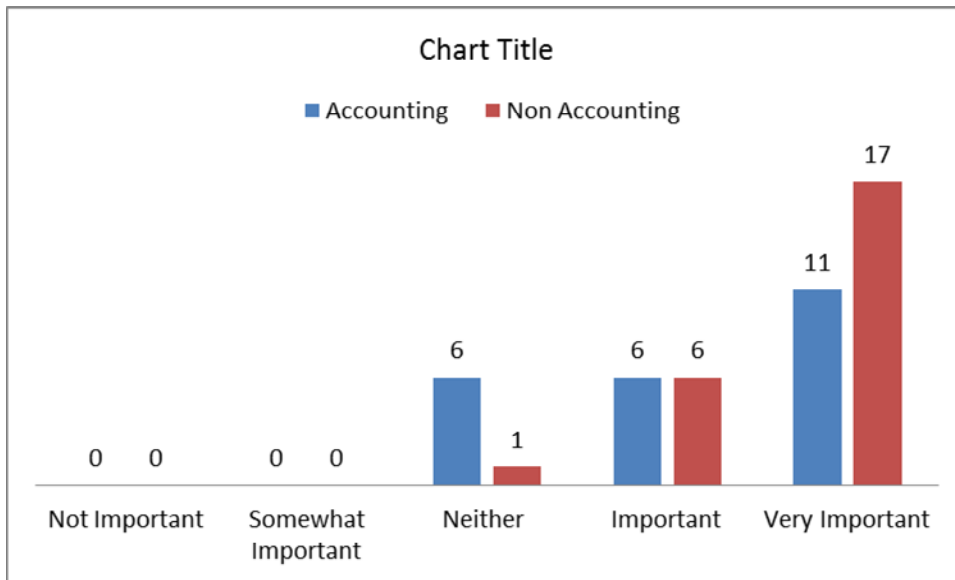
4.5.3 Marketing Sector

Figure 6.3 Innovation & Creativity in the Marketing Sector



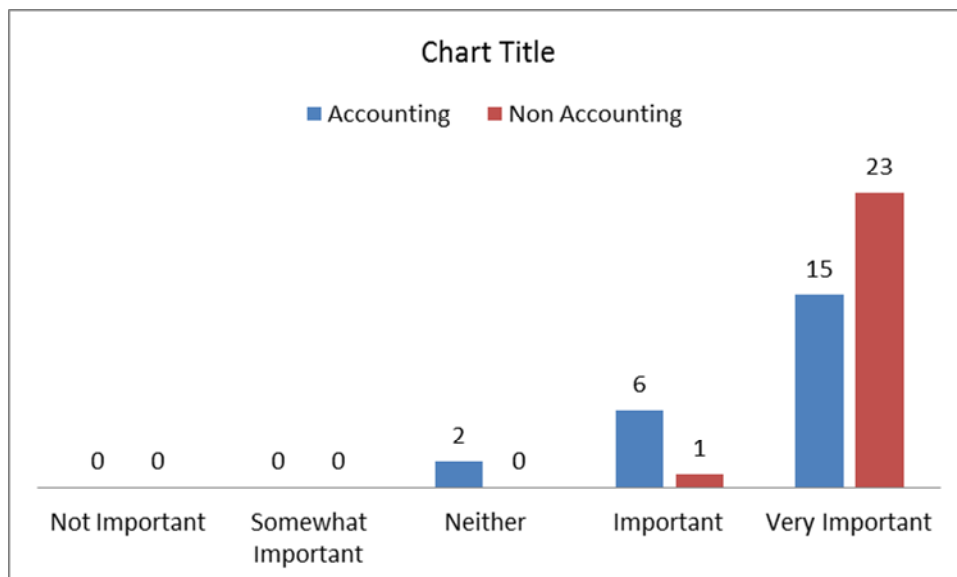
4.5.4 HR Sector

Figure 6.4 Innovation & Creativity in the HR Sector



4.5.5 Management Sector

Figure 6.5 Innovation & Creativity in the Management Sector



The above results indicate that the accounting and non-accounting students attribute similar importance rankings to innovation and creativity in all business sectors and the overall result

is that the majority of the population consider innovation and creativity equally important across all the above sectors.

4.6 Question Eight of the Questionnaire

Figure 7 : Important of Innovation and Creativity in the Accountancy Sector

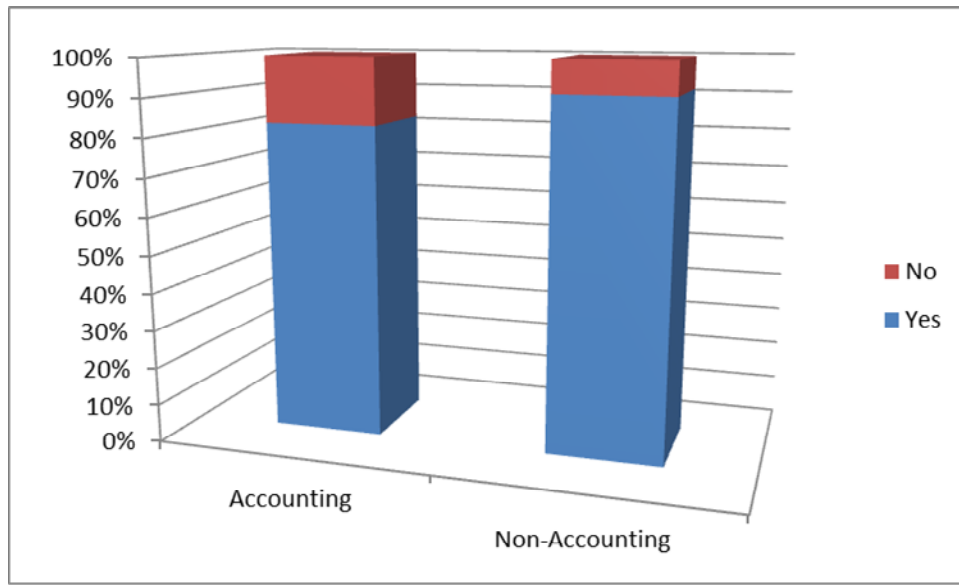


Figure 7 above illustrates that the majority of the population agreed that innovation and creativity are important in the accountancy sector. The focus group findings are in correlation to this view. The researcher asked the respondents to explain their reasons for their views on this. Those who answered yes had similar opinions stating that accountants should be constantly changing ways of doing things and being more creative in the work place as if they are not, they cannot progress as a profession. The small minority of participants who disagreed that innovation and creativity are important skills for the accountant to possess stated that the accountants are too routine and too restricted under different rules and regulations to be innovative or creative. Accountants are too risk averse to be open to change and innovation and creativity are about change.

CHAPTER 5 DATA ANALYSIS

5.1. Introduction

The research question was to determine the attitudes that exist among accounting and non-accounting students towards innovation and creativity in the accountancy sector.

- The research objectives set out for this thesis were:
- To establish a definition of innovation pertaining to the accountancy sector.
- To establish a definition of creativity pertaining to the accountancy sector.
- To gain an overview of the research which has been done previously in this area.
- To investigate the relationship between the accountancy sector and the terms innovation and creativity.
- To determine the attitudes of accounting and non-accounting business students towards innovation and creativity in the accountancy sector.

These objectives were achieved through an extensive review of the key literature that related to the subject area and also through the primary research collected via questionnaires and the focus group findings. This chapter presents the conclusions drawn on the findings uncovered by the researcher.

