CHAPTER 1

INTRODUCTION AND OVERVIEW OF THESIS

Contents

"If we knew what it was we were doing,
it would not be called research, would it?"
Albert Einstein

1.1 Overview of Chapter 1

The research objective of this study is to enquire into postgraduate accounting and finance students' perceptions of critical thinking in the context of group learning on a UK MSc programme. With this in mind, this chapter sets out the rationale and context for this study. Section 1.2 discusses the role of critical thinking within higher education (HE) and professional accounting education. Critical thinking has been the focus of attention in both contexts and its position is established with regard to students' learning. Its role in both contexts leads to an enquiry into critical thinking and group learning from the students' perspective. My particular research interest in critical thinking and group learning is explained in section 1.3. This section also explains how the research areas and focus are identified, drawing from a brief overview of the literature review in critical thinking and group learning. With this in mind, constructivism is identified as the cornerstone for this thesis and its role in this study is considered in section 1.4.

1.2 The background of the study

1.2.1 The role of critical thinking in higher education (HE)

Critical thinking has been seen as the foundation of Western university education (Barnett, 1997). This shows that critical thinking has an important role in education. Higher education constantly refers to the notions of critical thinking in documentation incorporating desired learning outcomes, benchmark statements and quality indicators. For instance, when the Dearing Report (1997) instructed the higher education institutions (HEIs) to include learning outcomes in relation to subject specific skills, cognitive skills and key skills in a programme or module specification, critical thinking always appeared under one of the skill descriptors in these documents.

Policy makers such as the Quality Assurance Agency (QAA) in the UK further established the importance of critical thinking in HE. The main role of the QAA is to safeguard quality and standards in UK universities and colleges. To achieve this, the QAA produces subject benchmark statements for both undergraduate and postgraduate levels. These statements provide standards and guideline for HEIs to inform students particularly of the learning outcomes to be achieved on completion of each specific degree programme. These documents and descriptions are communicated to HEIs, where they will be translated into their curriculum and thereby impact on both educators and students.

For example, the subject benchmark statements for both Accounting (QAA, 2007b) and Finance (QAA, 2007c) at undergraduate level require graduates to demonstrate cognitive ability and generic skills that include critical thinking. To illustrate, one of the statements states that students should have the 'capacity for the critical evaluation of arguments and evidence' (QAA 2007b, p.3). The skills descriptors in the statements may not be named as critical thinking directly or literally, but implicitly they incorporate the notion of critical thinking. The previous example brings out the capacity to think critically in order to carry out evaluation, argument and evidence, which can be notions within critical

thinking. To substantiate this observation, the following paragraphs provide some examples of the notions of critical thinking as set out by the QAA.

Likewise, the QAA currently also publishes master's degree subject benchmark statements (QAA, 2007a). However, there is no subject benchmark statement relating to Accounting and Finance, in which this study is interested. Therefore, the closest benchmark statement that would be relevant for reference purposes would be from Business and Management. The statement identified required skills for all masters' programmes include the following, which I think closely relate to critical thinking:

1. Being able to think critically and be creative: manage the creative processes in oneself and others; organise thoughts, analyse, synthesise and critically appraise. This includes the capability to identify assumptions, evaluate statements in terms of evidence, detect false logic or reasoning, identify implicit values, define terms adequately and generalise appropriately.
2. Being able to solve complex problems and make decisions: establish criteria, using appropriate decision-making techniques, including identifying, formulating and solving business problems; the ability to create, identify and evaluate options; the ability to implement and review decisions.
3. Critical self-awareness, self-reflection and self management; time management; sensitivity to diversity in people and different situations and the ability to continue to learn through reflection on practice and experience (ibid, p.6).

The same benchmark statement (QAA, 2007a, p.8) also states that once the students are in professional practice, they should be able to:

1. Deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to a range of audiences;

2. Be adaptable, and show originality, insight, and critical and reflective abilities which can all be brought to bear upon problem situations;
3. Make decisions in complex and unpredictable situations.

Similarly, the QAA (2010) also published a new reference document relating to Master's degree characteristics for HEIs in the UK. Students awarded this qualification should be able to:

1. Deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences;
2. Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level;
3. Continue to advance their knowledge and understanding, and to develop new skills to a high level. (QAA, 2010)

Though the term 'critical thinking' is not used explicitly in these documents, the implied notions are evident. The notions of critical thinking will be considered fully in Chapter 2.

