International Students at UK Universities: Critical Thinking- Related Challenges to Academic Writing

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Dedication

To my Loving Family

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Abstract

Universities in the UK host considerable numbers of international students pursuing higher degrees, which raises questions about the extent of their adaptation to a new academic environment. Critical thinking is a key skill expected of university graduates in the British education system, and it has been an increasing focus of attention in recent years. Concerns about international students' lack of critical thinking in academic writing have been raised by teaching professionals. A review of previous literature shows that little research has been undertaken on issues related to critical thinking for a culturally and linguistically diverse range of students. Furthermore, in those research studies which have been undertaken, the learner's voice has not been clearly evident. The present thesis, therefore, seeks to explore the problems faced by international students with regard to their approaches towards critical thinking, often derived from their previous cultures where people prefer a collective style of learning rather than an individual one, and where they respect and avoid criticizing the work of other scholars.

The experiences of international students studying at two British universities were investigated by means of face-to-face individual interviews, self-reports, learners' diaries and a case study, based on qualitative data. As a result of these findings, it was clear that the students held various conceptions of critical thinking which were based on their socialization and either their present experience of the practice of these intellectual skills, or the absence of this practice in their respective cultures. Majority of the students were found to choose surface rather than deep learning strategies. The analysis of data revealed that students from non-Western traditions are very different in approaching critical thinking tasks such as formulating and evaluating arguments, analysing critically and making sound judgements etc. Particular features of their previous educational experiences were identified as major barriers in the students' development of critical thinking. International students, in particular, felt that their previous educational background had not developed them in a way which encouraged them to think analytically and creatively. However, the analysis also highlights the fact that EAP language support programmes have been unable to address students' specific academic writing needs in order to bridge the skills gap of culturally diverse student bodies. The in-depth findings may support developments designed to enhance students' experiences in the British context.

Overall, the present thesis investigates cross-cultural issues by providing explanations for specific areas of difficulty related to students' poor writing performance, as a result of the fact

that critical thinking skills are crucial elements of the basic assessment tools in British universities. The thesis thus aims to make a modest contribution to broadening the understanding of international students' problems and approaches towards critical thinking, and presents methods which may be useful to facilitate students' learning experiences.

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CHAPTER 1: INTRODUCTION

1.1. Rationale and aims of the study

Critical thinking (CT) is generally considered to be important, since people who can think well/critically have a greater propensity to be good citizens and to be capable of contributing effectively to a country's economic and political well-being (Costa, 2001; Ennis, 1998; Paul & Elder, 2008). However, despite such agreement, there is little consensus on what constitutes CT and to what extent the perception of the concept differs in different cultures, which might be the result of a lack of a common definition of CT (Mosley *et al.*, 2005). A growing enthusiasm for CT led the American Philosophical Association to invite a panel of experts, under the leadership of Facione, to conduct a systematic investigation intended to achieve a more refined understanding of the state of affairs regarding the nature and assessment of CT. The results were later to become cornerstones of this understanding and known as the "Delphi Report". CT is defined by the panel of experts as to be: "purposeful, self-regulatory judgement which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, and contextual considerations upon which that judgement is based" (Facione, 1990: p. 2).

The panel of experts agreed that CT is based on a two-dimensional conceptualisation, which includes not only general cognitive/intellectual skills, but also dispositional aspects. Intellectual skills include: interpretation, analysis, evaluation, inferences, explanation and self-regulation, which are further categorised into sub-skills such as: categorization, clarification; formulation; assessment of arguments and claims; conclusion of the information; justification of results, and examination and correction of one's self (Facione, 1990: p. 6). These intellectual skills are considered to be cognitive strategies which are highly required for reasoning and interpreting information (Lun, 2010). These skills are also known as "higher order thinking skills", which differentiate them from the lower-level intellectual abilities of remembering, understanding and applying, as categorised by Halpern (1998) and Tsui (2006). Dispositions, on the other hand, are considered to be one's attitude, habits of mind, willingness and motivation to employ ones' skills in response to demand. According to Facione (1990), CT dispositions include: eagerness to investigate different kinds of issues; being well-informed; consciousness; believing in the reasonable; querying; confidence; accepting divergent views with open-mindedness; flexibility; consideration of others' views; fairness regarding the processes of reasoning and making judgements; equanimity in

accepting own faults; reflection; willingness to work in a complex situation; being attentive, and being consistent (p.2). Development of CT skills is one of the main goals of higher education and a key skill expected of university graduates in the UK (Ramsden, 2003). This view is supported by the National Committee of Inquiry (1997), which describes how the UK higher education (HE) system supports a culture which requires disciplined thinking, challenges existing ideas and encourages curiosity (para. 5). Similarly, the Framework for Higher Education Qualifications (FHEQ) in England, Wales and Northern Ireland (2008) demonstrates that successful students must be able to "evaluate ideas, arguments, concepts, assumptions and data critically, communicate ideas, information and conclusions effectively, deal creatively and systematically with complex issues, act autonomously in planning and management and implementation of tasks and be able to make sound judgements" (pp. 15-25).

It has been firmly established from the extracts above that international students need competencies not only in English language, but also in the educational practices and study skills which lie at the core of British university education. According to Tsui (2006), CT within the educational setting is, on the one hand, the formulation of arguments, analysis, interpretation and making sound judgements, and on the other hand the mechanism which these processes go through. As in other domains, CT in an academic context is also distinguishable by its conventions, rhetoric and standards, and considered to be crucial to the expression of scholarship. The quality of one's thoughts, spoken or written, largely determines the degree to which one is critical towards the construction of knowledge. These are the factors underpinning CT, which the current author considers to be the basis for developing the discussion in her thesis as to how these dimensions of CT can be realised in the performance of culturally and linguistically diverse students who are pursuing their higher education studies in UK universities.

Although the cultivation of CT is a current emphasis of UK HE policies, how different global cultures respond to this increasing emphasis on CT remains unresolved (Merriam, 2007). Egege and Koteleh (2004), however, argue that the standards and conventions of CT are not universal, but may be seen as culture-specific, and practices might vary in different cultures. Culture-specific conventions naturally come into play when determining the quality of expressions of thought (Canagarajah, 2002). Consequently, the challenge of becoming a critical/good thinker lies in the extent to which one's thoughts reflect the given academic discourse, as the mastery of such academic conventions does not occur naturally even for native speakers of the language (English), but comes after specific training. It seems

challenging to enforce CT in classes in British universities, as cultural diversity, which may have brought numerous social and economic benefits for the host economy, may also create serious issues concerning CT.

In recent decades, research studies have been conducted in the field of CT skills, involving a range of areas such as: cross-cultural comparison between students in Asian and Western cultures (Lun, 2010; Salili & Hoosain, 2007) systematic differences between native and non-native students' preferred cognitive styles (Nisbett *et al.*, 2002) the influence of individuals' language proficiencies on their CT practices (Cheng, 2000; Clifford *et al*., 2004), and Asian students' lack of CT ability (Lee & Carrasquillo, 2006; Paton, 2005). In the light of these studies, the differences in language ability and cognitive style might also affect students' CT performance within the host academic cultures. Although language abilities have been reported as one of the powerful variables in students' academic performance, the findings of Egege and Koteleh's (2004) study showed that the case is more complex than just language ability. International students encounter severe difficulties in coping with academic norms which seem unfamiliar to them (p. 76). This is because international students come with expectations which originate from their prior learning experiences, and which differ markedly from those of home students. These cultural differences appear when international students show their lack of ability to engage in classroom behaviours such as overt questioning, challenging others' ideas, giving their own opinions and critiquing. As these behaviours are associated with CT abilities (Tweed & Lehman, 2002), it is important to acknowledge the international students' perspectives about these norms.

Several other studies have also investigated CT from international students' perspectives, such as Costello (2007); Durkin (2008); Ridley (2004); Turner (2004) and Wong (2004), but those studies were limited in their implications. For example, some used different kinds of tests like CCTST and CCTDI to measure students' CT skills, others involved only Chinese international students and further studies were limited to Asian students only. Similarly, some studies involved just one discipline or just Master's level students etc. Research in the area of second language (L2) writing has clearly revealed the relationship between CT skills and dispositions, focusing on international students' CT levels, problems in ESL writing and the importance of critical writing. Researchers have also provided substantial evidence that those students with poor CT skills show deficits in academic writing, but no efforts have been made to investigate the nature of the initial CT-related problems faced by international students, or how approaches resulting from the lack of CT skills affect their studies from the start.

Generally, CT affects all the four skills of language learning but it plays a particular role in

writing academically. In the current study, the issues will be explored in the area of academic writing specifically, because the written form of language is a major means of testing student's knowledge of the differing content of different disciplines, and because academic writing at higher education level also involves features such as the formulation and evaluation of arguments, reflection, analysis, synthesis of information/ideas and drawing conclusions (Lillis & Turner, 2001). CT and academic writing are considered by writing professionals to be inextricably linked because of the demanding nature of CT in all disciplines. Thus it is logical to assume that orienting students towards CT would definitely be beneficial in moving students towards analytical/reflective writing, which is also called scholarly writing (Harris, 2006). Therefore, critical thinking and critical writing will be used interchangeably throughout the discussions of the present study.

In order to have a full understanding of the two key issues of students' problems and approaches in adapting to a new academic environment, this study, therefore, sets out to consider students from different cultural traditions, such as Middle Eastern, African, Asian sub-continental and Far Eastern traditions, as well as their British teachers' conceptions of CT, in order to find out the influence of cultural-educational context on the students' developmental process and practice of CT. As recognised by previous studies (Loyens *et al*., 2007; McLean, 2001), students' conceptions are negatively or positively related to their academic achievements. Similarly, in the case of teachers, having knowledge of what constitutes CT and how it should be valued is a key factor in contributing successfully to students' academic performance (Cosgrove, 2011; Paul, 1993).

Faculties and departments that teach international students face great challenges in their efforts to develop the effective use of CT, especially in terms of the academic writing of a wide variety of culturally and linguistically diverse students. The previous research literature shown here reveals a striking lack of relevant focus on the academic phenomenon of the current demand for higher-order thinking skills at university level study, in relation to international students' experiences in the UK. The present study, therefore, investigates the specific problem areas faced by international students arising from their lack of experience of CT in writing for academic purposes. A range of qualitative studies, such as Robertson *et al.* (2000); Lee & Carrasquillo (2006), and Kumaravadivelu (2003), found that faculty members who had experience of teaching international students expressed their dissatisfaction with the students' poor CT abilities, and identified difficulties in the students' ability to show CT in their writing. These observations suggest that the students showed a lack of ability to think critically. Therefore, it is necessary to examine what kind of problems result from the absence

of CT in students' writing in UK universities.

Learning approaches are another concern of UK academics because international students are generally perceived as passive, non-critical and rote learners (Ballard & Clanchy 1997; Cheng, 2000), which in turn often leads to poor learning outcomes. On the other hand, Ramburth and McCormick (2001) found no significant difference between Asian and Western students' use of learning approaches, and a recent study by Leung, *et al.,* (2008) has shown that students of the University of Hong Kong scored higher on deep learning approaches compared to their Australian counterparts. It is, therefore, important to identify any lack of congruence between the learning approaches of students from many different cultures in order to investigate the weaknesses and improve the quality of learning, as the majority of the research studies have, as illustrated in the literature review, mainly focused on Asian international students and have ignored students from other non-Western cultures.

Studies such as Howe (2004); Tiwari *et al*., (2003) and Robertson *et al*., (2000) have investigated the prominent role of cultural barriers in affecting students' academic performance. However, it is crucial to understand the factors affecting students' development of CT in terms of their native cultures because, without knowing the reasons for the lack of the key competencies, it seems illogical to solely investigate the students' problems and approaches. Montgomery (2007) points out that investigating students' cultural context is a fascinating and significant inquiry that has been a focus across continents throughout the last few years (p. 22). Otherwise, a lack of understanding may give rise to misconceptions among UK academics and students from many different cultures.

Needs analysis has been another key area which has been addressed in relation to international education (Hyland, 2006), in order to bridge the gap between students' previous study skills and the assessment demands placed on them in a new educational environment. Needs analysis in terms of their priorities should be the starting point of EAP programmes (Flowerdew & Peacock, 2001; Jordan, 1997). Needs analysis is also necessary with a view to proposing suggestions and models which might help reduce the serious challenge of CT and enhance students' performance in higher level education in British universities. Overall, the present thesis seeks to investigate the impact of cultural issues on the increasing importance of CT in HE system in the UK.

1.2. Research questions

The overarching goal of the present study is to identify international students' problems with, and approaches towards, CT in British universities. The research questions addressed by the present study have been generated by examining the relevant literature thoroughly, as well as through consultation with many international students and English-language teaching staff. The following three sets of research questions were framed for the current study:

1 i. How do international students and English-language teachers (ELT) conceptualise CT?
ii. What approaches do international students utilize or prefer to utilize towards writing?

2 i. What are the initial CT-related academic writing problems experienced by international students?
ii. What are the inhibiting factors to fostering international students' CT skills?

3 i. What is the role of EAP language learning modes towards CT practices?
ii. What possible suggestions/models would help to facilitate students' experiences of CT?

1.3. Overview of the research context and methodology

The researcher's choice of UK universities as the context for the current study is grounded in several factors. First of all, the UK is the country which receives the highest proportion of international students, including a variety of ethnic groups such as European, African, Australian, Asian, Middle Eastern and, North and South American etc., and which continues to seek more foreign students in order to improve its international and economic situation (Jordan, 1997). According to Higher Education Statistic Agency (HESA) (2011), of the total 428,225 incoming non-UK domicile students, 185,675 students came from Asia, 26,060 from the Middle East and 36,710 from Africa in the year of 2010/11. This may be because of the UK's high quality educational system and the provision of the best academic support available in universities for international students (Castro & Fernandez, 2005). Secondly, it is

useful to specifically research international students' experiences of barriers, and also their learning approaches, which have not been intensively researched in the context of British HE perspectives. Two UK universities were chosen to situate this research; both have been anonymised and coded as University A and University B. Although there are a large number of universities in the UK, only two were chosen for the purpose of this research due to issues of access and practicality. Furthermore, it was envisaged that two universities would be sufficient to investigate the issues under scrutiny, as the focus of the research was to investigate the perspectives of students from different cultural groups and both universities had a sufficiently large number of such students. This is something which has been strongly reflected throughout the data. The researcher is aware that the selected sample universities provide an interesting variation between in-house and franchised ESP provision, however, the purpose of the study is not to provide a comparative perspective between these two universities, but primarily to access a range of participants within the target population.

As international students come with different learning experiences and expectations, another way to attract them is to provide them with further assistance as a group, to help in meeting their cultural and academic needs. In terms of the academic support available in the universities, the language centres offer a range of language courses, including both pre-sessional and in-sessional programmes, in order to meet the academic needs of culturally diverse students. Pre-sessional courses are designed to provide students with: study skills; practical skills for reading and writing; speaking and listening skills in researching information; independent learning; team work, and presentation skills. In-sessional EAP courses, on the other hand, involve individual tutorials, workshops and group teaching to further develop students' study skills, including academic writing according to the assessment demands of the British education system. For the purposes of the current research, the majority of the target sample (12 teachers and 100 students) was chosen from pre-sessional language courses, while others (3 staff members and 5 students) were selected from the department of International and Community Education at University A, in order to conduct a study with a robust range. Regarding the associated methodology, a qualitative approach was used for collecting and analysing data. A qualitative approach was chosen in order to provide rich data on the difficulties and approaches of international learners in British universities. A qualitative approach also allowed for the exploration of different interpretations of CT. Multiple methods for data collection and analysis were used within this qualitative research paradigm. For example, participants were interviewed, some self-reported and others also kept learners' diaries. A case study was also conducted, in order to provide a baseline for the

other sources of data collection. The data were triangulated with staff interviews and documentary evidence to support the inquiry tools (Lewis-Beck *et al.,* 2004). A grounded theory approach (Corbin & Strauss, 2008) was used in order to generate themes, and then coding was undertaken in a way which was designed to explore the students' responses. However, this qualitative study was conducted specifically for the purpose of exploration and to fill the gap in the field, rather than to compare the different contexts.

Being an international student, the author has been well placed to investigate international students' perspectives, because of having a similar social and cultural-educational background, as well as personal experience of CT related problems in writing a text. This accentuates the need for original research in this area to provide a background to students' problems in terms of the lack of a critical approach in academic writing. This is also an attempt to identify the challenges and approaches encountered regarding CT, with a view to suggesting models for developing CT at the higher level of education. Furthermore, the dissemination of results from the current study may help to develop a clearer understanding of the phenomenon, and so contribute to providing possible solutions to the difficulties associated with critical thinking/writing.

1.4. Significance of the study

Universities in the UK have aspired to the ambitious goal of diversity in representing the world's different cultures in their student bodies, but in-depth understanding is still limited in terms of the major differences in cultural ideas that mean students make sense of the world in totally different ways. The current investigation seeks to make a modest contribution to the development of knowledge and the existing body of research in the field, by identifying the phenomenon of the lack of CT in different cultural-educational contexts. The study contributes by presenting a strong picture of non-English students' problems in, and strategies to, approaching CT tasks. This study confirms that almost all the non-English speaking and non-Western countries (included in the present study) have the same educational culture. The findings of the current study indicate that it would be a serious mistake to expect and require the same approach to learning from international students as those of the home student. The present investigation is crucially important for curriculum developers, educators and teachers of many different non-English speaking cultures, to help them review the current issues of higher education at a policy level, especially with regard to the development of academic

writing, both in general terms in the students' native language, and more particularly where English is a second/foreign language. This will help in the re-design of syllabi and in improving writing instruction in order to promote CT in university level education, in line with properly addressing students' needs and developing CT pedagogy. It is hoped that when it is realised, in cross-cultural countries, that there is a need to teach CT in order to tackle the obstacles to academic writing, most of the problems associated with this aspect of second language (L2) writing could largely be solved. Finally, of pedagogical importance, is that Western educators and policy makers should consider the developmental nature of these study skills when dealing with culturally diverse students.

1.5. Organisation of the study

The current study comprises seven chapters. This chapter presents the rationale and aims of the study, the main research questions, the context and methodology, significance of the study and organisation of the present thesis.

Chapter two draws upon a review of the existing literature in the current field of investigation in order to understand the definitions and importance of CT in the context of UK HE, to find out the underlying relationship between CT and different languages and cultures, and to investigate the problems which arise in international students' writing because of the absence of CT. It explores cross-cultural research on the learning approaches of international students and their difficulties in applying CT in their studies, and relates this to EAP practice.

Chapter three discusses the research methodology adopted for the current thesis. The principal methodology is qualitative in nature. The research methods are discussed in detail in terms of advantages and disadvantages. Ethical issues and gaining entry into the field are also highlighted. Sampling, data collection and data analysis strategies and procedures will then be discussed and explained. The study makes a contribution to the field by listening to the international students' own voices, where English is a foreign language or L2. This juxtaposition presents key points for comparison between CT development in the UK and that in many other non-English speaking contexts.

Chapter four provides the analysis of data such as the international students' conceptions of CT as well as the analysis of students' approaches towards academic writing, where a great majority of international students were found to choose surface rather than deep learning strategies.

Chapter five comprises students initial difficulties related to CT based on their social and educational experiences in their respective cultures. Inhibitory factors were also investigated amongst non-native cultures in the present study. The differences were explained by both the students and the faculty as representing cultural factors.

Chapter six reports the role of EAP language learning courses in fostering CT and analysis of the suggestions provided by international students themselves as well as English teachers to overcome these inhibitions to thinking critically.

Chapter seven is devoted to discussion of a summary of the findings and the important issues arising as a result; the contributions to research; recommendations for future work, and concluding thoughts.

CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

As the current investigation primarily focuses on the issues of critical thinking (CT) pertaining to international students' problems and approaches toward CT, this chapter reviews the relevant literature about several important aspects of these key issues namely: CT in the context of HE; international students' previous learning approaches; international students' problems in approaching CT tasks; and ways of bridging the gap between the learning processes of the native context and the actual writing performance in British universities.

2.2. Critical thinking in the context of higher education

Education will not, in itself, lead to a change in constructive learning, but rather to the way in which that knowledge is structured and conceptualized. Thus, education is not only the acquisition of information but the continuous process of knowledge construction. Research evidence shows that university students are not only expected to be a better workforce as a result of the transmission of knowledge and skills, but also to make contributions in the world as responsible citizens who are able to think well and learn independently (Barrie, 2004; Costa, 2006: ten Dam & Volman, 2004). Pither and Soden (2000) associate CT abilities with 'smarter' thinking, emphasized as expected from the university graduate, not only by government but by employers as well (p. 237). Kurfiss also points out in her book that if education is only to teach basic facts, then CT plays only a minor role and rote learning is sufficient. However, if the role of education is to develop greater reasoning skills in order to cope with and make decisions about life and society, then CT plays a central position, since reasoning is impossible without CT (1988: p. xv). This shows that the goal of HE is about more than just 'being knowledgeable', and is concerned with producing critical and independent learners.

Therefore, the focus of today's education has moved from mere knowledge retention, to developing intellectual abilities, and these abilities generally come under the term of critical thinking (Halpern, 1999; Pascarella & Terenzini, 2005; Phillips & Bond, 2004). Individuals' intellectual development, from the authors' viewpoint, is also necessary because of the direct

availability of a stream of information by means of electronic media. However, students need to learn how to differentiate between facts and opinions. Although there is considerable debate around the need to develop and enhance students' CT and its broader implications, defining the notion of CT is quite a "challenging task" (Johnson, 1992). Prior to the main discussion, the concept and precise meaning of CT need to be clarified.

2.2.1 Definitions of critical thinking in the literature

According to Paul (1993), the movement towards CT started in North America around the 1980s as the result of rapid global socioeconomic and political changes, following which educators began to argue for developing students' critical and creative abilities. Subsequently, the CT movement extended its influence to Europe and beyond. Since then, the need for teaching CT has become a topic of debate among educators, philosophers and psychologists. An overview of the definitions of CT in the mainstream literature is given as follows:

2.2.1.1. Overview of definitions of critical thinking

According to McPeck (1981), CT lies in active and reflective engagement (p. 8); for Paul (1992: p. 214) CT is a self-directed, systematic and appropriate form of thinking in order to bring perfection to a particular thinking mode, while Angelo (1995) stresses that CT includes rationality and higher-order thinking. Though intensive efforts have been made to define CT in the past three decades (Seigle, 1990; Norris & Ennis, 1989), most of the widely known definitions vary in their perspectives of CT. Some of these definitions are listed below:

Table 2.1: Different definitions of critical thinking

Dewey (1933)	CT is a change in personality to become more effective and doing best through the mental operations of thinking (p. 3)
Ennis (1987)	Reflective and reasonable thinking that is focused on deciding what to believe or do (p. 45)
Sternberg (1987)	The mental processes, strategies, and representations people use to solve problems, make decisions, and learn new concepts (p. 3)
Lipman (1988)	Skilful, responsible thinking that facilitates good judgment because it 1) relies upon criteria, 2) is self-correcting and 3) is sensitive to context (p. 39)

Siegel (1990)	CT includes logic, consistency, fairness and judgements, and critical thinking could easily move towards reasoning (pp. 23-24)
Halpern (1998)	CT is purposeful and goal-directed thinking, particularly using thoughtful and effective cognitive strategies, in order to increase desirable outcomes, to solve problems and to make decisions (p. 450)
Bailin *et al.,* (1999)	Thinking that is goal-directed and purposive, "thinking aimed at forming a judgment," where the thinking itself meets standards of adequacy and accuracy (p. 287)
Facione *et al.,* (2000)	Judging in a reflective way what to do or what to believe (p. 61)
Paul (2004)	Critical thinking is that mode of thinking - about any subject, content, or problem - in which the thinker improves the quality of his or her thinking by skilfully analyzing, assessing, and reconstructing it. Critical thinking is self-directed, self-disciplined, self-monitored, and self-corrective thinking. It presupposes assent to rigorous standards of excellence and mindful command of their use. It entails effective communication and problem solving abilities, as well as a commitment to overcome our native egocentrism and sociocentrism (cited in Scanlan, 2006: p. 12)

Dewey's (1933) definition of CT emphasizes improving an individual's thinking and stresses the capacity to weigh evidence and analyze ideas. Glaser (1941), on the other hand, sees CT as a set of skills related to logical inquiry, while Scheffler (1973) defines CT in terms of the ability to evaluate. Seigel (1990) sees CT as a process of reasoned and goal-directed thinking to improve actions and thoughts. Similarly, Lipman (1995) states that CT is a way of thinking skilfully to develop the skill of sound judgment for the purpose of self-correctness. Paul (2004) defines CT as the art of thinking in order to improve thinking, and argues that it is really difficult to synthesize the definitions of the complex skills of CT in one sentence. He also notes that some definitions are incomplete and limited, while CT leads towards valid arguments and conclusions which are substantiated and resistant to criticism. Although these multiple definitions of CT have many different perspectives (e.g., abilities, set of skills, process, reflection and action), they share the characterization of CT as a set of skills and a purposeful mental activity. Mayfield (2001) also summarizes those skills as the ability to: recognize assumptions; separate facts from opinions and make evaluations; ask questions and question the validity of evidence; verify information and listen to observe; seek to understand several perspectives, and seek the truth before reporting it.

Initially, most of the CT definitions focused on the individual's cognitive abilities/skills (Tishman & Andrade, 1996), but then attention turned to the recognition that one's having the skills does not assure that one is able to apply them well, when needed for a specific situation

(Ennis & Norris, 1990). For example, Ennis (1987) focuses on the idea of a means to an end in defining CT. In his initial definition (1962), he identified cognitive skills and then expanded his CT concept to encompass dispositions. Similarly Halpern (1998), Paul (1993) and Facione (1990) also described CT in terms of skills as well as disposition. Hale (2008), however, reports that the differences in the above definitions of CT led to a search for a more precise definition of the concept of CT. The best statement about CT can be seen in the consensus definition by a panel of experts under the auspices of the American Philosophical Association (Facione, 1990).

2.2.1.2. Consensus definition of critical thinking

For the purpose of educational instruction and assessment, the American Philosophical Association (APA) invited a cross-disciplinary panel of forty six experts, who completed a two-year "Delphi Report", to reach a consensus definition of CT. According to Reed (1998, p. 28), about half of the participants (52%) were related to the field of philosophy; 22% were affiliated with education; 20% were from a Psychology background, and 6% belonged to the Physical Sciences. The consensus definition has further become a cornerstone of CT research. To define CT, the experts used various terminologies and framing approaches in order to gain insight into the different disciplines. They understand CT in the following way:

> "We understand critical thinking to be purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation, and inference, as well as explanation of the evidential, conceptual, methodological, contextual considerations upon which that judgement is based." (APA, 1990: p.2)

The consensus definition is to some extent similar to the definitions of CT developed by other theorists, such as Ennis (1987; 1993), Halpern (1993), Paul (1993) and McPeck (1990). The consensus definition posits CT as a tool of inquiry for achieving a particular purpose in relation to decision-making and problem-solving. According to the panel of experts, CT is seen as a two-dimensional concept incorporating: 1) general cognitive skills, and 2) dispositions, in order to reflect one's beliefs (Facione, 1990).

CT comes within the dimension of cognitive skills; cognitive skills are essential for reasoning, which is a vital component of CT and can be achieved through using the cognitive abilities of argument analysis and evaluation, and the way knowledge and information is transformed (Lun, 2010: p.15). Evaluation and argument analysis are referred to as higher-order thinking

skills, in contrast to lower-order thinking skills such as memory, understanding and application (Halpern, 1998; Tsui, 2006). Higher-order thinking skills involve higher-level complexity, analysis and the absence of rote learning, while lower-order skills are unable to apply well-learned rules and principles effectively (Halpern, 1998: p. 451). Similar kinds of categorization can also be seen in Bloom's (1956) taxonomy of educational objectives as well as in John Biggs's (1978) SOLO taxonomy in the cognitive domain. According to the consensus definition of the Delphi experts, cognitive skills are further broken down into sub-skills, which are given in the table below.

Table 2.2: Summary of the taxonomies of cognitive skills in the consensus definition

1. Interpretations	categorization, decoding significance, and clarifying meaning
2. Analysis	examining ideas, identifying arguments, and analyzing arguments
3. Evaluation	assessing claims and assessing arguments
4. Inference	querying evidence, conjecturing alternatives, and drawing conclusions
5. Explanation	stating results, justifying procedures, and presenting arguments
6. Self-regulation	self-examination and self-correction

Many sub-skills in addition to the cognitive skills were identified by the Delphi experts, and these include: clarity of meanings and thoughts; classification and categorization; significant transformation from one context to another; identification, examination, assessment and analysis of ideas, claims and arguments; interpretations of alternatives; justification of evidence and procedures; self-examination; summarising, and concluding. The above list of intellectual skills and sub-skills is an organised framework of CT which has been explained for each particular stage. Similar kinds of cognitive skills are categorised by Pascarrela and Terenzini (2005), such as: identifying and recognising arguments, assumptions and central issues; referencing properly, and interpreting and drawing conclusions on the basis of evaluative data (p. 156).

CT also comes within the dimension of dispositions; CT is seen not only as a set of cognitive skills, but also as including dispositional aspects, which have been described differently by the different theorists (Ennis, 1987; Facione, 1990; Halperns, 1996; Paul, 1993). For example, Ennis (1987) identifies the following CT dispositions: 1) trying to make clearer statements; 2) being well-informed; 3) seeking reasons; 4) identifying credible sources; 5) considering the

whole situation; 6) trying to be focused and open-minded; 7) being concerned with originality; 8) identifying alternatives; 9) providing sufficient evidence; 10) trying to be precise and relevant; 11) manually and systematically dealing with complexities, and 12) trying to be sensitive (p. 46). Similarly, according to Halpern (1996) and Paul (1993), CT dispositions are described as: being active and responsive; persistence and willingness to cope with complexity; planning, flexibility and open-mindedness; focusing on self-correctness; putting thoughts into action in order to face social realities, and intellectual commitment to the use of CT abilities and attitudes. The writers have related CT dispositions to individuals' behaviour, which could lead to difficulties in identifying the exact nature of CT dispositions. The Delphi Report states that critical thinker must be:

> "Habitually inquisitive, well-informed, trustful of reason, open-minded, flexible, fair-minded in evaluation, honest in facing personal biases, prudent in making judgements, willing to reconsider, clear about issues, orderly in complex matters, diligent in seeking relevant information, reasonable in the selection of criteria, focused in inquiry, and persistent in seeking results which are as precise as the subject and the circumstances of inquiry permit" (APA, 1990: p. 3).

A summary of the taxonomies of CT dispositions is given below:

Table 2.3: Summary of the taxonomies of CT dispositions in consensus definition

1. Inquisitiveness with regard to a wide range of issues	2. Concern to become and remain generally well-informed
3. Readiness to embrace opportunities to use critical thinking	4. Trust in the process of reasoned inquiry
5. Self-confidence in one's own ability to reason	6. Open-mindedness regarding divergent world views
7. Flexibility in considering alternatives and opinions	8. Understanding of the opinions of other people
9. Fair-mindedness in appraising reasoning	10. Honesty in facing one's own biases, prejudices, stereotypes, egocentric or socio-centric tendencies
11. Prudence in suspending or altering judgements	12. Willingness to reconsider or revise a view where honest reflection suggests that change is warranted
13. Clarity in stating the question or concern	14. Orderliness in working with complexity
15. Diligence in seeking relevant information	16. Reasonableness in selecting and applying criteria
17. Care in focusing attention on the	18. Persistence though difficulties are

concern at hand	encountered
19. Precision to the degree permitted by the subject and the circumstance	20.