5.2 Conclusions

The author discovered an anomaly of definitions for innovation in the context of the accountancy sector, but Osborne et al. (2005) adequately summarises innovation as being the generation and implementation of a new idea into a new product, process or service. The focus groups conducted all agreed with this statement, with each group having their own variation of the term innovation. The accounting students considered innovation to be keeping up to date with current changes in the economic and financial environment, finding new and more efficient ways to do business and to be competitive, the creation of a new product or service, and innovation occurs when an individual is creative in generating new ideas or discovers a new and better way of doing something. The aforementioned interpretations by the account-

ing students' focus group can be sourced back to Osborne et al (2005) definition where innovation is generating a new idea and applying this new idea into a new product, process or service. The non-accounting focus group had a similar understanding of the term innovation, it is something new and fresh, it can be a business idea, style or even person, it is something new that has not been done before , that improves a process and makes them more efficient through innovation. Innovation is putting the ideas and thoughts developed in the creative process into action. All these statements can be related back to those definitions outlined in the literature review. The questionnaires triggered a similar interpretation of innovation, 91.30% of the accounting students and 66.67% of the non-accounting students agreed innovation was to do with the creation of new ideas and thoughts. Innovation is a way to make something better, while creativity is a way to make something different, 73.91% of the accounting students agreed with this statement while 79.17% of non-accounting students agreed with the statement. Innovation is to do with keeping up to date with changes, the accounting students were split with this statement however, with 47.83% of students agreeing, 26.09% disagreeing and 26.09% having no notable opinion on it. The non-accounting business students however, agreed strongly with this statement, with 83.33% agreeing. These results imply that the term innovation pertaining to the accountancy sector has been defined and the qualitative and quantitative results agree with the definitions uncovered in the Literature Review.

Similarly, creativity was widely defined in the Literature, with many variations of the term. The researcher felt that Mullins (2007) summarised creativity admirably as being the application of imaginative thought which results in innovative solutions to many problems. The focus groups fabricated many definitions of creativity which were consistent with the definition outlined by Mullins (2007). The questionnaires were created using the definitions obtained from the focus groups and the following responses were acquired. Creativity is about developing new ideas and thoughts. The accounting students agreed with this statement in the majority, with 91.30% of the accounting respondents agreeing while the non-accounting business students agreed with the statement with 66.67% of the respondents in favour of the statement being correct.

Creativity is a way of finding solutions to problems through the use of innovation This statement was also established from the focus groups and had a mixed reaction from both groups.

39.13% of accounting students agreed with this statement while 26.07% of the accounting respondents disagreed with the statement, with the remainder being indifferent. The non-accounting business students were also split with 54.16% agreeing with the statement while 41.67% disagreed. This illustrates that both groups were uncertain with the accuracy of this statement, which is in sync with the definition of creativity outlined by Mullins (2007). While the vast majority of the population agreed with this definition, there was a substantial amount of students who disagreed and who were uncertain. The researcher has succeeded in defining creativity pertaining to the accountancy sector and the majority of the population surveyed agreed with this definition, however, the author feels the percentage of disagreement was somewhat surprising.

5.2.1 To gain an overview of the research which has been done previously in this area

This research objective was achieved through the Literature Review and relevant materials were sourced. However, there has been limited research conducted into this specific area previously. Although there has been literature in the areas of accounting education, attitudes of students towards a career in accountancy and innovation and creativity in the accountancy sector, there has not been research conducted which ties all these areas together as the researcher has done.

5.2.2 To investigate the relationship between the accountancy sector and the terms innovation and creativity

The findings from the Literature indicates that there is a perceived negative attitude towards innovation and creativity in the accountancy sector. This attitude is portrayed by Hermanson and Hermanson (1995) who investigated top business students' perceptions of the accounting profession and found that the associated lack of creativity was amongst the most important negative perceptions that influenced a student's decision not to specialise in accounting. Other US studies found that students perceive accounting work as highly precise and thorough, discouraging creative individuals from pursuing an accounting major (Coate et al., 2003;

Saeman and Crooker, 1999). Accounting educators worldwide are being urged to alter curriculum to produce accounting graduates with a broader set of skills and attributes, encompassing more than purely technical accounting expertise (Braun, 2004). From this Literature, it is evident that accountants have a perceived specific skills set and people tend to associate accountants as not being creative and innovative in their work.

5.2.3 Attitudes towards innovation and creativity in the Business Sectors

The researcher set out to investigate the attitudes that existed among the accounting and non-accounting students in LYIT towards innovation and creativity in the accountancy sector. The researcher approached this by setting out the various sectors involved in business and requesting the students to rank the importance of innovation and creativity in each sector. In the focus groups, the researcher guided the discussion towards innovation and creativity in each sector.

Before divulging into each sector, the researcher questioned the important of innovation and creativity in the business sector as a whole. The accounting students' focus group found that it is extremely important in the current climate for businesses to find new ways of cutting costs effectively and increase revenues and they must be innovative and creative to find ways of doing this effectively. The non-accounting students felt it was very important as If you look at Robert Cooper's Stage Gate model and all the gatekeeper's and everyone that is involved, there needs to be someone from every single different part of a business for innovation and creativity to occur as it is completely cross functional. The questionnaire results illustrate similar views with 100% of the non-accounting students considering it very important and 86.96% of the accounting students with the remainder rating it as neither important nor unimportant.

The accounting students considered innovation and creativity important for management as it helps management to develop their own personal skills which makes them work better with people, to inspire people and motivate people to work. The non-accounting business students considered innovation and creativity to be important in management, but not as important as it would be in marketing or HR. They felt that one department without another does not make sense so obviously, innovation and creativity are important to a business as a whole, but that they are more prominent features in the departments that have a human element, such as HR and Marketing. The results from the questionnaires stated that of the accounting students sur-

veyed, 65.22% of them considered innovation very important in the accountancy sector, with 26.09% deeming it important and the remainder rating it as neither important nor unimportant. The non-accounting students considered innovation and creativity to be completely important to the management sector with 4.17% of those surveyed ranking it important and the remaining 95.83% rating it as very important.

The importance of innovation and creativity in the marketing sector was highly regarded. Of the focus groups, the accounting students agreed that innovation and creativity was part of the job of the marketing department whereas the non-accounting students stated innovation and creativity was what marketing was all about. They also commented that the differences in marketing and accounting in terms of innovation and creativity is evident based on the risk associated with acting innovatively and creatively in business. If a marketer acts in an innovative and creative way, they are rewarded, even if it doesn't work out, they are still encouraged to think outside the box, however, if the accountant were to do this, they would be punished as they would be acting outside of their regulations. Accountants cannot take a risk and be innovative and creative as they are dealing with money and investments, marketers are focusing on advertising and promotions so any publicity is good publicity in the eyes of the marketer. The questionnaire findings were that 100% of the non-accounting students rated innovation and creativity as very important for marketers whereas 91.30% of accounting students rated it as very important with the remaining 8.70% considering it important.

The accounting students' focus group stated that innovative and creative skills are necessary in managing human resources especially with businesses attempting to function with fewer employees so the work load needs to be divided and managed efficiently and effectively requiring innovation skills. The non-accounting focus group considered innovation and creativity to be vital in HR as they are the human element of a business. The findings from the questionnaires in terms of the importance of innovation and creativity in the HR sector states that of the accounting based focus group, 47.83% rated it very important, 26.09% important and 26.09% neither important nor unimportant. The non-accounting based focus group listed them in the following percentages; 70.83% very important, 25% important and 4.17% neither as neither important nor unimportant.