The central role of critical thinking is also evident in other countries such as the US and Australia (Jackson, 2009). For example, the Graduate Skills Assessment (GSA) in Australia includes critical thinking as one of its assessment criteria (Australian Council for Educational Research, 2011).

Many HEIs in the UK have started to incorporate the critical thinking skill descriptors in their module descriptions. This is evident in the university which the study was undertaken and many other HEIs whose module description documents are publicly available. In other words, there is growing pressure on HEIs to demonstrate that students are acquiring critical thinking in their learning. In brief, drawing from the evidence mentioned above, the notion of critical thinking for HE can be construed as a *skill* that students can learn, be equipped with and deploy in their future careers. This is not a surprising

observation: Barnett (1990) noticed that the curriculum had started to put a greater emphasis on skills. Bennett *et al.* (2000) called this a shift from academic competency to operational competency (ibid, p.6). With this emphasis and development in the HE landscape came the notion of skills development in HE, which may have ramifications for students' perceptions, particularly for critical thinking.

It is evident from the discussion above that critical thinking has become a highly desired and most valued learning outcome in HE. Critical thinking has also caught the attention of many parties in HE, such as accreditation bodies, employers and students in the UK. Similarly, professional accounting education also emphasises the need to acquire critical thinking skills or ability (in whatever form it may be) for prospective accounting students and practising accountants. For example, the International Federation of Accountants (IFAC)[1] has been constantly revising its education standards to restate its requirements for critical thinking. This link between HE and professional accounting education leads to the discussion in the next section 1.2.2, which explains the role of critical thinking in professional accounting education and its role in linking the two together.

1.2.2 The role of critical thinking in professional accounting education

Having established the important role of critical thinking in HE, critical thinking plays an equally vital role in professional accounting literature (Wolcott *et al.,* 2002). However, there is a need to address the relationship between professional accounting education and HE, in relation to critical thinking.

[1] IFAC is the global organization for the accountancy profession, dedicated to serving the public interest by strengthening the profession and contributing to the development of strong international economies. IFAC is comprised of 172 members and associates in 129 countries and jurisdictions, representing approximately 2.5 million accountants in public practice, education, government service, industry, and commerce. IFAC's mission is to serve the public interest by: contributing to the development of high-quality standards and guidance; facilitating the adoption and implementation of high-quality standards and guidance; contributing to the development of strong professional accountancy organizations and accounting firms and to high-quality practices by professional accountants, and promoting the value of professional accountants worldwide; and speaking out on public interest issues (www.ifac.org).

Velayutham and Perera (2008) argued that the desire to raise the image and status of accounting compared to other professions, such as medicine and law, has led the professional accounting bodies to promote the development of accounting programmes at universities. However, there is a different approach to this in the UK compared with other countries such as the US, Canada, Australia and New Zealand. Velayutham and Perera (2008) explained that an accounting degree is not the required entry route for professional accountancy education in the UK, but the possession of such a degree from recognised HEIs allows students to claim some exemptions from the full professional examination structure. Indeed, this is a core link between HE and professional accountancy education that this study will consider.

In the UK, the six professional accountancy bodies[2] have their own accreditation systems in place in order to ensure that the degree programmes are of acceptable standard and quality. In brief, this accreditation system allows HEIs to seek exemption from some of the examinations of the respective professional accountancy bodies, if their undergraduate and postgraduate degree programmes meet the professional curriculum and requirements in their professional examination structure. As most UK universities have decided to seek accreditation of their degrees from the professional bodies, a degree of control has been given to the professional bodies, particularly in relation to the assessment requirements and content of their accounting and finance degrees. In some cases, in order to obtain as many exemptions as possible from the professional accountancy examinations, university accounting and finance degrees may decide to replicate, in part, the professional qualifications by

[2] The Institute of Chartered Accountants in England and Wales (ICAEW), Institute of Chartered Accountants of Scotland (ICAS), Institute of Chartered Accountants in Ireland (ICAI), Chartered Institute of Public Finance and Accountancy (CIPFA), Association of Chartered Certified Accountants (ACCA), and Chartered Institute of Management Accountants (CIMA).

placing more emphasis on the required learning outcomes, syllabi and curriculum of the professional bodies.