The Delphi experts explain that a critical thinker must be able to: state the results of his or her own reasoning; justify that reasoning in terms of the evidential, conceptual, methodological and contextual considerations upon which those results were based, and present his or her reasoning in the form of cogent arguments (Facione, 1998: p. 6). The CT dispositions shown above are apparently related to human behaviours and are important for those who perform CT. According to Lun (2010) it is, however, reasonable to describe CT as an individual's tendency to use CT skills when needed. She further summarizes the common definitions of CT dispositions from four main theorists (Ennis, 1987; Facione, 1990; Halpern, 1996; Paul, 1993) as being: open-mindedness; being flexible in conjecturing alternatives; moving on the basis of evidence; persistent engagement with CT, and being aware and responsive (p. 20). Therefore a critical thinker must show flexibility, open-mindedness and consistency in engaging CT, and they also need to explain the procedures involved in reaching judgements. Research has also described CT dispositions in terms of attitudes, willingness, habits of mind and motivation to employ CT abilities (Facione *et al.*, 2000; Halpern, 1999).

Yang and Chou (2008) argue that CT skills alone are not sufficient to become a good critical thinker but that CT dispositions are also necessary. This section, however, highlights the relationship between CT skills, CT dispositions and cognitive strategies. According to Paul (1992), Facione*, et al*., (1997) and Norris (1991), the purpose of education includes both the development of CT skills as well as the fostering of CT dispositions. Giancarlo and Facione (1994), in their study of 193 high school students, reported a positive correlation between scores for CT skills and dispositions. Similarly, Colucciello (1997) and McCarthy *et al.* (1990) also reported a significant positive correlation between these two variables, while the analysis of Rimiene's (2002) study based on pre-test and post-test, found no significant difference between abilities and dispositions for CT. The results of these studies also suggest that students need continuing development towards CT disposition. On the other hand, Facione (2007) argues that critical thinking skills (CTS) and critical thinking dispositions (CTD) are two separate variables; having CT skills does not mean that one also has the disposition to use them. However, cognitive strategies, such as asking questions, reflecting, clarifying, analysing and summarising are crucial in generating and developing both CT skills and CT dispositions (Olson & Land, 2007), as well as in increasing desirable outcomes

(Halpern, 1998).

To sum up, considerable overlap and continuous modification can be seen in the theorists' points of view in defining CT. A critical attitude further helps a person to reflect in a thoughtful and supportive way in order to question, interpret, analyze and judge others' work. However, Paul and Elder (2008: pp. 2-3) argue that CT is a foundational set of meanings which is applicable to a variety of settings. Although both aspects of CT (skills and dispositions) are significant, international students whose cultures promote reproductive approaches to learning rather than CT development may not place the same values on them (Yang & Chou, 2008). Such approaches thus hinder the students' thinking habits and capacities, which can be seen as a cultural phenomenon. However, the present study is particularly concerned with both the dimensions, which are vital in thinking critically for academic writing since learners require specific attention to lead them to be able to formulate their own ideas and understand the implications of using these CT skills and dispositions. In relation to the development of critical thinking, John Biggs' SOLO taxonomy (Biggs, 1978) offers a useful guideline for evaluating cognitive development in terms of critical thinking. The next section provides the relationship between concepts of critical thinking and the SOLO taxonomy of learning, which gives a sense of where critical thinking sits in relation to the learning process.

2.2.2. Critical thinking and the SOLO taxonomy of learning

The SOLO taxonomy refers to the Structure of Observed Learning Outcomes (Biggs, 1978) which describes a hierarchy where each partial construction [level] becomes a foundation on which further learning is built (Biggs, 2003: p.41). The SOLO taxonomy consists of a progressive hierarchy of five levels, namely, Pre-structural, Uni-structural, Multi-structural, Relational and Extended Abstract levels, with Pre-structural marking lower-order skills at one end, and Extended Abstract marking higher-order cognitive skills at the other. The details of these different levels of cognitive skills and their associated examples can be seen in Figure 2.1 below.

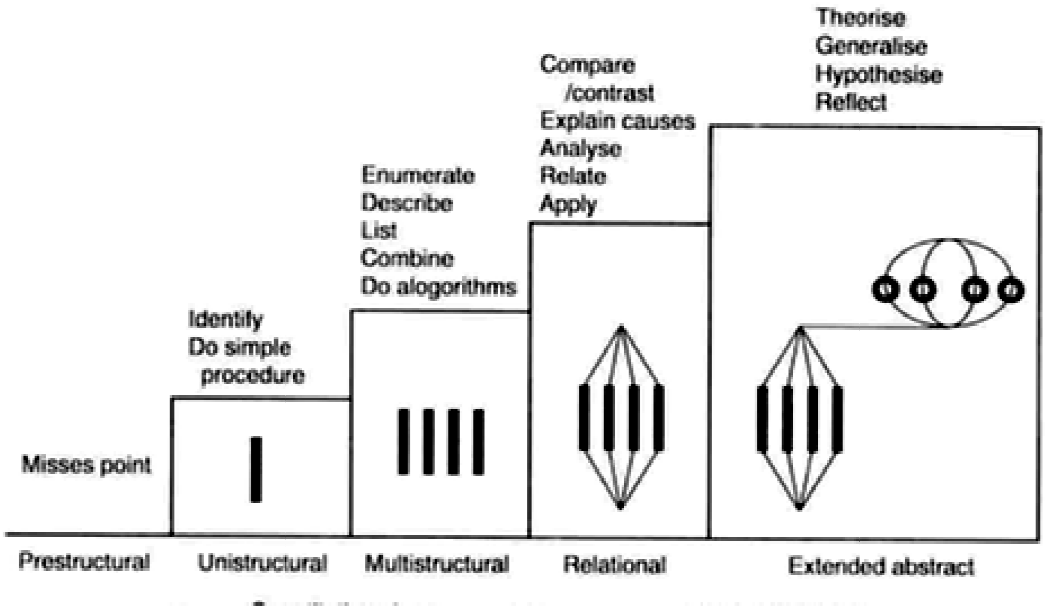


Figure 2.1: The SOLO taxonomy. Adapted from John Biggs (1999:67)

At the 'Pre-structural' level, students are not able to show logical relationships in their responses, a factor which is based on tautology and their inability to comprehend. At the next level, 'Uni-structural', students' responses contain one relevant item from the display, but miss others that might modify or contradict the responses. There is a rapid closure that oversimplifies the issue. At the 'Multi-structural' level, responses contain several relevant items, but only those that are consistent with the chosen conclusion are stated. Closure is selective and premature. Most or all of the relevant data is used at the 'Relational' level, where conflicts are resolved by the use of a relating concept that applies to the given context of the display and leads to a firm conclusion. Finally, at the 'Extended abstract' level, the context is seen as only one instance of a general case. Questioning of basic assumptions, counter examples and new data are often given that did not form part of the original display. Consequently, a firm closure is often seen to be inappropriate (Biggs & Tang, 2007).

The upper two levels of the SOLO taxonomy have usually been associated with the cognitive skills of critical thinking (Tsui, 2006). On the other hand, the lower three levels are more related to acquisition of knowledge and information. However, the SOLO taxonomy helps to understand and express the various levels of critical thinking competencies from lower to higher. It also provides comparability and 'alikeness' in the standardisation of surface and deep level learning. As university level education has higher expectations of the development of critical thinking skills, it is reasonable to assume that terms related to the upper two levels of SOLO taxonomy will be more frequently focused on in assessing students' academic

performance. For example, when assessing students' writing, students' actual knowledge cannot be measured, therefore it is important to focus on what *competencies and skills levels* the students are expected to have in terms of 'constructive alignment' (Biggs, 2003). The avenue for identifying CT related educational practices lies in the assessment criteria for students' performance. The National Qualification Framework (NQF) (2008) demonstrates remarkable similarities between the skills required and the upper levels of the SOLO taxonomy in all categories, such as students' ability to 'critically reflect' and 'evaluate' their strategies in applying skills. The next section provides a more systematic discussion of the SOLO taxonomy and its application of such levels by the NQF in the UK HE system.

2.2.3. Critical thinking in the UK higher education perspective

The UK is one of those Western countries where academic practice is rooted in the pursuit of Socratic thinking (which is considered the main form of reasoning), such as argumentation, logical reasoning, evaluation and seeking truth through thinking critically. Thayer-Bacon (2000) calls it "a battlefield mentality", which emphases a critiquing, logical and supporting evidence approach in order to accept or reject an assumption, idea, concept or theory. According to Paul Ramsden, a substantial voice in UK HE, teachers are seeking to develop students' CT abilities across subject matters and language diversity (2003: pp. 22-25). The majority of relevant studies have also put emphasis on developing students' CT skills at university level (e.g. Bauer & Liang, 2003; Tsui, 2006). Davies (2003) concludes that CT is a fundamental requirement of university education, which demands students to be critical and analytical in their learning approach in order to achieve a deeper understanding of issues, to evaluate evidence in support of arguments and to analyze material critically. One of the main reasons behind the rapidly increasing emphasis on CT development is that the national government and employers organisations argued for preparing students to be able to think well (Pithers & Soden, 2000: p. 273).

The position of CT as a main goal can be seen in Government documents such as the National Committee of Inquiry in the UK HE (1997), which emphasizes that higher educational culture in the UK requires the generation of new ideas by challenging old ones, demands disciplined thinking and encourages curiosity (para. 5). The Framework of Higher Education Qualifications in the UK (2008) also underscores this fact. For example, students at undergraduate level are required to evaluate different problem-solving approaches appropriately, and demonstrate accurate, reliable and coherent arguments, using a wide variety

of techniques to analyze the information critically and propose alternative solutions to problems, developing existing skills and acquiring new competences in order to make sound judgments (pp.16-19). Similarly, to summarize the extract given in the HE Qualification Framework, Master's and Doctorate level students should be able to:

- Critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgments, and to frame appropriate questions to achieve a solution - or identify a range of solutions - to a problem.
- Communicate information, ideas, problems and solutions to both specialist and non-specialist audiences.
- Deal with complex issues both systematically and creatively, make sound judgments in the absence of complete data, and communicate their conclusions clearly to specialist and non-specialist audiences.
- Demonstrate self-direction and originality in tackling and solving problems, and act autonomously in planning and implementing tasks at a professional or equivalent level.
- Continue to advance their knowledge and understanding, and to develop new skills to a high level.
- Make informed judgments on complex issues in specialist fields, often in the absence of complete data, and be able to communicate their ideas and conclusions clearly and effectively to specialist and non-specialist audiences

(2008: pp. 16-24)

The descriptors above show that students at the higher level of education should have a sound knowledge of the basic theories and concepts in their field of study. They should not only have an ability to communicate accurately, clearly and evaluate arguments and evidence but also dispositions such as the readiness to approach CT opportunities and trust on the process of reasoned inquiries. These NQF descriptors clearly refer to the upper levels of the SOLO taxonomy, particularly the ability to explain causes, relate and compare, analyse, apply, reflect and generate theory. Whilst the SOLO taxonomy offers a straightforward way to classify instructional activities in order to assess students' academic performance, the NQF levels also provide a primary understanding of the practice of critical thinking within the instructional contexts of British educational cultures. As all courses must be structured according to these descriptors, it helps to understand expectations of students' cognitive development in terms of thinking critically. These expectations of learning outcomes show the importance of CT in an educational context, while the course structures reveal the actual practices in relation to CT development. According to Tiwari et al. (2003), in order to provide the greatest benefit to students, the instructional contexts should provide many opportunities for students to participate at the upper levels of cognitive engagement, where critical thinking takes place.

Similarly, in the context of the present study, critical thinking is deemed to take place when students are required to perform at the *upper two levels* of the SOLO taxonomy.

Although cultivation of CT is a current emphasis of UK higher education, as well as that of any culture influenced by global changes, how different cultures are affected by this increasing emphases on CT is a hot topic for research nowadays (Merriam, 2007), because culture has an important influence on how CT is perceived and exercised (Lun, 2010). This raises many further questions, such as how CT is valued, as well as how it affects students' academic performance, in different cultures. Therefore, the aim of this thesis is to investigate the extent to which international students feel able to realize CT in their own writing and the extent to which their perceptions of CT match the actual demands posed by assessment in the UK HE system.

2.2.4. Critical thinking in the cultural-educational context

The increasing demand for the development of university students' intellectual abilities is crucial but challenging, due to the current influence of global change in terms of cultural diversity. Definitions of culture are usually understood in terms of shared views and meanings, behaviours, knowledge, beliefs and values (Merriam, 2007). According to Lun (2010) "shared meanings, norms, expectations or values are cognitive phenomena that cannot be known through one's senses, so observable behaviours are used as indicators of the unobservable culture" (p. 3). This aspect of culture may be a consequence of the increasing flow of shared information among people in different cultures. This, however, moves the focus of individuals towards new culture-specific knowledge and experiences.

Previous research literature claims that teaching and learning practice is different in different cultures. These differences and the interplay between different cultures further lead to the difficulties of culturally diverse students in meeting the demands of a dramatically changing world. Due to practices brought about by social change, theorists and educational policy makers are facing challenges (Crossley, 2000). Previous studies have confirmed that the impact of culture on education could be best investigated by examining and relating the existing educational concepts and theories across different cultures; for example, the well-established Western educational concept of CT, which has been challenged for its applicability to non-Western cultures (Li, 2002; Salili & Hoosain, 2007). The National Council for Excellence in CT Instruction (2003) takes the view that CT is based on universally valued components, which are: clarity of meaning; language accuracy; precision; consistency;

relevance; reliable supporting evidence; logical reasoning, and depth. Egege and Kutieleh (2004), however, disagree with this view, and state that the techniques of reasoning advocated by Western academics seem to be cultural rather than universal. HE academics have also acknowledged that the challenges which international students face because of their lack of CT skills stem from the differences from their own cultural-educational context (Bacha, 2002).

Due to this growing cultural difference, the debate concerning the significance of cultural context has turned to the question of how culturally diverse students studying in Western Anglophone countries such as the UK, USA, Australia and Canada, approach CT tasks (Jones, 2005; Kelley, 2008; Paton, 2005). Previous studies have explained those cultural differences in terms of two main philosophical traditions: the Confucian and the Socratic. According to Tweed and Lehman (2002), Confucius emphasizes goal-based learning, with the goal being self-perfection in morality and behavioural reform among individuals, which encourages learners to be respectful to their authorities. On the other hand, Socratic philosophy, it is alleged, is based on the tendency to constantly challenge, question and evaluate ideas, beliefs and knowledge, in order to arrive at a rational judgement.

Hammond and Gao (2002) further explain that initially, both the philosophical traditions were student-centred, and applied discussion and interactive approaches; however, educational practices became the preserve of a privileged group due to historical developments in both the East and the West, which affected the teacher-student relationship. As a result, both systems then turned to the teacher-centred practice of education, which emphasized top-down transmission of knowledge, and changed their focus towards rote memorisation (Lun, 2010). Research evidence also shows that subsequently, Western educational systems then moved towards a more interactive mode, involving independently generated knowledge, objective thought and personal freedom, with the result that the Western educational systems now coincide with the Socratic style of education, and tend to encourage the development of students' CT abilities (Paul, 1993, cited in Lun, 2010). Meanwhile, the Asian education culture has remained the same, with a teacher-centred approach and one-way transmission of knowledge, where questioning behaviours are not encouraged or practised (Merriam, 2007). The observable difference in the level of CT between the educational practices of the Confucian and Socratic philosophies seems to be a key factor in successful performance in English-speaking universities.

Although the research literature above has classified the initial cultural differences in two main philosophical traditions, this seems a broad brush approach in relation to the present

study. 'Western' education might be seen as encompassing some quite distinct traditions, and the distinction between systems that do and don't encourage CT may be seen as determined by more national cultures and historical contexts. UK is one of the Western countries, where HE system have traditionally based on the open discussions, critical debate and argumentation (Durkin, 2008) and where the development of students' CT skills is a key characteristics and highly emphasised in the Government documents (Pither & Soden, 2000).

In addition to these views, cultural differences have been explored in terms of two lines of theory which can be described as language abilities and cognitive styles. It has been noted in the research literature that language has become an instrument of reasoning in the true sense and reflects human intellectual capacity as well. According to Lun (2010: p. 126), "behavioural manifestations of CT, such as critical debate, argumentation, or even writing an argumentative essay, require the appropriate use of language." Previous research (Clifford *et al.,* 2004; Halpern, 2006; Hau *et al.,* 2006) has shown the significant positive relationship between language ability and CT skills. In relation to international students, Paton (2005) speculates that the perceived inability of Asian students to adopt CT could possibly be due to their linguistic difficulties in second language (L2) academic discourse. Though CT skills are equally needed by English-speaking as well as international students, language plays an effective role in hindering international students' expression of CT. The demand for higher level language proficiency in academic tasks may result in cognitive overload for international students, and this might cause them to be less expressive of critical thoughts.

On the other hand, Egege and Koteleh (2004) argue that while no-one can dispute the importance of students' linguistic abilities, the results of their study showed that the case is more complex than just language abilities. Research studies which focus on the cognitive differences between Asian and Western students suggest that analytical cognition is more likely to have a positive effect than holistic cognition, which might be negatively related to CT, and these preferences may result in the low CT performance of international students in academic discourse. Most of all, these differences affect the ways students express themselves through writing. International students often face writing challenges because they adopt passive learning styles and avoid debate or criticism of the material raised in class (Barker *et al.,* 1991: p. 80). Paul and Elder (2006) suggests that CT tools should be part of everyday routine in learning, in order to improve and deepen students' knowledge and reasoning even while approaching writing (p. 38). Next section deals with the learning approaches of culturally and linguistically diverse students.

2.3. International students' approaches to learning

Learning approaches are the methods that students adopt to conduct their academic tasks, thereby relating negatively or positively to the learning outcomes. Psychologists and philosophers have identified different learning approaches as consisting of deep, surface and achieving learning approaches (Biggs, 1987; Entwistle, 1997; Haggis, 2003; Marton & Saljo, 1976; Volet & Chalmers, 1992). This section reviews these deep, surface and achieving approaches, and in particular, research into international students' learning approaches, since HE in the UK represents a cultural, linguistic and social diversity which is greater now than ever in the past.

2.3.1. Deep, surface and achieving approaches

Nearly 30 years ago, Marton and Säljö (1976) introduced the two concepts of 'deep' (associated in meaning with construction) and 'surface' (associated with memorisation and reproduction) approaches to learning; since then, the fundamental differences in students' learning approaches have been the subject of many studies. Some have investigated the students' ways of approaching learning qualitatively (Marton & Saljo, 1997); while others, such as Entwistle (1994), and Biggs (1987), look at the approaches using questionnaires in a quantitative way. Despite the differing aims, research methods and findings of the aforementioned studies, they were all agreed on the dichotomy between deep and surface approaches to learning (Prosser & Trigwell, 1999). Besides these two (deep and surface) approaches, Biggs (1994) also identified a kind of mixed learning approach, called the strategic/achieving learning approach, which can be switched to deep or surface according to the demands of the context.

The deep approach focuses on the meaning of learning and relating previous knowledge to newly learned materials, and to life experiences as well (Haggis, 2003). The deep approach to learning might be adopted because of the crucial need for it in future employment. In contrast, surface learning approaches are associated with the memorization of discrete facts, reproduction of terms and procedures through rote learning, and viewing learning tasks in an isolated way; this might be adopted for more peripheral components of learning. The third approach of learning, called 'strategic' or 'achieving', is associated with the ability to switch between deep and surface approaches, rather than being a distinct approach to learning in

itself. Using a strategic or achieving approach seeks an optimal outcome in which the achievement rate could be raised higher through effort (Biggs, 1996; Entwistle, 1994; Haggis, 2003; Volet, 1999). The writers of these studies further explain that deep learners are intrinsically motivated to learn, while students using surface learning approaches are motivated by external factors such as the desire to obtain a qualification or the fear of failure. On the other hand, the achieving approach to learning is motivated by visible success such as high grades regardless of interest; it involves organising time and workspace, and the focus is on what to expect, planning and prioritising.

Previous literature above also provides the empirical basis of the relationship between students' learning approaches and a particular academic context. In relation to academic writing assessment criteria, Elander et al. (2006) suggest that assessment criteria describe the properties of work resulting from a deep approach to learning, and that whilst skills are amenable to training, deep approaches to learning are associated with motivational factors and active student engagement in the discipline. Since a deep approach to learning is desirable, and since assessment criteria codify desirable qualities of students' work, it is perhaps natural to assume that the criteria represent the expected outcomes of a deep approach to learning (pp.74-75). Another study, by Scouller (1998), shows that comprehensive essays are more likely to be associated with a deep learning approach. According to Fabb & Durant (1993), deep approaches help in using appropriate language as well as other conventions, which are transferable and considered as skills (p.74). Saljo (1979) identifies five learning concepts, which are further replicated and developed by Beaty *et al.* (1990), who characterize the learning concepts shown below:

1. The learning concept is a process mainly designed to gain information and expand general knowledge.
2. The learning concept is a process that primarily repeats information in a certain field in order to transfer it to a different situation (a lesson or a test) by imitation.
3. The learning concept is a pragmatic process; the primary goal of learning is applying the learned knowledge.
4. The learning process is a concept of understanding and discovering, which produces new insights about previous, acquired knowledge and its relation to new terms.
5. The learning process is a concept of directed interpretation to

understand reality.

6. The learning process is a designed and formulated concept, which causes changes in the individual's vision of the world and helps him achieve greater self-realization.

Many other researchers also suggest a similar kind of categorization to that illustrated above (e.g. Van Rossum & Schenk, 1984; Saljo, 1979), and they further explain that students whose learning approach coincides with the first three categories tend to adopt the surface approach, while those whose learning approach matches with the last three characteristics are considered deep learners. Ramsden (1991) classifies the six characteristics into a first and second group: the first group (items 1, 2 and 3) represents an approach that considers learning as a process which is based on external factors. The second group (items 4, 5 and 6) emphasises the personal and inner dimensions of learning (p. 76). According to this discourse of the learning process, international students are portrayed as passive, rote learning, uncritical, surface and reproductive learners, who are happy with the "teacher-centred" learning environment, as proposed by Conway and Ashman (1997), which is promoted through the examination-based system (Ballard & Clanchy, 1997). The general argument could lead to the validity of these learning approaches in terms of the international students' native educational context, but in Western universities the critical and analytical approaches to study are essential, and are features which promote independency and focus on developing the skills of arguing, discussing and debating, both in formal assessments, and in the application and manipulation of knowledge.

2.3.2. Relationship between critical thinking, deep approaches and academic performance

According to Bailin *et al.,* (1999) CT is not only the repetition of skills, but also the development of related knowledge and skills (p. 280). Similarly, the argument aspect of CT can be related to deep learning in terms of formulating new ideas/claims and justifying conclusions on the basis of evidence (Marttunen & Laurinen, 2001: p. 139). Therefore it is suggested that students should be encouraged to adopt a deep/critical learning approach rather than a surface one, because choosing a deep strategy depends largely on the students' commitment to reaching a complete understanding of the subject matter (Biggs, 1994). The following characteristics are a reflection of using the deep approach: being able to present the

entire picture of different aspects of the study; the ability to relate new knowledge to previous knowledge; the ability to relate the learning materials to everyday life experiences; a tendency to use meta-cognitive skills, and the ability to use a critical perspective to obtain alternative solutions to problems (Biggs, 1996). Learners who take deep approaches are often academically high achievers and maintain feelings of great satisfaction in their learning.

Critical approaches towards learning have received more attention in recent years, as higher education demands active and reflective learning in order to achieve the desired learning outcomes (Tagg, 2003). In particular, the shift has been moved from passive to active and from a teacher-centred to a learner-centred approach, by engaging students in a deeper level of reasoning to make them capable of applying their skills to real life situations. Higher education institutions are fostering deep approaches to learning because deep learning approaches focus on substance and the underlying meaning of the information, and an understanding of the key concepts (Bowden & Marton, 1998). In contrast, surface approaches are based on rote memorization with the purpose of studying for a test or exam to avoid failure (Biggs, 1989). In exploring the relationship between CT and learning approaches, the recent study of Thomas *et al.* (2008) shows that students' engagement with the analysis of information, understanding of alternatives and synthesis is the reflection of deep learning approaches (p. 4). Chapman (2001) examined the development of CT skills in students of an introductory Biology course after deep approaches had been emphasized. Following the notion that "students learn best when actively constructing their understanding rather than absorbing it" (p.1157), Chapman found that CT skills were developed when traditional content was removed to make room for more complex learning. In other words, when instructors emphasized a meaning-oriented approach (deep), rather than reproducing-oriented approach (surface), it gave students more time to deeply engage in the material, so leading to the adoption of CT skills (Chapman, cited in Thomas et al., 2008: p. 15). It can be inferred from the research literature mentioned in this section that CT and deep learning approaches are inter-related, and have a significantly positive effect on students' academic performance. Therefore, critical and deep approaches will be used interchangeably throughout this thesis.

The findings of Thomas et al.'s (2008) study suggested that deep learning approaches also had a strong positive relationship with CT dispositions, such as having the "habits of mind" typical of a critical thinker. This also suggests that, "even after controlling for student characteristics, the more a student is exposed to higher level cognitive tasks in class, thinks reflectively about learning, and integrates ideas and concepts across contexts, the more that student will view him or herself as a critical thinker, having characteristics like open-

mindedness and inquisitiveness" (Thomas *et al.,* 2008: p. 15). Deep approaches to learning are also associated with enjoyment (Tagg, 2003), better information processing (Ramsden, 2003) and personal commitment, such as discussing, understanding and constructing ideas with different perspectives (Biggs, 2003).

On the other hand, the studies of Zeegers (2004) and Gadzella *et al.* (1997) show a relationship between CT approaches towards learning and high grades, as discussed in the section below. The relationship between learning approaches and academic performance was also central to the cross-cultural study of Watkins and Biggs (2001), but the findings were rather disappointing, with correlations of 0.11 for surface and 0.16 for deep approaches. These kinds of results are generally blamed in the literature on their lack of reliability (Biggs, 1987; Scouller & Prosser, 1994). However, the majority of studies agreed on positive correlation between academic performance and deep approaches and negative correlation between academic performance and surface learning approaches (McKensie & Schweitzer, 2001; Zeegers, 2004; Zhang 2001). Entwistle *et al.* (2003) point out that the results of the research vary according to the differences in the procedures. For example, study by Minbashian *et al.* (2004) clarifies that that question difficulty during exam could be an intervening variable.

In contrast, the surface approaches to learning are generally seen as: resulting in low grades; are less satisfying; are dominated by rote strategies, show minimum interest in relating to the materials; involve studying in a linear manner, without showing an in-depth understanding, and rely on memorization rather than comprehension in order to fulfil the task (Biggs, 1994; Ramsden, 2003; Tagg, 2003). This approach shows less inclination to use cognitive skills, and is motivated chiefly by students' need to avoid failure. Besides the characteristics of both the learning approaches, an interesting question is their relationship to learning outcomes. These studies have shown consistent results in associating deep learning with higher quality, and surface approaches with low quality learning outcomes. The study of Trigwell and Prosser (1991) has also found a positive correlation between critical/deep approaches and higher grades, and between a surface approach and low marks. Similarly another study has related a deeper approach to higher order learning skills as well (Murphy & Alexander, 2002).

Being an international student researcher, it is really interesting to investigate the important area of international students' (those from non-English speaking cultures) learning approaches, and the effect of these approaches on their academic performance in the British HE context. Academic performance, in this case, means the general level of grades in their written work, such as essays, assignments, dissertations and theses, which are perceived as assessing higher levels of cognitive processing. The research reported above contributes to the

advancement of the current study of international students' approaches using qualitative research methods, as many previous studies have employed quantitative methods such as Biggs' Student Process Questionnaire (Biggs, 1987) and the Approaches to Studying Inventory (Entwistle & Ramsden, 1983).

2.3.3. Research on international students' learning approaches

The learning approaches of international students represent another area of interest which might influence students' academic writing performance. Though CT has become one of the crucial learning practices and is often presented as a core academic skill for succeeding in university education in the UK, the case is not same in all cultures (Vandermensbrugghe, 2004). Therefore, having to adapt to an unfamiliar learning approach is always a great challenge for international students because of the expectations and experiences they bring with them from their previous learning backgrounds. Ridley (2004) argues that in higher education, the nature of the different disciplinary discourses can be confusing and mysterious for students who are diverse culturally and linguistically. Huang (2006) also describes the fact that problems arise when Chinese international students are confronted with the expectations of UK academics. Studies have also shown the notable relationship between students' approaches to learning and cognitive activities, which are most likely related to deep learning methods, including self-evaluation of ideas, self-questioning and looking for a range of alternatives (Chin & Brown, 2000; Case et al., 2002).

The research literature also shows a big difference between international students' classroom behaviours and educational expectations in the West (Atkinson, 1997; Davidson, 1998; Lee & Carrasquillo, 2006). Some associate these behaviours with the Confucian values of respecting authority (Cheng, 2000; Kumaravadivelu, 2003), considering the fact that Asian and Western educational cultures have been influenced by Confucian and Socratic philosophy respectively (Hammond & Gao, 2002; Tweed & Lehman, 2002). While some others consider this a misconception (Kim, 2003), because the ability advocated in CT, to formulate arguments with flexibility and open mindedness was the basis of Confucianism (Hammond & Gao, 2002). Thus, on the basis of the views illustrated, it is argued that the lack of CT in students' behaviour is more related to CT practice, or lack of it, in the students' native cultural and educational context.

According to Department for education and skills (DfES) UK (2007), in the British academic context, students are encouraged to evaluate evidence by making their own judgments from

an early age. This intellectual tradition means that students are brought up to learn the meaning of evaluation, as making judgment or claim about something, from the beginning of their education. In contrast, international students are characterized as surface and rote learners in their approaches towards studies (Kim, 2002), and this is because of the adoption and promotion of the passive learning style and avoidance of active or discussion-based learning in the classroom (Barker et al., 1990: p. 80). In the HE system in the UK, where a great number of students come from culturally, linguistically and religiously diverse backgrounds, the use of quantitative instruments can tend to obscure important variations within samples and lead to over-generalisations. Hence, the current investigation examines the students' approaches towards CT in order to obtain some sense, not only of the nature of these approaches, but also of factors that influence their academic performance negatively. However, the present study investigates whether these differences remain the same in relation to approaching academic writing tasks in the British universities.

At university level, learning approaches are considered the reflection of the relationship between students and tasks. The approach paradigm was then extended to the university level writing by Biggs (1988), following the *text comprehension* work of Kirby (1988) and, Marton and Saljo (1976) which involves writing processes to investigate writer's surface or deep levels. Lavelle (1993) measured writing approaches along with the Inventory of Processes in College Composition. Similarly, the research of Lavelle and Zuercher (2001) examines university students' writing approaches based on five factors such as "Elaborative", "Low Self-Efficacy", "Reflective-Revision", "Spontaneous Impulsive" and "Procedural", by using the *Inventory of Processes in College Composition* (Lavelle, 1993). Reflective-Revision and Elaborative was the representative of deep approaches, while Procedural, Spontaneous-Impulsive and Low Self-Efficacy were associated with surface approaches to writing. The focus of all these previous research was to investigate that how students making meaning in their writing. On the other hand, the studies of Poser and Webb (1994), and Ryan (2000) link students' writing approaches to their conceptions and beliefs and writing outcomes.

Recently, Green (2007) investigated the writing approaches of five international students in an Australian university and suggests *an embedded, holistic, cross-cultural approach to academic skills development*. The findings of these researchers have established that the basic variation is that students who use a deep approach show meaningful and proactive engagement in tasks, while students who use a surface approach reproduce information and focus on memorisation. In line with other research studies, the author has come to the point of view that knowledge is constructed rather than transmitted, and that international students

have different characteristics in terms of constructing knowledge, which they have learned from their past learning experiences.

International students are usually perceived as passive, uncritical, silent, compliant and rote learners, which further conflicts with British academic standards and results in poor learning outcomes (Cheng, 2000; Biggs, 1996). Cultural differences in learning approaches between English speaking and non-English speaking countries have been a topic of debate for many years as each country is different in its educational experiences such as teaching methodology, curriculum development and learning practices etc. Chan (1999) gives the example of the Chinese style of learning as influenced by Confucianism, where the lecture method is the dominant way of teaching and in consequence, limited opportunities for questioning and discussion are available. Therefore the students are unable to express their own views and opinions openly. Huang (2006) states that the students' abilities to solve problems are neglected through the examination-based assessment system in Asian countries, which does not make them able to relate their learned knowledge to practical life experiences (p.7). Lack of CT ability is, for international students, a key factor affecting their performance in English-speaking universities. Academics in HE have acknowledged that the challenges international students face are because of their lack of CT skills, which stems from the differences from their own educational cultures, though sometimes they blame language and stylistic issues for their academic failure (Samuelowicz & Bain, 2001). Therefore, cognitive styles seem to be more problematic in the cultural dimension. Keeping these differences in mind, the present thesis will seek to investigate the initial CT-related issues in international students' academic writing.