The researcher focused on all departments and not just the accountancy sector as it gives the researcher a better perspective on the findings. The focus group findings on the importance of innovation and creativity in the accountancy sector was that the accounting group felt that it

was important for reducing costs and analysing how they performed and deciding on ways to improve on this performance, with computers doing a lot of the technical work for accountants now, they have more time to focus on the area of being innovative and creative and finding new ways of cutting costs and improving on the financial performance. The non-accounting students had a dissimilar perspective on innovation and creativity in the accountancy sector stating that while some accountants are very capable of it, the majority of accountants would be too technical to be innovative or creative. Innovation and creativity are not a part of a skills set that would come naturally to the accountant. The questionnaire results captured contradictory attitudes of the accounting and non-accounting students towards innovation and creativity in the accountancy sector, with 66.67% of the non-accounting students rating it as very important while only 39.13% of the accounting students rated it very important. The non-accounting students were made up of 29.17% for important while 8.70% of the accounting students ranked it as important. 4.17% of the non-accounting students felt it was neither important nor unimportant as opposed to the 34.78% of the non-accounting students who chose this option. The accounting students also made up 17.39% of the somewhat important rating.

While the important of innovation and creativity in the accountancy sector was regarded highly by both groups, it is evident that although it was marked highly important by the majority of all students, it is considered least important to the accountancy sector opposed to the other sectors. The findings from the attitudes towards innovation and creativity in the other sectors put perspective on the attitudes towards the accounting sector.

5.2.4 To determine the attitudes of accounting and non-accounting business students towards innovation and creativity in the accountancy sector

The focus groups conducted among accounting and non-accounting students established that there are very definite attitudes towards innovation and creativity in the accountancy sector. The non-accounting students were split down the middle with half of them agreeing that innovation and creativity had a place in the accountancy sector while the other half disagreed. The attitudes students had were very definite and clear with some being positive towards the relationship and the other half being negative towards the relationship.

The accounting students were also split in their attitudes towards innovation and creativity, with four disagreeing with it and three agreeing that it is important. These results have outlined to the researcher that there are very mixed attitudes from various students and so the questionnaires were constructed with a clear intention to determine each individual groups overall attitude towards innovation and creativity in the accountancy sector. .

The questionnaire results indicate that the vast majority of both groups agree that innovation and creativity are important in the accountancy sector, with 82.61% of accounting students considering it important and 91.67% of the non-accounting students considering it important. The students who completed the questionnaires were asked to explain the reasons for their answers. The majority who said yes to innovation and creativity in the accountancy sector, they believed innovation and creativity is important for the accountancy sector to keep up with the changes that are occurring economically, that in order to keep competitive in business, the accountants need to have a new edge and innovation and creativity is the type of change that would give an accountant an edge on their competitors. The minority who said no answered this way as they felt accountants were too routine-based, that they didn't have the necessity to be innovative and creative so they don't use these skills. Overall, it can be concluded that from the qualitative research, a positive attitude exists among the accounting and non-accounting students in LYIT towards innovation and creativity in the accountancy sector.

CHAPTER6: RESEARCH CONCLUSIONS & RECOMMENDATIONS

This thesis was concerned with investigating the attitudes among accounting and non-accounting business students towards innovation and creativity in the accountancy sector. Chapter six outlines and summarises the main findings of the research, draws conclusions and implications and proposes recommendations based on the findings.

6.1 Main Findings

Analysis of the research highlighted the following findings which were deemed to be of particular significance from the researcher's point of view:

- Innovation is the generation and implementation of a new idea into a new product, process or service.
- Creativity is defined and understood by the accounting and non-accounting students as being the application of imaginative thought which results in innovative solutions to many problems
- The majority of the population felt that accountants do not possess all of the cognitive abilities which are necessary for innovation and creativity to occur, however, the majority of the population agreed that accountants are more than capable of being innovative and creative.
- The research which has been done previously into this area is now out-dated and the attitudes and stereotypes that typical are associated with the accountant are changing as the role of the accountant in business and in practice has changed drastically as a result of the economic downturn.
- The overall attitude of accounting and non-accounting students towards innovation and creativity in the accountancy sector is a positive one. This illustrates that attitudes are changing and the role of the accountant is changing. The change in the attitudes towards innovation and creativity has been attributed to the tougher economic climate with students declaring innovation and creativity to be the skills necessary for

accountants to succeed in the challenging economic climate that Ireland has found itself in.

6.2 Conclusions

The relationship that exists between innovation and creativity in the accountancy sector is a complex one with the attitudes of the accounting and non-accounting students adding to the complexity of the relationship. The attitudes that exist towards innovation and creativity in the accountancy sector as held by the accounting and non-accounting students in LYIT cannot be classified in one given attitude as the complexity of the duties and roles of the accountant and the various skills they possess cannot be underestimated. Although, in this case, the research question is answered as a positive attitude exists towards innovation and creativity in the accountancy sector.

The literature identified the various skills and characteristics associated with the work of the accountant, and innovation and creativity have begun to emerge recently in reports and literature as being a desirable skill of the accountant. The accounting profession today demands a new kind of professional accountant with diverse knowledge, skills and competences which are dissimilar to those skills, competences and knowledge required in previous decades (Germanou et al., 2009). This highlights the fact that the changing role of the accountant is sometimes misconstrued and the skill set they are expected to possess is constantly expanding and changing, however, the traditional attitudes people have towards the work of the accountant are still prominent as demonstrated by the small minority of this population. The technical skills are a given for an accountant, however, the many generic skills that go with the role of the accountant in the accountancy sector have been overlooked until recently.

The author believes that the overall attitude that exists towards innovation and creativity in the accountancy sector can be attributable to the changing and challenging economic climate that has emerged in recent years.

The researcher also found the fact that of the total population surveyed, the overall majority did not agree the accountant possesses the cognitive abilities which were outlined in the literature review by Bessent et al. (2007) as those abilities necessary for creativity and innovation to occur. The majority of the accounting students felt that accountants were not

capable of the process of unlearning or the process of experimentation. However, this is in contradiction to the CPA vision report 2011 which stated that, “CPA’s must rapidly develop new skills, gain new knowledge, and develop new competencies in broader areas of business practice so they are able to jump the experience curve.” (CPA Report, 2011, p.21). This encourages accountants to break out of their typical routine and to experiment with new ways of doing things.

All in all the researcher concludes that based on the sample size selected from LYIT, the attitude that exists among accounting and non-accounting students towards innovation and creativity in the accountancy sector is a positive one. However, the researcher has identified that a divide in opinion exists on the topic of innovation and creativity in the accountancy sector which is evident with both the accounting and non-accounting business students. The literature does highlight the traditional views that existed towards generic skills such as innovation and creativity but it also captured the positive attitude towards innovation and creativity as adopted by the accountancy profession. The missed views suggest to the researcher that the attitudes of the accounting and non-accounting students at the moment are only beginning to change and that their attitudes at the minute are influenced only by the education they are receiving as they have not entered the working world as of yet.

6.3 Recommendations

This research highlights the fact that the role of the accountant is changing and that the attitudes that exist towards innovation and creativity and the accountant have become more positive with the majority of the population supporting the use of innovation and creativity in the accountancy sector. The researcher felt that the accounting students were very clear in their attitudes towards innovation and creativity in the accountancy sector and they were open to embracing the new skills, however, a small minority of the non-accounting students felt that accountants should stick to what they know and that accountants have a limited skills set that revolves around technical skills. The author recommends that the changing role of the accountant should be better documented and that there should be more communication between the accounting and non-accounting based departments to develop a mutual understanding of the roles of each department and the capabilities of each individual.