The link between the professional bodies and HEIs is facilitated by the importance both give to critical thinking. Kimmel (1995) argues that critical thinking is an integral part of accounting (and auditing) because of its 'open-ended' nature, where there is no *best* solution for any situation. He also argues that incorporating critical thinking into the accounting curriculum could achieve two objectives: i.e. improving students' thinking skills whilst still providing an accounting knowledge base. His view was that thinking skills and accounting knowledge were two inseparable entities in the accounting classroom. For example, learning accounting rules would be of limited use if the students did not have the thinking skills to apply them.

Reinstein and Bayou (1997) support Kimmel's (1995) arguments and state that due to the advancement of technology, accountants only add value by means of interpreting accounting data and transforming it into meaningful information, to provide critical advice and recommend appropriate courses of action. Critical thinking is the process that provides this added value (Reinstein & Lander, 2011). In other words, they suggest that critical thinking is crucial to the profession. Therefore, critical thinking plays an equally central role within both HE and professional accounting education.

This view of the role of critical thinking is evidenced by the considerations of the Accounting Education Change Commission (AECC), which was set up by the American Accounting Association (AAA). Since the 1980s, there has been a call for critical thinking in the accounting curriculum in the US (American Accounting Association, Committee on the Future Structure, Content, and Scope of Accounting Education (The Bedford Committee), 1986; Perspectives on Education: Capabilities for Success in the Accounting Profession (The White Paper), 1989; Bradford and Peck, 1997, Accounting Education Change Commission, 1990; American Institute of Certified Public Accountants (AICPA),

1999). It is evident that in the US, critical thinking is central to both HE and professional accounting education.

Most recently, the Pathways Commission on Accounting Higher Education in the US was undertaken "to study the future structure of higher education for the accounting profession and develop recommendations for educational pathways to engage and retain the strongest possible community of students, academics, practitioners, and other knowledgeable leaders in the practice and study of accounting" (Ben *et al.,* 2012). This project extends the contribution from previous initiatives such as the AAA (1986), the AECC (1990) and the AICPA (1999) and works towards addressing challenges and issues facing accounting education.

The Pathways project engages with professionals such as the IFAC and academia to collate core competencies for accountants of this century. This sheds light on the design of the accounting curriculum and professional development plans. The project recommends developing the components of accounting competency in three divisions: technical knowledge, professional skills, and professional integrity, responsibility, and commitment. Critical thinking is the first to be considered in the division of professional skills:

- Critical thinking, problem solving:
  - Ability to identify and solve unstructured problems;
  - Capacity for inquiry, research, logical and analytical thinking;
  - Professional scepticism and ability to think independently;
  - Ability to effectively deal with difficult issues (Ben *et al*., 2012, Chapter 7).

Similarly, to demonstrate the central role of critical thinking in professional accounting education in UK, the Professional Oversight Board for Accountancy (POBA) of the Financial Reporting Council (FRC)[3] stated:

[3] The FRC sets the standards framework within which auditors, actuaries and accountants operate in the UK. By agreement with the six chartered accountancy bodies, the FRC has a non-

> There have been numerous calls for accounting education to be more closely related to the demands of accounting practice itself, with emphasis beyond practical skills and technical knowledge. For example, the QAA Benchmark Statement (2000) for UK accounting undergraduate programmes highlights the importance of developing a combination of subject knowledge and skills, cognitive abilities and non-subject specific skills, as well as knowledge and understanding of contemporary theories and empirical evidence. In essence the consideration of both conceptual and applied aspects of the subject, together with the development of relevant generic and subject specific skills, form the essence of an accounting undergraduate programme. Particular attention is also given in the QAA Benchmark Statement to the need to obtain knowledge of and to be able to critically evaluate contemporary theories and empirical evidence in at least one of its contexts (for example, accounting and capital markets; accounting and the firm; accounting and the public sector; accounting and society). The Accounting benchmarking group members represented both the academic community and the professional bodies and therefore its findings, in terms of accounting education, should be used to inform the future direction of training and education in the Accountancy Profession. (Professional Oversight Board for Accountancy, 2005)

The Professional Oversight Board (POB), part of the FRC, is a UK regulatory body specialising in the accounting, auditing and actuarial professions. The POBA contributes to the regulatory regime for auditing and the accountancy profession. One of the POBA's functions is to review the regulatory activities of the professional accountancy bodies in relation to their members, including education, training and continuing professional development. By agreement with the six chartered accountancy bodies, the Professional Oversight Team also exercises independent oversight of the regulation of the

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statutory role for oversight of the regulation by the professional accountancy bodies of their members beyond those that are statutory auditors.

accountancy profession by the professional accountancy bodies. The six bodies have agreed that they will consider and respond carefully to the FRC's recommendations. Therefore, the call from the statement above would have an impact on professional accounting education in the UK.