2.4. Academic writing challenges of international students

International students pursuing higher degrees in British universities come with concepts of learning which originate from their prior learning experiences, and which differ markedly from those of home students. These cultural differences occur when international students show their lack of ability to engage in classroom behaviours such as overt questioning, challenging others' ideas, giving their own opinions and critiquing. Where the development of students' CT skills is a key characteristic of HE in the UK, various studies demonstrate that international students' abilities, such as creativity, problem solving in real situations, evaluation of situations and critical inquiry, are largely absent from their portfolio of past

experiences (Kim, 2003; Lillis & Turner, 2001). A range of studies (Lee & Carrasquillo, 2006; Paton, 2005; Robertson *et al.,* 2000) show that teaching international students is an unsatisfactory experience for academic staff in the West, particularly with regard to the students' poor critical and analytical thinking skills. These studies have commented clearly on international students' deficiencies in terms of their ability to think critically. In the present section, a relationship between academic writing and critical thinking, cultural difference in academic writing conventions and international students CT-related initial writing difficulties will be reviewed.

2.4.1. Critical thinking and academic writing - a relationship

Language in written form is a major means of testing student's knowledge of the different content of different disciplines. Writing skills are very important in our personal and professional lives and something real through which people actually express their thoughts and feelings. Generally, writing is considered a tool for the creation of ideas and the consolidation of the linguistic system by using it for communicative objectives in an instructive way. While, academic writing is a particular style of writing that fulfils the purpose of education (Kelley, 2008) and used by undergraduates, graduates and lecturers in their assignments, essays, dissertations, PhD theses and academic papers. Bereiter and Scardamelia argue that students at the higher level of education are usually expected to go beyond "knowledge-telling" to "knowledge-transformation" while writing (cited in Leki & Carson, 1994: p. 96).

On the other hand, CT is an indispensable ability for students who wish to generate their own ideas and critique materials in order to relate others' assumption to their own ideas and thinking. People can make sound decisions on the basis of analysis and evaluation of ideas because learning only occurs effectively when the ideas of learners are challenged. In addition, it is of great help in preparing them to succeed in life and assisting them to use what is learned for their future. Learning in this way is only feasible through thinking critically Barnett (1997) claims that CT is a defining concept in the Western educational systems (p.1). Similarly, according to Davidson (1998) the notions of CT are linked to doing well in Western universities (p. 2). This section, however, explains the relationship between CT and academic writing, CT as a core assessment criterion for writing, and the problems and challenges that international students encounter in relation to this.

2.4.1.1. Role of critical thinking in academic writing

Writing is an assessment tool which helps to promote students' in-depth understanding of issues, and UK academic discourse is expected to be clear, accurate, significant and logical, with students constructing their own voices (Matsuda, 2001). Generally, CT affects all the four skills of language learning, but it plays a particular role in writing academically. The relationship between CT and academic writing can be seen as a stepping stone in engaging students in creative learning opportunities. As I established above, research evidence shows that developing students' CT skills is a key characteristic and a main goal of the UK HE system (Cosgrove, 2009; North Report, 1997; Palfreyman, 2008; QAA, 2008; Turner, 2006). According to Ramesden (2003), UK academia has historically heavily invested in the notions and approaches of CT. Fundamental to these approaches are competitive discourse and dialogue, which make use of a range of argumentation skills. Proof and justification are other vital components of these academic traditions, and arguments and critical analysis are also linear to this paradigm. This is because, as noted above, in Western cultures, individuals are taught to evaluate ideas and events from an early age. Similarly, in their education systems, students are encouraged towards a claim-based learning approach which argues a position of "reflective scepticism" when it comes towards knowledge claims (McPeck 1981: p.7). Egege and Kutieleh (2004) illustrate how the classical Chinese, for example, are different in their educational tradition, which relies on analogy and circular reasoning. Ideas about CT, critique, and critical being in the West are likely to be heavily context dependent, and even within local institutions, views about what constitutes the essence of criticality will differ (p.80).

In terms of the relationship between CT and academic performance, the studies of Williams and Stockdale (2003) investigated the positive relationship between these variables and their findings, suggesting that students with high CT skills performed better than their counterparts with low CT skills in university courses, regardless of the course structure. They also suggested that students with low CT skills can improve their skills by putting in more effort. Hyland (2003) states that academic writing tasks are very demanding and require highly cognitive engagement to produce a good piece of writing, and that this is simply based on the "social practice" of the target community (p. 25). Therefore, academics in UK higher education expect students to "write to learn" and consider academic writing as a discovering and creative process (Kelley, 2008) which not only involves linguistically good text but also emphasises well organised content (Samaraj, 2004). In comparing the skilled and the unskilled writer, it is claimed that "unskilled writers" are less flexible and more concerned

with surface level mistakes (Uzawa, 1996), while, "skilled writers" are concerned to explore and discover ideas and capable of using meta-cognitive skills effectively (Harris, 2005). According to studies above, the development of these skills maximizes the performance of writers.

Academic writing, according to Kelley (2008), is a "fundamental component of academic literacy." She suggests the importance of explaining the nature of academic writing to culturally diverse students, because it includes a complex set of skills such as argumentation, developing new ideas and building knowledge, which might be unfamiliar for the international students. Previous research has shown that students' cultural diversity could have a positive as well as negative impact on their CT abilities (Deakins, 2009; Pascarella *et al.,* 2001), but how cultural diversity specifically influences the students' writing experiences is not clear. Research (Cheng, 2000; Kumaravadivelu, 2003) also shows that the perceived lack of CT skills of international students is rooted in the difference between their behavioural patterns and the behavioural expectations of Western academics (classroom behaviour such as overt questioning, critiquing, and critical discussion). As Biggs (1997) suggests, considering international students in the Australian context, "language issues aside, the problems presented by the cultural gap between school and university are different from those experienced by non-Anglo-Celtic international students in extent, not in kind" (p. 121).

In short, thinking critically has been acknowledged by educators as a crucial requirement of academic writing for many years, but there are still issues to consider such as the exact nature of the international students writing problems because of their lack of CT skills, what the background factors are which cause these problems, and finally how to improve student performance in these areas. CT is highly necessary to the enhancement of writing performance, and for this purpose critical pedagogy needs to be supported.

2.4.1.2. Critical thinking skills as core writing assessment criteria

Written work for academic purposes, such as essays, assignments, projects, reports, theses and research papers, all demonstrate highly demanding outcomes, but students are often confused about what constitutes a good piece of writing. Elander (2003) explains that CT is not only one of the central objectives, but also a crucial assessment criterion in British HE. His survey of study skills showed that essay writing was the most common topic on which students requested guidance. It was also noted that academic professionals have been struggling to specify the criteria for good writing and to make clear what constitutes a good essay

(Andrews, 2003). Sadler (1987) argues that students' success depends on the type of initiatives or learning required for assessment criteria (p. 194), which are defined as the distinguishing properties or characteristics expected of a piece of work in order to judge its quality. CT has been defined in terms of skills by McPeck (1981: p. 8), who suggest that "the core meaning of CT is the propensity and skill to engage in an activity with reflective scepticism." CT has been identified as one of the four core criteria from the analysis of published assessment criteria in the fields of Psychology, Business Studies and Geography, along with the use of language, structuring, and argument. For example:

Table 2.4: CT as core assessment criteria for student writing

Core Criteria	Examples
Critical thinking	• Does the author present material in a critical manner? (Pain & Mowl, 1996). • Clear application of theory through critical analysis/critical thought related to the topic area (O'Donovan *et al.,* 2000). • Evaluation includes conceptual/ methodological critique and an appreciation of alternative perspectives and current controversies (Elander, 2002).

(Adapted from Elander et al., 2006: p.67)

According to Elander et al. (2006), the purpose of using assessment criteria in teaching is to improve students' understanding of what is required, thereby improving their performance in assessments, and good answers should not be predicated on being right, in the sense of true, but on the quality of the justification given for a response (p.72). Bailin (1999) argues that CT does not include the repetition of skills but the development of relevant knowledge based on the application of criteria (p. 280). CT skills, however, can be effectively improved by specific training and integration with subject-matter, because it is not just a question of knowing more about one's discipline, but is affected by learning styles and out of class experiences, suggesting a complex learning process (Elander *et al.,* 2006: p. 78). They further note that one of the aims of using assessment criteria to support learning should be to extend the benefits of understanding assessment criteria to students with learning goals, and to encourage those with performance goals to use the assessment criteria in ways that facilitate learning (p. 86). Argumentative practice could have a significant effect on society. The assessment of CT in the education system often demands the identification of issues, the consideration of different viewpoints and response to counter arguments. Thus argumentation

has a positive relationship with writing in terms of academic achievement in terms of grades, academic success, and preparation for college and employment. Students' ability to critique, and to show deeper understanding and analysis as well as justification and evaluation, are considered as assessment criteria (often called marking criteria), and play an essential role in improving marking reliability and making student assessment explicit and transparent, in order to engage students actively in the assessment process.

Analysis of the above studies suggests that academic writing requires the learning of complex skills, which are transferable from one task to another within disciplines, and are amenable to improvement with practice and instruction. This also provides a conceptual framework for maximizing the benefits of using assessment criteria as a part of teaching. From a cultural-educational perspective, CT practices at an institutional level could have a powerful impact. Tiwari et al.'s (2003) research supports this claim by suggesting that institutional background might affect the students' CT abilities; for example, the way courses of study are structured, and how instructional practice is employed. Instructional practices could offer a different structure to reinforce students' engagement in CT (Lun, 2010: p. 51). Furthermore, Ridley (2004) explains that each university discipline has its own discourse, and it can be a challenge for students experiencing the new demands placed on them by writing in these discourses or genres. As a result they face difficulties in understanding the standards and expectations of a new education system.

2.4.2. Cultural differences in academic conventions

Critical thinking within the educational setting is both the formulation of arguments, analysis, interpretations and making sound judgements, and also the mechanism which these processes go through. Like CT in relation to other domains (e.g. self and the world), CT in an academic context is distinguishable by its conventions, rhetoric and standards. CT is considered the expression of scholarship. The quality of one's thoughts, spoken or written, largely determines the degree to which one is constructively critical towards knowledge. The standards and conventions of CT, however, are not universal but often seen as culture-specific in their practice (Egege & Koteleh, 2004), which might vary in different cultures. As such, culture-specific conventions naturally come into play when determining the quality of expressions of thoughts (Canagarajah, 2002). Consequently, the challenge of becoming a critical/good thinker lies in the way in which one's thoughts reflect the given academic discourse (Huang, 2006).

Regarding learning approaches, reasoning is crucial for academic success in the UK HE system (Atkinson, 1997; Benesch, 1999). However, memorisation is still regarded as a valid learning practice in the most of the non-English speaking countries. Richards and Skelton (1991: 40) state that international students are less critical, which is reflection of their past learning approaches. These cultural approaches to learning may also affect the writing conventions. Atkinson (1997) notes that writing conventions vary across cultures and different languages structure organise writing discourse differently. In the study of Mauranen (1994), Finnish students encountered writing difficulties due to differences in academic writing conventions as academics in English expect students to state main points clearly and coherently but Finnish students could not show the compatibility. Scollon (1997: p. 353) has summed up the previous research on contrastive rhetoric as follows:

> "A very broad range of studies have shown that no language or culture can be reduced to one or two diagrammatic structures that might be applied across the board from internal cognitive schema to paragraph structure…. At the same time, strong clear evidence, amply demonstrated across the languages of the world, shows that there are situationally, generically, or stylistically preferred compositional forms and that these are not the same from language to language or from culturally defined situation to culturally defined situation".

Differences between the academic writing conventions and styles of international and home students have been noticed since the 1960s, and it has also been confirmed that argumentation, analytical writing and thinking critically are the dominant communicative styles in British universities, derived from Western cultures, while international students have already learned to write in the style of their native academic cultures. Research shows that the writing skills of students' first language (L1) could influence their writing in English negatively or positively, because the Western patterns and stylistic elements of writing often seem alien to international students (Adeyemi, 2008; Lillis & Turner, 2001). Their knowledge about, and skills in, writing in their L1 affect the way they write in English. Because of this influence, students may use rhetorical patterns and stylistic elements characteristic of writing in their native language but alien to the Anglophonic writing tradition (Kelley, 2008). This transfer impedes effective communication between the writer and the reader, and also affects assessment of the writer's performance negatively. Therefore, to reduce the negative effect of the way writing was taught in their native language, students should be made aware of Western academic writing conventions. Likewise, English language teachers (ELT) should also consider the cultural differences in the planning and assessment of their writing.

To think critically underpins success in academic tasks; there is no doubt that this is difficult in one's native language, but the expectation has a detrimental effect on the performance of L2 learners. In the study by Takano and Noda (1993), they found that Japanese speakers performed less well in doing a task in English as their L2, but performed better in the same task while doing it in their native Japanese language. Therefore, thinking in L2 might result in greater cognitive load (Davis et al., 2005) and may impair students' ability to solve problems. While higher-order thinking abilities can help to increase levels of language proficiency, and according to Renner (1996, cited in Liaw, 2007: p. 46), "developing students' ability to reflect on their own learning process can help them progress in learning," these issues become more challenging for culturally and linguistically diverse students pursuing university studies in the UK.

Lun (2010) points out another perspective, which is that sometimes stereotypical standards of judgement might misinterpret the international students' ability to think critically, which is a factor which clearly needs to be addressed in terms of cultural considerations, by explaining the unfamiliar learning approach in intercultural classrooms and investigating the factors that influence and cause the differences in engagement with CT at HE level. Mastery of the CT conventions does not occur simply even for native speakers of the language (English), but comes after specific training. However, these differences in education systems might further lead to discussions about the issues such as how international students approach CT tasks, which needs to be addressed carefully in university education.

2.4.3. Pivotal issues in international students' writing

Being critical and analytical in one's thinking is the main requirement for succeeding in many academic disciplines in the UK HE system, but results in a great challenge for students coming from different cultural backgrounds, who are obliged to adapt to an unfamiliar learning approach. They are incapable of answering analytically, not only because of the demands of writing in a foreign language, but also because these students do not actually know what it is to make their own point, or how to create their own meanings in analytical ways. The differences in expectations between international (non-Western) students and their faculties are issues which deserve considerable attention. As writing in L2 is a difficult task for non-native students, they always receive much lower ratings, not only linguistically but also in terms of thinking critically. Davies (2003) argues that despite being proficient in English language, international students still encounter academic writing problems and this

may be because the type of writing required in the English universities is complex in nature and non-English students might not have come across such experiences in their native backgrounds.

As shown in the study of Egege and Koteleh, academics often comment on South East Asian students' writing such as "lacking arguments", having a "lack of clarity and criticality", and "worse still", being "descriptive in nature". These comments are the same even for students with a good level of English proficiency, because in some cases a good piece of writing can be argued poorly and being critical is related more to logic than language (2004: p. 2). Logical reasoning was found to be another key component for academic success in his research. The research literature shows that Asian international students are considered to be passive due to a lack of understanding of the requirements of analysis and critique (e.g. Richmonds, 2007; Tapper, 2004). One of the main reasons for Asian students' assumed cognitive deficiency could be their cultural background. Referring to the Western logical convention, Davies concluded that the principles involved in CT and argumentation at university level need to be taught explicitly in order to promote students' abilities in writing essays, papers and dissertations (2003: p.2). He also points out that the actual meaning of CT skills application is still not clear, and most academic staff only becomes aware of CT when they notice its lack in students' writing.

According to Tapper (2004), with regard to the application of CT in a university context, CT terms such as analysis, evaluation, reflection, questioning and judgements are found again and again (p. 201). A lecturer (quoted in Creme & Lea, 1997) stated, "I can recognize a good piece of student writing when I see it. I know when it is well structured and has a well-developed argument but it is difficult to say exactly what I am looking for, let alone describe a good argument more fully" (pp. 36-37). Bonnett (2001) states that argument is the defining feature of writing critically: "Your essay is your argument and everything else makes sense because of it." He explains that argumentation is an advanced level attribute of education. An argument goes to the heart of recognising one's life, and argumentation abilities make learning more enjoyable and comfortable. It also changes learners from passive to active (pp.1-3).

Issues of the students' perceived lack of CT capability are frequently indicated as a key factor undermining students' ability to perform successfully (Kelley, 2008). Academics have also identified the dishonest behaviour of international students, which is responsible for problems such as students' inappropriate textual borrowings as instances of plagiarism. Howard (2000) categorises such problems in terms of fraud, insufficient citation, and excessive repetition.

Chandrasoma *et al.,* (2004) argue that unacceptable inter-textuality is "centrally concerned with questions of language, identity, education, and knowledge" (p. 172). These problems and challenges draw attention to the fact that the students' approach to expressing their understanding is completely different to what their teachers expect. Most of their problems are very common, such as: repetitions; vague generalization of ideas; poor reasoning in terms of both making the point clear, and of critical analysis and evaluation, and lack of transition between theory and practice etc. Since CT plays a central role in academic writing and its assessment through written assignments, Carpenter and Krest (2001) state that "unquestionably, college writing courses ought to foster CT" (p. 46). Te-Wiata, et al., (1996) notes that assessment tasks focusing on CT are designed to determine the extent to which students recognise the assumptions underlying their beliefs and behaviours, and give justification to their ideas and actions (p. 15). This strongly emphasises the fact that that students have to demonstrate deep thinking to engage in direct critique, and must express themselves by making concise, evaluative statements and giving literal meanings and logical reasons. Unfortunately, international students' particular experiences have not given them an awareness of the value of logical thinking that lies behind the appropriate way to write in UK HE.

On the other hand, Volet and Kee (1993) found that in Australian universities, Singaporean students were fully aware that they were expected to analyse critically. Similarly, a study by Huang (2006) on Chinese students demonstrated that they were good at evaluation of ideas; however they lacked creativity and were poor in exploring new dimensions of knowledge. But there is a general consensus that in Asian countries, the intellectual skills of comparing, evaluating different points of view, arguing and presenting one's point of view are not developed. Similar views are often reported in the literature (e.g. Ballard & Clancy, 1991). These studies noticed that students from non-Western countries often had difficulties with "analytical writing"; they also considered that the precise nature of their writing was "description" rather than "analysis". The findings of these studies found in their analysis that even intelligent and highly educated students, some of them mid-career professionals, were also having great problems with British academic writing. This may be because, as noted on many occasions above, growing numbers of international students come from cultures which have strong traditions of learning by absorption, valuing the wisdom of the past, and particularly viewing academic writing in ways that are radically different from those of the British education system. Davidson (1998) demonstrates that the reason why CT is less practiced in some cultures is because the practices learned from previous educational

backgrounds affect how students understand and approach their assignments. A big gap has been found between the Asian and Western education systems, their requirements, their philosophies, standards and conceptions of knowledge and the educational and cultural problems of non-English speakers etc. (Hammond & Gao, 2002; Tweed & Lehman, 2002), however, little is known about the international students' poor development of analytical skills and the consequences of the adoption of surface/non critical learning approaches by many students from non-English speaking backgrounds, because learning outcomes may be related to their CT development .

2.4.4. Barriers to developing critical thinking in non-English settings

Cultural background not only shapes students' learning experiences but also determines what we value as knowledge and learning (Ryan, 2000: p. 16). According to Richardson (1994) learning approaches differ systematically from one culture to another. He has noted two distinct approaches of higher educational level such as 1) transformative and 2) reproductive orientation. Hofstede's (1997) 'power distance' approach of cultural dimensions helps to understand the reflection of different educational context on the social attitudes. Power distance has been defined in terms of inequality in power, in which less powerful people consider the authority of powerful person to be normal. According to Hofstede's definition "East Asian cultures are characterized by large power distance, low individualism and high uncertainty avoidance, whereas the UK is characterized by low power distance, high individuality and low uncertainty avoidance" (cited in Durkin, 2008: p. 17). In educational settings, this power distance may affect the teachers' role in such a way that students accept them as authority, which often result in a passive learning environment. The societies of large power distance are based on teacher-centred classrooms in which they are considered expert and respected who can never be criticised and where students only speak when they are invited to do so. On the other hand, in the educational system of low power distance countries, students are expected to be independent, can question, can speak spontaneously and contradict the teacher (Hofstede, 1986: p. 313).

Ballard and Clanchy (1997) argue that Asian international students belong to the examination-based education system and the first reason for this is that Asian societies highly value academic achievements gained through that system. The second reason, from Ballard and Clanchy's (1997) point of view, is the students' respectful behaviour towards academics in

those societies, which affects their learning approaches, and the third reason may be the limited teaching-learning resources due to economic fluctuations. According to Meyers (1986), the lecture traditions in Asian countries generally foster passive learning in which CT is either taught implicitly or not at all (p. 86). The research of Shamim (as cited in Richmond, 2007) describes the traditional style of teaching in Pakistan is as follows: "Students mostly listen to their teachers passively because of the non-existence of active learning opportunities." The learners are passive listeners with virtually no opportunities to become active participants in the teaching/learning process. During a lecture, the learners note down every word of the lecture (or as much of it as they can) to faithfully reproduce it in examinations (p. 106). Similarly, Somwung and Siridej (2000) also note that education in Thailand re-enforces memory-based learning rather than enhancing students' abilities to use the acquired knowledge (p. 87). McVeigh (2002) argues that in Asian countries, "Students who answer in the class cannot be a nice person and such students are imprudent" (p. 48). Accordingly, the aforementioned cultural-deficit idea supports the views of Ballard and Clanchy (1997), Volet and Renshaw (1996), who claim that the "reform process is very slow in these countries" (India and other Asian countries) and the emphasis is still on students passing their exams only, rather than on the promotion of a critical and analytical approach to learning.

Other studies have also pointed out that in Asian countries one of the valid practices is memorization rather than questioning and critiquing knowledge, which often leads to poor quality learning outcomes (Cheng, 2000: Kember, 1996;). Similarly, Vandermensbrugghe (2004) reports that the exam-based nature of the education system in Asia promotes rote learning, while Richmond (2007) also notes that the educational methods commonly used in developing countries, particularly rote learning by students expected to be passive recipients of knowledge, are mostly ineffective in the training of professionals required to think critically and creatively about the development needs of their nations. The Report of the World Bank (2005) draws our attention to the poor quality of the educational curriculum in Asian countries (p. 71), and Ryan (2000) further explains how the differences in students' learning practices in the different educational systems affect their learning approaches, learning styles and their relationship with their teachers. As CT ability is one of the crucial requirements for success in the British HE system, and is considered a socially constructed concept and embedded in Western culture (Atkinson, 1997), students' prior experiences of learning practices become barriers for them in a new educational environment. Although the educational practices in Asian countries have been found to conflict with Western learning

standards (Kember, 1996; Watkins & Biggs, 2001), the area of students' approaches to study is of particular interest.

Previous studies further explain the reasons for the kind of learning which characterises the Asian culture. This may be because the Western concept of the self focuses on individuals, who are responsible for their own actions rather than depending on a group, while Asian people are dependent psychologically on others such as parents and the immediate community. Western people are very clear when defining themselves but Asian people have a tendency to speak indirectly about views and feelings. In the context of international education, views about international students' lack of CT are based on their observed classroom behaviours, such as rarely answering questions, lack of their own opinions, rarely participating actively in group discussions, and lack of involvement in critiquing, challenging ideas, argumentation or a direct style of written and oral communication. These kinds of behaviour patterns are usually taken negatively in Western culture (Biggs, 1996; 2001).

These classroom behaviours are strongly considered as CT indicators in the Western and British educational cultures (Durkin, 2008; Tweed & Lehman, 2002; Ennis, 1998; Atkinson, 1997) and on the basis of these behaviours, students' CT abilities are assessed by teaching professionals in the West. The majority of the barriers to the development and promotion of students' CT skills, as reported in previous studies (illustrated above) are cultural-educational in nature. This may be because every educational culture has its own unique teaching and learning context, so adaptation is difficult. International students' challenges in English-speaking university classrooms might be due to the differences between teaching and learning styles in their own background and those in Western educational systems. As Volet (1999) and Crossley (2000) have pointed out, some aspects of international education cannot be appropriately transferred to Western educational theory because of the cultural differences. These different aspects of learning cultures in different education systems consist of some explicit expectations and tacit criteria in evaluating the teaching-learning practices and appropriate learning behaviour in that specific educational context. Teachers and instructors who are acquainted with the rules and expectations prevalent in the West have developed a tacit set of standards concerning which teaching or learning practice is appropriate in the Western context (Lun, 2010: p. 24).

Therefore, based on Hofstede's (1997) views, international students coming from large power distance countries may need to take shifts from previous approaches to new ones. According to Blue, (1993: p. 98) if international students want to succeed in the academic culture (of the host society), they will have to assimilate to some degree the norms of that culture which may

or may not resemble the norms of their L1 academic culture. Adaptation of the new forms of behaviours is interdependent with academic success as noted by O'Donoghue (1996: p. 76). In UK academic culture students are required and encouraged to ask questions, give their own views and justify their points with valid arguments, and discussed and debate in the class (Shin & Lee, 2000). This will further leave the room for discussion about the appropriate pedagogy for international students in English-speaking countries, with an emphasis on teaching and developing CT as an educational ideal and turning their focus towards the actual learning practices of CT. Issues

The present investigation will however, be different from those above because some of the studies have targeted samples in Asian countries only, and some have focused on secondary level barriers, while the current study includes samples from many different non-English cultures as well as specifically targeting the primary barriers to CT development. Furthermore, the present study will not only investigate the students'writing approaches, specific problem areas of students writing but also what can help to facilitate their writing experiences in the UK HE system.

2.5. Towards the solutions: how can the gap be bridged?

Investigations have demonstrated the low level CT performance of international students at the higher level of education in English-speaking countries such as the UK, the USA, Australia and New-Zealand, and the majority agree with the "single truth" view that students' previous cultural-educational background in non-English speaking countries has hindered their development of CT (Facione *et al.,* 2000; Guest, 2000). A review of literature in the field of critical thinking, on the other hand, shows that all people have the same capabilities for critical thought, which can be taught at all age levels, from young to old (Lai, 2011). Facione *et al.* (1997) also claim that CT skills can be learned as well as encouraged to develop. In this section, cultural-educational support, the role of English for academic purposes (EAP) language learning modes as well as a self-conscious approach in fostering CT will be reviewed

2.5.1. Cultural-educational support

Writing for the purposes of HE involves attracting others' attention towards ones' unique role and contribution as part of an academic community. Therefore, to express your own point of

view you need to use critical and reflective thinking, and also need to be able to analyse others' arguments critically (Elder & Paul 2006). According to Halpern (1996) CT is the use of intellectual skills in a manner which helps to reach desirable outcomes (p. 5). For Beyer (1987), CT involves the skills of analysis and evaluation in order to examine beliefs and make sound judgements (p. 33), while Kegen (2000) argues that learning is a development process which is both informative and transformative (p. 50). Higher education is based on transformative and constructive learning, rather than an informative approach. According to Marlowe and Page (1998), constructive learning includes questioning and modification of experiences. Kauchak, *et al.* (2002) describe how constructivism requires CT, which is why teachers use a variety of learning experiences for students.

The difficulties which international students experience have been reported frequently, and these are in areas such as creativity; problem solving in real situations; critical inquiry; arguing; presenting their own points of view; critical analysis, and critical evaluation (Huang, 2006; Kim, 2003; Kumaravadivelu, 2003; Lee & Carrasquillo, 2006; Robertson *et al.,* 2000). The literature also points out the cultural-educational background as a main reason behind the lack of development of students' intellectual skills to approach knowledge critically (Samuelowicz, 1987; Egege & Kutieleh, 2004). There is also a pool of evidence (e.g. Todd, 1996; Volet & Renshaw, 1996; Entwistle & Ramsden, 1983) to suggest that the adoption of the reproductive approach is not restricted to Asian students, and that "students will tend to employ a surface approach if that is what the curriculum appears to demand, or if the learning environment is unfavourable" (Kember & Gow 1991: p. 118). It is important to recognize that international students' needs and expectations impact their learning experiences accordingly. The current research, however, aims to investigate not only the international students' problems and approaches but also suggests possible solutions to facilitate their writing experiences. The contributions of this study will draw attention towards the learning diversity present in UK tertiary classrooms, as well as towards the changes that may be needed in order to maximise their learning.

Research has demonstrated that Western cultures including UK strongly emphasize student-centred learning (Ho *et al.,* 2004), and as a result, non-Western students' learning experiences do not match with this active learning process and create challenges. According to Gabler and Schroeder (2003), "an active learning process is emphasizing on purposeful interaction and the use of knowledge in real situations" (p. 4). Initially students need help to change themselves from passive to active learners, and to become self-developing, where CT is essential. There is also a need to make students aware of new learning processes so that they

can understand how to use the learnt knowledge. Learning expectations and standards should be clearly explicit for students to learn and perform well, and in order to bridge the gap between their performance and the required standards, because different cultures have different approaches to thinking and writing (Egege & Koteleh, 2004). Therefore, international students also need to be able to develop arguments according to the English academic convention. Feedback and small group teaching have also been mentioned in the literature as ways to develop students' CT skills for academic writing. Curricular development is one of the ways to support students' needs, in which summative assessments could be reduced in favour of formative assessment in teaching. Students' success largely depends on the approach of teachers such as constructive alignment, teaching large groups, teaching small groups, active learning etc. (Paul & Elder, 2002). The education system should produce teachers who are confident to not only understand critical thinking but also know how to teach it. They should also have a comprehensive sense of the whole and a realistic idea of how to cultivate this in students while teaching the content of a subject or discipline.

Duron *et al.,* (2006) propose a five-step model to move students towards CT which includes: explicit explanation of the learning objectives; teaching through questioning; creating an active teaching/learning environment; taking a process approach towards learning, and giving appropriate feedback and assessment (p. 161). According to Paul (1993), deficiency in reasoning skills comes from typical school experiences, which focus on covering the content, and promote lower-order learning, and therefore result in memorisation rather than deep understanding. Previous research also suggests that all human beings can benefit from CT instruction, because CT skills are not just for the gifted, they are for everyone (see Kennedy *et al.* 1991; Lewis & Smith, 1993). Bailin *et al.* (1999) suggest that instruction for primary grade level students should include: valuing seeking for truth; respecting others' viewpoints during discussion; open-mindedness; willingness; perceiving differences; clarifying; considering alternatives, and making decisions. Similar kinds of recommendations are made by the Delphi Report (Facione, 1990: p. 27). Van-Gelder (2004) suggests that CT skills need to be practiced deliberately, which can only occur when CT skills are made explicit and a separate part of the curriculum, while Pithers and Soden (2000) reject this view and state that CT should be taught generally. Halpern (2001: p. 278) suggests a "broad-based, cross-disciplinary" approach to teach CT skills effectively. On the other hand, Bailin *et al.* (1999) and Lipman (1988) support a general approach to CT skills in but argue for "hand-in-hand" instruction in basic skills, such as reading, writing, listening, and speaking. In the research of Bataineh and Zghoul (2006) it is concluded that CT abilities can be taught and learnt successfully by providing

proper instruction, and for this purpose teachers should be trained in such skills (p. 38).

To sum up the above empirical evidence, it is clear that without reasoning, knowledge is of limited value. Therefore, students must be active learners and able to think critically in the classroom, because CT promotes an active cognitive process and develops an open-minded attitude in order to deal with ideas systematically, communicate effectively and move towards questioning, discussing and debating actively.