The researcher also recommends that the terms innovation and creativity in the accountancy sector should be better documented and explained as the term creativity and the accountancy

sector triggered the term “creative accounting” with members of both focus groups and they were weary of stating that creativity in the accountancy sector is a positive influence.

The researcher also recommends that the changing skills set of the accountant should be further recognised in the syllabi of accounting courses in Ireland. While there are certain modules that deal with business planning and management, they are very restricted in their content and do not encourage innovation and creativity to freely flow. The researcher believes that when students specialise into their different streams, the accounting degree students do not have innovative or creative modules that relate specifically to the accountancy sector and any courses that include these skills are typically a part of a module which all streams of the business degree are taking part in. The researcher recommends that the syllabi should be updated as change is occurring rapidly and graduates may find themselves ill-equipped for a career in the accountancy sector.

6.4 Further Areas of Research

Although this study identifies the attitudes that exist among accounting and non-accounting students towards innovation and creativity in the accountancy sector, it deals only with the attitudes that exist in one institution in one area. It does not address the complete student population in Ireland as the researcher was limited in terms of time, money and geographical location which prevented more extensive research into the area. This could be an area of further research as it would determine if the attitudes pertaining to LYIT are generalizable of students in the entire country.

The study identifies the attitudes that exist, however, the researcher did not address the issue of how these attitudes were formed. This lack of understanding could form the basis for further research.

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APPENDICES

APPENDIX 1 QUESTIONNAIRE

Questionnaire

My name is Edel Gallagher. I am a Masters in Accounting student in LYIT. I am carrying out research into the attitudes that exist among accounting and non-accounting students towards innovation and creativity in the accountancy sector. The following questionnaire has been compiled solely for the purposes of this research and all information gathered will be confidential and used only for the purposes of this research project.

Please put an X in the relevant box.

Q1) What age are you? Under 18 [] Over 18 []

Q2) What course are you enrolled in within LYIT?

- (i) Bachelor of Business (Honours) in Accounting []
- (ii) Bachelor of Business (Honours) in Marketing []
- (iii) Bachelor of Business (Honours) in Management []
- (iv) Bachelor of Business (Honours) in Sports Development & Coaching []

- (v) Other []

If other, please specify.

3) From the following list, select the duties you feel are duties carried out by an accountant.

- | | YES | NO |
|------------------------------------------------------------------------------------------------|-----|-----|
| (i) Preparation of the financial statements | [] | [] |
| (ii) Preparation of other financial Information | [] | [] |
| (iii) Oversee there is compliance to the rules and regulations laid out for : | | |
| (a) Tax purposes | [] | [] |
| (b) Financial reporting purposes | [] | [] |
| (c) Auditing laws and regulation purposes | [] | [] |
| (iv) Use financial information to help management with the decision making process | [] | [] |
| | Yes | No |
| (v) In house tasks such as salaries, paying suppliers, recording all cash inflows and outflows | [] | [] |

- (vi) Communicate financial information to other departments [] []
- (vii) Would you agree with the statement that the main role of the accountant is:
- (a) number processing and [] []
- (b) using this information to make decisions? [] []

Q4) From the following list, select the skills of an accountant in order of importance, where 1 is not important and 5 is very important. Please underline relevant answer.

- | | | | | | | |
|--------|-----------------|---|---|---|---|---|
| (i) | Communication | 1 | 2 | 3 | 4 | 5 |
| (ii) | Team work | 1 | 2 | 3 | 4 | 5 |
| (iii) | Analytical | 1 | 2 | 3 | 4 | 5 |
| (iv) | Numerical | 1 | 2 | 3 | 4 | 5 |
| (v) | Organisational | 1 | 2 | 3 | 4 | 5 |
| (vi) | Time management | 1 | 2 | 3 | 4 | 5 |
| (vii) | Innovative | 1 | 2 | 3 | 4 | 5 |
| (viii) | Creative | 1 | 2 | 3 | 4 | 5 |

Q5) From the following list, select the characteristics of an accountant in order of importance, where 1 is not important and 5 is very important. Please underline relevant answer.

- | | | | | | | |
|-------|---------------|---|---|---|---|---|
| (i) | Logical | 1 | 2 | 3 | 4 | 5 |
| (ii) | Competent | 1 | 2 | 3 | 4 | 5 |
| (iii) | Knowledgeable | 1 | 2 | 3 | 4 | 5 |

Q6) Please rate whether you agree or disagree with the following statements where one is strongly disagree and five is strongly agree. Underline relevant answer.

- | | | | | | | |
|-----|---------------------------------------------------------|---|---|---|---|---|
| (i) | There is an accountancy sector in every business sector | 1 | 2 | 3 | 4 | 5 |
|-----|---------------------------------------------------------|---|---|---|---|---|

(ii) The accountancy sector is a collection of accounting professionals	1	2	3	4	5
(iii) Innovation is to do with the creation of new ideas and processes	1	2	3	4	5
(iv) Creativity is about developing new ideas and thoughts	1	2	3	4	5
(v) Innovation is a way to make something better while creativity is a way to make something different	1	2	3	4	5
(vi) Innovation is to do with keeping up to date with changes	1	2	3	4	5
(vii) Creativity is a way of finding solutions to problems through the use of innovation	1	2	3	4	5

Q7) Do you feel the accountant working in the accountancy sector possesses the following skills :

	YES	NO
(i) The ability to acquire information from a wide range of sources requiring attention and perception?	[]	[]
(ii) Intelligence	[]	[]
(iii) The ability and capability to interpret, process and manipulate information?	[]	[]
(iii) Sense-making, giving meaning to information.	[]	[]
(iv) Unlearning, the process of reducing or eliminating pre-existing routines or behaviours, including discarding information.	[]	[]
(v) Implementation	[]	[]
(vi) Experimentation	[]	[]
	Yes	No
(vii) Reflection	[]	[]
(viii) Using information to solve problems.	[]	[]

(ix) Do you think accountants are capable of thinking :

- (a) creatively [] []
(b) innovatively [] []

Q8) How important do you feel innovation and creativity are in the following sectors where 1 is very important and 5 is not important. Underline relevant answer.

- | | | | | | |
|------------------------|---|---|---|---|---|
| (a) Business Sector | 1 | 2 | 3 | 4 | 5 |
| (b) Accountancy Sector | 1 | 2 | 3 | 4 | 5 |
| (c) Marketing Sector | 1 | 2 | 3 | 4 | 5 |
| (d) HR Sector | 1 | 2 | 3 | 4 | 5 |
| (e) Management Sector | 1 | 2 | 3 | 4 | 5 |

Q9) Do you feel innovation and creativity are important skills for accountants to possess? [] []

Explain your reasons for this view. _____

Thank you for taking the time to complete this Questionnaire.

APPENDIX 2 FOCUS GROUP PRE SCREENING QUESTIONNAIRE

Focus Group : Pre- Screening Questionnaire

1. Age
Under 18 Over 18

2. What course are you enrolled on within LYIT
MA in Accounting
MSc of Marketing Practice
Other

If other, please specify _____

3. Are you aware of the concepts of innovation & creativity in business?
Yes No

4. What is your understanding of each of these terms in a business context?

Innovation : _____

Creativity : _____

5. Are you familiar with the term the accountancy sector?

Yes No

What is your understanding of the term "accountancy sector?" _____

6. Do you consider innovation & creativity to be terms that relate to the accountancy sector?
Yes No

7. Do you consider accountants to possess innovation and creativity skills?
Yes No

8. Did you study modules within your college programme that encourages innovation & creativity?
Yes No

If yes, what was the module?