In other words, the POBA (2005) highlighted 'non-subject specific skills' for professional education, which had drawn the attention of professional accountancy bodies such as the ICAEW, CIMA and ACCA to consider incorporating critical thinking into their learning outcomes. For example, the ICAEW lists in its ACA qualification skills such as applying judgement, drawing conclusions and making recommendations. Most recently, CIMA is introducing an updated syllabus for its professional qualification in 2015. CIMA argues that the syllabus aims to produce competent and confident management accounting professionals who have non-subject specific skills such as critical thinking.

Similarly, from a wider perspective, the International Accounting Education Standards Board (IAESB) of the IFAC was established to develop a uniform guideline educational syllabus to be adopted by all its members. In this capacity, accounting bodies such as the ACCA, CIMA and ICAEW are required to consider these educational standards while formulating their qualification structures.

International Education Guideline (IEG) No. 9 of IFAC (International Federation of Accounting, 1996) sets out that professional accounting education should provide intellectual skills that enable professional accountants to solve problems and make decisions. They should have the capacity for inquiry, research, abstract logical thinking, inductive and deductive reasoning and critical analysis; interpersonal skills that enable them to work with others; and communication skills that allow them to listen, discuss, present and defend views effectively.

A later revision from IFAC, International Education Standard (IES) [4] 3, recommended that a broad general education for professional and accounting education should provide the student the ability "to conduct inquiry, carry out logical thinking and understand critical thinking" and emphasised intellectual, interpersonal and communication skills (International Federation of Accounting, 2004).

It is evident that IFAC has informed the professional qualification structure. To illustrate, the ICAEW has provided a good example to reflect these emphases in its initial professional development toolkit (IPD). IPD refers to the development of added value professional skills for an ICAEW qualified accountant. Critical thinking, to some degree, is reflected in its sections on Personal Effectiveness and Professional Judgement:

1. Personal Effectiveness: Displaying an enquiring and questing mind; persevering in inquiry; thinking creatively; contributing new ideas; taking a view, recognizing alternative views and expressing a view even though it might be controversial.
2. Professional Judgement: Able to apply a sceptical and critical approach in straightforward, complex and practical situations; identifying wider implications of analysis; weighing alternative views in testing the validity of ideas and prioritising and trade-off solutions.

In other words, ICAEW IPD follows the recommendation from IFAC for its professional accountants. ICAEW defines these two elements into three levels of its ACA qualification framework. In this way, ICAEW not only introduces the important roles of critical thinking in its qualification, but also recognises that critical thinking is important for any future accountants.

Drawing from the discussion above, it can be concluded that critical thinking is as important in professional accounting education as in HE. The demand of the

[4] International Education Standards (IES)**:** The benchmarks that IFAC member bodies are expected to meet in the training and education of accountants.

accreditation process, for various reasons, has encouraged HEIs to consider incorporating critical thinking to correspond to the learning outcomes and requirements of the professional accounting bodies, both for undergraduate and postgraduate levels.

1.2.3 The perception of critical thinking in HE and Professional accounting education

As discussed above, critical thinking has been perceived implicitly as a mastery of a series of discrete skills or operations that can be generalised across contexts, subjects and disciplines. Verbs such as 'analyse', 'evaluate', 'interpret' and 'recommend' are used within programme descriptors and learning outcomes. This particular perception of critical thinking assumes that it is a skill that can be learned and transferred from one context to another and from one subject to another. For example, the QAA subject benchmark statements for both Accounting (QAA, 2007b) and Finance (QAA, 2007c) require HEIs to develop students with the required "cognitive ability and generic skills" that closely associated with critical thinking, such as "critical evaluation of arguments and evidence". Similarly, International Education Standard (IES) 3 recommends that professional accounting education should provide the student with the ability "to conduct inquiry, carry out logical thinking and understand critical thinking" (IFAC, 2004).