2.5.2. Role of EAP language learning modes

Previous research literature places a great importance to the relationship between language and thought. For Suhor (1985) language, thinking and learning are interrelated. He emphasizes on the integration of CT skills and English language teaching. He illustrates that the art of the English language involves a wide range of essential thinking skills because of the close relationship between thinking and language as established by Piaget, Vygotsky, Berk and others. Additionally, "many aspects of reading and writing are pertinent to important thinking skills." (p. 2). Diller (1978) also claims that "we cannot say we know a language until we can think in it" (p. 34). He gives an example of a singer who can sing a song in another language perfectly but is unable to understand its meaning and think about it from different angles. As it is challenging to develop critical thoughts in a native language, it becomes even harder in a second language to express CT. This is due to the centrality of the English language, because every discipline has its own language, but demands the ability to express and understand through the target language, which makes it more difficult without fluency in that language. According to Sadler (1989), CT skills are key skills for improving students' academic performance, and for the best learning outcomes it is vital to provide explicit instruction in the system. He further argues that providing direct and authentic evaluative experience is necessary for the development of evaluative expertise (p. 143).

According to Hyland (2006) EAP (English for Academic Purposes) courses attempts to assist students towards their studies and research in English as a target language. He further argue for the need and development of EAP in the following words "supported by an expanding range of publications and research journals, there is growing awareness that students, including native English-speakers, have to take on new roles and engage with knowledge in new ways when they enter university. They find that they need to write and read unfamiliar genres and participate in novel speech events" (P. 1). Therefore, the aim of EAP modes is not

only to develop English language abilities but also the study skills of writing, reading, speaking and listening. The main models for teaching EAP include, the product approach; the process approach; the team teaching approach; content-based instruction approach; content and language integrated learning; academic vocabulary approach and the genre approach. Interestingly, these EAP models are mostly revolved around academic writing, "as academic writing is so important for students of all kinds, and as it is such an umbrella term, it is hardly surprising that there is range of approaches and types of practice for it" (Jordan, 1997: p. 164).

According to Flowerdew and Peacock (2001: p. 56) the product approach emphasises on "the finished product, or text, rather than the process students go through in order to write their text". Jorden (1997) has noted that this approach has been criticised because it "restrict students' creativity". The process approach views writing as a creative process involving brainstorming, planning, drafting, editing, feedback, revision and proofreading in order to determine students' critical thinking and creativity (Flowerdew & Peacock, 2001; Jordan, 1997). In this approach students are responsible for their own learning in participating actively to make good progress. Horowitz further questioned that "whether the process approach realistically prepared students for the demands of writing in academic context". According to him "the process approach gave students a false impression of what is required of them in university settings and, in particular, its very special socio-cultural context and expectations" (cited in Flowerdew & Peacock, 2001: p. 57).

On the other hand, the team teaching approach is a co-operative method in which the subject teachers have to co-operate with their EAP teachers in order to deliver EAP course effectively (Flowerdew & Peacock, 2001). The aim of this approach is to prepare students to understand lectures and exams. Dudley-Evans (2001) has emphasised on the *mutual understanding* between language teachers and subject teachers. However, this approach is also not without problems. For example Benesch (as cited in Abdulkader, 2009: p. 48) stated that "this approach is overly concerned with making students adhere to the established practices of the institution and the syllabus at the expense of the students' critical views of them. Besides, this model strongly focuses on course content. This is why beyond Master's level, the approach may not work. For instance, PhD is an individual study and cannot be dictated by a subject teacher, language teacher or department. A student may well need help with some language or subject-specific elements, but this EAP teaching model seems not to fit such programme of study and another approach will be needed". Content-based instruction is an American model approach to teaching EAP which has been characterised as "a major force in English as a

Second Language. The rationale for CBI rests on the notion that integrating language and content has pedagogic value, as the use of meaningful language will motivate students and enable content learning along with language learning pedagogy today" (Schleppegrell & Oliveira, 2006: 254). Research literature also suggests that this approach did not meet the needs of students and teachers in the EAP (e.g. Brinton & Holten, 2001).

Another approach to teaching EAP is called content and language integrated learning (CLIL), which involves teaching course subjects through the medium of a foreign or second language (Abdulkader, 2009: p. 50). This approach not only improves language proficiency but also intercultural knowledge (European Commission, 2008). Besides its benefits, this approach is limited to the subject specification. Next model is academic vocabulary approach was proposed by Coxhead and Nation (2001) in order to improve students' academic vocabulary which is crucially important aspect of academic writing. But this approach was seen a narrow model as academic writing more likely happens with sentence level and structure not only with vocabulary. While, the genre approaches, is based on the work of Swales's (1990) and Bhatia's (1993) genre analysis. According to Paltridge (2001: p. 58) genre approaches involve "language and discourse features of the texts, as well as the context in which the text is produced".

It can be drawn from the analysis of above EAP models that the general aim of EAP is to improve the two important areas of students' learning, which are: 1) language proficiency, and 2) introducing them to academic conventions and skills (Stroch & Tapper, 2009: p. 218). Studies of this focus have produced varying results, with a noticeable improvement in students' performance after EAP shown by Archibald (2001), and with no significant difference shown by Brown (1998) and Green (2005). Some of the EAP courses were also blamed for being problematic in terms of skills development, for example their focus on preparing students for the tests of IELTS and TOEFL (Green, 2005; Alderson, 2000). Previous research has also observed a slight improvement in the development of academic writing skills through EAP courses in terms of formality (Storch & Tapper, 2009; Shaw & Liu, 1998), but they could not find any gains for accuracy and complexity. On the other hand, James (2006) found a significant transfer of language and study skills from a content-based EAP programme geared towards an Engineering course. In the qualitative study of Dooey (2010), students perceived EAP as a valuable experience in terms of increasing their confidence level in their language abilities, and of preparing them for the kind of tasks required for their courses.

Therefore, Diller has proposed "the guided practice" to fulfil the needs of second language

learners to help them to be proficient in using language (1978: p. 35). According to Vermillion (1997), language is the most important medium by which thought is expressed, so it is extremely important that language teachers are concerned with the interface between language and thought. As people's language skills develop their thinking skills need to develop as well, because the two skills appear to depend upon one another in order to function at a higher level (p. 11). Other studies strongly emphasise that language classes should teach students the expected academic conventions based on faculty feedback (Zhu, 2004; Casanave, 2002). According to Reid (2006), EAP courses should focus on CT development, which could also influence students' motivation significantly. To date, little is known about how EAP students' academic writing experiences are positively affected by the writing which is required in their courses, or about how EAP courses foster CT in their classes. This exploratory study considers the students' accounts of the development of the study skills which they need to apply in their academic writing.

2.5.3. The self-conscious approach towards critical thinking

Further to the above discussion of cultural-educational influences and support, as well as the role of EAP language courses in CT development, another important approach could be the self-conscious approach. According to Elder and Paul (2006), CT is a self-conscious attempt to improve the quality of one's thoughts. She suggests following key parameters to thinking critically, such as: one should be clear about purpose and analyse concepts and ideas; one must support claims with sound evidence; one must present justifications logically, and examine consequences of arguments with reasoning. As CT skills are related to ones' motivation, collaboration, and creativity, it is more likely that students who can monitor their own learning activities are more likely to demonstrate higher-order thinking abilities. In addition, Lai (2011) argues that "the ability to critically evaluate one's own arguments and reasoning is necessary for self-regulated learning." Motivation is another factor which plays a very important role in encouraging students to persist in CT tasks. Similarly, one's CT dispositions, such as willingness to work from diverse perspectives, could enhance collaborative opportunities, while open-mindedness and flexibility are considered strong indicators of creativity (Lai, 2011).

Paul and Elder (2008) propose following key questions in order to apply critical analysis to the arguments of others, for example: What is the purpose of the author? What is the key

question that is being addressed? What is the most important information that is being used to support the conclusions reached? Are the data and evidence accurate and are they being reported correctly? Is the author withholding other information that might be relevant? What kind of inferences is the author making? What concepts are being used? What assumptions are being made? What are the implications of this article? What point of view is being expressed? This might help to avoid sloppy and misleading concepts, and encourage students to be logical and fair and avoid negative critique and debates.

2.6. Summary

As a result of a review of the existing literature in the field, a number of key points have emerged which help to address the stated research questions. The literature reviewed in this chapter shows a general consensus that a modern globalised economy strongly requires the ability to think critically. Critical thinking includes both a set of skills (Case, 2005; Ennis, 1987; Facione, 1990; Halpern, 1998; Paul, 1993; Willingham, 2007), and a set of critical thinking dispositions (Bailin *et al.,* 1999; Ennis, 1985; Facione 1990; 2000; Halpern, 1998). Research evidence also shows that both CT skills and CT dispositions are the product of cultural processes. The most commonly identified cultural differences are seen as being the product of Confucian and Socratic traditions of thought, which are the most significant influences amongst previous educational experience. It is often held that British education is characterised by Socratic approaches, while other traditions such as Middle Eastern, Asian sub-continental and Far Eastern traditions are more Confucian, although the picture may be more complicated than this suggests. It is therefore commonly supposed that students from non-Western traditions suffer a CT 'deficit' which is both cultural and linguistic. The research also suggests that this CT deficit does not appear to be addressed by current EAP programmes. This may account for issues in performance in written tasks in UK HE by international students. Therefore the present research is designed to explore and test these propositions. In the next chapter, the research methodology will be presented.

CHAPTER 3: RESEARCH METHODOLOGY

3.1. Introduction

This chapter is devoted to a discussion of the research methodology employed in the present investigation, including issues pertaining to the data collection and data analysis. As stated earlier, this study aims to explore the challenges encountered by international students in relation to the absence of critical thinking (CT), and the approaches to writing adopted by international students. Further, the study seeks to develop suggestions which would help to minimize the challenges of thinking critically and reflectively, in order to enhance students' academic writing performance. Specifically, this chapter deals with: the research methodology; research design/conceptual framework (which includes gaining access to the field, the context setting and the samples); research instruments and the procedures for data collection, as well as data analysis.

3.2. Research methodology

The present study adopted a qualitative approach, the definition and nature of which is given below in order to demonstrate the appropriateness of its use for the problems and issues identified in the current study.

3.2.1. Qualitative research

There is a lively and ongoing debate concerning the most appropriate research methods for educational research. The whole debate centres largely on the nature of the reality and trustworthiness of research findings (Adeyemi, 2008; Cohen *et al*., 2007; Magagula, 1996; Cresswell, 1994). Qualitative research is defined by Macmillan and Schumacher (2006: p. 15) as an inquiry, in which researchers collect data in face-to-face situations by interacting with selected persons in their settings. Qualitative research describes and analyses people's individual and collective social actions, beliefs, thoughts and perceptions, and qualitative studies are important for: theory generation; policy development; improvement of educational practice; illumination of social issues, and action stimulus. Cohen *et al.,* (2000) conclude that: Qualitative research is said to penetrate situations in the ways that can establish cause and effect, in real contexts, recognising that context is a powerful determinant of both causes and

effects and thereby, determine the cause and effect.

These definitions suggest that qualitative research is an appropriate approach for a researcher wishing to understand the experiences of international students confronting the problems of learning and performing CT in the UK HE system. Qualitative research has also been described as a multi-method approach by Denzin and Lincoln (1994: p. 2), who suggest that "Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter." In the case of the present research, concerned as it is with the experiences of students from a range of cultural backgrounds and disciplines, and from different learning contexts, this naturalistic approach avoids imposing an inappropriate template on the students' experiences. Being qualitative, the present research is less concerned with numbers and more concerned with information expressed in words, for example perceptions, interpretations and feelings, as described by Walliman (2006). In contrast to formulating, testing and confirming or disconfirming hypotheses, as is usual with quantitative approaches to research, qualitative research draws on the data collected by the researcher to make sense of human behaviour within the research context (Burns, 1999: p. 22). Also, qualitative data often focuses on smaller numbers of people than quantitative data, yet the data tend to be detailed and rich (Cohen *et al.*, 2007).

The present study draws on both naturalist and interpretive theories. It is naturalist in the sense that the social world was studied in its natural state and situations were examined through the lens of the participants rather than the researcher. It is interpretive because the students' perceptions, approaches to problems and needs are interpreted by the researcher, which opens "the possibility for multiple perceptions" (Moses & Knutsen, 2007: p. 11). Since the author was herself an international student, there are also interesting points of comparison to be made between her own experiences and those of the participants.

3.2.2. The characteristics of qualitative research

According to Creswell (2007: p. 37), qualitative research begins with assumptions, the possible use of a theoretical lens, and inquiring into the meaning which individuals ascribe to a social or human problem. The final written report includes the voices of participants, the reflexivity of the researcher and a complex description and interpretation of the problem; it also extends the literature or signals a call for action**.** Some authors claim that qualitative research is better understood by the characteristics of its methods than its definitions (Bogdan & Biklen, 1992; Sherman & Webb, 1988). They provide a list of characteristics, which are

summarised by McMillan and Schumacher (2006), who describe qualitative research as an inquiry that:

- "is based on a constructivist philosophy that assumes that reality is a multi-layered, interactive, shared social experience that is interpreted by individuals;
- is concerned with understanding social phenomena from participants' perspectives, which is achieved by analysing the many contexts of participants;
- involves the collection of data in face to face situations by interacting with selected people in their settings;
- describes and analyses peoples' individual and collective social action, beliefs, thoughts, development, improvement of educational practice, contributions to policy, social actions and so on" (pp. 315-316).

These characteristics (illustrated above) fit the framework of the current study of CT as a human problem; international students' inability to think critically at the higher educational level was identified in their natural settings by analysing their written words and reporting the detailed views of students and teachers. To find out the reasons for the difficulties experienced by students, the researcher built a holistic picture of their overall approaches towards academic writing, utilizing the multi-method focus of qualitative processing in order to come up with the suggestions for facilitatory contributions to educational practice. Cresswell (1998) characterises this kind of qualitative research as: "an inquiry process of understanding, based on distinct methodological traditions of inquiry that explore a social or human problem. The researcher builds a complex and holistic picture, analyses words, reports detailed views of informants and conducts the study in a natural setting" (p. 15).

3.3. Research design

In order to present the study design, this section describes the methods of gaining access to the field and the associated ethical issues, context setting and the sample, as well as participants' background information. The researcher's relationship with participants and other issues related to the students' cultural diversity are also discussed. Finally, the data collection, as well as data analysis, techniques are explained in detail, in terms of how these would help to answer the research questions for this study. Maxwell (1996) has described research design as being based on the following components: the researcher's relationship with those he/she studies; the researcher's planning of different times and settings; sampling; interviewing; how the researcher collects the data and the instruments which are utilized for this purpose; what the researcher does with the collected information, and how he/she uses it

in order to make sense of it.

3.3.1. Gaining access into the field and ethical issues

Gaining access into the field is one of the key issues faced by any researcher, and before the study, it is crucial for the investigator to seek the permission of the authorities of the particular institution or organisation where the research is to be conducted. As noted by Cohen *et al.* (2005) and Blaxter *et al*. (2006), "the investigator cannot expect access to a nursery, school, college or factory as a matter of right. They have to demonstrate that they are worthy, as researcher and human beings, of being accorded the facilities needed to carry out their investigation" (p. 53). According to these writers, access includes documents, people or institutions. Documents can be accessed through libraries or institutions, whilst people may be accessed in their homes, workplaces, universities or over the internet. The institutions can be universities, schools or government departments.

In relation to this study, the researcher needed permission from: firstly, the language institutes of two universities, which were: 1) University A and, 2) University B; and secondly, access to the department of Community and International Education, in order to access the international students' written assignments as well as to interview their assessors for a case study. Official letters and emails were sent, and personal visits were also made, to contact the heads of these institutions in order to gain official access to carry out the research. The aim and purpose of conducting this study were explained, and reasons were given for the prospective participation of international students and teachers. The nature of the research was explained in further detail, in order to request the procedures of interviewing (students and teachers), self-reporting, keeping diaries and examining students' written assignments. Finally, they agreed to grant me access, conditional on obtaining fully informed consent from all participants.

Ethical consideration is another main issue which stands out as a continuing concern throughout the process of data collection and analysis. Consideration of ethical issues is a necessary feature of all stages of the research project, from initial planning, through data collection, to writing up (Blaxter *et al*., 2006: p. 162). The British Education Research Association (BERA) guidelines (2004) point out several ethical requirements, such as:

- "Participants' understanding and agreement is needed to their participation without any duress, prior to the research getting under way.

- Researchers must take the steps necessary to ensure that all participants in the research understand the process in which they are to be engaged, including why their participation is necessary, how it will be used and how and to whom it will be reported.
- Researchers must recognise the right of any participant to withdraw from the research for any or no reason, and at any time, and they must inform them of this right (p. 6).
- The confidential and anonymous treatment of participants' data is considered the norm for the conduct of research (p. 8).
- Researchers must comply with the legal requirements in relation to the storage and use of personal data as set down by the Data Protection Act (1998) and any subsequent similar act" (p. 9).

In relation to the present research, participants' informed consent was taken verbally. However, all the participants received an explanation of: the importance attached to their participation; the significance of the study; their rights concerning withdrawal from any stage of the process, and finally a request for permission to record their interviews. Participants were also assured that all the information they provided for the research purpose would remain confidential, data would be used strictly for the purposes of the study and their names would be replaced with symbolic names. For the researcher, two additional ethical issues, those of 1) avoiding bias, and 2) using appropriate research methodology, were also considered. According to Kumar (2005: p. 214) bias on the part of the researcher includes using a method or procedure which the researcher knows to be inappropriate, for example, using an invalid instrument, selecting a highly biased sample or drawing conclusions which are wrong or unethical; these issues will be dealt with in the section below.

3.3.2. The context setting and the samples

3.3.2.1 The context of the study

The two Universities of UK, which like most universities, are public sector bodies and depend largely on government funding. International students are also a great source of funding for these universities and, because of their importance in terms of internationalisation, these institutions attract overseas students. According to Abdulkader (2009), most of the universities in the UK are usually aware of international students' different needs, be they academic or cultural, as international students are part of the structure of all UK universities (p. 100).

In order to specify the target population, the English-language institutions of both the were selected as the basis for sampling. The selection of the language institutions for my empirical

study was based on several criteria. Firstly, my status as a PhD student at University A offered me an opportunity to conduct my research in this institution, and it was also very convenient to get to Leeds University for the purpose of research. Secondly, both the universities are higher education institutions that have language centres with a variety of English-language courses for overseas students, which are very different, for example, from the ones in which I studied in my home country. This represented a good opportunity to broaden my research in terms of discovering how CT is embedded in learning in the universities of the UK (English-speaking/Western countries), as compared with the prior learning of those who come from non-English speaking backgrounds. This study as a whole, however, will contribute to understanding of the cultural phenomenon of CT for many other non English-speaking cultures throughout the world. Both theuniversities and their language centres, actively encourage overseas students. With regard to country of origin, the students came from a wide range of countries throughout the world.

Both the language institutions were similar in the sense of students' cultural diversity and language backgrounds, and also had similarly qualified language teachers in terms of holding degrees in ESL/EFL. Though it would have been possible to choose just one university for the study, the reasons for choosing both the universities were to get rich information in terms of differences in age group, gender, prospective degrees, subject groups and nationalities, as well as to strengthen the results of the research findings.

3.3.2.2. The samples

According to Punch (2005), sampling is an important technique of qualitative research because it is not possible for a researcher to do everything everywhere, or to study everyone. Cohen *et al.* (2007) point out that a sampling strategy is essential for the suitability and the quality of the research conducted, because the findings of the research depend on the *method of sampling selection* (Kumar, 2005). Therefore, sampling is equally crucial for qualitative as well as quantitative research because a researcher is unable to research everything, even about a single case.

The participants selected for the present study were university students from the University A and the University B, who were studying English as a second or foreign language for their course of studies. The total sample consisted of 105 international students (different in terms of gender, age, prospective degree, course of study, having 1st or 2nd/3rd degrees in the UK and nationality) and 15 second language teachers (all British). The sampling techniques were used for the present study are called 'snowball sampling", in which a small group of students who

qualify for inclusion are identified and help in identifying other participants as a chain process (Robson, 1993: 142). The sample was selected according to the following criteria. Firstly, all the selected participants were non-native speakers and there was no set boundary in terms of the participants' level of education, as some interviewees were studying for bachelors' or master's degrees and others were PhD students in various stages of their studies. With regards to access, as the participants all shared the author's experience as an international student, and their participation was voluntary, the author adapted her research timetable to suit their needs. To obtain participants, the researcher used different 'snowball' type strategies through personal networking and communication with students and staff. Of the total sample, 50 participants were interviewed, 50 participants were asked to self-report and five students' written work was analysed. Staff participants were 15 in number (12 were taken from both the language institutes and three were staff members from the department of International and Community Education at University A). Both students and teachers in the sample were given code names, such as: interviewee students IS1-50, self-reported students SR-S1-50 and teachers T1-12. The following table provides a description of the main student participant interviewees.

Table 3.1: A profile of the student interviewees

Name Code (IS)	Gender	Age in Years	Current Study	Subject Groups	Doing 1st Degree in UK	Country
1	F	25	MSc	Engineering (Embedded system)	Yes	India
2	M	30	PhD	Accounting	No	China
3	M	38	PhD	Accounting	No	Pakistan
4	F	31	PhD	Education	Yes	Pakistan
5	M	29	MSc	Computer Sciences	Yes	China
6	M	25	MSc	Accounting and Finance	Yes	Iran
7	M	25	MSc	Engineering	No	Iran
8	F	27	MA	English Literature	Yes	Oman
9	F	30	MA	TESOL	Yes	Libya
10	M	31	MSc	Mechanical Engineering	No	Oman
11	F	25	BSc	Engineering	Yes	Saudi Arabia
12	F	22	BSc	Computing	Yes	Japan
13	M	21	BSc	Computing	Yes	Pakistan
14	F	24	BSc	Accounting and	No	Pakistan

				Finance		
15	M	23	BSc	Computing	Yes	China
16	F	28	MSc	Computer Sciences	No	China
17	F	24	MA	TESOL	No	Libya
18	M	26	MSc	Engineering	No	Libya
19	F	24	MSc	Human and Health Sciences	No	China
20	F	22	BA	Social Sciences	No	Japan
21	M	20	BSc	Engineering	No	Saudi Arabia
22	F	32	PhD	Education	No	China
23	F	26	MA	English Language	No	Pakistan
24	M	22	BSc	International Business	No	Japan
25	M	24	MA	TESOL	Yes	Libya
26	M	26	BA (Honours)	Business and Management	Yes	China
27	F	22	BA (Honours)	Business Studies	No	India
28	F	23	MSc	Engineering	Yes	Iran
29	F	21	BSc	Accounting	No	Saudi Arabia
30	F	32	PhD	English Literature	Yes	Pakistan
31	M	24	BA	Modern English Language	No	China
32	F	29	BSc	Accounting	No	Libya
33	F	29	BSc	Business Management	Yes	Saudi Arabia
34	M	29	MSc	Human and Health Sciences	No	Iran
35	F	32	BSc	Business Management	Yes	Japan
36	M	22	MA	TESOL	Yes	Libya
37	F	29	MA	International Education	Yes	Pakistan
38	M	27	BSc	Computing and Business Solutions	No	Saudi Arabia
39	F	34	BSc	Engineering	Yes	China
40	M	31	PhD	Musicology	Yes	Iran
41	M	22	BSc (Honours)	Human and Health Sciences	No	Japan
42	M	34	BSc	Engineering	Yes	Saudi Arabia
43	F	28	MSc	Human and Health Sciences	Yes	Japan
44	F	29	PhD	Engineering	Yes	China
45	M	38	PhD	Computer Sciences	No	Japan
46	M	25	MSc	Engineering	No	Japan

47	M	29	MA	TESOL	Yes	India
48	F	26	MA	TESOL	Yes	Libya
49	M	32	MA	Education	Yes	China
50	M	29	MSc	Human and Health Sciences	No	Japan

The above table shows the broad representation of international students in the sample from the language institutions of both the universities (Huddersfield and Leeds). The sample consisted of 25 male and 25 female students. Most participants ranged between the ages of 19 and 39. In addition, 25 participants were newcomers and 25 were seniors doing their 2nd or 3rd degree in the UK, aiming for awards of BA/BSc, MA/MSc and MPhil/PhD. The respondents were also categorized in terms of the three main disciplines of Humanities, Computing and Engineering and Business Studies. As can be seen, the participants came from a wide range of countries. The Asian interviewees were the largest group of participants (30), with students coming from China, India, Pakistan and Japan. Middle Eastern nationalities, including students from Iran, Oman and Saudi Arabia were the next largest group (13). Participants from Africa, including Libyan students, were the third largest (7). As far as the number of self-reported students is concerned, the table below demonstrates their information:

Table 3.2: A profile of the self-reported students

Name Code (S-RS)	Gender	Age in Years	Current Study	Subject Groups	Doing 1st Degree in UK	Country
1	M	39	BSc	Engineering	No	Libya
2	M	25	BSc	Accounting	Yes	Japan
3	M	23	PhD	Accounting and Finance	Yes	Saudi Arabia
4	M	21	BCom	B.Com	No	Bengal
5	F	31	PhD	Human and Health Sciences	Yes	Indian
6	M	22	BSc	Business	No	Japan
7	M	23	BA	Education	Yes	China
8	F	22	BSc	Engineering	No	Bengal
9	M	30	MSc	ICT	No	Iran
10	F	37	LLM	Social Sciences	No	Saudi Arabia
11	M	27	BSc	Accountancy	Yes	Iran
12	F	24	MSc	Business	No	India
13	F	26	MA	Social Sciences	Yes	Bengal

14	M	21	MA	Information Systems and Business	Yes	Bengal
15	M	23	MA	Business	No	Pakistan
16	M	20	BSc	Computing	Yes	Pakistan
17	M	21	BSc	IT	Yes	India
18	F	32	PhD	English Literature	No	Pakistan
19	M	25	MA	Tourism and Hospitality	No	China
20	M	22	BA	Business Management	Yes	Bengal
21	F	27	MSc	Engineering	Yes	Saudi Arabia
22	F	28	MSc	Accounting	Yes	Libya
23	M	23	MSc	Computer Sciences	Yes	Iran
24	F	23	BEd	International Education	Yes	Japan
25	F	22	BSc	Accounting	Yes	Japan
26	F	28	MSc	Information Systems in Business	No	Jordan
27	F	28	MSc	Business studies	No	China
28	M	32	PhD	Education	Yes	China
29	M	27	MSc	Engineering	No	Libya
30	M	31	PhD	Engineering	No	Oman
31	F	26	MSc	ICT	No	Jordan
32	M	26	MA	Social Sciences	No	Japan
33	M	22	MSc	Computing	No	China
34	F	35	MSc	ICT	No	Saudi Arabia
35	M	37	PhD	Computing	No	China
36	M	26	MSc	ICT	Yes	India
37	F	27	MSc	Accounting	No	Pakistan
38	M	22	MSc	Engineering	No	China
39	F	24	MA	Tourism	Yes	China
40	M	35	PhD	Education	No	Pakistan
41	M	28	MA	Accounting	No	Jordan
42	F	24	MSc	Social Sciences	Yes	Japan
43	F	29	MA	English	No	Iran
44	M	25	MA	English Literature	No	Japan
45	F	24	MSc	Human and Health Sciences	Yes	Jordan
46	F	26	MSc	Engineering	No	Saudi Arabia
47	M	31	BA	Business	No	China
48	F	37	PhD	English	Yes	Jordan
49	F	32	PhD	ICT	No	India
50	F	21	BSc	Computing	No	Bengal

With regard to the self-report participants, the above table shows the representation in terms of the variables of gender, age, level of education, course of study and nationality. The number of male and female participants was each 25, and the age groups were similarly balanced, with interviewees ranging between 19 and 39 years. The major disciplines remained the same as well, and comprised Humanities, Computing and Engineering and Business studies. In terms of different nationalities, Asian interviewees again remained the highest number of participants (32), including Bengali, Chinese, Indian, Pakistani and Japanese. There were 15 Middle Eastern students, and these came from Jordan, Iran, Oman and Saudi Arabia. African (Libyan) students were 3 in number.

In order to get an insight into the students' writing skills development in EAP (English for Academic Purposes) courses, 15 international students (from those interviewed) were also given diaries to note instances of the demands for CT in their everyday sessions. All the participants were enrolled in pre-sessional as well as in-sessional language courses in the language institutions for eight or ten weeks. These students' details are given in the table below:

Table 3.3: A profile of the diary-keeping students

Name Code	Gender	Age in Years	Current Study	Subject Groups	Doing 1st Degree in UK	Country
1	F	25	MSc	Engineering (Embedded system)	Yes	India
4	F	31	PhD	Education	Yes	Pakistan
9	F	30	MA	TESOL	Yes	Libya
12	F	22	BSc	Computing	Yes	Japan
13	M	21	BSc	Computing	Yes	Pakistan
24	M	22	BSc	International Business	Yes	Japan
25	M	24	MA	TESOL	Yes	Libya
28	F	23	MSc	Engineering	Yes	Iran
30	F	32	PhD	English Literature	Yes	Pakistan
35	F	32	BSc	Business management	Yes	Japan
36	M	22	MA	TESOL	Yes	Libya
37	F	29	MA	International Education	Yes	Pakistan
39	F	34	BSc	Engineering	Yes	China
40	M	31	PhD	Musicology	Yes	Iran
48	F	26	MA	TESOL	Yes	Libya

The participants shown above were requested to keep the diaries in order to obtain rich information about the help they were given in developing CT skills, in the EAP writing courses particularly. The students were asked to keep diaries during their courses and chosen on the basis of personal contact and relationship with those students. An interesting point related to gender was that, of the diary-writing learners, ten were female and five participants were male; because of my status as a female researcher, it made it easier to persuade female students to participate in this particular exercise. The diary keepers were drawn from both pre-sessional and in-sessional language courses of the EAP programmes. The purpose of pre-sessional and in-sessional programmes is to develop not only language but study skills, such as: academic writing skills; library and research skills; independent learning skills; group learning skills; academic speaking, and presentation skills (ELTC, 2008). The diary-keeping students were all newcomers and they also participated in the main interviews.

The sample of staff comprised 12 staff members drawn from both of the language institutions, and three staff members from the Department of Community and International Education at the University A. The participants were experienced in teaching international students. All the 12 language tutors were interviewed face-to-face, while the other three staff members were interviewed through e-mail, and one also participated in the case study for the current research project. Below is the description of the staff interviewed face-to-face in the research:

Table 3.4: A profile of staff interviewees

Name Code	Gender	Positions	Teaching Experience
T1	M	EAP Tutor	17 years
T2	F	EAP Tutor	10 years
T3	F	English Language Support Tutor	21 years
T4	M	EAP Tutor	31 years
T5	F	English Language Support Tutor	25 years
T6	F	EAP Tutor	35 years
T7	F	EAP Tutor	8 years
T8	M	EAP Tutor	25 years
T9	F	EAP Tutor	7 years
T10	F	English Language Support Tutor	30 years
T11	M	EAP Tutor	23 years

T12	F	EAP Tutors	20 years

The above profile of staff interviewees represents them as having two different perspectives: EAP tutors and English language support tutors; they were all quite experienced in teaching ESOL/EFL international students.

A case study was also conducted for the purposes of the present investigation. The background of the case study participants is shown in the tables below. Table 3.5 shows the information relating to the five Chinese international students, whose written work was analysed in the case study of international students' problems with CT in their academic writing. Case study participants were also coded with names such as for the students (case study student) CSS1-5 and for the teachers (case study teacher) CST1-3

Table 3.5: A profile of the case study participants

Name Code (CSS)	Gender	Course of Study	Subject Groups	Completed 1st Degree in UK	Country
1	F	BEd	Education	Yes	China
2	F	BEd	Education	Yes	China
3	M	BEd	Education	Yes	China
4	F	BEd	Education	Yes	China
5	F	BEd	Education	Yes	China

As is clear from the table above, all the five case study participants were Chinese and enrolled on the same B.Ed course. Four students were female and one was male. They were all completing their first degree in an English-speaking university in the UK. Their British teachers also participated in the case study with detailed email interviews; whose profile is shown in the staff interviewees (email) in the section 3.6.