9. If you did not study such a module, do you feel such a module would have been appropriate as part of your programme?
Yes No

Explain?

10. Do you think accounting courses should include innovation and creativity modules?
Yes No

Explain your answer :

11. From your attitude towards the accountancy sector, do you think innovation & creativity are important skills for today's accountants? Explain.

APPENDIX 3 FOCUS GROUP THEME SHEET

Focus group theme sheet

Introduction:

Welcome everybody, and thank you for agreeing to take part in the focus group. My name is Edel and I am a Masters in Accounting student at Letterkenny Institute of Technology. As part of my course, I am doing a research dissertation. I am working on research in the area of innovation and creativity in the accountancy sector and the attitudes third level accounting and non-accounting business students have towards innovation & creativity in the accountancy sector. I'm interested in knowing what you think about innovation and creativity in the accountancy sector. The results of the research will be used to determine the attitudes that exist towards innovation and creativity in the accountancy sector and to help develop a survey to target a larger sample. There are no right or wrong answers in this process, so please feel free to be honest and open about your point of view. I'm interested in all your opinions. Before we begin, I'll just tell you a little bit about the process.

The aim of the focus group is to collect information like a researcher does when they ask you to complete a survey. However in the focus group setting, rather than conduct a one to one survey, we discuss various questions and issues as a group where everyone has their say and can discuss these issues with one another. Your identity will remain anonymous in the focus group results so you can express your opinions freely.

The discussion will last about two hours. Everyone will have the opportunity to speak and share their thoughts and feelings and I will guide the discussion.

For the purposes of the research, we would like to record the focus group proceedings. This is purely to analyse the findings thoroughly and this information will be used for the purposes of this research only. If I could get everyone's permission, it would be greatly appreciated.

Questions

1. How familiar are you with the concept of the accountancy sector?

2. Are you aware of the work carried out by those in the accountancy sector?

3. What is your understanding of the duties to be carried out by an accountant in

4. What skills and characteristics do you consider to be essential for accountants?

5. From the following list, select the skills you feel are necessary for accountants to possess in the accountancy sector.

Numerical Skills	<input type="checkbox"/>	
Communication		<input type="checkbox"/>
Creativity	<input type="checkbox"/>	
Critical Thinking	<input type="checkbox"/>	
Innovation	<input type="checkbox"/>	
Organisational Skills	<input type="checkbox"/>	
Time Management Skills	<input type="checkbox"/>	
Analytical Skills	<input type="checkbox"/>	

6. What is your opinion on accounting courses in Ireland, do you feel they prepare students for the working world? Explain?

APPENDIX 4 FOCUS GROUP OPINION SHEET

Focus Group –Opinion Sheet

Are Innovation & Creativity concepts that are relevant in today’s business sector?

Are Innovation & Creativity skills that all business sector denominations should possess? I.e. Should they be incorporated in to Management, Accounting, HR, Marketing ..etc, or are they skills that apply to one area?

Do you consider innovation & creativity to be skills pertaining to the accounting profession? Explain reason for answer.

Would you consider modules that include Innovative and Creative thinking to be appropriate as part of an accounting course?

From your knowledge of the role of accountants in the accountancy sector, do you feel they possess the following skills :

- | | YES | NO |
|--------------------------------------------------------------------------------------------------------------------|--------------------------|--------------------------------------------|
| (i) The ability to acquire information from a wide range of sources attention and perception? | <input type="checkbox"/> | requiring
<input type="checkbox"/> |
| (ii) Intelligence, the ability and capability to interpret, process and formation? | <input type="checkbox"/> | manipulate in-
<input type="checkbox"/> |
| (iii) Sense-making, giving meaning to information. | <input type="checkbox"/> | <input type="checkbox"/> |
| (iv) Unlearning, the process of reducing or eliminating pre-existing behaviours, including discarding information. | <input type="checkbox"/> | routines or
<input type="checkbox"/> |

Implementation and improvization, autonomous behaviour, reflection and action. Using information to solve problems

experimentation,

APPENDIX 5 FOCUS GROUP 1 (ACCOUNTING) TRANSCRIPT

1. How familiar are you with the concept of the accountancy sector?

Response :

Collection of all accounting professionals within Ireland or other countries

Business sector in which all the accounting services are provided

Accountancy bodies oversee the accountancy sector.

2. Are you aware of the work carried out by those in the accountancy sector?

All participants are aware of the work carried out by those in the accountancy sector.

3. What is your understanding of the duties to be carried out by an accountant?

Provide the financial information. Prepare the financial statements. Decide if the financial statements show a true and fair view of the financial position of the company. Oversee that there is compliance in terms of tax, auditing and financial reporting regulations and laws. They perform and contribute to the decision making. Report if they consider any fraudulent behaviour to be taking place, report to the relevant authority.

4. What skills and characteristics do you consider to be essential for accountants?

Logical. Competent. Understand the sectors in which they are working in and the business operations. Knowledge of the standards governing them. Know the relevant standards and laws that are in place. Professional Skepticism.

Do you consider generic skills to be important or do you consider technical skills to be the primary skills necessary?

Communication and team work are important as they are essential skills in a work environment when communicating with clients.

Why didn't you mention the generic skills in the original question about skills accountants possess?

As accounting students we focus more on the technical skills. It is a given that accountants should possess generic skills on entering the work force. They feel that in all jobs it is assumed that you should have well developed generic skills. But when accounting students and accountants look for a job or go for a job interview, the type of skills they want to see you possess are the generic skills as it is a given that you have the technical skills. Employers focus on how well developed your generic skills

are as it is difficult to measure or identify these skills on a piece of paper and interviews tend to identify your generic skills. If you say you're good at communicating, they will need evidence of this and there is no course or exam to show you are good at that.

5. What is your opinion on accounting courses in Ireland, do you feel they prepare students for the working world? Explain?

They prepare students in the technical sense and give you the technical background that you need. But when it comes to working in an actual practice, there seems to be a gap between working and education. What you are taught in theory is not what actually happens in practice.

From your answer to the characteristics and skills of an accountant. Did you learn these characteristics and skills as a part of your course, were you encouraged to think technically in your course and ignore generic skills. Were you expected to develop generic skills on your own accord?

Some subjects are better at developing skills than others. The more theoretical courses show how generic skills like communication are important.

Do you think any of these skills were developed in this course? (MA in accounting)
This year we are expected to have already developed these skills. Generic skills are expecting to be learned at undergraduate level. The masters course is mostly technical. Group assignments are aimed at encouraging and developing these skills as well as having presentations.

Do you feel your skills are being developed well or that you're being forced to use skills you're not comfortable using, do these skills come naturally to you or is it a case of I'm doing this because I have to?

To a certain extent these skills come to you with experience and practice of using them. Students feel forced to do presentations in this course and they don't like doing them or feel comfortable doing them. However, by doing presentations it does help in preparing you for the working world as you will have to use those types of skills in the working world.

1. Are Innovation & Creativity concepts that are relevant in today's business sector?

Yes. It's important because we're in difficult economic times and people need to be able create new jobs and find a new way of making money.