Such perceptions of critical thinking can be problematic, as critical thinking is now viewed as a generic skill that can be learned and applied in any context. This confirms Barnett's (1994) claim that HEIs have been holding a utilitarian notion of critical thinking, as there was a shift from academic competency to operational competency. In other words, this perception of critical thinking would seemingly provide many easy answers to issues relating to critical thinking. For example, critical thinking now can be easily identified and

expressed in discrete descriptors to examine whether students are acquiring this skill. For an educator, this means that critical thinking can be broken down into a series of procedural steps or processes that can be easily taught and learned in the classroom. If critical thinking is associated with discrete processes, procedures or operations, then this also suggests that one can be a critical thinker when one masters those processes. For example, if accounting students are good at analysing and evaluating issues at hand, then they are thinking critically about these issues.

Indeed, critical thinking plays an important role both in HE and professional accounting education. However, is it really all about the skills that are outlined in the various statements mentioned above? Is critical thinking that simple to understand?

It is evident in the literature that "critical thinking as skills" is one of the views; however, there are many other models of critical thinking which go beyond this notion. With this in mind, this leads us to the next section (1.3), which briefly explains how perceptions of critical thinking have become one of the focuses in this study.

1.3 Finding research interest and focus

1.3.1 My background and interest in critical thinking and group learning

My interest in critical thinking arises from my teaching career in Malaysia. I was the programme leader for the Diploma and Advanced Diploma in Business Studies (Management Accounting) in one of the college universities in Malaysia. These programmes had been working closely with CIMA and were awarded maximum exemption from CIMA examinations at that time. In other words, graduates from the programmes were being exempted from up to eleven of the total of fifteen papers in the CIMA qualification examination. I was also the

module leader for the management accounting modules for both the second year and the final year of the programme. At the same time, I was also a chartered management accountant, an associate member of CIMA, which enabled me to relate teaching and learning to the business environment, particularly the employers' views on accounting education. With this previous education and career background, I was able to consider a range of perspectives about the theory and practice of accounting education, particularly in relation to a professional accounting qualification like CIMA.

In order to gain the maximum exemptions from CIMA examinations, the learning outcomes for the programmes and modules had been developed to reflect closely the CIMA professional qualification's structure and requirements. In addition, CIMA had agreed with the college that external examiners must be appointed for those modules that were claiming exemption from the professional body. The college had appointed many external examiners, mainly from UK universities. These external examiners always highlighted the need to cultivate critical thinking with the students in examination questions. They also urged the faculty to 'teach' critical thinking in the classroom. These conversations and dialogues stirred an interest in me to research critical thinking.

I became aware that critical thinking is a term with many definitions and ways to explain it. Bailin *et al.* (1999) propose that if the ultimate goal of education is to develop critical thinking in students, then it must be "true to the core meaning of the educator's basic concept of critical thinking" (ibid, p.286). Bailin *et al*. (1999) highlight the importance of the educators' perceptions of critical thinking in developing students' critical thinking. What about the learner's perceptions of critical thinking? I also became aware of how students varied in how they perceived critical thinking. It is evident in the literature that there were few empirical studies of this area from the students' perspectives. The majority of the studies were conducted within the nursing profession (Duchscher, 2003; Marchigiano, Eduljee and Harvey, 2011), suggesting that

there was a lack of interest in these areas with regard to accounting and finance students. With this in mind, the students' perception of critical thinking became an area of key interest for me.

The initial idea about researching critical thinking indirectly prompted the question as to how critical thinking might be developed and I started to be interested in group learning. This is because group learning is often a focus for various reasons in the accounting classroom and I had been using it in my teaching. My view of group learning was that it was not about students merely coming together for group work: it involved more aspects which required further investigation and study. A review of literature on critical thinking drew my attention to Barnett's (1997) model of critical thinking, which argues that a social context (including group learning) is necessary for the development of critical thinking from a skill level to a higher level of criticality.

Based on personal engagement with the literature and previous teaching experience both in Malaysia and in the UK, the research ideas, aims and objectives started to take form. Section 1.2 has already established the central roles of critical thinking at any level of study, and this study is particularly interested in HE and professional accounting education, given my background as a chartered management accountant, and my teaching career, which had involved accounting and finance students.