Table 3.6: A profile of case study staff interviewees (via email)

Name Code	Gender	Position	Teaching Experience
CST1	F	Lecturer	8 years
CST2	F	Lecturer	6 years
CST3	F	Head of the Department	Over 10 years

These three staff members were interviewed via e-mail and one, who was the Head of International and Community Education in the School of Education and Professional Development in University A, participated in the case study along with their five Chinese international students' written drafts, in order to provide me with the detailed information required about the international students; this was helpful because she had been directly engaged with international students for the last ten years.

3.3.3. Author's role as a researcher

According to Gillham (2000), the researcher's role in the study is an important factor in qualitative research. Atkinson *et al.* (2003: p. 62) state that researchers, as authors, frame their accounts with personal reflexive views of the self. Their data are situated within their personal experience and 'sense making'. They themselves form part of the representational processes in which they are engaging, and are part of the story they are telling. Therefore, the researcher's role has been questioned and seen as a 'crisis of representation' over the last two decades, and there has been a focus on researchers' struggles with how to locate themselves and their subjects in reflexive texts (Denzin & Lincoln, 1998: p.2). Coffey (1999) argues, in response to this critique, that the practice of 'reflexivity' is the workable usage of researcher subjectivities, primarily through the acknowledgment of these and embedding them within the research. On the other hand, Patton (1990: p. 472) states that, in order to establish an investigator's credibility, the principle should be to report any personal and professional information that may have affected data collection, analysis, and interpretation – either negatively or positively. In relation to the present study, as the author is an international student herself, it is necessary to include her experience and perspective to understand her inevitable connection to the research situation and informants' responses, and the resultant effect of this connection upon the outcome.

The author's role in the present investigation was that of an international student in the UK, researching the experiences of other international students in the UK; thus, she was both a participant and a researcher. As a participant, she shared the main issues related to academic writing and critical thinking which arose with the international students. This could have caused bias in the study, as the authors' personal preconceived notions of critical thinking-related challenges for international students may have influenced her interpretation of students' responses. Such bias, however, has been reported to be an unintentional manifestation within research questioning in qualitative research. According to Mehra (2002),

the qualitative research paradigm comprises the researcher as an important part of the process. The researcher cannot separate himself or herself from the topic/people he or she is studying; it is through interaction between the researcher and the researched that the knowledge is created. Therefore, the researcher's bias enters the picture even if the researcher tries to stay out of it.

As previously stated, the author was fully aware of the dangers of her role in the present study. Although, being both an international student and a researcher, her comments could have some impact on the discussion or interpretation of students' responses, various techniques were adopted to minimise the influence of any potentially biased interpretation of the data. For instance, when conducting individual interviews, interview schedules as well as less structured strategies were adopted to establish a clear framework, to reduce bias and to maintain objectivity within the study. Through this, the researcher was not free to go beyond the listed questions, a factor which may enhance the reliability of the procedure. The author found, very early on, that these techniques worked well. Students were in all cases enthusiastic about talking to another international student and appreciated the chance to discuss their experiences as they did not often get such an opportunity. This was also kept in mind when framing prompts and probes during the interviews, as well as in the interpretation of participants' responses. Having the interviews recorded on tape was also a useful tool for checking the reliability of the data. The interviews were listened to again a number of weeks after they had taken place, and the author tried to critically analyse her reactions as well as those of participants towards the questions and answers. The author also had endeavoured to keep the interpretation and analysis fair and balanced, in order to respect the participants' voices. This was particularly important since the author also had a similar experience of learning in a non-English speaking background and tried to ensure her preconceptions did not affect the research.

The self-reports can also be considered a fallible source of data, as minor changes in question wording, question format or question context can result in major changes in the results obtained. However, the researcher overcame this issue by carefully explaining the wording of questions to participants and ensuring the same questions (open-ended) were used in all the self-reports. To overcome response bias, it was important to avoid too many closed questions. Another weakness acknowledged in the self-reporting method is acquiescent responding, which involves participants' agreement with the question or statement without considering them properly. Participants were told clearly about the value of their self-reported questions, and they were reminded many times to consider all their responses properly before handing

the reports back.

Similarly, to avoid subjectivity, brief and precise questions were set out in the learners' diaries and with regards to the case-study a lengthy time period provided the researcher with a fuller understanding of the issues and enabled her to present them clearly and coherently. Although bias is considered unethical, interpretivism recognises that "what we see is determined by a complicated mix of social and contextual influences and/or presuppositions" (Moses & Knutsen, 2007: p. 9), hence all the evidence explored was reported. The author also kept a reflective journal in which she wrote her thoughts and ideas following each interaction with the participants, and also at various stages of the investigation. This provided her with a chance to reflect on the validity of these thoughts, and to adjust them in the light of new research material.

Finally, it can also be argued that the author's background and role may have had a positive effect in the present study, as it allowed her to build up a relationship of trust and familiarity with the participants, which an outside researcher may not have achieved. The international students may have felt more able to share their experiences with someone who understood the CT-related difficulties in the same way that they did.

3.3.4. Methods and procedures of data collection

3.3.4.1 Data collection methods

As noted above, a qualitative approach was adopted in this study: this consisted of a range of methods (interviews, self-reports, diaries and a case study) in order to achieve data triangulation (Cohen *et al*., 2005). My approach also involved respondent triangulation (Adeyemi, 2008) in the use of more than one group: teachers and studentsetc. (p. 62). Interviews, self-reports and learners' diaries were specifically used to minimise the risk of biased conclusions and to maximise the reliability and validity of the research findings. Sells *et al*. (1997) claim that the use of multiple data collection sources increases the trustworthiness of the findings of the research. Similarly, Adeyemi (2008) concludes that a combination of three or more data collection methods minimises threats to the validity of the research. Cresswell (1998) also notes that:

> "There are four basic types of information to collect: observations (ranging from non-participants to participants), interviews (ranging from

> semi-structured to open-ended), documents (ranging from private to public) and audio-visual materials including materials such as photographs, compact disks and video tapes" (p. 120).

Two of the types of data collection methods mentioned above, interviews and the examination of students' written documents (included in the case study method), were used in the current study. In addition self-reports and learners' diaries were also used to enrich the information collected. Mori (2007) specifies the diary method as appropriate for language studies. Therefore, this method was used in order to gain insight into the EAP courses.

Mcdonough and Mcdonough (1997) explain the use of diaries in the study of English language teaching from three aspects, which are: 1) being rich, both qualitatively and quantitatively; 2) being self-evidently subjective and introspective, and (3) being retrospective and reflective (pp. 112-124). Nunan (1992) also mentions diaries as an important and valid research tool (pp. 118). Similarly, self-reports are also one of the qualitative research methods which are useful to get first hand information from participants about their beliefs and thoughts. Various authors (Ickes, 1997; Vazire & Gosling, 2004) have reported that self-perceptions strongly influence people's interaction with the world.

3.3.4.1.1 Interviews

Interviewing the second language staff and international students was the main method of data collection for this study. According to Kvale (1996), interviews are the interchange of views between people, and the method enables participants to discuss their interpretations about themselves and the world from their own point of view. Interviews consist of various types, such as structured or semi-structured, closed or open-ended and formal or informal etc., and the use of these kinds is dependent on the sources available. Kvale (1996) further categorises interviews in this way: "Interviews are different in the openness of their purpose, their degree of structure, the extent to which they are exploratory or hypothesis testing, whether they seek description or interpretation, whether they are largely cognitive focused or emotion focused" (pp. 126-127).

According to Rubin and Rubin (2005), interviews are essential and can be defined as one of the main data collection methods which include a conversation, basically involving open-ended questions for the purpose of eliciting information. For the purpose of this study, the semi-structured interviewing technique with open-ended questions was selected as the main

method for data collection. Some of the literature (Cohen and Manion, 1995; Patton, 1990) claims that semi-structured interviews with open-ended questions are a flexible approach, which enables the researcher to capture the complex issues related to individuals' perceptions and experiences. Gillham (2000) also reports that this is the most important type of interviewing, and could be the most productive source of data if conducted properly. Similarly, semi-structured interviews, according to Freebody (2003), begin with a predetermined set of questions, but allow some latitude in the breadth of relevance (p. 133).

The selection of semi-structured interviews for the current study was based on the following rationale. Firstly, these kinds of interviews allow flexibility for the participants as well as the researcher. As Cohen *et al.* (2005) note, this type of interview enables the researcher to follow up ideas, investigate feelings and motives and probe responses. Similarly, using semi-structured interviews in the current study enabled me to probe informants in order to make unexpected responses clearer. It also enabled me to remind interviewees about missed points (Oppenheim, 1992). Interviews can also "develop ideas and speak more widely on the issues raised by the researcher" (Denscombe, 2007: p. 176). Secondly, semi-structured interviews can be used to follow up unexpected results and consume less time than other kinds of interviews, such as unstructured interviews, because unstructured interviews do not involve prepared questions, probes and prompts to direct the flow of interviews (Kumar, 1999). However, in semi-structured interviews, an interview schedule is used to establish a clear framework and reduce bias in the study, since as Freebody (2003) and Kumar (1999) note, researchers are not free to go beyond the listed questions and this may enhance the reliability of the procedure.

a) Advantages of interviews

The most important aspect of the research is the construction of the research instruments (Kumar, 2005), because the quality of the gathered data is dependent on the research instrument. He further explains that each method of data collection has advantages as well as disadvantages, and each could be used for certain situations. Some of the advantages of interviewing are presented below:

1. Adaptability: one of the major advantages of interviews as a method of data collection is their adaptability. It is easier to elicit participants'

ideas, probe their responses and clarify vagueness than is the case with the use of questionnaires.

2. Body language: interviews help understanding by the ability to interpret body language such as facial expressions, nods and smiles (Bell, 1999).
3. Personal information: participants can be more easily encouraged to give their personal beliefs and views in face-to-face interviews rather than questionnaires (Gillham, 2000).
4. The provision of insight into the students' views: interviews are usually conducted for exploratory types of research in order to gain insights into opinions.
5. Richness: interview methods based on open-ended questions often yield rich and unpredictable information (Rubin & Rubin, 2005).

The selection of the interview method for data collection helped me to answer my research questions appropriately, and also helped me to achieve the overall aim of my study, which was to explore the barriers and approaches to the development of international students' CT and its use for their courses of study. Using the interview method also helped me to gain an in-depth understanding of participants' beliefs and practices (Rubin & Rubin, 2005). Having discussed the advantages of the interviewing method, particularly that of semi-structured interviews to enrich my overall research, it is necessary as a next step to discuss some of the problems that may arise from using this method, in order to avoid them as much as possible.

b) Interviewing problems

It is a fact that, to conduct an appropriate interview, great care and effort is required. As O'Leary (2004) notes, to "prepare an interview schedule and data recording system; run a trial or pilot; modify the process as appropriate; conduct the interviews; and finally analyse the data" (p. 164) is an exhaustive process. Freebody (2003) also points out that students' consent should be considered properly. Good co-ordination of and between the interviewees should ensure the success of the interview, but this method can still have some integral problems. It is necessary for researchers to acknowledge such weaknesses in order to minimise their effects. Some of the problems associated with semi-structured interviews are shown below:

1. Expensive in nature: interviewing can be very expensive, especially if you have to travel from one place to another. For example, my

interviews in the University of Leeds were expensive, as I needed to go whenever participants were available for interviews for the purpose of data collection.

2. Time consuming: the second problem with the interviewing method is that it is time consuming, as stated by Bell (1999): "if you allow one hour to be spent at the actual interview, there is also travelling time and time lost through any one of numerous mishaps (respondent late home, sudden crisis with children which causes delay, unexpected visitor who interrupts the interview, etc."
3. Contradictory opinions over a certain point: this can happen because the participants' concentration is diverted, and their changing moods are another potential problem that may affect the results of the study by misleading researchers with contradictory responses.

This was clear in the case of the current study while interviewing three students. These students were unable to pay full attention to my questions because of some personal problems, such as having to meet a relative at the time of interview or, in another case, a student having to prepare for her presentation, and so on. As a result, many of their responses were short and not thoughtful, and this caused further difficulty in transcribing those interviews. Cameron (2001) calls interviewing "potentially a face-threatening act", as it involves invading the informants' privacy and "risks exposing the informants to negative judgement." This frequently leads many participants to being more reticent, as well as more reluctant to engage with the interviewer's questions in a straightforward manner, by highlighting face-saving points and marginalising, or concealing, face-threatening ones (p. 147). Marshall and Rossman (1999) also note that interviewees sometimes feel reluctant to provide all the information the interviewer hopes to explore.

In relation to my study, there were also some interviewees who were really concerned for me to keep their information hidden and confidential. According to Maxwell (1996: p. 73), this means that there is no guarantee that the views of participants represent the whole group. In my study, I interviewed participants on an individual basis in the hope that their responses would be the reflection of the views of a certain group, as the participants in the current study represented the broad cultures that can be seen in the population.

The control of bias and the maintenance of objectivity in terms of both the research process itself and the conclusions drawn" (Kumar, 1999: p. 12), was the problem which I faced

throughout conducting interviews for my study. This was also kept in mind while framing prompts and probes, as well as in the interpretation of the participants' responses (Abdulkader, 2009: p. 95). Apart from the problems stated above, the author had some preconceptions based on her personal experience and knowledge, because she already had learnt in the same non-English speaking background. Although at times her mind tried to interpret their responses unintentionally, it was important to keep her interpretation fair and balanced, in order to respect the participants' voices.

3.3.4.1.2. *Learners' diaries*

Another important method of data collection for the current research project is the learners' diaries method. Using international students' diaries, this project aimed to learn about their experiences and perceptions of developing CT skills in EAP (English for Academic Purposes) courses. The diaries were produced by 15 international students. For Bailey (1990), a diary study 'is a first-person account of a language learning or teaching experience, documented through regular, candid entries in a personal journal and then analysed for recurring patterns or salient events" (p. 215). According to Plana (2001), the writing of diaries helps students become more aware of their feelings towards a specific learning situation and towards the experience of learning (p. 174). The diary-keeping method in the present study provided an in-depth understanding of the role of EAP courses in developing CT skills for students' courses of study. In higher education, learner diaries have been used to shed light on the learning process and factors that affect it (Helm, 2009). Diaries provide a valuable insight into the many different perspectives of the learning process, such as: the learners' anxiety; their strategies; classroom interaction and its influence, and self-study (Yin, 2002; Simard, 2004). This study, however, will raise awareness about CT, and the signs of criticality in language classes designed to help students to develop these skills. Porto (2007) associates the word "awareness" with the diary method in this way: "Awareness was realised through diary writing, which provided a forum where learners could assess their own knowledge through a combination of observation, introspection and discovery (p. 676)".

The diary method is an important tool in exploring learners' learning experiences and processes which may be "hidden" or "inaccessible" to observation by investigators (Bailey & Ochsner, 1983: p. 189). However, this method of data collection is also not free of limitations. The research of Schmidt & Frota (1986) showed that subjectivity is the major limitation of studies using diary methods. Jones (1994) also notes that this limitation may "increase the

danger of finding what one sets out to find rather than what is objectively there." He further argues that the goal of a study should be to find out what is involved in the learning process, which involves subjectivity (p. 444). To avoid subjectivity, however, this study set out brief and precise questions in the learners' diaries.

3.3.4.1.3. *Self-reports*

The self-report method is another common and increasingly used method of data collection. It is a method usually based on questionnaires, in which participants are free to report their feelings, attitudes and perceptions without the researcher's interference. The self-report method is flexible and contains both open-ended as well as closed questions, in order to obtain intensive data in a short time. McDonald (2008: p. 2) discusses the value of the self-report method as one of the most common measures for obtaining accurate data about individuals' behaviours, perceptions and actions. Schwarz (1999) also points out that the objective of using self-reports is to collect information related to a particular construct directly from participants. He further explains that self-reports are the preferred method for social sciences, especially in the field of psychology.

Vazire (2006) conducted an analysis published in 2003, in the *Journal of Research in Personality,* which showed that 98% of researchers were using self-reports in order to assess personality traits, and in 70% of these studies, self-report was the only method used. Similarly in 2006, about 95% of studies also used self-reported questionnaires, as reported in the *Journal of Personality* (Kagan, 2007). Robins *et al*., (2007) also found self-reports to be a frequently used method in research studies (p. 677). "On the surface, the fact that obtaining self-reported data is so popular makes complete sense, the most informative and accurate information about wanted constructs" (McDonald, 2008, p. 2). Paulhus and Vazire (2007) also suggested that "no one else has access to more information" than oneself, because others might not be aware of some of the information or detail (p. 227). They emphasise the practicality of self-report measures for the collection of data from large samples, either directly, from face to face work with the participants, or via the internet.

In the case of the current research, it took the researcher just two weeks to distribute and collect all self-reports from the participants. The participants were all students and were accessed through a snowball sampling technique. Self-reports were included as a data collection method in my own research in order to access a large sample of culturally and linguistically diverse students' perceptions, and to get a complete sense of their reported

problems. In spite of the advantages and strengths of using self-reports, there are some weaknesses in this method: "Self-reports are a fallible source of data, and minor changes in question wording, question format, or question context can result in major changes in the obtained results" (Schwarz, 1999: p. 93). Question wordings were carefully explained to participants in the current study, and the same questions (open-ended) were used in the self reports, therefore they were carefully designed.

Another problem might be 'response biases', as noted by Moskowitz (1986). Paulhus (1991) reported "a systematic tendency to respond to a range of questionnaire items on some basis other than the specific item content (i.e., what the items were designed to measure)" (p. 17). Too many closed questions were avoided for the purpose of this study, in order to handle this weakness. According to Paulhus and Vazire (2007), another weakness can be 'acquiescent responding', which includes participants' agreement with the statement without considering it properly. Participants were told clearly about the value of their self-reported questions, and they were reminded many times to consider properly before handing it back. The next section provides the details of the data collection procedures:

3.3.4.2. Procedures for data collection

This section describes the actual steps taken in data collection. As my study involved multiple data sources (a case study, individual interviews,, self-reports,and learners' diariesthere were five main phases in order to complete all the data collection procedures. Details of these different phases are given below:

3.3.4.2.1. Interviewing phase one: pilot testing

The international students' interviews involved three phases: phase one included pilot testing; phase two included student and staff interviews in the University A, and the third phase included student and staff interviews in the University B. In the case of the students, all the interviews were carried out face-to-face, though initially it was planned to conduct some interviews by e-mail. E-mail interviews could have been less time-consuming and less expensive, but the researcher soon realised that they might affect the students' responses, in the sense that they could be shorter and less motivated than face-to-face interviews. What is more, supplementing participants' answers by seeing their body movements and facial gestures would not be possible in the case of phone or e-mail interviews. . The face-to-face

interviews were conducted in both the universities, at a convenient place.

The interviews were carried out with 50 international students and 12 English tutors. The student participants were all university students: 27, including five from the pilot testing, were from the University A, and 23 were from the University B. Similarly, the English staff members were all senior English language tutors in the two universities mentioned above. I interviewed six staff members from the language centre of A University and nine from the University B. The first phase of interviewing was based on the pilot testing of interview questions on my university informant and four more university students studying for an MA in TESOL. Testing and refining the interview questions was the main goal of this phase, and this also helped me to be prepared for conducting the other interviews. This phase provided me with help in circumventing the targeted information rather than hitting the key points directly (Abdulkader, 2009: p. 122).

In this phase, the researcher firstly had to rethink and try to revise some of the sub-questions of the interview questions. Secondly, she prepared herself to handle some of the issues which may arise during interviewing, such as the quality of the recorder and the interviewees' concentration, etc. Thirdly, it improved her confidence level and practical experience in conducting a good interview. Finally, practising with someone she was familiar with gave her chance to feel comfortable with carrying out an interview, as she was interviewing for the very first time in her life. In the pilot phase, five students were interviewed and the interviews were carried out on 26 and 27 June 2009 at the University A. The participants were: a Chinese female, an Iraqi male, a Libyan female and two Pakistani females. The total time for the five interviews was about three hours. All the interviews were recorded.

The pilot testing of interviews helped me to later conduct the main interviews with ease in many ways: 1) it provided me with the chance of revising, decreasing, removing and adding to the main interview questions as well as sub-questions; 2) it also helped me to ensure an adequate place for interviewing participants in terms of avoiding noise and interruptions; 3) it allowed me to ensure the quality of the recording, and 4) it enabled me to discover that serving them with tea and coffee before starting an interview was very useful because this created a relaxed and informal atmosphere.

3.3.4.2.2. Interviewing phase two: University A

On 20 July 2009, the author started to carry out the main interviews regarding international students' problems and approaches at the University A. She had already gained access to

international students and staff members from the head of the language centre, on the basis of the official letter from her supervisor, explaining the research purpose and the need for students' help to collect data for her PhD study. She had some Pakistani friends doing their PhD and Masters Studies in different departments at the University of Huddersfield, and was also enrolled in EAP (pre-sessional and in-sessional) courses in the English language centre. She also had some Libyan friends doing their M.A. TESOL in the education department where she herself was based. All these contacts were interviewed; they then introduced her to some other friends and times were arranged to interview them. This became a chain which developed further to allow meetings with other international students, and in this way all the 27 interviews were completed, including the five from the pilot testing at A University.

The researcher chose her research office, where she was currently based, to conduct all the interviews with the international students, because it was a very silent and comfortable place. Fortunately, all of the participants were very flexible about coming at the times they were requested, which was when the office was available. Being international students, they were, in fact, happy to report their problems with, and approaches towards, their course of studies in this new educational environment. My impression of four of the participants was that they were feeling tired and uneasy, but this might have been because of personal problems. I tried my best to make them feel relaxed, and even assured them that they need not answer any question they did not feel comfortable with. Otherwise, all the participants were quite confident and preferred to use English language for the interviews. One of the interviewees spoke very slowly, so that not all her ideas could be fully recorded. Bell (2005) also noted this problem in his study. All the 20 interviews with international university students from the University A were completed within two weeks; this was because of the willingness of all the international students to be interviewed for the purpose of reporting their own views about their study-related issues regarding CT.

The tutor interviews were conducted soon after finishing with the student participants, in the common room of the language centre at A University. Because of the busy term, which was filled with pre-sessional, in-sessional and many other general English language courses, it was difficult to get time from the tutors for interviews. However, I keep contacting them and finally five English language tutors helped me by arranging their time so that I could interview them. Just like the students, all the tutors were also interviewed individually. It took me ten days to complete all their interviews because of their busy schedules. The interview with each tutor lasted for approximately one hour.

3.3.4.2.3. Interviewing phase three: University B

Similar steps were taken to those mentioned above in order to carry out interviews with international students at the University B. To gain access to the students as well as staff members, the author contacted the director and the head of the English language centre by e-mail. Fortunately they gave her a quick response and called for a meeting to explain the research purpose and the type of data collection methods. The meetings were successful and they granted an open access to their international students and second language staff members. Additionally, they also provided a very silent and comfortable room for interviewing the staff participants and a student common room to interview the student participants whenever they were available, which was a great help for the researcher.

In preparation for the interviews, the head of the Language Institute of B University introduced the researcher to many international students. The researcher obtained their e-mail addresses and phone numbers, and began contacting them via e-mail; luckily most of them replied. Accordingly she was able to call them for interviews on 8 August. Three students were interviewed that day, and after interviewing them she took them for some tea or coffee in a café, which they appreciated, and this enabled a very informal and friendly discussion. The next day they introduced the researcher to two of their Japanese friends from the Engineering department for interviews. On 13 August, a meeting was arranged to interview these, as well as three more international students; two were studying for an MSc and a female participant was doing a PhD in Social Sciences. In this way, all the 23 interviews of student participants were completed within three weeks.

Soon after completing the student interviews, the researcher turned to conducting some staff interviews at the University B. In order to interview the English language staff members, the head of the language institute was again contacted for her help. She introduced staff members, to whom the researcher explained her research purpose and the importance of the study, and requested their participation. They happily agreed to be interviewed and, with the help of the head of the language institute, two days (27 and 28 August) were arranged to complete all the seven interviews. All the participants were very experienced in teaching international students, and provided the researcher with a great deal of information that she needed for her study.

3.3.4.2.4. Learner' diaries: phase four

As mentioned above, learners' diaries enable the researcher to gather data in a natural human setting, in order to examine or evaluate something and so understand the situation. For the purpose of data collection for the current study, the diaries selected related to CT help for international students in EAP courses. The diaries were properly prepared beforehand prior to giving them to the students. All the selected 18 participants were enrolled in a pre-sessional EAP course for a period of eight to ten weeks (from 13 July to 27 of September). All the participants were instructed of the guidelines for diary writing, as reported by Richards and Lockhart (1994). The researcher herself being an international fellow, it was easy to persuade them to keep and write the diaries for the purpose of the study, and also to convince them of the importance of their views. They were appropriately directed so that they only needed to report their personal experience and feelings about the CT elements in their language programmes, rather than the process followed by the tutors. They were also told that they just had to write diaries during academic writing classes, not in classes related to other language skills. Finally, they were asked to hand the diaries back soon after finishing their course. All of them completed diaries during their academic writing sessions, and the researcher collected them in, in order to analyse their views and feelings.

3.3.4.2.5. Phase five: the self-reports

Self-reports were conducted after completing the interviews and diaries data in Oct 2009. As this study demanded the inclusion of international students of different ages, gender, nationality, level of education and subject group, accordingly the sample grew to 105 international students, including the self-reports. At first the researcher had planned to interview all the students, but it proved difficult to manage 100 interviews listening to the students' own voices. Instead, it was decided to conduct 50 self-reports, along with 50 face-to-face interviews, in order to save the time and ensure the robustness of the study findings. During the process of interviewing the international students, the researcher had built good connections with many students already. This helped her to find students quickly, distribute self-reports and clearly explain their purpose. On 3 October, she met the students personally and handed out all self-reports within three days; most promised to return them the day after distribution. Only a few students were unable to return them the next day, but handed them

back after three days. All the self-report data was collected within one week, which was a great advantage.

The next section deals with the notion, methods and procedures of the case study.

3.3.4.3. Case study

Initially, the present study aimed to gain in an in-depth understanding of international students' problems and approaches related to critical thinking in their academic writing, by means of interviews, learners' diaries and self-reported methods. After completing the interviews, learners' diaries and self-reports, the researcher found a large gap between theory and practice, especially in relation to the second research question. The collected data provided a rich analysis of international students and English teachers' perspectives in terms of: their conceptions of CT; students' preferred approaches to academic writing; their main difficulties in relation to academic writing; the barriers behind those problem areas, and what would help to facilitate their academic writing experiences. However, the data could not exemplify the reported jargon of CT-related problems, or explain how teachers realised the lack of CT in their students' writing, thus helping answer the second research question. This left the researcher trying to understand how 'saying' and 'doing' fit together. It was addressing these issues which prompted the author's choice of using a case study. This was also justified by Yin (1984: p.23), who suggests that: "Case study research excels at bringing us to an understanding of a complex issue or object and can extend experience or add strength to what is already known through previous research". Therefore it was decided to employ a case study design in order to make complete sense of the data. The present study assumes that critical thinking is the product of a tradition of thought and of educational discourse, and therefore a more constructivist approach needs to be adopted, for example, exploring how students utilize CT in their writing, how their teachers see it as relating to their previous experience, and how teachers, through the process of assessment, reach judgements on whether students' writing exemplifies it

Cohen *et al.* (2007: 170) define a case study as "the investigation into a specific instance or phenomenon in its real-life context". The case study method, is generally used to investigate 'what?' and 'how?' questions (Yin, 1994: p.1), and the present case study is concerned with the question of 'what' the international students' initial CT related problems are, and 'how' teachers realise the lack of CT in students' writing. The focus was on the process rather than outcomes, in context rather than a specific variable and in illumination rather than

confirmation (Merriam, 1998: p.19). Furthermore, insight gleaned from the case study was intended to influence policy, practice and future research.

3.3.4.3.1. Instrumental case studies

According to Stake (2000: p. 437), case studies can be categorised into three types: intrinsic case studies, instrumental case studies and collective case studies. He explains that the intrinsic case study is usually used for gaining a better understanding of an interesting phenomenon. On the other hand, an instrumental case study is frequently employed for providing insight into a particular issue, often to rebut a generalisation which aims at supporting a rival thesis, whilst the collective case study is normally based on a number of cases which indicate some common characteristics of phenomena, such as populations or other large groupings. Although an instrumental case study is undertaken for the purpose of providing a comprehensive understanding of a phenomenon by using a particular case, it does not depend on the researcher being able to defend its typicality; the researcher does need to provide a rationale for using a particular case (Stake, 1995). However, as the development and application of the key skills of critical thinking vary within the cultural-educational context, the researcher could not find an individual case from which to take data. Therefore, the present case study is categorised as an instrumental case study, because the chosen cases are based on students' writing samples and their teachers' feedback comments. The cases were studied with an intrinsic interest, however, the researcher had no interest in generalising her findings as the focus was to understand the issue. The cases would offer me specific new perspectives to understand the academic phenomena related to the lack of CT in international students' writing.

This case study was designed as an exploratory study aimed at understanding the specific problem areas of students' writing that exemplified their lack of CT. An empirical case study investigation was conducted, as a study of a case is a systematic way of looking at what is happening (Davey, 1991). The idea was to discover what might be important to look at more extensively in future research. Thus, the present case study is especially well suited towards generating, rather than testing, hypotheses. The potential advantage was that understanding of the students' areas of difficulty was more likely to be gained from their written extracts, and that these should also provide a more comprehensive understanding. An initial challenge was that of defining the cases. The author r understood that this would involve getting students'

writing samples, in order to study linkage. The identification of such writing samples became the first task for case selection.

3.3.4.3.2. Choice of cases and methods for data collection

The case study was conducted in the department of International and Community Education at University A. The case study was based on the written documents of five Chinese university students and three e-mail interviews with their tutors, together with analysis of the feedback comments on the students' written drafts. The students' academic writing drafts were examined to discover the problems that resulted from their lack of CT. It was very important for the researcher to find international students from a suitable cultural-educational background to "confirm the basic process or constructs that underpin the study" (Voss *et al.*, 2002: p. 202). Therefore the chosen cases were carefully selected: firstly, all five of the Chinese student participants were from culturally and linguistically diverse backgrounds. Secondly, they were doing their first degree in British HE, and they were enrolled in the same academic year (2008/09) on the same BEd programme. Thirdly, the three teachers, were in a better position to provide an in-depth insight into the target issues. The profiles of case study participants have been given in the Sample Selection section (3.3.2: p. 79-80).

It has also been argued that case studies are typically based on either qualitative, quantitative or multiple methods (Yin, 1994)). The methods used in the present case study are qualitative. Analysis of the students' written samples and individual interviews with their English teachers would provide different perspectives. In the current exploration, emphasis is placed on the contrast/similarities between evidence in students' written samples and the detailed responses of their teachers. There was an initial encounter with all the students' writing samples in order to evaluate the cases in the study; having an initial encounter with the eight case study samples was to make sure that this would help to attain the objectives; for example:

1. it allowed the author to obtain a profile of each of the participants;
2. it was important to have gone through the students' writing samples in order to have a quick look at the target phenomenon and to know exactly what was to be expected from evaluation of these writing samples;

3. it also gave the author a chance to familiarise herself with the materials;
4. it provided the opportunity for testing the English tutors' reactions to talking about the target issues.

Two instruments were used in the case study: document analysis and interviews. According to Punch (2005), documents, whether historical or contemporary, are a rich source of data for social researchers. Documents can include: letters, diaries, biographies, brochures, government publications, academic and publicity materials, websites, regulations, policy statements, writing extracts, statistical reports, guides and so on (Gillham, 2000). Gillham further points out that documentary source of data can be used in different ways, depending on the nature of the study. For example, some studies might use only documentary evidence, while research based on case studies or grounded theory studies may use documents in conjunction with interviews and observations. In relation to the present case study, documentary evidence was used in conjunction with interviews, which were, as Gillham (2000) suggests, not expected to answer a research question, but to form part of the evidence.

The three teachers participating in the case study evaluation were individually interviewed. The format of the interview questions for this later stage of the investigation is included in the Appendix. The interviews were carried out via e-mail because of the teachers' busy term-time schedule. Similar interviews were carried out for the initial investigation; the content of these was less personal, so it was appropriate to provide a more formal, less intimate context. The purpose for carrying out these interviews was:

1. to provide insights into teachers' perspectives about international students' initial CT-related challenges in academic writing;
2. to identify teachers' reactions on these problem areas, and
3. to obtain suggestions for improving the materials.