Non-financial measures are just as important as financial measures in assessing performance of a company. Because of the tight competition in today's business sector it

is very important to always be one step ahead of your competitors and for this reason innovation and creativity play a big role in the business sector. It is important in the current climate for businesses to find new ways of cutting costs effectively and increase revenues and they must be innovative and creative to find ways of doing this effectively.

2. Are Innovation & Creativity skills that all business sector denominations should possess? Should they be incorporated in to :

Management? : Important skills for them to have as it helps them to develop new skills to get people to do what they want them to do, to encourage and inspire people. It makes new ways for management to manage their work force and to reward them.

(ii)Accounting? : Reducing costs and analysing how they performed and deciding on ways to improve on this performance. With computers doing a lot of the technical work for accountants now, they have more time to focus on the area of being innovative and creative and finding new ways of cutting costs and improving on the financial performance.

(iii)HR? : Innovative and creative skills are necessary in managing human resources especially with businesses attempting to function with fewer employees so the work load needs to be divided and managed efficiently and effectively requiring innovation skills.

(iv)Marketing? : Very important now with a lot of businesses running facebook campaigns and using facebook to contact customers. This is a cheaper way of advertising in comparison to running a radio campaign or other print media advertisements however, it is equally as effective and shows there is innovation and creativity in marketing.

3. What area do you consider innovation and creativity to pertain to the most or do you consider them to be equally important in each denomination?

It's needed more in areas where there's more human involvement and interaction like in marketing or HR where their roles are more varied than that of the accountants.

4. Do you consider innovation & creativity to be skills pertaining to the accounting profession? Explain reason for answer.

There is a common stereotype that accountants are not innovative or creative and that they are all about the numbers. However, in the current economic climate they have become much more innovative and creative with cost cutting and budgeting. Tax

advisors are particularly innovative and creative when it comes to accounts.

You've said they are probably innovative and creative. Why do you think they are probably more innovative and creative rather than saying they are.

More of a focus today on accountants being more innovative and creative and it is expected they have more skills nowadays with increased pressures on accountants in the current economic climate.

Would you consider modules that include Innovative and Creative thinking to be appropriate as part of an accounting course?

It would be appropriate at undergraduate level. It gives you experience on how to generate a new idea and workshops on how to develop and implement this idea. As well as showing you how to brainstorm and have creative flow when generating new ideas. It encourages students to be more enterpruenorial when creativity and innovation is allowed to flow freely. It does depend on how the module is taught and if the students actually get hands on experience at developing these skills. If it's not taught well then there is no interaction and it would be a waste of time, it needs to have a practical approach where the student has interaction in the module and gains experience in being creative and innovative.

As post-graduate students going out into the working world, do you think you are equipped with innovation and creativity skills as a direct result of your education or do you feel you don't have these skills.

Don't feel like these skills have been fully acquired as you need to learn this skills with experience. The module they were taught in LYIT did help in developing these skills but acted as a stepping stone in the development as they had to do up a business plan and focus on strengths and weaknesses of the venture and helped them to come to grips with simple real life issues like how are we getting the money to fund this. It was helpful but still left a lot to be learned. It was only a low level of skill development received from the module and that they all need to work on these skills more and they should be focused and developed further in a later stage of education like in a post graduate course. The level you were taught at undergraduate level highlights the basics but you are still left with a lot more to learn before your equipped to deal with the working world level of skills.

There is an attitude out there that students are better off spending more time on the technical areas and it is a waste of time focusing on innovation and creativity and other such skills. The skills you are learning as part of the module must actually apply to practice and be of benefit to you going into the working world. You need to see how it's going to be beneficial to you and how it will apply to your working life.

Was the module purely for accounting students or was it a mixed business class? It was a mixed business class. Everyone was equally involved and we were split up into groups of accounting and non-accounting students. The accounting students were equally as natural at idea generation as their fellow group members.

Would you consider modules that include Innovative and Creative thinking to be appropriate as part of a non-accounting business course?

Yes. It would be seen as more important for non-accounting business courses to have more focus on innovation and creativity. Accounting is primarily to do with figures but on marketing you have to be able to come up with new ideas to sell a product. You are in a much more competitive area in the non-accounting side of things in that they must always be ahead of their competition and must be constantly thinking and changing their appeal.

From this focus group and the discussion we've had. What are your attitudes towards innovation and creativity in the accountancy sector?

It is an important skill to have but the regulations that are in place for accountants in terms of ethical standards and compliance to legislation does limit the extent to which accountants can be creative and innovative. There are a lot of regulations out there for accountants.

They aren't the most important skills for accountants but they are definitely skills you still need and should have although they are low down on the list of skills necessary for accountants, they would still be on the list. Technical skills are portrayed as being more important and therefore they get more attention and focus. There is competitiveness in accounting modules to be the best at the technical skills and people concentrate purely on perfecting those and ignore the other skills that go with it. There is a lot of emphasis put on the technical skills and none on the generic skills. Employers invite you for an interview based on your technical skills and how well you've performed on your exams in the areas of tax, audit and financial accounting. You get offered an interview based on your technical skills but your generic skills aren't taken into consideration until the actual interview and so it is important to do well in the technical side of modules. Easier to identify the technical areas. It is important to be innovative and creative in the accountancy sector and it should definitely be encouraged more. It is important to have the skills of innovation and creativity but the regulations in place for accountants prevent them from moving out of their routine duties and thinking in a creative and innovative way. Every duty an accountant has is heavily subject to regulation and there is a set way of performing their tasks. It is good to be innovative in the business process but not with the financial reporting element of it.

5. Are Innovation & Creativity concepts that are relevant in today's business sector?

Yes. It's important because we're in difficult economic times and people need to be able create new jobs and find a new way of making money.

Non-financial measures are just as important as financial measures in assessing performance of a company. Because of the tight competition in today's business sector it is very important to always be one step ahead of your competitors and for this reason innovation and creativity play a big role in the business sector. It is important in the

current climate for businesses to find new ways of cutting costs effectively and increase revenues and they must be innovative and creative to find ways of doing this effectively.

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Would you consider modules that include Innovative and Creative thinking to be appropriate as part of an accounting course?

It would be appropriate at undergraduate level. It gives you experience on how to generate a new idea and workshops on how to develop and implement this idea. As well as showing you how to brainstorm and have creative flow when generating new ideas. It encourages students to be more enterprunerial when creativity and innovation is allowed to flow freely. It does depend on how the module is taught and if the students actually get hands on experience at developing these skills. If it's not taught well then there is no interaction and it would be a waste of time, it needs to have a practical approach where the student has interaction in the module and gains experience in being creative and innovative.

As post-graduate students going out into the working world, do you think you are equipped with innovation and creativity skills as a direct result of your education or do you feel you don't have these skills.

Don't feel like these skills have been fully acquired as you need to learn this skills with experience. The module they were taught in LYIT did help in developing these skills but acted as a stepping stone in the development as they had to do up a business plan and focus on strengths and weaknesses of the venture and helped them to come to grips with simple real life issues like how are we getting the money to fund this. It was helpful but still left a lot to be learned. It was only a low level of skill development received from the module and that they all need to work on these skills more and they should be focused and developed further in a later stage of education like in a post graduate course. The level you were taught at undergraduate level highlights the basics but you are still left with a lot more to learn before your equipped to deal with the working world level of skills.