Drawing from the discussion above, this study refines the research focus to undertake a study into critical thinking in the context of group learning, particularly the students' perceptions of critical thinking. With this refined research interest and focus, section 1.4 considers a theory of learning in which students' perceptions are central, namely constructivism.

1.4 Constructivism within HE and students' perceptions of critical thinking

1.4.1 Constructivist view of student learning

There has been a considerable amount of research into student learning within HE: see, for example, Marton and Säljö's work on students' conceptions of learning in the 1970s, and Prosser and Trigwell (1999), Biggs (1999), Ramsden (2003) and Entwistle's (1988) work on student learning. These studies involve students' perceptions of the learning process, and they particularly draw upon Biggs' (1987) constructivist 3P model. This conceptualises the interrelationship of students' perceptions within three sets of factors (Presage, Process and Product). In this view, the next few sections consider the rationales for researching students' perceptions within HE and constructivism in this study.

Constructivism is a learning theory about how people might acquire knowledge and learn. It states that learning is an active and contextualized process of constructing knowledge rather than acquiring it. In other words, the emphasis is on the learners who actively interact with their environment, constructing the knowledge themselves through experiencing things and reflecting on those experiences.

This is an important underpinning assumption in constructivism: that learners construct knowledge for themselves individually (and socially). Unlike objectivism, knowledge is not assumed to be 'out there' (hidden in books or the teachers' 'heads') and transferable, but rather a personal and social construction of meaning where the student tries to make sense of what is taught by trying to fit it with his/her experience. In this sense, it is a widely

accepted paradigm within learning and teaching communities. This is evident with its advocators such as Dewey (1938), Piaget (1971) and Vygotsky (1978), whose work has had significant pedagogical impacts on teaching and learning within HE. Therefore, it is argued that constructivism has been accepted as the most relevant view of learning within HE.

Brown (2005) argues that constructivism is making way for social constructivism in recent development and trends in education. Social constructivism sees learning as a process of constructing knowledge in a social context: for example, group learning. In this sense, whilst knowledge may be developed internally (constructivism), it can also be developed through active participation and active interaction with the social worlds. For example, Dewey (1938) argues that knowledge emerges from situations where meaningful experiences take place. According to him, these situations must be embedded in a social context such as a learning community (for example, a classroom) where students can construct their knowledge together. In other words, social constructivism views learning as a social process where meaningful learning occurs when individuals are engaging in social activities and knowledge is socially constructed through their interaction with others and with the environment in which they live. Although constructivist researchers have different views on the extent to which the social setting of learning contributes to the construction of knowledge, they concur that active interaction and negotiation are the important factors in this setting.

With this constructivist stance, Biggs's (1999) 3P constructivist learning model in particular conceptualises the learning process as an integrated system of 3Ps, i.e. Presage, Process and Product. This is a student-centred model that is well recognised within the teaching and learning communities, which draws my attention to consider it more fully in the next section (1.4.2).

1.4.2 Biggs's 3P model (1999)

Biggs's (1999) 3P model is an interactive system that describes three points in time at which learning-related factors are placed. These three points in time

refer to before (Presage), during (Process) and after (Product) learning takes place: hence the 3P model.

Presage refers to those factors that exist prior to the time of learning, which comprise students' personal characteristics and their learning environment. Student factors comprise the relevant prior knowledge the student has about the topic and the student's ability, interest in the topic and commitment to the university. On the other hand, the teaching context refers to situational factors which define the learning environment, such as teaching methods, what is intended to be taught, assessment strategy and the climate of the classroom and of the institution itself.