A semi-structured format was used, based on questions formulated in advance. As open-ended questions provide no restrictions on the content or manner of the reply other than the subject area, Cohen and Manion (1989: p. 313) list the advantages of open-ended questions: they are flexible; they allow the interviewer to probe, so that he may go into more depth if he chooses, or clear up any misunderstandings; they enable the interviewer to test the limits of a respondent's knowledge; they encourage cooperation and rapport, and they allow the interviewer to make a truer assessment of what the respondent really believes. In relation to the case study, Stake (1998) points out that "As a form of research, case study is defined by interest in individual cases, not by the methods of inquiry used."

To gain access to the students as well as staff members the author firstly contacted the head of department via e-mail to arrange a time for meeting. In this meeting, the author explained the purpose of the case study and the nature of data needed, and she granted her willingness to provide the researcher with all the necessary data for the study. A week later, an e-mail was received, with attachments of the students' written drafts in electronic files. After gaining permission to interview all three tutors, including the head of department, the research emailed the interview questions and replies were received within ten days. By the end of November all the data had been collected and the researcher could start thinking about analysing it appropriately.

As the collected data was already in written form, the method for translating the discussions into results was a key decision to make. However, the relevant meanings were captured in writing, to allow appropriate analysis to be carried out. Each written transcript was read several times in order to come to a better overall understanding of each participant's experience. Analysis of the case study data was further combined with responses from the main data collected through interviews, learners' diaries and self-reported methods.

3.3.4.3.3. Triangulation

The tendencies to report personal bias and to be unrepresentative are the main problems reported in literature relating to the case study method (Yin, 1994; Burgess *et al.,* 2006). The discussion of information gathered can depend largely on the researcher's interpretation. Kumar (2005: p.214) notes that 'subjectivity' is related to a researcher's educational background, training and competence in research, and his or her philosophical perspective; in contrast, 'bias' is a deliberate attempt to either hide what a researcher has found in his or her study, or to highlight something disproportionately to its true existence. Cohen *et al.* (2000) point out these problems as limitations in that they may be, by definition, inconsistent with other case studies or unable to demonstrate a positivist view of reliability (p.184). As bias is considered unethical (Moses & Knutsen, 2007, p.9), in order to avoid these negative factors, triangulation strategies were adopted.

Triangulation is considered a very useful strategy for ensuring the validity of the research process by using multiple methods (Cohen *et al.*, 2000; Denzin & Lincoln, 2000). According to Cohen *et al.* (2000) it can be utilised at different levels, such as time, space, combined level, theoretical, investigator and even methodological triangulation (p.113). With reference to the present case study, triangulation might help to eliminate the issues in question.

Triangulation was used in relation to three concerns: firstly, to evaluate the same phenomenon by using multiple qualitative approaches and in order to provide alternative perspectives on the same phenomena. The second concern was to include different sample groups, such as students as well as teachers, in order to provide richness in the data. A third concern regarding the case study method is that it is time-consuming (Yin, 1993). The current authors' response to this concern is that a lengthy time period provided her with a fuller understanding of the issues, and enabled her to present them clearly and coherently through triangulation with the other data.

3.3.4.4. Relationship between different data collection methods and their significance to research findings

Interviews, self-reported methods and learners' diaries have long been staple features of qualitative educational research. Their relative capacity for generating large samples, and the opportunities which they offer for in-depth analysis, often render them highly attractive to researchers who may be uncertain about the scientific credibility of qualitative approaches. In the present study, however, the researcher has noted that the seductiveness of a combination of methods can result in a tendency to overlook complexities that may only be revealed when a single method is employed. Multi-method research, as described by Tashakkori and Teddlie (2003) involves the use of more than one method, but should be restricted to methods selected from within either quantitative or qualitative approaches. Multi-method designs are generally intended to supplement one information source with another, or to 'triangulate' an issue by using different data sources to approach a research problem from different points of view. Multi-method approaches might combine student interviews, observations, self-reports, diary methods and a case study, for example, where again the key design idea is to cross-check between sources and to supplement one kind of data with another.

In the present research, data was collected from a combination of different qualitative sources, which raises the question of how these different data collection sources are related to each other, and how they significantly and comparatively contribute to the overall research findings. Interviews, learners' diaries, self-reported methods and a case study were used as a combination of qualitative data collection sources. Previous literature suggests that these methods can either be used alone, or combined with other qualitative methods, or with quantitative approaches (Tashakkori & Teddlie, 2003). Although a great number of studies have conducted multi-method research strategies with interviews, observations, self-reports

and diaries etc. (e.g. Elliott, 2007; Mamlin *et al.*, 2001; Hofton *et al.*, 2003), no study has been found to use a combination of qualitative approaches along with a case study.

Even though it is difficult to provide justification as to the richness of using this combination of qualitative methods in a short description, the researcher hopes that she has been able to make clear that these methods can capture the complexity of educational practice in cultural contexts. Whilst such approaches are all academically respectable, and can offer some valuable insights (Elliott, 2004), the authors concern was that they should be appropriate for studying complex issues related to 'how' and 'why' questions, as in the case of the present study. Initially, only two methods, interviews and learners' diaries were selected for the purposes of data collection according to the nature of the research questions. As the aim of the study was to explore international students' approaches and problems related to the lack of critical thinking in academic writing, it was thought best to explore both students' and their teachers' perspectives by interviewing them, in order to get an in-depth understanding. On the other hand, learners' diaries were used in order to supplement one of the research questions (question 3(i)), which set out to investigate the role of EAP language modes in developing CT in academic writing courses. The present study also intended to raise awareness about CT, and the signs of criticality in language classes designed to help students to develop these skills. Porto (2007) associates the word 'awareness' with the diary method in this way: "Awareness was realised through diary writing, which provided a forum where learners could assess their own knowledge through a combination of observation, introspection and discovery. The diary method is an important tool in exploring learners' learning experiences and processes which may be "hidden" or "inaccessible" to observation by investigators" (Bailey & Ochsner, 1983: p.189).

Overall the interview and diary methods helped to answer the research questions appropriately in order to achieve the aims of this study. However, the researcher found, at some points in the students' responses during the interviews, that an in-depth understanding of students' beliefs and practices in relation to CT might be best illustrated through written rather than spoken responses. For example, one of the student participants, in response to the first research question, reported that "*There is much more in my mind about critical thinking but it is difficult to explain verbally; it will be very supportive if you ask me to write in order to show my full understanding with the concept*" (IS14). Another student similarly stated: "*I'll try my best to conceptualise what critical thinking is, but if you provide me chance to write it down that would help more*" (IS29). Yet another student participant answered in response to other research questions: "*Let me think…I know well where I do make mistakes in my writing,*

but unable to explain because I need some time to think; its better if you say me to write this answer" (IS43). Other students also indicated similar views.

Keeping this in mind, the researcher decided to utilize some self-reported methods, based on the same research questions as those of the interviews. The self-report method is flexible in terms of obtaining intensive data in a short time. McDonald (2008: p.2) discusses the value of the self-reporting method as one of the most common methods for obtaining accurate data about individuals' behaviours, perceptions and actions. Regarding the case study, readers might be puzzled to find a case study discussed in the context of the present study as one of the source methods. As Gillham (2000) states, case studies are not usually expected to answer a researcher's research questions, but they can form part of the evidence. The uniqueness of the case study method lies in the in-depth study of an issue. Furthermore, the case study method is generally used to investigate 'what?', 'how?' or 'why?', and it is also used "when the focus is on a contemporary event within some real-life context" (Yin, 1994: p.1). A more detailed discussion of the purpose of choosing a case study has been given above, in section 3.3.4.4.

Finally, as a researcher, my purpose was ultimately to shed light upon the complexities of educational practice and understanding, in order that critical thinking may be developed and enhanced. Using more than one method also accommodates triangulation, whereby, for example, claims from different data sources can be compared. Findings from research of cultural-educational studies ought to speak clearly to the intended readers and should also be transparent to anyone who may be peripheral to the study, but still interested in its findings. The readers of such studies are often highly influential in relation to progressing outcomes from stated research findings. Combined methods may enhance acceptability in cases where readers may not be convinced of the findings from merely one or two data sources. Although such investigations are often time-consuming, expensive and difficult to manage, particularly when working cross-culturally, they result in precision, objectivity and the rigour of traditional research approaches. Interviews, self-reports, learners' diaries and a case study were specifically used in order to minimise the risk of biased conclusions and to maximise the reliability and validity of the research. Furthermore, Sells *et al*. (1997) claim that the use of multiple data collection sources increases the trustworthiness of the findings of the research.

3.3.4.5. Reliability and validity of the overall research

In order to conduct effective qualitative, as well as quantitative, research, consideration of the

validity and reliability of the research is a very important factor. According to Cohen *et al*. (2005), reliability means the accuracy and precision of the research, and its quality, while validity is concerned with honesty, depth and richness, and objectivity (Adeyemi, 2008). This section, therefore, deals with the validity and reliability of the current study.

3.3.4.5.1. *Reliability*

Joppe (2000) defines reliability as: “the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability, and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable” (p. 1). Paton (2001), similarly, considers validity and reliability as crucial while designing research study. This leads to the question “How can an inquirer persuade his or her audiences that the research findings of an inquiry are worth paying attention to?” (Lincoln & Guba, 1985: p. 290). Healy and Perry (2000) answered the question by suggesting that the quality of a study should be judged in each paradigm in terms of: credibility; neutrality or conformability; consistency, and applicability. Lincoln and Guba (1985: p. 300) use the term “dependability”, in discussing qualitative research. According to Seale (1999), the “trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability” (p. 266). When judging (testing) qualitative work, Strauss and Corbin (1990) suggest that the "usual canons of ‘good science’ require redefinition in order to fit the realities of qualitative research" (p. 250).

3.3.4.5.2. Validity

According to Joppe (2000), validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow you to hit "the bull’s eye" of your research object? Researchers generally determine validity by asking a series of questions, and will often look for the answers in the research of others (p. 1). In qualitative research, validity is defined in many different ways, such as by describing it as “rather a contingent construct, inescapably grounded in the processes and intentions of particular research methodologies and projects” (Winter, 2000: p. 1). Although some scholars, such as Creswell and Miller (2000), argue that the term validity is not applicable to qualitative research, on the other hand they feel that it is necessary to measure their research. They further conclude that the validity affects how it is

perceived by other researchers. Others have suggested their own terms, such as quality, rigour and trustworthiness as alternatives (Davies & Dodd, 2002; Mishler, 2000; Seale, 1999; Stenbacka, 2001).

In relation to the present study, the adopted approach necessarily means that there is limited generalisability, but that the author was more concerned to generate insight. The research questions of the interviews, self-reports and learner's diaries derived from the researcher's personal experiences of being an international student, as well as from the current literature in the field. The case study check list was drawn from the current model of assessment criteria for students' writing for academic purposes. In addition, the teachers' feedback was examined for comments on relevance and proof. In short, to ensure the validity and reliability of the research, the following strategies were employed:

1. Triangulations were used throughout in the data collection process, using many different research instruments in conjunction with students' artefacts, teachers' feedback, field notes and the literature reviewed in Chapter Two.
2. Purposive sampling techniques helped me to easily target the participants with similar key characteristics, in order to get as much important information as possible from the process which could also apply to the majority of similar settings.
3. To make the findings more substantial, verbal quotations from participants' actual responses were included in the text.
4. The researcher's experience as an international student also informed the choice of questions to be explored.
5. The feeling of international collegiality between the researcher and the international student participants helped to promote a friendly atmosphere. This enabled them to respond more openly and naturally.

The research questions used in this study consisted of: interview questions for teachers; interview questions for students and self-report questions for students; diary checklist for students, and writing assessment criteria and teachers' feedback comments for examining students' written work. In ensuring the credibility and reliability of the research, the designed research questions (main and sub research questions) were shown to: my supervisor, as an English education expert; many other experts of English language and international education teaching, and to the expert faculty members as promoters of this study, in order to get their

input and to check its validity and reliability. This exercise assured the author that the designed research questions were capable of measuring the needed data pertaining to the study aims, and that these could be used in any other research setting as well. Some modifications were made according to the experts' suggestions, in order to enhance the relevance, significance, understanding, clarity and applicability of the research questions. Some of the items were also removed after being pre-tested, as they did not bear relevance to the study. After pre-testing, a few items were refined again and, after that refining process, the questions were fully ready to use for data collection.

3.3.5. Procedures of data analysis

Data analysis procedure is based on two steps: data analysis preparation, and data presentation and analysis. The first step of data analysis preparation includes transcriptions and coding, while the second step includes the presentation and analysis of data. These steps are discussed below.

3.3.5.1. Transcription and coding

By November 2009, the author had completed all the data collection. It took about two months to organise all the collected data into different categories in different files in order to start analysis. First of all, all the data were transcribed and then coded the responses appropriately. Transcription was started in January 2010. The author agrees with Walliman (2006) and May (2001) that transcription is a very lengthy process, and one hour of interview can take eight or nine hours to transcribe. Another issue, described by Cohen *et al.* (2000), is the inevitable loss of data because "a transcription represents the translation from one set of rule systems (oral and interpersonal) to another very remote rule system (written language)" (p. 281). For example, the facial expressions of the participants were missed in my transcriptions of interviews. According to Rubin and Rubin (2005), precise transcripts include "grammatical errors, digressions, exclamations, profanity, and indications of mood such as tears or laughter" (pp. 203-204). For this study, Rubin and Rubin's (2005) model of transcription was followed, which includes some grammatical errors, silences and pauses. Those were further indicated as interruptions by ellipses (dots). As all student participants in my research were second/foreign language learners, words repeated because of language difficulties were deleted. Facial expressions of the participants were also not transcribed or

added to the data.

The next step towards data analysis was coding the transcribed data. A systematic coding of the transcript data allows major categories or themes to emerge. An inductive approach was used to analyse the data for the current study. This approach of data analysis is evident in several qualitative studies, such as Strauss and Corbin (1990), Miles and Huberman (1994: p. 9).These studies claim that an inductive approach helps the researcher to understand the meaning of complex data through categorizing and coding the data. The transcripts were read several times to identify themes and categories. After discussion a coding frame was developed and the transcripts coded. If new codes emerged the coding frame was changed and the transcripts were reread according to the new structure. This process was used to develop categories, which were then conceptualised into broad themes after further discussion. The themes were categorised into three stages: initial impact, conflict, and resolution.

The specific approach for data analysis follows the Grounded Theory Approach (GTA) of Strauss and Corbin (1999). GTA has been described as a production of the in-depth relationship between phenomenon and the situation which is reflected in the data. Three interrelated activities such as; open coding, exile coding and selective coding were suggested for GTA analysis. Open coding is directly derived from the data and based on conceptual rather than descriptive codes, axial coding describes relationships, while selective coding formulates these concepts and relationship into a coherent theory. A coding scheme was developed specifically for identifying appropriate themes of the reflection of students and teachers' responses. The main themes were categorised and were then defined, described and re-written until the author felt assured of their appropriateness and inter-relatedness. Using the above approach, all the transcripts were categorized/ coded. A coding framework was developed. Responses were analysed to identify the emergence of the main themes and then coded accordingly. All the responses for the five main and sub-questions were coded carefully into many different stages, in order to condense the raw texts into the brief summary.

3.3.5.2. Data presentation and analysis

Presentation and analysis of qualitative data varied is based on the issue of "fitness for purpose" (Cohen *et al.*, 2007: p. 461), which means that the kind of analysis performed depends on the kind of research undertaken. For example, Cohen *et al.* (2007) point out that a suitable analysis for a case study could be descriptive. They further explain that the nature of

data collected also influences the kind of data analysis. Magagula (1996: p.11) provides the following guidelines for the data analysis process:

1. The investigator's statements should accurately reflect the respondents' perceptions.
2. The findings should be a function of the informants and the conditions of inquiry, rather than biases, motivations, interests and perceptions of the investigators.
3. The results must be transferable to other similar situations.

These guidelines are the key points to keep in mind during analysis. In relation to the current research, based on Kumar's (2005) approach of thematic analysis, I applied a thematic analysis for my study. Drawing upon this, all the responses were clustered under each question. Emerging themes were identified and coded accordingly. "Elaborated description", suggested by (Brown & Dowling, 1998: p. 83), was used for the writing up process, by describing and providing direct quotations from the participants' responses. Some tables of descriptive statistics of frequencies and percentages were also produced to supplement with the elaborative descriptions in order to present the readers an appropriate picture of data analysis. According to Abeyasekera, *et al*., (2000) such approaches to qualitative data presentation and analysis are meaningful and of great value to the researcher who is attempting to draw meaningful results from a large body of qualitative data. The main beneficial aspect is that it highlights all the factors may remain confound from the readers' eyes. Overall analyses were carried out manually, without using any analysis software such as QSR Nudist or N-Vivo. One possible disadvantage of handling the data manually was that it was a more tiring and physically demanding process, but it provided me with close access to, and in-depth understanding of, the issues explored.

3.4. Summary

To ensure the credibility of the research findings, mixed methods were used for triangulation purposes, which were: interviews, self-reports, learners' diaries and a case study. Purposive sampling techniques were used to choose a sample, in order to enable the advantage of applying the participants' information to a similar setting. Face-to-face individual semi-structured interviews were carried out with student and teacher participants, combined with

self-report based on similar questions to those of the interviews. Learners' diaries and a case study were examined to explore the participants' conceptions, perceptions and feelings about CT and the related problems and approaches. The QAA report of UK HE and the standard writing criteria used by teachers were also examined. Being an international student, the researcher's experience also informed the choice of elements to be discussed and examined with both students as well as teachers. Furthermore, the feeling of international collegiality that existed between the researcher and the international students as participants helped to ease the data collection procedures, such as by encouraging the participants to open up with their natural feelings and perceptions about the issues. To sum up the data collection methods, Figure 3.1 is given below in order to clearly shown the research questions, location of the data, how it was obtained and the form of data that was collected for analysis.

Research Question	Data Location	How Data Obtained	Form of Data
CT conceptions	Teachers Students	Interviews Self-reports	Qualitative
Approaches students use	Students	Interviews Self-reports	Qualitative
Challenges encountered	Teachers Students	Interviews Self-reports Case Study	Qualitative
Inhibitions to CT performance	Teachers Students	Interviews Self-reports	Qualitative
Role of EAP language modes	Students	Learners' Diaries Interviews Self-reports	Qualitative
Suggestions or solution models	Teachers Students	Interviews Self-reports	Qualitative

Figure 3.1: Data Grid

To summarise, the methodology adopted, theoretical considerations, different research strategies and the tools used for data collection have been discussed in this chapter. The study contexts and ethical issues were also discussed, as well as: the actual research design, including my relationship with the participants as the researcher; the sampling issues; the actual procedures of data collection; issues of reliability and validity, and procedures of data

analysis. The results will be discussed in the next three chapters.

CHAPTER 4: RESULTS FROM THE WRITING APPROACHES OF INTERNATIONAL STUDENTS

4.1. Introduction

It was established in the conclusion to the literature review chapter that there is a strong need for a study of international students' approaches to academic writing. This is important to observe the difference between higher and lower order cognitive engagement with writing tasks in terms of CT development between different cultural groups, since there has been regular criticism of these students for being passive rote learners and non-critical thinkers because of their lack of a critical approach towards their studies (Samuelowicz & Bain, 2001; Tanaka, 2004). Previous research studies have been identified three kinds of learning approaches as consisting of deep, surface and achieving learning approaches (Biggs, 1987; Entwistle, 1997; Marton & Saljo, 1976; Volet & Chalmers, 1992). The deep approach focuses on the meaning of learning and relating previous knowledge to newly learned materials, and to life experiences as well (Haggis, 2003). In contrast, surface learning approaches are associated with the memorization of discrete facts, reproduction of terms and procedures through rote learning, and viewing learning tasks in an isolated way; this might be adopted for more peripheral components of learning. The third approach of learning, called 'strategic' or 'achieving', is associated with the ability to switch between deep and surface approaches, rather than being a distinct approach to learning in itself. Richmond (2007) found that Asian countries tend to focus more on surface learning approaches, in which students are not expected to employ analytical and critical views. On the other hand, it is firmly believed that analytical approaches are prevalent in the UK cultural-educational context (Pither & Soden, 2000).

This may be because international students pursuing higher degrees in British universities come with concepts of learning which originate from their prior learning experiences, and which differ markedly from those of home students. These cultural differences occur when international students show a lack of ability to engage in classroom behaviours such as overt questioning, challenging others' ideas, giving their own opinions and critiquing. As these behaviours are associated with the concept of CT (Tweed & Lehman, 2002), it is important to acknowledge the international students' and English language teaching staffs' perspectives on these norms of CT. According to Clark and Moss (2005), students/teachers' perspectives are

vital in considering their teaching/learning practice, as ones' conceptions are negatively or positively related to their teaching/learning approaches. Therefore, there is a great need to understand students-teachers' understanding with the concept of CT as well as approaches to writing academically adopted by students who are culturally diverse, in order to examine the exact influence of CT practices in cultural-educational context.

On the other hand, the SOLO taxonomy of learning, suggests that in order to succeed academically students must engage in writing as a process of knowledge construction rather than information production. Watkins has argued that using the deep, surface and strategic approaches as analysis framework, students' approaches to writing can be researched in the cross-cultural context (1996: p. 9) because these perspective will allow the researcher to address the cultural factors. However, previous research in the field of students' writing approaches has mainly focused on the students of Confucian heritage (e.g. Watkins & Biggs, 2001) and none of them has considered the academic writing approaches of a group of culturally and linguistically diverse group explicitly. Therefore, the present study was designed to target this gap.

In order to investigate this effectively, two research questions were set out as follows: 1) how do international students and English-language teachers (ELT) conceptualise CT? And 2) what approaches do international students utilize or prefer to utilize towards writing? A combination of interviews and self-reported methods were chosen to gain a deeper insight into the teachers' and students' views, and to enable an in-depth examination of the effects of different cultural-educational contexts on the phenomenon.

4.2. International students' and English language teachers' (ELT) conceptions of critical thinking

The main purpose of investigating international students' and English teachers' was to explore the potential differences in students' (with different cultural backgrounds) understanding of the concept of CT, and to determine how their understanding was different from that of their English language teachers in the two UK universities. The interviews and self-reported answers provided an in-depth perspective from the participating international students as well as the English teachers in terms of their understanding of the concept of CT.

4.2.1. Conceptions of critical thinking: international students' perspectives

The main issues regarding the students' conceptions of CT emerged as three sub-themes, namely: students' perceptions of academic writing, the importance of CT, and students' understanding of the notion of CT. The responses are outlined below for subsequent analysis.

4.2.1.1. International students' perceptions of academic writing

The findings of the study show that almost all the students had a good understanding of what academic writing is, so this may help them to understand the academic conventions of CT properly. Students viewed academic writing mainly in terms of formal writing and institution-based writing, which is normally done in schools, colleges and at university level. The students' perceptions of academic writing appeared to be consistent with how academic writing has been presented in the previous research literature (e.g., Kelley, 2008; Bowker, 2007). The students' answers in response to the general question included, for example: "writing for assignments, dissertations, reports, proposals and thesis etc"; "planned and structured writing"; "writing that scholars use in their research"; "quality writing"; "clearly and accurately written"; "involve academic vocabulary and coherence"; "academic writing helps to generate new ideas", and "academic writing deepens ones knowledge." Writing for particular purposes is an important element of academic writing; otherwise it remains effortless (Storch, 2009). Similar ideas were found from the student sample:

> "All written work that is done for the academic purpose such as assignments, projects and thesis is academic writing" (IS7).
> "Academic writing includes the kind of writing we do in school, college and university for our assignments, reports, proposals and research projects is academic writing" (IS31).

The goal of achieving an outcome through academic writing requires proper planning and organisation. Many students, for example IS12, IS27, S-RS55, S-RS72 and S-RS89, perceived that academic writing is a structured form of writing, organised in such a way that the information makes sense. These perceptions support the view of Spandel (2005), who argues that writing involves organising and communicating information. Some of the participants put forth similar ideas, for example: "academic writing is at once a structured and properly organised form of writing" (IS42), and "academic writing involves planning

and organisation; further, organised information helps you to produce quality work" (IS21). Writing in an academic context is considered as the language of scholarship (Kelley, 2008), because scholars' work largely determines a higher degree of quality in their writing. Some other students supported this argument, as follows:

> "The kind of writing used by scholars in their research work is called academic writing in my point of view" (IS18).
> "Academic writing would be identifying by its quality because academic writing demands higher quality work" (IS9, IS47).

On the other hand, some other participants overlapped clarity with accuracy in academic writing, in this way: "writing must be grammatically accurate, and use academic vocabulary because this has a strong impact on academic writing" (IS5), and "academic writing should be clearly and accurately written" (S-RS96). It was also noted in the previous studies by Fox (1994) that grammatical accuracy is crucial for academic writing, particularly second language writing. Another student reported that "academic writing is interrelated with clarity and accuracy and without those writing is not academic writing" (IS83). An emphasis on clarity and accuracy can be seen in Paul and Elder's (2008) intellectual standards for quality enhancement. Almost all the students possessed similar perceptions about the nature of academic writing, regardless of their age, gender, level of study, discipline, nationality or whether they were studying or their first or second/third degree in the UK HE. Some participants offered the view that academic writing helps to generate new ideas and sharpens one's knowledge, which is very similar to the findings of the studies conducted by Adeyemi (2008). According to participants such as IS2, S-RS59 and S-RS64, academic writing helps students to generate and develop new ideas and then defend them with arguments. Another said:

> "Students construct new ideas in writing their assignments and project, which deepens their knowledge and creativity" (IS13).

This shows the international students experiences, as they look through their writing into the academic world. Furthermore, it strongly affects their ability to write in a different educational environment. According to McLean (2001), students' prior learning conceptions and experiences affect their future learning in a more flexible way. The findings showed that international university students from many non-Western cultural backgrounds articulated a similar understanding about academic writing. Although a few differences could be observed on the basis of individuality, they were essentially the same in terms of their understanding.

The above responses were followed by another question to determine the international students' understanding of academic conventions.

4.2.1.2. Importance of critical thinking

The results of the present study indicate that the student sample perceived CT as core skills for academic writing in either a first or a second language. This shows their awareness that the development of CT is fundamental to the academic writing requirements of UK HE. This was the theme ignored in the discussion of students' conceptions of CT in the mainstream literature. The range of key skills mentioned by students was as follows. A great number of students were agreed that CT is crucial for university education (see also Howe, 2004), which included the skills of "analysis", "logical organisation", "inferences", "judging and deciding" and "synthesising". The participants highlighted the importance of CT by focusing particularly on the necessity and demand for it in the UK HE system, in comparison with in the educational systems in their native countries. For example:

> "In my point of view that skills such as critical analysis and giving my own judgement, are more important because when we come to study abroad, especially in UK, they focus on critical thinking skills in academic writing. I look at my course and some assignments of my friends they just demand for high level thinking skills" (IS12).

Critical analysis of presented material and deciding what to believe or do (Paul & Elder, 2008), are important components of CT and core criteria for academic writing at the higher level of education in the UK (Elander *et al*., 2006). Other, similar views given by the students were: "In fact, to give the supporting evidence in order to justifying your statements are the important skills to write well in UK universities" (S-RS62), and: "you must have the skills to clarifying (sic) the meaning what you have written and to conclude your ideas are the more important here (UK) I think" (IS40). Sufficient knowledge is also considered an interdependent skill of cognitive abilities (Garside, 1996; Ten Dam & Volman, 2004), as one of the participants stated:

> "You should have fully grasped on the knowledge about your subject for writing your academic assignments and dissertations etc. because it is necessary to use your thinking abilities" (S-RS77).

According to Ivani (2004), writing correctness and accuracy is associated with grammar, punctuation, spelling and referencing. Some of the participants in the present study, however, emphasized only the importance of linguistic skills, including grammar, vocabulary and paraphrasing. For example, "language skills such as grammar and vocabulary are very important for writing assignments because I am studying Science subjects and I need to use academic vocabulary properly" (S-RS93). Another student stated:

> "For writing academically, it is very important to ignore spelling mistakes as well as use appropriate grammar and punctuation" (IS1).
> "Language abilities, for example choosing right word for right situation, perfect grammar and enough vocabulary are very important" (IS15).

Aside from language abilities, a few student participants also reported the importance of structuring skills in academic writing. For example: "basically it's important to know that how to write introduction, how to manage your literature and then conclusions" (IS96) and similarly, another international student said: "being speaker of other language, structuring looks very important to me because academic writing should be well organised and properly structured" (IS21). These views support the most important rules for writing an academic essay suggested by Peck and Coyle (cited in Elander *et al*., 2006), in association with writing structure, which are divided into three stages: introduction, body and then conclusion (p. 80). The next section shows the students' conceptions of CT.

4.2.1.3. Students' conceptions of critical thinking

Similar to the CT definitions in the research literature (Ennis, 1987; Facione, 1990; Halpern, 1998; Pennycook, 2001; Paul, 1993), different points of view were identified in the student's responses regarding their conception of CT. The students perceived various terms to be under the umbrella of CT, such as: interpretation, making judgements, supporting evidence, critical evaluation, critical analysis, presenting alternative perspectives etc. Based on the students' previous experiences and understanding, a frequently highlighted concept was "critical evaluation". Critical evaluation appears to be a fundamental skill for academic writing at university level (Lillis & Turner, 2001). The idea that the nature of CT is the accomplishment of critical evaluation can be seen in some of the participants' responses, such as: "in my opinion to evaluate the process of the subjects and comparing it to old experience and checking your results and matching your results with others" (IS22).

Another student conceptualizes that: “critical thinking is to analyse the situation critically to solve a problems” (IS59). Though some educators like Onion (2009) strongly equate critical evaluation with CT, this basic concept of CT is vague in many ways. It is certainly vague in the respect of CT standards. One important issue is what students mean by critical evaluation when they talk about it. As interviewee IS79 stated:

> In my point of view critical thinking is basically an examination of some of the information and evaluating and analysing the assumptions and different things which is related with that information.

It can be seen from the above quotation that the student has overlapped many skills with evaluation. For the most part, terms presented as “critical evaluation” by learners seem very limited in their meaning, as this respondent shows: “one’s ability to evaluate different situations and evaluate the subject matters” (IS57), whilst in its strongest sense, critical evaluation also includes methodological critique and presenting alternative perspectives (Elander & paul, 2002).

“Analysis” is another main concern of academic writing in the West (Lillis & Turner, 2001), and perceived as a core cognitive ability of critical thinkers (Tsui, 2002; Paul, 1993). Many students presented similar views:

> CT must be the analysis of a problem or an issue in order to differentiate good and bad points and analysis skills are really important to think in critical way (IS82).
> All the information and ideas can be organised through critical analysis of the situation to produce quality academic writing (IS57).

Another said, “Analysis is another face of critical thinking and analysis skills are very important to be succeeding” (IS14). Though many students suggested that analytical skills are a necessary aspect of thinking critically, they were not labelled in detail as similar in the literature (Halpern, 1998).

According to some other students, CT can be achieved through “interpretation” in order to clarify things and provide alternative solutions for problems and situations. Facione (1990) identified interpretation as a cognitive skill, and further divided it in terms of categorisation, decoding, significance and clarifying meanings. It was noted from the student sample that: “when we interpret an issue or problem to clarify the hidden meanings and motives, it shows our critical thinking skills” (IS5). Interpretation was also offered in Pascarella and Terenzini’s (2005) list of cognitive skills. Similar views were also notable:

> I think, looking at the different perspectives of the problem or situation through interpretations is critical thinking, which helps to focus on the important issues to come to the conclusions (IS73)

Presenting "argumentation" (Durkin, 2008) and "referencing" in order to support your arguments are further skills aspects of CT (Pascarella & Terenzini, 2005), and seen as the basis of quality academic writing (Kelley, 2008). Many of the participants offered general ideas of CT in terms of argumentation and querying evidence. According to them, "art of the language and art of the thinking lies in how to organize your arguments and express your ideas" (IS80) and "Critical thinking is giving your arguments but not for bad reasons just to explain the things to avoid some mistakes in future" (IS19). Similarly, referencing is seen as a common strategy of CT. For example, "if we want to show our critical thinking for academic writing, we need to provide proper evidence to support our ideas" (IS77). Another also suggested:

> Students need to give references to justify their arguments because this shows their CT skills. Referencing is a skill that is essential to think critically because we have to give arguments against and for about other authors' work (IS16)

The issue of meaning matters a great deal in terms of the quality of the concepts that the students described, because some students conceptualised CT as "problem solving". For example "Critical thinking is how to solve our problems" (IS55) and "if someone knows how to solve his/her problems, he/she is critical thinker" (IS12). These views can be rejected for many good reasons, because one may solve a problem critically but another can do the same uncritically. As Halpern (2007) suggests creative thinking is the basic requirement for thinking critically in order to solve problems.