There is an attitude out there that students are better off spending more time on the technical areas and it is a waste of time focusing on innovation and creativity and other such skills. The skills you are learning as part of the module must actually apply to practice and be of benefit to you going into the working world. You need to see how it's going to be beneficial to you and how it will apply to your working life.

Was the module purely for accounting students or was it a mixed business class? It was a mixed business class. Everyone was equally involved and we were split up into groups

of accounting and non-accounting students. The accounting students were equally as natural at idea generation as their fellow group members.

Would you consider modules that include Innovative and Creative thinking to be appropriate as part of a non-accounting business course?

Yes. It would be seen as more important for non-accounting business courses to have more focus on innovation and creativity. Accounting is primarily to do with figures but on marketing you have to be able to come up with new ideas to sell a product. You are in a much more competitive area in the non-accounting side of things in that they must always be ahead of their competition and must be constantly thinking and changing their appeal.

From this focus group and the discussion we've had. What are your attitudes towards innovation and creativity in the accountancy sector?

It is an important skill to have but the regulations that are in place for accountants in terms of ethical standards and compliance to legislation does limit the extent to which accountants can be creative and innovative. There are a lot of regulations out there for accountants.

They aren't the most important skills for accountants but they are definitely skills you still need and should have although they are low down on the list of skills necessary for accountants, they would still be on the list. Technical skills are portrayed as being more important and therefore they get more attention and focus. There is competitiveness in accounting modules to be the best at the technical skills and people concentrate purely on perfecting those and ignore the other skills that go with it. There is a lot of emphasis put on the technical skills and none on the generic skills. Employers invite you for an interview based on your technical skills and how well you've performed on your exams in the areas of tax, audit and financial accounting. You get offered an interview based on your technical skills but your generic skills aren't taken into consideration until the actual interview and so it is important to do well in the technical side of modules. Easier to identify the technical areas. It is important to be innovative and creative in the accountancy sector and it should definitely be encouraged more. It is important to have the skills of innovation and creativity but the regulations in place for accountants prevent them from moving out of their routine duties and thinking in a creative and innovative way. Every duty an accountant has is heavily subject to regulation and there is a set way of performing their tasks. It is good to be innovative in the business process but not with the financial reporting element of it.

APPENDIX 6 FOCUS GROUP 2 (NON-ACCOUNTING) TRANSCRIPT

How Familiar are you with the concept of the accountancy sector?

Aware that it exists and that there is an accountancy section in every business and that it co-operates with every single part of the business. Aware of accountancy as at undergraduate level they would have done accountancy modules so they are aware of what is done by the accountants. They can do accounts themselves and were taught accountancy to a certain level. From a marketing point of view must be aware of how much you are spending and that the accountancy department of a business is very interested in the money that goes into a marketing campaign. Accountants and the marketing team in a business must work together on a project to determine the effectiveness of the campaigns. If the money for a campaign isn't being returned, it's very difficult to justify the campaign. The marketing side of the business must know for the accountant's what is the objective for the campaign and what is the return we get for this investment. From audit, and accountants and accounting firms is my understanding of the accountancy sector as this is what I would deal with.

As Marketers, we are still involved in the financial side of the business. Have to know how much money is being spent on your campaign. You have limited funds available to you for the marketing job as the accountants give you your budget and you run with that. It's as if the accountants have the control as it is all about the money. Must always be able to say how much was spent last year and how much a certain item cost and what you expect it to be this year and how many customers did we get from running a certain advertisement (Revenue) Must know how much your paying suppliers and so on for the accountants. Must be accountable. Always work closely with the accounting stream as they help manage campaigns and look for the return on investment on running the campaign. The numbers is the main aspect of a business.

Are you aware of the day-to-day duties carried out by an accountant?

Aware of what they do vaguely but obviously not as informed as an accounting student. There are so many different streams in every subject, like marketing, there are different streams that you can take and it's the same for accountants. Have a general overview of what is done by the accountants. There are many duties and streams as there is so many types of accounting like cost accounting, budgeting and forecasting and invoicing and auditing. Appreciate there are lots of different streams like there is for marketing. Inhouse accountants deal with salaries, paying suppliers, when they get paid and it's a big area.

Accountants do year ends and go through the balance sheets and profit and loss accounts at the year end. Go through all the receipts to make sure there is a paper trail. Must check everything that was spent. Their job is mostly just processing the numbers and from this they can determine what could be done and what should be done and how it is done. It's not just processing the numbers, it's understanding it and being able to make decisions and recommendations based on this information. The head of finance/accounting needs information from sales, HR and marketing so they need to be able to communicate to these individual departments and share information in language that non-accounting departments will understand. Working capital management is the bid one today with accountants and making sure they have enough money in the business. Must now find the most effective way of saving the company money and accountants are very much under pressure in today's environment to find ways to cut costs. Must come up with solutions for saving money. An

accountant is a very good person to go to from a business perspective, if you wanted to move into a new area and the accountant is an invaluable asset when trying to make the decision to invest.

What skills and characteristics are essential for accountants to have?

They must be very focused and good with numbers. There is a definite stereotype that they are number crunchers, but they don't agree that its true from accountants they know. They are very careful with their money but that comes with the job. They keep a very close eye on where the money is going and comes from. They have to have a good grasp of their own finances before they can become professional accountants. If they aren't good at handling their own money, then they'd be wreckless with other people's money. With the banking crisis in the financial services, accountants have got a bad reputation. They must be ruthless when it comes to cutting costs. Make cut backs and decide what areas need to be cut. But then you wonder are they being ruthless or do they not value other sectors. Perception that accountants think they are the most important area and that marketing and other areas aren't important. That they are a waste of money. They don't understand that you must spend money to make money.

They have organisation and communication skills. They must be fair. Have good time management. They take on work and still must allow time to complete other work they have. Must have a healthy balance with the work schedule.

What is your opinion on accounting courses in Ireland.

No. Not taught about the computer side of it. Expected in a work place to have knowledge of Sage which you are not taught in a business course at undergraduate level. The LYIT course does give students from accounting a lot of exemptions and from doing the masters they have very few final exams to sit with the exemptions they get. It's a very long and different process for an accounting student in comparison to non-accounting business students. Accounting students have to keep going if they choose that stream whereas marketing students can chose to finish after their degree, post-grad etc. Accounting students don't get this choice. Have to finish out your time if you want a career at the end of it. Accounting students must be extremely dedicated to wanting a career in the accountancy sector. If you pick accounting stream in a business course , you must be an accountant. Only one choice. If you pick marketing, you have a lot of other options available to you. Accounting has a lot to do with law. So you do have the option of being an advisor on tax law and that type of thing. A lot of legal professionals would work closely with the accountants. Particularly in the area of tax. There are so many things you are expected to be able to have when entering the work world and it's unrealistic to expect a college to prepare you for all of these. A four year course is not long enough to cover everything. Must look at the review process in the college. Is it good enough to pick up on the areas that the course falls down on. Rating course and lecturer evaluation, are people transparent with feedback in a small college, probably not. Would need to ask people who are working but from our perspective, the accounting course is very comprehensive and prepares students well. The outcome from a college and the number of graduates going to work for big four companies speaks for itself. It's a good sign that the accountancy course is doing well when students are being taken on by big four companies.

Do you think that innovation and creativity modules on an accounting course are important?