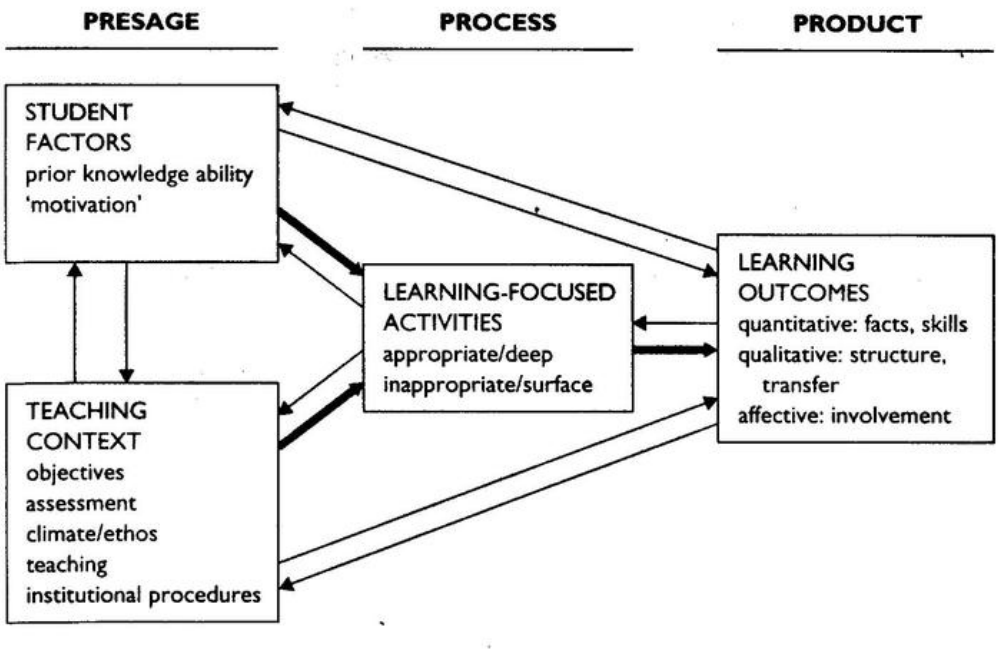

Figure 1.1: The 3P model of teaching and learning (Biggs 1999, p.18). Used with permission of the author.

Process factors describe how students approach their learning. Biggs (1999) suggests two approaches that students adopt, namely surface and deep approaches to learning. Biggs explains that the surface approach "arises from an intention to get the task out of the way with minimum trouble, while appearing to meet requirements" (ibid, p.14). By contrast, the deep approach "arises from

a felt need to engage the task appropriately and meaningfully, so the student tries to use the most appropriate cognitive activities for handling it" (ibid, p.16).

Product describes the learning outcomes (quantitative, qualitative and affective) which students derive from the Process. The learning outcomes can be knowledge facts from a particular topic, understanding of a particular concept and students' involvement in learning. Most importantly, Biggs (1999) highlights that the learning outcome is determined by other factors, and that the relationship between the three Ps is like an interacting system. As shown in Figure 1.1 above, Biggs (1999) explains that the general direction effects are marked with heavy arrows, which show the linear relationship of the three factors in the model. On the other hand, the light arrows connect everything in the model to explain that all components in the model form a system (ibid, p.19). In brief, Biggs (1999) proposes that the students and learning context presage factors jointly determine the approach that students adopt (process) and in turn determine the outcomes (product). However, Biggs (1999) notes that a more complex analysis is possible by looking at how all the elements (in the three P factors) interact with each other, behaving as a system in the model.

In this sense, the model seems to suggest predictable relationships between the three factors. For example, Biggs (1999) suggests that students with an intention to engage meaningfully with the task are likely to adopt the deep approach in a learning process and yield desired learning outcomes. There are studies to provide evidence that students' adoption of deep approaches to learning is related to the Presage factor, such as the teaching context (Entwistle & Ramsden, 1983; Trigwell and Prosser, 1991b) as well as the student factors (Dart *et al*., 2000). On the other hand, there are also some studies that have found that the deep approach to learning results in higher quality of learning outcomes (Marton & Siiljo, 1976; Trigwell and Prosser, 1991a, b).

Prosser and Trigwell (1999) argue that the relationship between the three factors in the 3P model of learning does not have to be a linear or cause-effect

order. Bamber and Tett (2000) agree with Biggs (1999) and highlight the need for a contextualized model of learning, which can describe the relationship between the range of "enabling or disabling" factors, from psychological to contextual, that affect students' *learning* in a HE environment (ibid, p.64, italic mine). However, they caution the readers that it is important to see that this relationship between students' learning and the context is iterative rather than deterministic. Ramsden (2003) says that it is important to understand how students 'adapt' to the requirements they perceive – their perceptions of assessment, course and activities given to them in and outside the class. Ramsden (2003) points out that students tend to please the teachers and therefore 'adapt' to the learning context they perceive. In other words, the 3P model, on which this study will be based, acknowledges that students construct their learning in the context of the particular social setting, the tasks and the environment they perceive. Most importantly, many studies (for example, Biggs 1999; Prosser and Trigwell 1999; Ramsden 2003) show that the practical application of 3P models lies within the Presage factor, namely students' perceptions of themselves, the learning process and the learning context. Educators and researchers need to be aware of this dimension and be responsive to such realities.