On the other hand, some of the participants conceptually confused CT with criticism of others' work. For example; "critical thinking means to criticise others' work" (IS33); similarly, another was found to say: "It does not to follow some reference or books but to the evaluation of different studies to correct where mistake is" (IS41). For another student; "CT is to find faults from others work and correct them" (IS95). These views can be seen as negative thinking, in the sense of seeking to find others' mistakes and then criticise. Satariyan (2006) explains that CT is not negative thinking, and criticism should be offered in a constructive manner with sound arguments. It is always positive, productive, friendly and developmental.

Finally, some other students in the present sample were not aware of the concept of CT at all, and they clearly answered that they didn't know or were not clear about what CT is. For

example, one student admitted that he didn't know much about critical thinking, but assumed that, "actually I am new in UK and I do not know much about critical thinking but I think focus on important information is critical thinking" (IS73). This was an unexpected finding, as I would have expected that most of the participants would at least be aware of the concept of CT. It was surprising to note that about one third of the participants either had vague conceptions of CT, or they were not aware of the notion at all. It was also noted that participants who replied with 'don't know' or 'not sure' seemed reserved, silent and less expressive about discussing CT, and this could be a possible attribute of their cultural values of social harmony (Chiu, 2008).

Furthermore, this research was specifically designed to examine the cultural-educational influence on the cultivation of CT and its effect on students' writing in a second language, as well as their writing approaches in English-speaking universities. King and Kitchener (1994) explored the idea that conceptions and understanding of knowledge generally developed over time. As one of the interviewees said,

> I didn't understand and sure what it means by critical, actually it was not important in our back home country and I think now I am getting idea with the increment of educational level that what critical thinking is (IS86).

The students' conceptions of CT presented above could be seen as reflections of the students' aptitudes for CT. The best way to judge these conceptions is to consider what kind of thinking educators would and would not judge to be CT. According to Bailin *et al.* (1999), CT must be directed towards some purpose, such as answering a question, making a decision or to solve a problem or situation. These clarifications suggest the mental formulation of an aim, in order to be able to make a reliable judgment.

4.2.2 Conceptions of critical thinking: English language teachers' perspectives

The present section presents the analysis of the English language teachers' (ELT) perspectives. In relation to the English language teachers' conceptions of CT, various categories of themes were identified, for example, issues regard tutoring international students, and the importance of critical thinking and what constitutes CT.

4.2.2.1. Issues regarding teaching international students

Almost all the teachers described themselves as experienced in teaching English as a second language. The majority of the L2 teachers reported that they had above 20 years experience of teaching ESL students. On the other hand, two teachers had eleven and seventeen years experience, while a further two had three and eight years teaching experience respectively. Common themes in the teachers' responses regarding their role included: "adjustment of international students in new educational environment", "understanding students' cultural-educational backgrounds and their English language proficiency" and, most importantly, "to provide them with the skills they need for success in their academic courses". These views appeared consistent with the previous research literature (e.g. Ryan, 2000; Wisker, 2000).

Helping international students to adjust to an unfamiliar learning environment is an important aspect of facilitating students' learning experiences, as one of the teacher participants stated: "the main issue is I think to adjust them in new educational environment, to understand their level of English language and most important their cultural background" (T2). This unfamiliar environment can lead them to higher stress levels (Burns, 1991) because of the fear of failure. Other teachers strongly focused on understanding the students' language proficiency: "The main issues are language in terms of spoken and written English" (CST1), and "I think the main issue for me is the range of level of understanding of English within each group" (CST2). However, as Jepson *et al.,* (2002) argued, international students' proficiency levels in English language do not ensure that they are well prepared for academic success in the new educational system. Similar but more detailed ideas were notable from CST3; she reported her concerns in this way:

> "I think the main issues for international students are interconnected and include: academic writing, language, critical thinking and relating new knowledge taught in UK universities to their own country specific context. In terms of academic writing, international students are generally not used to extensive writing that requires structuring and building up of a logical and coherent argument."

The adjustment problems mentioned in the above quotation could possibly be the consequence of the need to meet Western cultural-educational norms such as "questioning, criticizing, refuting, arguing, debating and persuading" (Major, 2005: p. 85). She further explained that 'constructivism' is widely endorsed in 'Western' education, but for international students from a different cultural, social, political, economic and academic context, tutors may fail to really understand their existing 'mental models' and this can cause

difficulty. Similar kinds of adjustment problems were also identified by Mehdizadeh & Scott (2005). They added that this can make international students socially and intellectually incompatible with their Western counterparts.

Some teacher interviewees also suggested the issue of needing to "satisfy students to fulfil their needs and expectations", in order to give them a good experience in the UK HE system. This study, however, strongly emphasises the importance of providing students with quality in their education, and guaranteed outcomes for a successful academic life in English-speaking universities; as Biggs (2003) stated, only to explore students' problems is not enough.

4.2.2.2. Importance of critical thinking

The common answer to this question was that CT skills are vital and absolutely important for achievement at the higher level of undergraduate and postgraduate study. The importance of CT can be seen in one teacher's response, that: "CT skills are very important because it is the essential part of the university study in the UK and the international students have not had much exposure to critical thinking and it's really very important to teach these skills" (T2). This supports the views of many studies, which report that the teaching of CT is a main emphasis in today's higher education (Hayes, & Perry, 2008; Lun, 2010; Ramesden, 2007; Tsui, 2006). Interviewee T5 added that the reason for the importance of CT is specifically related to writing academically:

> "Critical thinking is very important for academic writing because the essence of academic writing study it is central to be able to analyse critically somebody's work and come to conclusions and then possibly base your own work on the analysis."

The views reported above uphold the argument of Pithers and Soden (2000), who indicate that the main focus of HE is to develop the "key skills" of university graduates. Onion (2009) and Pennycook (2001) state that CT is a set of skills which involves the questioning, critiquing, evaluation and systematic analysis of problems expected of university study. T7 further demonstrated the importance of CT skills across disciplines, as follows:

> "They are vital in every academic course and it is same and need for all subjects arts, science, etc. It is not something that you just study a course and you have to prove it but it's vital for every academic study and should be taught across the discipline. It's absolutely heart of writing I think."

There is a debate in the mainstream literature, for (Ennis, 1987; Halpern, 1998, 1999) and against (McPeck, 1981, 1990) the idea of teaching CT across disciplines. However, the recent studies of Ten Dam & Volman (2004) and Moore (2004) suggest that CT skills are general, applicable and transferable across fields or subjects. The teachers' views in the present study also suggest that it would be more beneficial to teach CT skills generally. One cannot deny that CT helps to decide what to believe or do (Ennis, 1987); in a similar way, interviewee CST2 noted that: "thinking critical is incredibly important otherwise a student will believe something just because it has been written in a book or a teacher tells them it is a good idea."
The importance of CT has also been reported in terms of academic writing assessment criteria. Focus on this importance shows that CT skills are essential for achievement at the higher levels of undergraduate work and for all study at Masters and PhD level. CST3 reported that:

> "Assessment criteria at the Honours level have the four broad criteria for assessments such as: knowledge and understanding, analysis & critical awareness, research and reading and presentation (including language). Whilst many international students (and tutors of international students) may get pre-occupied with the latter, it is the critical thinking that is required in the other three that is vital for demonstrating higher level thinking abilities. CT skills required for the Honours marking criteria are: an ability to question issues, to fully rationalise analytical techniques, synthesising conflicting elements of an argument, critical and evaluative discussion and use of reference material, solving 'real world problems', critical reflection on experiences and context, innovative and original use of knowledge and understanding, presenting a balanced argument and sensitivity to a particular audience when being assessed. At Masters level the QAA benchmarks require students to be able to contextualise knowledge and understanding, see inter-relationships, apply theoretical perspectives, realise and utilise integrative links, reflect, apply learning from previous experiences to new situations, and to show strengths in analysing, synthesising, and solving complex problems and evaluating alternatives."

The descriptors from the academic infrastructure, the Quality Assurance Agency (2008) for HE level, also strictly underscore similar assessment criteria to those mentioned in the above quotation. According to Elander *et al.* (2006), assessment criteria in teaching serve the purpose of improving students' performance. Rust *et al.*, (2003) also note that: "inviting students into the shared experience of marking and moderating should also enable more effective knowledge transfer of assessment processes and standards" (p. 152). On the other hand, CST3 focused on *form-driven* approaches to writing. She thought that:

> "Developing students' ability to write in good academic English can to a limited extent help them develop critical thinking skills. For example, we usually give a suggested writing frame to students when presenting them with an assignment: this offers students a form to structure their work, and therefore, in a sense, to structure their thinking. We encourage them to structure their paragraphs logically, and so in a sense, this could help them work on structuring their thinking in order to get good grades."

Peck and Coyle (1999) associate form-driven approaches with structuring techniques that can be learned by answering questions such as: how to build an essay? Does the essay have a clear, logical and well-defined structure? Are the sections obvious? Is material organised well? And are the arguments well developed? (Elander, 2002; Pain & Mowl, 1996). The teachers' views and conceptions above also support the previous literature which suggests that student' conceptions of CT are negatively or positively related to their academic achievements (Buckely *et al*, 2010; Loyens *et al*, 2007; McLean, 2001).

4.2.2.3. Teachers' conceptions of critical thinking

The understanding of the concept of CT shown within the teachers sample appeared to be consistent with the CT definitions which have been presented in the literature by theorists. CT was conceptualised in terms of skills/abilities and dispositions. CT as a set of skills included an ability to: challenge, examine and analyse data/information; evaluate arguments; decide what to do or believe; judge independently, and present alternatives. In dispositional terms, critical thinkers were seen as creative, flexible, open-minded, well informed and willing to experiment and play with ideas. The c*onsensus definition* of CT is also two-dimensional, involving skills and dispositions, as explained in the literature review chapter. Pascarella and Terenzini (2005) had drawn a similar list of skills from different definitions of CT: identifying and recognising issues; finding out relationships; referencing, concluding and interpreting etc. The majority of the participant teachers were agreed that critical analysis helped students to apply theory/materials in a critical manner. Other, similar ideas shown by the teacher participants were:

> "CT is an ability to analyse text and engage in a critical way to break down the piece into argument to reach to conclusions" (T5).
>
> "CT involves the skills of analysis of given information in order to show their broad understanding and knowledge of the subject and ability to discuss alternative perspectives on the issues with open-mindedness" (T12).

This supports the findings of the study of O'Donovan *et al.* (2000), which identified that CT is the clear application of theory through critical analysis. Evaluation of arguments and assumptions is a crucial element of CT; otherwise the aim of CT is not best achieved. Hale (2008) has stated that, regardless of all the different aspects of different definitions, all the theorists are agreed that CT entails a process of evaluation and critical analysis in order to improve one's thinking. Many teachers offered this general idea about the evaluation process, and suggested that CT can be best defined in terms of the evaluation of arguments/assumptions/ideas/information etc., in order to demonstrate a deep understanding of the issues and balanced judgements. For example: "CT is intellectual engagement and evaluation of the arguments/ideas, which includes challenging ideas and assessing claims" (T2). Another teacher participant suggested:

> "CT is critical evaluation of arguments and assumptions to be able to evaluate them and make an informed and balanced judgement" (T10).

The teachers' conceptions were very similar to those reported by Paul and Elder (2001) and Halpern (2007). Other skills mentioned include: critiquing and appreciating alternative perspectives: "CT skills are the ability to critique and assess the information you have and to look at it with different angles" (T2); skill in "going beyond the text and kind of see more evaluation and shed light on them" (T9); skills in argument analysis and inferences (Facione, 1990); "CT means an in-depth understanding of the content you studying and supporting your opinion with logic argumentation" (T11), and finally, the skills of deciding and making judgements (Ennis, 1987). One of the teacher participants responded that deciding what to believe or do, is very difficult to describe, because "It's to do with analysing whatever other people have written and evaluating in an objective way, and the thing is it's quite important not to accept everything written" (T4). He elaborated by giving the example of Wikipedia, which people think is golden, but in fact "that's rubbish". Another teacher reported:

> "I would say it's where people don't accept the first answer that they have given, they question at it, and they look at it flexibly. They are not negative but they are finding more about it. And don't just accept the first thing they read, meaning if they are reading an article, they just accept that here all the things are correct; rather to think about particulars that are given in that article" (T3).

According to CST1, "CT is the ability to develop knowledge through analysing text and conventionalising belief systems, from there to be able to evaluate them and make an informed and balanced judgement". CT cannot be promoted simply through the repetition of

thinking skills, but rather by developing the relevant knowledge, commitments and strategies (Bailin *et al*., 1999: p. 280). CT in relation to academic writing was particularly emphasised by CST3, who was also the Head of Department of International Education at the University of Huddersfield, as follows:

> "CT skills include "challenging ideas/ arguments/ theories" that have been presented at university (lecture, books, seminars etc), "demonstrating a deep understanding" that there are arguments for and against many of these, and to be able to "intellectually engage" with those arguments and "make judgements" about the validity of the cases. It also means to be able to apply "originality in analysing" into a completely different situation (either to indicate its applicability or inapplicability). In terms of academic writing they should be able to present an integrated discussion with a strong and consistent thread or line of argument that links understanding, knowledge, ideas and references in critical perspective" (CST3).

The ideas mentioned in the above conceptions of CT are best called the "evidence of success" in the academic world, because academic writing strongly emphasises such aspects of CT (Kelley, 2008). Critical thinkers, according to the above conceptions of CT, were also viewed as those who are "flexible, open-minded" and "willing to engage critically." These characteristics of critical thinkers are seen as essential in the research literature as well (Halpern, 1996; Facione, 1990; Ennis, 1987). According to Lun (2010), these dispositions are necessary in order to present an alternative perspective, thus broadening one's information. Despite the conceptions illustrated above, one of the teachers (with 30 years teaching experience) was unable to define the term of CT. She answered "it's really hard to conceptualize critical thinking so could you please go to the next question." To summarize the conceptions of CT, as it is typically understood by English teachers, it would appear to have at least the following three features: 1) it should be done for the purpose of making up students' mind about what to believe or do; 2) they should try to fulfil standards of adequacy and accuracy, and 3) the critical thinking fulfils the relevant standards to some threshold level.

4.3. International students' approaches to writing

Based on Biggs' (1993) conceptualisation of learning approaches, themes were categorised into surface, strategic and deep level writing approaches. He has revealed that at the "surface level" students are unable to approach ideas and facts critically, relying on memorisation to pass their exams and *surface level* is usually associated with low academic achievements (. At

the "strategic level" students try to manage and organise their studies in order to get good grades and *strategic approaches* can be switched to either surface or deep levels, depending on the students' efforts. While, at the "deep level" students look at the central arguments, connecting ideas and using evidence, and examining the situation critically, and which is associated with a higher level of academic success (Biggs, 1996). On the other hand, For UK academics, it is reasonable to expect students to adopt *deep approaches,* because CT development is their main focus.

When the international students were asked about the approaches which they used or preferred to use in academic writing, they reported a range, from surface to deep. A total of 97 student participants out of 100 (including interviewees and self-reported responses) answered the question, while 3 students replied with "do not know/unable to recognise" etc. The responses can be seen in the table below:

Table: 4.1: Students' approaches to writing

	Descriptions	Frequency	%
Surface Approaches (SA)	Reproduction of ideas	50	51.5
	Focus on collecting information	62	63.9
	Textbook-boundness	74	76.2
	Lack of purpose	81	83.5
	Routine memorisation	14	14.3
Achieving Approaches (AA)	Efforts to organise	29	29.8
	Time management	10	10.1
Deep Approaches (DA)	Interested in wider reading to seek meanings	17	17.5
	Critical and thoughtful about ideas/information	7	7.2
	Understanding thoroughly	11	11.3

When all the analysis was completed and put together, it was found that the approaches which the majority of the international students utilized or preferred to utilize in their writing for academic purposes were mainly surface oriented. It is obvious from the data above that the majority of the students preferred to build their work on others' ideas; tried to put in as much information as they could; relied on memorisation; focused mainly on textbooks; regarded the purpose as being to pass the exams, and some did not even care about the writing assessment criteria. On the other hand, some of the participants emphasised their efforts to achieve good marks; organising the information for writing; managing their time to meet their deadlines, and memorising in order to understand the materials etc. Some students, however, also

showed their attention to utilizing deep approaches, such as: being interested in wide reading; seeking meanings; being critical and thoughtful about ideas; following assessment criteria, and wanting to understand thoroughly. Therefore, it is important to discuss in detail international students' approaches towards academic writing in the host educational context, because this might directly affect the students' learning outcomes (Norton, 2003).

In responses to the second research question, comments made by culturally diverse students are categorised in deep, surface and achieving approaches to writing as an analysis framework, which further revealed differences between these three approaches.

4.3.1 Students who take surface approaches to writing

Based on the analysis of students' interviews and self-reports a great majority of the students has been characterised as taking surface approaches to writing. Many inter-related variables were also identified to be associated with students' cultural-educational backgrounds, which reflect the findings of the previous studies in the field. Details are presented below:

4.3.1.1. Passive learning experiences

International students who take or prefer to take surface approaches to writing generally bring passive learning experiences with them, which can be seen from the students' statements below:

> "In Saudi Arabia, we have to sit in the classrooms quietly to listen our teachers carefully. We cannot argue, we cannot question because it is considered as misbehaviour" (IS14).
>
> "We join schools/ colleges and universities to get knowledge so we have to sit longer, listen the lectures and note the important things to write in exams" (S-RS6).

The teaching styles in non-Western cultures were reported as being teacher-centred, and lectures were the main source of information. One of the students said that "teachers provide us all the necessary information that we need to pass our examinations" (IS22). Another student remarked that "In Pakistan universities and colleges are very small with limited resources, so the lectures are the best way to get more knowledge and information" (S-RS13). Although students find it the best way to get information, some of them also reported the drawbacks of this teaching style:

> "One of the problems with lecture method is that they are used for big class sizes usually 40-50 students so we can never get chance to ask our teachers anything if we do not understand something" (IS34).
> "Our teachers try to cover too many things in lectures so sometime important information is overwhelmed and class feel bored" (S-RS18).

One participant also called the lecture method a "...easy-way style which helps students as well as teachers to make fewer efforts and get more" (S-RS17). In addition to the "easy-way" teaching/learning style, many students also showed disappointment at the lack of tutorials on their teaching practice in their home countries. As one participant explained, "one of the characteristics of the UK higher education system is the tutorials, which we do not have in our country. In my point of views tutorials are the best way to enhance students' understanding with subject matters" (IS44).

4.3.1.2. Reproduction of ideas

Copying the ideas or words of other scholars without proper referencing is strongly condemned in UK academic conventions, and this is known as plagiarism (Norris, 2007); however, a significant number (51%) of the international students reported it as their main writing approach, which shows the "dividing line" between English and non-English speaking cultures. Some of the participants reported this issue as follows:

> "In my point of view our knowledge is always an extension of others' work, so I always try to follow some good writers' ideas in my assignments" (S-RS14).
> "I follow others work to write perfectly but my teacher here doesn't like and always comment that it's show your own views. And I do not know what she means by it?" (IS42).

This may because, as Dryden (1999) noted, the "Japanese students are not asked for producing original ideas or opinions. They are simply asked to show a beautiful patchwork (p. 5). Some other students mentioned that they are taught to strictly respect other authorities and this is the main reason to follow others' ideas and build their writing on those. One student said that "our scholars are our honour and it is their respect when we build our work on their ideas as sometime we do not use the reading material as it is and reproduce it" (IS6). This supports the views of Buranen (1999) and Liu (2005), who claim that "using other sources is a sign of respect for the received wisdom and knowledge and also a way of demonstrating

one's own learning or accomplishment" (p. 69). It notable, however, that the students are aware of the importance of citation and referencing, for example:

> "Although the ways and methods of citations in China are very different from here (UK), we usually provided the list of references at the end of our writing drafts without mentioning in between, but here we have to support our every word with evidence. It is difficult but I think it is the best way to refer others' work" (IS26).
> "I think it is entirely wrong to copy others' ideas and words and paste them without proper citing like in the Universities in Libya" (S-RS33).

Some participants also stated the reasons for copying others' ideas, as follows: "one of the reason to copying other work is that we (international students) cannot properly trained for English language writing so this prevent us from linguistics mistakes" (IS10). While some others also responded that they copied different ideas from previous books, articles and the internet, and then utilized them in their own work, because it helps them to write critically. Interviewee IS38 pointed out that: "I find out some examples of previous work to write like that because it gives us idea how to write critically." Similar kinds of responses were found in the study of Rinnert and Kobayashi (2005), which compared Japanese and American students across disciplines and academic levels.

4.3.1.3. Focus on the collection of information

Another surface approach towards writing academically, reported by majority of the students (62%), was collecting information. It is important, in their view, to collect as much information as possible when write critically; for example, one student said: "In my point of view to write critically, it's important to collect much information about topic and to memorise that information because then you can write easily, that's the thing I do" (IS2). Other participants also stated the reasons for collecting information;

> "My main approaches for assignment writing etc. are to collect different information on the same issue from different books and articles because without information one cannot use own thinking for writing" (S-RS44).
> "I think we should have proper information about the given topic in order to present different perspectives of the presented issues. But sometime it makes me depressed when my teachers comment my writing with lack of connections between ideas or lack analysis or lack critical reflection because I try my best to present proper information" (IS19).

Draper (2009) describes such learners as shallow learners, who understand the material correctly but are unable to connect the different learning concepts. International students' responses have shown them to be generally "less spontaneous" in accepting the UK's academic learning style (Wong, 2004), but Wong also strongly believes in the learners' flexibility, which can be seen in one student's response below:

> "It is common in Oman to write long essays without interpreting and analysing like here (UK) and we know that we are always pointed out as poor writer in the English speaking countries. Reason is not that we are poor in writing but actually we are used to write this way since schools and this does not mean at all that we are unable to perform better. If we get proper training, courses and workshops like here we can also master the skills of writing" (S-RS12).

The evidence overall, however, showed that the kinds of writing approaches students used or preferred to use were surface rather than deep, which may lead them to descriptive rather than critical writing.

4.3.1.4. Textbook-boundness

According to the international students' previous experiences, dependence on textbooks is related to the quality of their writing. 76% of the participants thought that they learnt well through textbooks. It is clear from the information provided by the international students that their previous assessment criteria had required them to present taught materials. Responses showed that "textbooks are the main source of information in Korea and it is very difficult for the students to write outside the books because our teachers do not accept it" (IS4). Another said that "I think learning through course books are the best way to get knowledge" (S-RS46). Similarly, some other students said:

> "My basic approach is to read through all the book material and then utilize it for my assignments because our teachers demand to write from books not from any other sources" (S-RS40).
>
> "In my country the most important thing is to answer the question rather than to discuss it, so it is easy for students to write from textbooks" (IS16).

Notably, they were aware that these kinds of approaches led them into writing problems such as plagiarism, lack of creativity and lack of critical analysis etc., because the education systems in non-English speaking countries, as reported by the international students, do not

require or acknowledge the substance of ideas and CT like in the UK. Therefore, some drew attention to this: "we are asked to provide some quality information in our assignments but never asked for where those come from and to justify the source and this cause problems of plagiarism when students go in the English speaking universities for higher education purposes" (S-RS50). Another student said that:

> "Students follow course books only because in India our teachers do not promote research skills, they like "quick solutions" of the problems and course books fulfil that purpose. But the difficulties such as plagiarism, critical analysis and arguments we face in UK are the reflection of our writing problems. I like the writing strategies being taught in the UK" (IS11).

The previous experiences of the international students clearly showed cultural differences in educational practice, as knowledge and skills are interpreted differently in different cultures (Wong, 2006). The UK education system promotes active learning and encourages CT development, but non-English cultures seem to value passive learning, without giving opportunities for questioning and debating, which is not helpful in terms of developing students' CT skills in order to compete as global citizens.

4.3.1.5 Lack of purpose

The different writing approaches mentioned above by students depend on whether learning cultures focus on and encourage surface or critical/deep strategies. It was found from all the collected data that the approaches which the international students utilized in writing were mainly surface in nature. The students' preferred approaches showed a lack of value/importance placed on CT in their writing. The data indicated that these kinds of approaches make students less motivated. As one of the interviewees said:

> "Academic writing is just a go through process in my country. You cannot imagine that still we are struggling without proper guidance for writing and it is totally depends on teachers' mood, the way they assess our writing. The drawback is that sometime we receive disappointed marks and this makes me unhappy with my education system" (IS16).

A vast majority (83%) of the participants indicated that their educational cultures were mainly exam-driven and therefore they had to write purely with the goal of passing their exams. They could not perceive other valuable purposes for their writing. One of the students reported that:

"we are prepared for exams and not for development and I totally disagree with these policies" (S-RS21). Another said that "learning can never occur with exam-based systems; students need skills to solve their problems" (IS15). The reasons given were:

> "Students are never challenged for constructing the knowledge and creativity; they are only assisted with books and lectures, no research, no knowledge" (S-RS5).
> "Examination system is easy for teachers themselves as education system is totally teacher centred that is why they trying to keep going with old traditional teaching methods but we want change now" (S-RS38).

Some of the students reported that the purpose of academic writing in their home countries was to show or display the information which had been put in their minds, for example: "The main purpose of writing assignments in my home country was to display the information provided by my teachers which is totally wrong and promote descriptive writing" (IS32). Some other students confirmed this:

> "Interestingly writing in my country is just to show our "information bank" to our teachers and nothing else, students have to write big essays and teachers give good grades to their favourite ones" (IS18).
> "My teacher always wanted to check how much I know about the given topic, she never asked to show my own thoughts and arguments. This is, in my point of views is the main drawback of non-English speaking countries education system" (S-RS37).

Based on the analysis of the students' approaches, it is safe to assert that, overall, the non-native and non-Western international students failed to approach writing by thinking critically. One positive sign, however, was that the students realised the weaknesses of their home cultural-educational experiences, though it appeared that the students had never been asked to value CT for writing beyond its immediate objective to pass an exam or get good grades.

4.3.1.6 Routine memorisation

The education system in Asian countries has been criticised as passive and as promoting rote learning (Huang, 2004; Richmond, 2007; Campbell & Li, 2008). Rote learning is usually described as "learning without understanding" (Wong, 2004). The students' responses in the current study could perhaps be the reflection of passive education systems, not only in Asian countries, but in many other non-Western countries as well, which negates the stereotypical view of Asian students as "passive learners", because the case seemed to be similar in many

non-English regions. Some students responded that they memorised any reading materials because it helped them to write quickly. One of the participants said:

> "I try to write in many different ways but memorizing the good piece of work and writing in my assignments is the thing I prefer because that helps me in my writing assignments quickly" (IS21).

Some other students stressed the problems of learning by memorisation in their studies in the UK: They stated:

> "I am used to write by memorization from my childhood experiences but here (UK) the system is totally different and because of this learning approach my written work is always without arguments and justification." (S-RS17)
>
> "For me, when I start writing my assignments I try to remember what our teachers taught us and then try to write in similar way because majority of the teachers do not like us to quote same they have taught rather than from other recourses such as internet or books" (SR-S39)
>
> "I always try to memorise all the lectures of my teachers in order to write my assignments. I always get good marks writing this way because this makes my teachers happy. But such methods are strictly condemn here in the UK education system, while in my back country for me actual problem is not how I approach writing but why I approach writing this way"(IS2)

The responses shown above follow the argument of Kember *et al.* (2008), who claim that approaches to learning are markedly influenced by the teaching and learning environment. Some other students followed similar rote approaches towards their writing, because: "In my home country [Pakistan] we usually have write too much to make our teachers happy to get good marks and it is difficult for me to write according to the new system's demand..." (IS25). To sum up, students' (who take surface approach to writing) views refer to the "knowledge telling" approach to writing as categorised by Scardamalia and Bereiter (cited in Green, 2007), who views the basic conceptions of writing in terms of 'knowledge telling' and 'knowledge transforming'. 'Knowledge telling' refers to a process of simply telling what one knows about the subject; there is little reflection, interpretation or integration. In contrast, those who view academic writing as 'knowledge transforming' understand the constructive nature of knowledge; they see issues of content and issues of rhetoric as inter-related. For these students, the research and writing process is reflective and iterative.

4.3.2. Students who take achieving approaches to writing

Along with taking surface writing approaches, a moderate number of students reported their efforts to organise their writing as well as time management in order to meet their deadlines. These approaches has been characterised as achieving or strategic approaches following the concept in the previous research literature as under:

4.3.2.1. Efforts in organisation of writing

Based on the analysis, some international students also mentioned their efforts to organise their writing and time management, which were put forward as strategic approaches. Strategic or achieving approaches are usually known as a "well-organised form of surface approach" (Gibbs, 2001), in which the learner struggles and becomes motivated to achieve good grades in their studies (Jones, 2005). Some of them said that they focused on writing and re-writing, and always kept notes to get good marks in assignments, such as "...listening lectures carefully and making notes to get good grades in my assignment" (IS20). Another two answered that they fully concentrated on improving their organisational skills in terms of writing in a creative way, as follows:

> "I prefer to follow the work of outstanding writers and always search for different kinds of organisational strategies such as organising ideas and information to improve my academic writing to pass my assignments because I am weak in these skills" (S-RS46)
>
> "I always spent enough time on the organisation of my assignments because if writing is well organised you can have good grades easily" (IS6)

A few also added that they depended on the internet to organise their writing because it is the main source of providing guidelines. Interviewee IS19 complained about not having proper guidance for academic writing, and said that:

> "As internet usage is increasing day by day and a big source of information throughout the world I get all the guidance from internet to manage my writing work because I am very conscious to pass with good marks and I do not have proper guidance how to write. Teachers on the one hand never encourage us for quality writing but on the other side sometime they do not accept what we have written our own. This is very strange for students."

The majority of the participants who reported strategic approaches directly linked them to getting good marks in their assignments and exams. However it has been suggested in the research literature (Byrne *et al.,* 2002; Diseth & Martinsen, 2003) that higher grades are achievable by using the kind of strategic approaches mentioned above.

4.3.2.2. Time management

Time management is another main factor which is reported by students those take achieving approaches to their writing. For example:

> "I try to write like academics and for this I follow some books and my main strategy are to focus on managing the time to meet my deadlines and this motivates me for study" (IS11)
> "For me the most important thing is to complete work in time. Some students do not care for deadlines but for me time management is main thing" (IS29)

Some students on the other hand, also highlighted the rude behaviours of some of their teachers when speaking about their writing approaches in the British universities as follows:

> "I think we all (students) try to submit our assignments in time but sometime if there is misshapen by GOD, some teachers react very rudely and this is not only case in my back home country but in the UK as well, which is very painful sometime. Teachers should be polite in those cases" (SR-S2)

It is of no wonder in the teacher-centred authoritative teaching environment but looks at odds with student-centred pedagogical settings. This clearly supports the argument of Ho (2001), who has noted that such kinds of behaviours de-motivate students and move them towards surface learning approaches rather than deep ones.