Yes, because it would help them to work better with other departments. It is to do with communication, if your doing a new product with a company and you have a limit on what you can spend. The person creating the product might not know the best way to fund it. There's a big focus now on new types of ventures that accountants would never have been familiar with before in terms of how they'd be treated in the books and categorised as assets and current assets, etc. Accountants need to open their eyes to new technologies and ventures coming in. It helps accountants to be more successful if they think outside of their routine and consider that something different to what they always do might work better. It would set you apart from other accountants. When accountants tender for work now, it is very competitive. You would want to hold on to customers based on the fact that you have skills and innovation that would keep the customer. Must set yourself apart from your competitors. Accountants could develop more efficient processes for carrying out their duties. Information sharing is a big thing when it comes to innovation. Accountants can't information share with regulations. Networking through innovation would allow current customers they have to be able to offer something new to another customer that is lagging behind.

Do you think courses that include innovation and creativity are appropriate for non accounting business courses?

Definitely, it is a very big part of marketing. Everything changes so fast in marketing. It's the job of the marketer to make your company stand out. You must be constantly looking at new ways to do things so that is innovation. Every module we are taught, we are told to be different. Always told to differentiate. Must have different promotions to other companies and always keep being different. Must know how your strategy puts you ahead of someone else. Innovation is about trust. Trust is one of the biggest areas of weakness for the accountants. Always taught not to share information and to keep everything confidential. Innovation may be a big leap for an accountant because a lot of it is about trust and working together to move forward. This is the biggest area that needs to be looked at for accountants to become innovative and creative. It would need to be taught from first year though if it were to be successful.

Do you think innovation and creativity are concepts that are relevant in the business sector as a whole?

Yes. Across a business all the different departments come together to help a company out-perform everyone else. It's not just up to one department. The whole team must be involved. It's not limited to one department and although being innovative and creative is what marketing is, and it's instilled in a marketer's mind that that's what they must be. If you look at Robert Cooper's Stage Gate model and all the gatekeeper's and everyone that is involved, there needs to be someone from every single different part of a business. It's completely cross functional. Although there are people who choose accounting because they don't like the creative side of marketing and they enjoy the structure and routine that comes with accountancy. I was going to chose accountancy and the reason I didn't was because it was too structured and there's too many rules and models that you have to stick to. In marketing, this isn't the case. However, with the recession and money being tighter, maybe accountants are being made become more creative and cut back and save money in an efficient manner. There is a lot of pressure on accountants and at the end of the day, the success of a company and how well it is doing, responsibility for this always falls back on the accountants so they are under a lot of pressure in that sense for the company to perform well. Accountants are stuck in the office too much and

they don't spend enough time out on the floor seeing the final product and what is actually being output. They see the numbers but not always what the numbers mean. The financial sector as a whole are like this, banks are like this too. Banks depend on cash flows for forecasting things like that but they don't identify things like innovation or go with the new ideas, or product development. They should consider embracing innovation more as what they have done in the past has failed and they should look at new ways of operating. If the accountants spent more time out of the office and on the floor they might see a new way to do things, a better way of producing the good cheaper.

Marketer's are told that if they do something wrong, learn from it and go forward but the accountants are punished for doing something wrong and given a warning. It's more quantifiable when an accountant does something wrong than if a marketer does something wrong as it's very difficult for a marketer's mistake to be measured despite the accountants seeing the marketer's as costing the company a lot. From the accountants we know, you never hear them coming home from their day and describing it as positive. Would never say they had a great day, whereas marketer's come home and are delighted if they have a successful presentation or project. But in saying that, an accountant really gets to learn how an organization runs and what works and what doesn't. Accountants work for several years in a firm and then they are capable of opening up their own business and doing it well. You learn a lot of valuable information about how a company works and how to make it work. The work of the accountant is where it all happens in a business because it is all about the figures. The figures are the key to getting started. Although you do need a good idea that's going to work, you also need to know the financial side of it and how they work for the business to be a success.

Are innovation & creativity skills that all business sector denominations should possess or do they apply to one area specifically?

It is very important for all of them. Although a lot of it is dependent on the culture of your organization and the way the organization is run. It's about control, monitoring and each metric, you need to have the aspects of every department worked in. If management are doing a project and they don't take in the marketing or accounting side of it, it doesn't make sense, it wouldn't work if you left it like that. It's important that everyone is working together.

It's a given that some areas are more innovative and creative than others. HR and marketing is all about the human element of the business whereas there has to be measureables when it comes to accounting. It also depends on the industry and the stage of growth you are in, need to be more innovative when in the growth part of business development whereas more mature products, it's more difficult to reinvent yourself and get marketer's reengaged. The problem with accounting is that it is a very serious profession. Revenue don't laugh much if bills aren't paid. If money hasn't been paid when it should have been paid then they are rigorous and innovation and creativity go out the window when an accountant is sitting in front of these bodies trying to explain why money hasn't been paid. Money does make the world go round and without money, accountants are in trouble. It is about accountants being open to innovation and creativity, when it comes to dealing with clients, should encourage them to start a new venture, and be more encouraging. Be more critical with their advice, say when they need help badly and work on the customer service side of it.

Are Innovation and creativity skills that pertain to the accounting profession?

Some accountants would have innovation and creativity skills. They are very rigid and it's all about their facts. It's not a skill that would come naturally to you. As a marketer, I find it hard to deal with numbers now as I'm not used to thinking that way and I think it works the same for accountants. They work at figures for a reason .it's what they are geared towards, just like marketer;s thrive on being creative and innovative. Everyone has a natural skills set and it varies per individual and accountants are set in there skill set. They do the same thing every month, always doing the same jobs but marketing is different. Accounting students happily admit that they aren't good at being creative or innovative and they hate doing things like presentations which marketer's would be natural at. The thought of presentations is not something accountants are comfortable with. They are more technical and more into showing people the facts and the figures. They are very different so you can either be one or the other. You must have a good grasp of each of them to be successful in the business sector but you can't be great at both. Just an understanding of each helps.

Do you think accountants are capable of being creative and innovative naturally?

No. They have presentation skills and need to be able to communicate to other departments in language that they understand. I don't see them capable of thinking outside the box however. It's not an area you can pigeonhole and say all accountants are this whereas they are all different as individuals. Communication is important as they use shorthand and accounting terminology that wouldn't be known by other sectors. Need to know people won't understand these terms in a presentation. It's like medical people using medical terms which people don't understand. If you go for an interview and they use terminology relating to the accounting side that isn't your background.

What is your general attitude towards innovation and creativity in the accountancy sector?

It's not very welcome in the accountancy sector. It should be there when they are being analytical of the numbers but when they are required to be, and it should be applied to the client customer service offered by accountants. You find that with accountants they aren't necessarily people's people in terms of communicating and it's their approach and the way they are taught everything has to be. They should be more open to new ideas when dealing with customers. They should reallt be learning these skills now when you see new emerging technologies like wind technology, and areas that are outside the box for Ireland, then change needs to be embraced more. Some organizations are more open to it than others. My cousin works in Sydney with an accounting firm and his job is to review the way they process their data now and find better ways to process this data and he moves from project to project constantly changing systems and improving them and that's his job and he is an accountant so that's innovation and creativity. So maybe, in Australia it is embraced more. So maybe it's Irish culture that discourages change. It does depend on the company. Big companies seem to be more welcome to innovation and creativity as they have the resources and time to develop this. Every decision and process does boil down to the money and people don't have the money and this can inhibit creativity or not. In NY, cousin wanted to change the way things were done in NY to the way they were done in London with the approval of his manager, but the staff didn't like the changes being brought in and he was being innovative and creative and he faced a lot of resistance from staff so that's again to do with the culture of the firm.