Interestingly, Salmon (1989) discusses the personal stance in learning. She explains the significance of personal stance in learning:

> "because personal stance refers to the positions which each of us takes up in life, this metaphor emphasises aspects of experience which go deeper than the merely cognitive, and which reflect its essentially relational, social and agentic character" (p.231).

Salmon's (1989) explanation of personal stance can be distinct from perception. Salmon (1989) particularly highlights the personal stance in learning, which she refers to as "the positions which each of us takes up in life" (ibid, p.231). She argues that "it is through the stance we take up in any situation that we give our own distinctive meaning to what it involves" (ibid, p.231).

Brockbank and McGill (1998, p.66) draw on Salmon's (1989) work and suggest that personal stance is another important factor that influences learning. They go on to explain that there are two dimensions of personal stance. The first refers to the content of what we learn; the second refers to the contexts that students bring to the process of learning.

The second dimension of this personal stance suggests that students may come to any learning session with their own attitude and perception, as identified by the 3P model. Students may have unconsciously formed a personal stance towards a teacher. The stance may be about the teacher's class, race, age and apparent disposition towards the learners in the eyes of the students (ibid, p.67).

Brockbank and McGill (1998) call this personal stance, the "black box of process" within teaching and learning, which is largely unexplored (ibid, p.66). This informs a potential area for research into student learning for this study, particularly in relation to the Presage element of the 3P model particularly the students' perceptions.

1.4.3 Students' perceptions as the research focus of the study

Drawing from the discussion above, it could be argued that constructivism or social constructivism emphasises students' learning and teachers' teaching, it encourages learners' personal involvement and development in learning, and also takes account of learners' perceptions and the context of their learning experience. This would be an appropriate view within HE because the focus is on students who can demonstrate conceptual understanding rather than replicating what was taught.

Research into students' learning, within HE and the constructivism stance has placed the significant focus on students' perceptions. Particularly, Prosser and Triggwell (1999) argue that the focus should be on the students' perceptions

(ibid, p.11). On the other hand, Ramsden (2003) reminds educators and researchers that students respond to the situations they perceive, and that it is important to be aware of this in teaching and learning (ibid, p.63). Likewise, Biggs (1999) argues that learning is a way of interacting with the world. In his view, the acquisition of information does not bring about changes (or learning) in students, but the way students structure that information and perceive with it does. Therefore, Biggs (1999) argues that education is about conceptual change. Biggs (1999) thus highlights the importance of perception in teaching and learning.

What research has been carried out on students' perceptions? This question informs the research focus for the present study, which is to enquire into critical thinking in the context of group learning, particularly postgraduate accounting and finance students' perceptions.

1.5 Conclusion of Chapter 1

The above discussion identifies research into students' perceptions of their learning as an area for further investigation and exploration. This study, therefore, is an enquiry into critical thinking in the context of group learning, particularly postgraduate accounting and finance students' perceptions. The research focus is developed and established after careful consideration and arguments about the roles of critical thinking with HE and students' learning. The rationale of focusing on students' perceptions is also deliberated in light of evidence from research into students' learning within HE over time.

It appears that constructivism not only provides a theoretical framework for student learning, but also offers an appropriate research methodology for the investigation of students' perceptions in this social context of learning: hence, this is a qualitative study.

In summary, this chapter highlights the basis of this research, which is my interest in critical thinking and group learning, as explained in section 1.3. My background also provides an insight into the origin of this study. Together with the calls from the accounting profession and academics to foster critical thinking in student learning, these are the rationales for this research, particularly my interest in the perceptions of critical thinking in the context of postgraduate accounting and finance students.

The structure of this thesis

Chapters 2 and 3 provide a critical review of the relevant literature, particularly on critical thinking and group learning, and identify the gap to formulate the research objective. Subsequently, Chapter 4 justifies the constructivist paradigm and research methodology and describes the rationale and design of a constructivist and qualitative approach for the research. Chapters 5 to 7 analyse and report the findings, drawing from students' interviews. Finally, Chapter 8 discusses the implications of the substantive findings and the recommendations for the pedagogical practice for teaching and learning; the conclusions and contribution of the thesis are also considered.