4.3.3. Students who take deep writing approaches

Unlike the students who have been reported above in terms of taking surface and achieving approaches to writing, some international students talked about their interests in wide reading and research as follows:

4.3.3.1. Being interested in wider reading in order to seek meanings

Seventeen per cent (17%) of the student participants reported that they preferred to undertake wide reading and researching from different angles in order to seek meanings, which is a clear indication of a "deep" approach. Self-reported student (S-RS3) pointed out that: "mostly I like to consult with broad reading before writing because I am too much interested to present meaningful ideas not the chunks of information. I also prefer to copy Western style writing." Similarly, interviewee IS14 always tried to understand the material in-depth to find out the hidden issues:

> "Think really deep to understand what the material is about to find out the hidden issues. I just prefer reading books and articles. That helps me a lot. Actually I am always interested in wide range of reading and then think about it with different angles. Its best approach towards writing I think."

This supports the view of Duran *et al.,* (2005) that progression from the passive to the active learner and from a surface to a deep approach is considered essential and highly appropriate to higher education, and which was confirmed by another student who said: "reading is the main part of academic writing, students need to read meaningful text in order to write best essays otherwise writing is just a piece of writing without attraction and nobody would like to read it and you won't be able to compete with other classmates in exams " (IS15). Others stated:

> "If one's wants to write comprehensive essays or assignments, they need to read lots of material and especially when students move here in UK because academic writing demands too much reading" (S-RS27).
> "It is important to read much material and search internet to compare and contrast different concepts to use your thinking differently and critically" (S-RS6).

A deep learner can easily transfer and connect different learning concepts according to their knowledge and understanding (Draper, 2009), and other studies have also found links between "learning approaches and academic achievements" (Jones *et al*., 2003; Mattick *et al*., 2004).

4.3.3.2. Being critical and thoughtful about ideas and information

On the other hand, only 7% of the students preferred to be critical and thoughtful before writing any ideas or presenting information. Criticality has consistently been associated with

deep approaches (Egege & Koteleh, 2004; Cosgrove, 2009) but, disappointingly, only a few participants reported this kind of approach towards writing academically. The students' responses were as follows:

> "In my point of view, writing should be more innovative and critical. Although it is not required from the learners to show critical thoughts about an issues, but personally I like to write such way because everything we read is not trustworthy so we need to be careful before writing" (IS16).
>
> "Students are not motivated for thinking creatively, may be they are not encouraged for this from their teachers like me, but at least they should try to be critical to cope with writing problems in higher level of studies especially in English universities like England etc." (IS34).

Another student mentioned that it is best to be critical because then you can analyse from different perspectives: "Thinking deeply and critically helps to analyse with different angles on things. The more you have ideas you can write well comparatively" (S-RS21). Leung and Kember (2003) argue that there is a significant relationship between being critical and deep approaches.

4.3.3.3. Understanding thoroughly

From examining the students' responses, it was determined that 11% of the participants, preferred to understand the material thoroughly before writing. Understanding the underlying theories is another approach to deep learning (Bryne *et al.,* 2002). Interviewee IS13 stated: "Every time I try to understand different ideas and then summarize to utilize them in my writing." Another international student, S-RS4, emphasized cultural aspects in enhancing critical thinking skills, and this approach was mentioned by other respondents as well: "I prefer to join forums like English forums to talk about different culture to understand new information and relate it with my previous ideas is the best way to think critically, and then we can use our analytical thinking in our writing with many different angles." Further examples of responses include:

> "Academic writing is not just to put everything in it but it is very formal in nature so I think we should understand the hidden issues of every matter we read or try to write afterwards" (S-RS47).
>
> "In-depth understanding is the best way to show your reflective thoughts. Only reading without understanding does not mean and then you cannot write appropriately at the university level" (IS13).

It can be seen that the students who prefer deep approaches to their writing held higher-order motivation to learning and they see academic writing not just routine process but the development of arguments and justifications of the evidences. These approaches follow the line of Scardamalia and Bereiter's (1991) views, who promote constructive approaches to learning rather than informative. The data presented above is unique in terms of identifying students' approaches to academic writing in a large sample of non-English speaking students, and shows the practical nature of their approaches in the cultural-educational context.

4.4. Discussion of results

Assessing international (mainly Asian) students' conceptions of CT and comparing them with those of their Western counterparts has been the focus of many recent studies, such as Lun (2010), Jones (2005) and, Phillips and Bond (2004). On the other hand, although other studies such as Huang (2006) have explored the CT conceptions of both students and teachers at postgraduate level, this study differs from those previous studies in the way that it not only explores the conceptions of international students, but also those of their British teachers, in order to find out the differences and similarities regarding general conceptions, values and cultural-educational context. Both the samples, of students and teachers, articulated conceptions of CT which revealed varying degrees of understanding. Both the samples seemed to hold similar views about the nature of CT in terms of the skills dimension, but the students could not acknowledge the dispositional dimension of CT; this could lead them to a disparate articulation of CT, which is called a "tick-box approach" (Cosgrove, 2009), where a student understands CT in a formulaic way with limited potential for applying it in practice. In relation to the SOLO taxonomy of learning, students' conceptions of CT are more related to the lower levels, which use terminology such as recite (remember things), paraphrase, identify, name, count, enumerate, describe, classify etc.

On the other hand, Durkin (2008) suggests that learning to think critically is a learning journey and equally applicable to all students. Starting points may be different for students of different cultures, but achievements are usually based on the requirements of the educational context. Meanwhile, the conceptions of the teachers in the present study were clearly associated with upper levels of SOLO taxonomy and seemed focused on a broader level of understanding of the significance of the CT terminology they were using. These differences in

perception between the samples might help in assessing the cultural and universal understanding of CT.

In addition to the students' and tutors' conceptions of what CT is, both the samples (of students and tutors) seemed to place a high value on the higher order competence to compare, relate, analyze, apply theory, explain in terms of cause and effect, generalize, hypothesize, criticize, theorize, etc in terms of the development of CT for university study (see also Howe, 2004). Students and tutors appreciated the importance of having skills of analysis, evaluation, synthesising, referencing and concluding in order to produce quality academic writing. CT also provides the lens to engage with ideas intellectually. Most importantly, both the samples reported in their interviews that CT skills are the main assessment criteria for academic writing. However, cross-cultural differences were also observed in terms of CT awareness; for example, the majority of the participants who were newcomers were not aware at all, or had very poor conceptions, of CT, while the students who were doing their second or third degrees in the UK were somewhat more aware of the term CT. It is, therefore, argued that the students' conceptions of CT might have been influenced by the UK educational culture which places a great importance to the higher order-thinking skills.

The findings of the present study show that all the non-Western students (included in the present study), not just Asian students as discussed by Durkin (2008) and Jones (2005), are equal to adapting to the conventions of different educational cultures. As explored in the present study, although the international students and English teachers were different in terms of their conceptualisation, the students might still be capable approaching CT skills in their writing for their courses of study. This speculation has been developed to resolve the next research question by demonstrating students' approaches to writing. Investigation of students' writing approaches is an essential component of educational practices, because it offers opportunities for the students to show how they have learnt, and in order to promote transfer of knowledge. The results suggested that surface approaches to writing were the preference of the majority of the non-Western students, regardless of their nationality. Exploratory questions were used to emphasise the significance of using CT as a writing approach, yet the majority of the students were found to utilize or prefer to utilize non-critical and rote-learning approaches. Consequently, it was not surprising to find their performance lower in terms of academic writing. According to Brabrand & Dahl (2008), surface learning implies that the student is confined to performance at the lower SOLO levels, where the student does not have any kind of understanding, but instead uses irrelevant information and/or misses the point

altogether. Scattered pieces of information may have been acquired, but they are unorganized, unstructured and essentially void of actual content or relation to a topic or problem.

Previous studies also showed a positive correlation between students' approaches and academic performance (e.g., Bowles, 2000; Collins & Onwuegbuzie, 2000). The current investigation is important in demonstrating that the students' approaches were a significant and predictable variable in their academic writing performance, regardless of the effect of other cultural and educational barriers. More importantly, the students' writing approaches differed in relation to the extent to which they had adopted British academic culture, and it appeared that only a few of the students were motivated to apply CT approaches for academic writing purposes. This clearly conflicted with the expected and suggested critical thinking approach of UK HE system that place higher importance on the development of CT skills, and where it is reasonable to expect that terms related to the upper two levels of SOLO taxonomy is more likely for deep learning outcomes. The QAAs' description of CT articulates the expected outcomes for university level students as follows:

- To evaluate arguments, assumptions, abstract concepts critically in order to make judgements, and to frame appropriate questions to achieve a solution to a problem.
- To communicate information, ideas and problems appropriately and effectively.
- To deal with complex issues systematically and creatively, to make sound judgements and to communicate their conclusions clearly.
- To demonstrate self-direction and originality in tackling and solving problems (2008: p. 15-25).

The extracts above provide the new learning context for these students from a non-native-speaking background, and their approaches to writing at the higher level of education seem unable to meet the UK HE ideals. It is evident from the literature (see Chapter Two) that UK HE places much emphasis on CT development for the four language skills generally and for writing particularly. The present findings have also increased and enhanced knowledge by investigating the direct relationship between students' writing approaches and their academic writing performance. Previous literature has investigated the link between surface learning approaches and lower outcomes, and linked deep learning approaches with higher quality learning outcomes, for example Prosser and Trigwell (1999), and a significant positive

relationship has been observed between deep-processing learning approaches and CT skills (Gadzella *et. al*., 1997; Egege & Koteleh, 2004).

Interestingly, students with achieving or strategic strategies demonstrated both higher and lower CT skills. This drew our attention to the findings of the study of Williams and Worth (2003), who noted that note-taking is a study habit and does not have any relationship to CT abilities, and suggested that students could engage in effective study skills regardless of their CT abilities. In another study, by Williams and Stockdale (2003), it was found that even students with a lower level of CT skills perform better at times. Nevertheless, it seems that encouraging students to engage in deep-processing learning, with the goal of cultivating their CT skills, is highly desirable. On the other hand, students who reported their preference for utilizing deep approaches were able to perform at upper SOLO levels, in which the student can understand relations between several aspects, has the competence to compare, relate, analyze, apply and generalize structure beyond what was given, to perceive structure from many different perspectives, and to transfer ideas to new areas (Biggs, 2003). These were the students who had already completed their first degree in the UK; therefore, it can be argued that their writing approaches might have been somehow influenced by the British educational culture. This was also observed when a moderate number of the non-Western participants were not even aware of the term of CT (answered in the first research question). These findings further indicated the international students' adaptive nature (see also Durkin 2008 & Elander, 2002).

The present study suggests that CT approaches could be the remedy for the students' writing problems. As the development of CT skills is the main outcome of university level education (e.g. Pither & Soden, 2000), the findings show that this development involves deep-processing learning and deep approaches. The findings also appear logical, as non-Western educational culture discourages students' CT approaches, and it is suggested that behavioural adaptation to the UK academic context might help to overcome the students' experiences of difficulties in writing at the higher level of education. For instance, senior students (second or third degree in the UK) showed greater interest in deep learning than did the beginners (first degree in the UK), and this was because of the practice of the behavioural norms of the UK educational culture. Williams *et al*., (2003) also found international students scoring more highly at the end of a psychology course than at the beginning. Therefore, it is important to highlight that, due to the explicit nature and practice of such academic conventions, non-English speaking students can learn to apply CT approaches regardless of their cultural

backgrounds. The implications in this situation are that international student's previous learning backgrounds must be considered in assessing their CT skills.

CHAPTER 5: IDENTIFICATION OF THE CRITICAL THINKING PROBLEM AREAS OF INTERNATIONAL STUDENTS

5.1. Introduction

It was ascertained from the reviewed literature that one of the main goals of UK higher education is to foster in university students the capacity for the expression of critical perspectives on received knowledge. Argumentation, proof and justification, and critical analysis are all vital components of the UK academic tradition (Soden & Maclellan, 2004), which are the reflection of higher order cognitive engagement in relation to the SOLO learning domain. On the other hand, previous research has reported that faculty members with experience of teaching international students have reported dissatisfaction because of the lack of critical thinking (CT) expressed in the texts produced by international students (Huang, 2006; Kim, 2003; Kumaravadivelu, 2003). These studies have illustrated the fact that the problems are especially acute for students coming from non-English speaking backgrounds, where cultures encourage highly traditional views of authority and do not support critical and analytical thinking (Jones *et al.,* 1999). This perception has also served as the basis to argue that deep-level learning may not be encouraged and practised in international cultural-educational context. However, there has been little recognition of the students' own reflection on their initial CT-related problems, their struggle to deal with the dominant academic writing conventions and the possible underlying reasons for the difficulty.

The present chapter not only identifies a specific area of critical thinking problems, but also addresses the possible causes underlying them. The participants were asked the following questions: 1) what are the initial CT-related academic writing problems experienced by international students? And 2) what are the inhibiting factors to fostering international students' CT skills? This chapter presents the findings from the interviews, self-reports and a case study of fifteen teachers and one hundred and five students described in Chapter Three. The case study was conducted in the department of Education and Professional Development at the University A, in order to triangulate documentary evidence, and to support the other inquiry tools (Burgess *et al.,* 2006). The case study was included the analysis of written samples of five Chinese international students enrolled on a B Ed degree, together with the feedback comments of three of their tutors. The case study was categorised as 'instrumental', which is a type of study used to accomplish something other than understanding a particular

situation. It provides insight into an issue or helps to refine a theory. This case is of secondary interest, which plays a supportive role in facilitating our understanding of the issues. This kind of case is often examined in depth, its context is scrutinized, its ordinary activities are detailed, and it is used because it helps the researcher pursue the external interest. The case may or may not be seen as typical of other cases (Stake, 1995, cited in Baxter & Jack, 2008: p. 549).

Thematic approach was used to analyse the case study results. For example all the written samples were coded, and themes were generated, reviewed and named in order to write the results. A table of descriptive statistics of frequencies and percentages was produced and then supplemented with students' written extracts as well as their interviews and self-reported responses afterwards. Abeyasekera, *et al*., (2000) has stated that such approaches to qualitative data presentation and analysis are meaningful to draw meaningful results. As the case study is based on the limited nature of sample, analysis would be illustrative rather than conclusive. Similar data analyses and data presentation methods were applied on students' and teachers' interviews as well as students' self-reports. The results of a case study were then combined with these interviews and students' self-report responses, in order to contrast their views with the actual CT-related initial problems found in the students' written samples. Qualitative methods were chosen in order to get deeper insight with the teachers' and students' views and to determine an in-depth examination of the effects of the different cultural-educational context on the phenomenon as follows:

5.2. Initial critical thinking-related academic writing problems experienced by international students

This section presents an overview as well as the holistic picture of the analysis of the students' and teachers' perspectives, as shown below.

5.2.1. Students' problems: an overview

Students' written samples yielded the following results: as academic writing is often seen as "culturally determined" in previous research (Belcher & Connor, 2001; Li, 2006), the research questions set out to identify international students' problems in coping with academic writing in an "unfamiliar" and "intellectually independent" academic environment. All five participants seemed to experience great challenges in the following major aspects of CT: 1)

clarity of writing; 2) critical analysis; 3) logical organisation; 4) supporting evidence; 5) precision and drawing conclusions. The following evidence (either teacher's comment or mentioned words) of the lack of CT was identified and analysed as follows:

Table 5.1: Evidence of the lack of CT in international students' written samples

Evidence of the lack of CT	C-SS1	C-SS2	C-SS3	C-SS4	C-SS5	Frequency	Percentage
Lack of clarity	16	12	18	13	15	**74**	**21.8**
Lack of critical analysis	23	16	19	19	11	**88**	**25.9**
Lack of logical reasoning	17	14	14	15	13	**73**	**21.5**
Lack of supporting evidence	15	11	9	10	8	**53**	**15.6**
Lack of precision& concluded thoughts	16	9	7	12	7	**51**	**15.0**
Frequency	**87**	**62**	**67**	**69**	**54**	**339**	**100%**
Percentage	**25.6**	**18.2**	**19.7**	**20.3**	**15.9**	**100%**	**Total**

It is shown above that in total, 339 indications of the lack of CT were identified from the five students' written samples. The incidences of evidence related to the lack of clarity were 74 in total; those related to the lack of critical analysis were 88; those suggesting a lack of logical reasoning were 73, and those related to the lack of supporting evidence and the lack of precision & drawing conclusions were 53 and 51 respectively.

Results of the students' interviews and self reports indicated the following: that the problems due to the lack of CT reported by students were categorised into four broad themes, namely: lack of critical analysis; lack of critical evaluation; difficulty in clarifying meaning, and lack of supporting evidence or proper referencing, as shown in Table 5.2:

Table 5.2: International students' CT-related writing problems: the students' perspectives

Description	***Frequency***	***%***
Lack of critical analysis	61	66.3
Lack of critical evaluation	72	78.2
Lack of clarifying meanings	57	61.9
Lack of supporting evidence	83	90.0
Total	92	100

A total of 92 students out of 100 reported their writing difficulties clearly. The majority of the respondents (66%) reported that critical analysis was usually lacking in their academic writing. 78% of the respondents reported that they felt unable to evaluate material critically, while 61% admitted that they faced problems in clarifying meanings. Furthermore, 90% of the participants stated that they encountered problems with providing appropriate evidence. The remaining 8 students comprised those who either considered themselves good critical thinkers, or who responded with "Do not know" or said they were unable to think critically.

The tutors' interviews yielded the following results: all fifteen (15) teachers admitted that their students found great challenges with using CT in academic writing. In answer to the question of what the international students' CT-related writing problems were, and how they (the teachers) would identify the lack of CT in the students' written work, they replied as shown below:

Table 5.3: International students' CT-related writing problems: the English-language teachers' perspectives

Description	***Frequency***	***%***
Lack of clarity and understanding what is expecte	9	60.0
Lack of critical analysis	14	93.3
Lack of critical evaluation	12	80.0
Poor referencing	10	66.6
Total	15	100

Table 5.3 shows that 60% of the teacher participants pointed out problems with students' lack of clear understanding of what is required of them; 93%, on the other hand, said that students lacked critical analysis in their writing, and lack of critical evaluation and interpretation was reported by 80% participants. Similarly, 80% responded that international students were unable to provide proper evidence to support their arguments or to make value judgements, while 66% found that poor referencing was the common problem of international students due to the lack of CT. The CT-related writing problems found in the students' written sample, the interviews/self reports and the tutors' interviews were further merged with each other as follows.

5.2.2. Students' problems: the holistic picture

Analysis of the students' and teachers' perspectives suggested a more complicated picture than reported in previous studies. They further explain that students' writing usually seems vague when they are asked to write. They also suggest that this might be because these elements of CT are pervasive ideas of the Western communication style. The specific and direct effect of the lack of CT was significant and clear, indicating that the cultural-educational context of learning is an important factor in poor CT performance. The problems observed were similar amongst almost all the non-Western participants, regardless of their age, gender, level of education, nationality or subject speciality. The students' problems were categorised into five main aspects of CT.

5.2.2.1. Lack of clarity

This concerns the clarification of the meanings of thoughts, ideas, assumptions or arguments, and was found to be one of the major issues of concern, not only in all five of the students' written samples, but also as reported in the students' interviews, self-reports and teachers' interviews. This coincides with the views of Facione (1990) and Lillis and Turner (2001) which emphasise the lack of ability to clarify meanings, purposes, ideas and information. Frequently articulated comments were: "I am not sure I understand it, what are you saying?", "Be clearer, can you give me an example?", "Can you explain it further?", "Could not understand what you mean" and "Explain a bit more", etc. Some of the extracts (copied from the students' assignments) are given below to exemplify their writing difficulties in terms of clarity in university level writing:

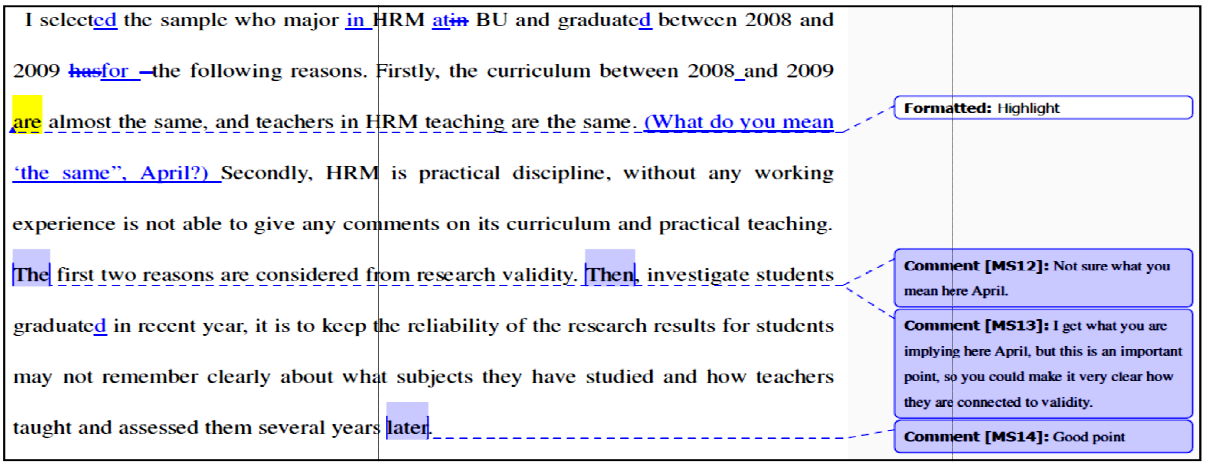


Figure 5.1: [C-SS1, example taken from research method chapter, p. 5]

Figure 2 above shows that C-SS1 is having difficulty in explaining the validity and reliability of the sample selection for her project and does not seem to be clear in connecting the reason given to the validity. Though C-SS1 gave quite good reasons for validity, the explanation lacked connection between those reasons and validity. The teacher, on the other hand, also marked appreciation of the last sentence, in order to motivate the student. Another extract was taken from C-SS2's assignments. This student also encountered a similar kind of difficulty while communicating about the characteristics of curriculum resources in China, for example:

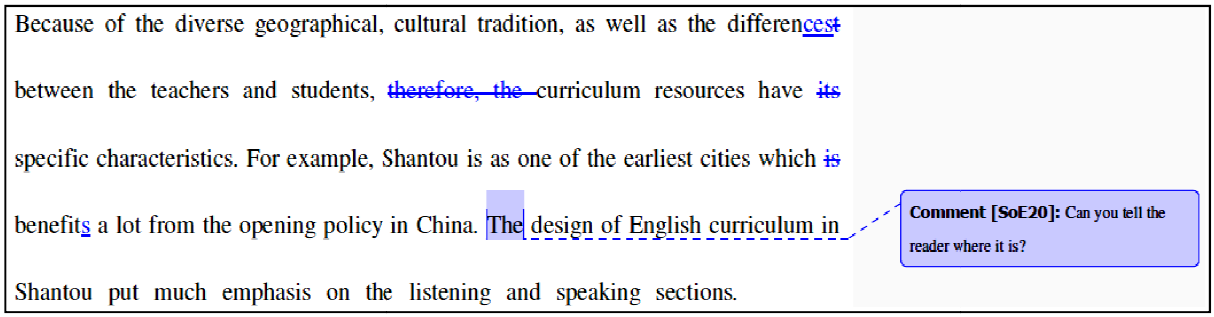


Figure 5.2: [C-SS2, literature review section, p. 10]

The writer here has stated that Chinese curriculum resources have specific characteristics, and has also mentioned "Shantou" as one of the cities in China which have benefited from those resources as well. But soon after this, the writer began another sentence without clarifying where those resources come from, which would leave the reader wondering. Similar problems can also be seen in the writing of C-SS4. This writer probably wanted to write about the role and importance of the hotel industry in the Chinese market, but seemed unable to explain it adequately, as shown below in figure 3:

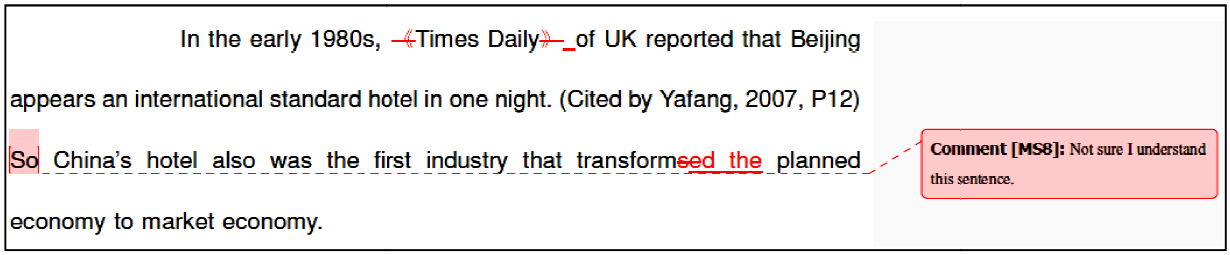


Figure 5.3: [C-SS4, literature review chapter, p. 2]

Insufficient clarity was an obvious flaw: this has been defined as the use of meaningless words or expressions, or language which is ambiguous (Caroll, 2002). Similarly, in weaker pieces of writing, arguments were usually given without explanation. As writing is called a mirror of

one's thoughts, academic writing should be written clearly and cohesively (Hyland, 2003). Similar kinds of weaknesses were reported by other student and teacher participants. IS2, IS14 and S-RS39 reported that a lack of clarity of ideas was their main problem, for example:

> "Being an international student, I have many writing problems in analysis and arguments but the main problem in my writing which is often pointed out by my tutor is clarifying what I meant and what I wanted to write" (IS23).
> "I try my best to formulate ideas according to my teachers' expectations but when I write down those ideas; they look vague to the readers" (S-RS17).

The findings of the present study support the views of Fujioka (2001) and Izzo (2001), which have identified the fact that international students encounter more CT difficulties than lexical problems. Some of the students linked their lack of clarity to writing in English as a second language; for example, one student said: "I was used to write in Urdu in my home country so when I came here I could not think in English. My mind always thinks in Urdu and then translates it into English and this is why I am unable to make my ideas clear" (IS33). Similarly, T13 thinks that the problem may be the difference between the language they are using to think in and the language they are asked to write their assignment in. She stated:

> "I think that some students who are weak at writing in English may well be able to think critically in Mandarin or Cantonese, but may not be able to express the complexity of their thoughts in the target language of English. I think that sometimes these students have written their assignment first in their home language and then tried to translate it, and that for a variety of reasons, does not allow them to convey the quality of their thinking in English: an awful lot gets lost in translation."

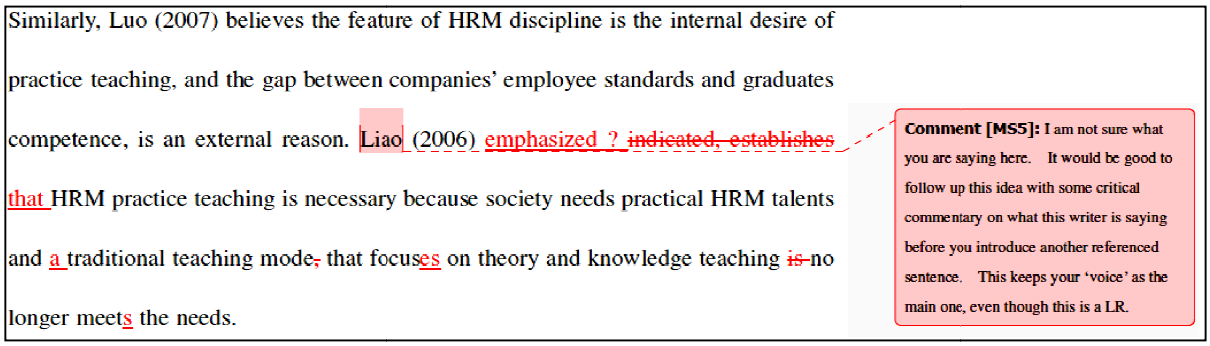
Consequently, international students are regularly criticised by UK academics due to their lack of CT (Huang, 2006). According to T9, the method of working in the new educational environment is basically difficult for the international students; they can never produce critical text until they are able to understand what is required. He stated: "I think they are very new skills for almost all of the international students; the basic problem is that they cannot understand what is required, such as clarity of thoughts, critical analysis and critical evaluation." When asked about how he would find evidence of CT in students' written work, he explained;

> "I think in students' written work I would be looking to see if I can observe that they have written the text clearly in their own words, so that they can understand the text and not just parodying the text"

Interviewee T1 also pointed out similarly, that: "one of the great problems is they need to be able to write clearly, evaluate the text critically and able to predict what is going to be there to make links. They need to be able to summarize properly and logically in order to reach to a sound judgment of the issues." Clarity was also considered one of the eight intellectual standards identified by Paul and Elder (2008), in order to assess one's thoughts.

5.2.2.2. Lack of critical analysis

Critical analysis is another highly demanding CT skill required to meet the standards of academic writing, which includes examining ideas and identifying and analysing arguments (Facione, 1990). To analyse critically, students need the ability to organise their arguments in a systematic and logical way, presenting information in a critical manner and giving their own voices (opinions/views/arguments), and this was reported to be another main problem in students' writing. Some of the extracts which show a lack of critical analysis in students' writing are given below. For example, C-SS1 is stating the reasons why HRM practice is necessary, but she is lacking her own voice while referring to other works:


Similarly, Luo (2007) believes the feature of HRM discipline is the internal desire of practice teaching, and the gap between companies' employee standards and graduates competence, is an external reason. Liao (2006) emphasized ? ~~indicated, establishes~~ that HRM practice teaching is necessary because society needs practical HRM talents and a traditional teaching mode~~,~~ that focuses on theory and knowledge teaching ~~is~~ no longer meets the needs.

Comment [MS5]: I am not sure what you are saying here. It would be good to follow up this idea with some critical commentary on what this writer is saying before you introduce another referenced sentence. This keeps your 'voice' as the main one, even though this is a LR.

Figure 5.4: [C-SS1, literature review chapter, p. 5]

Showing *critical voices* is one of the important aspects of writing which is a concern for teachers. Students seemed unable to present their own independent voices in writing. This problem is continuously pointed out by their teachers, by asking: "Could you say bit more by giving reasons?", "Could you follow up your thinking/arguments on the implication?", "What are the similarities and differences?" and "Could you comment critically?" etc. C-SS3 had to

analyse the teaching-learning methods in public and private schools in China, but skipped the most important information in this way:

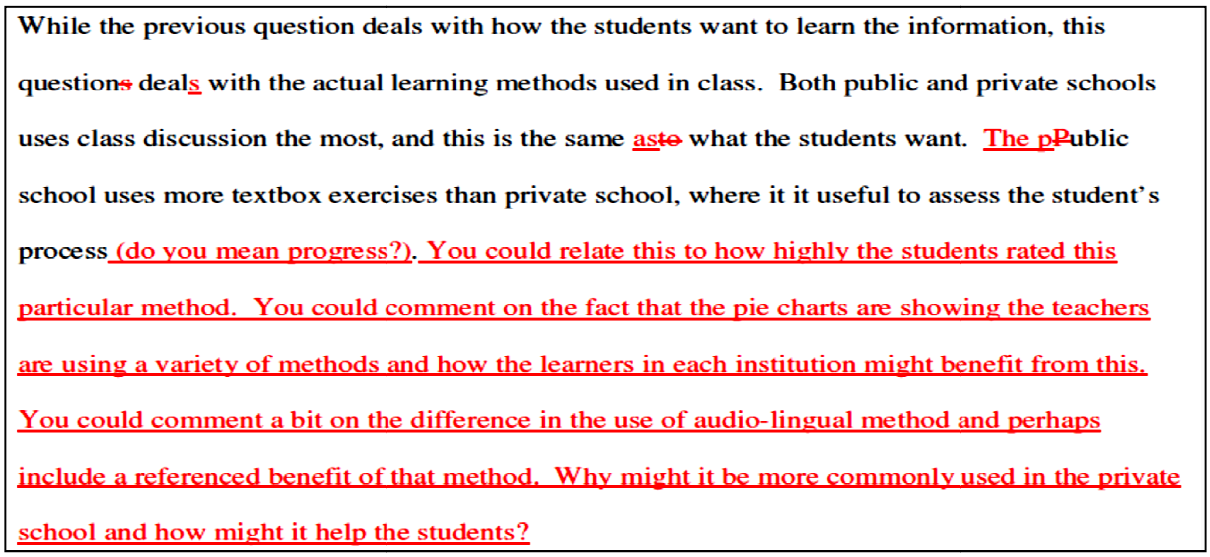
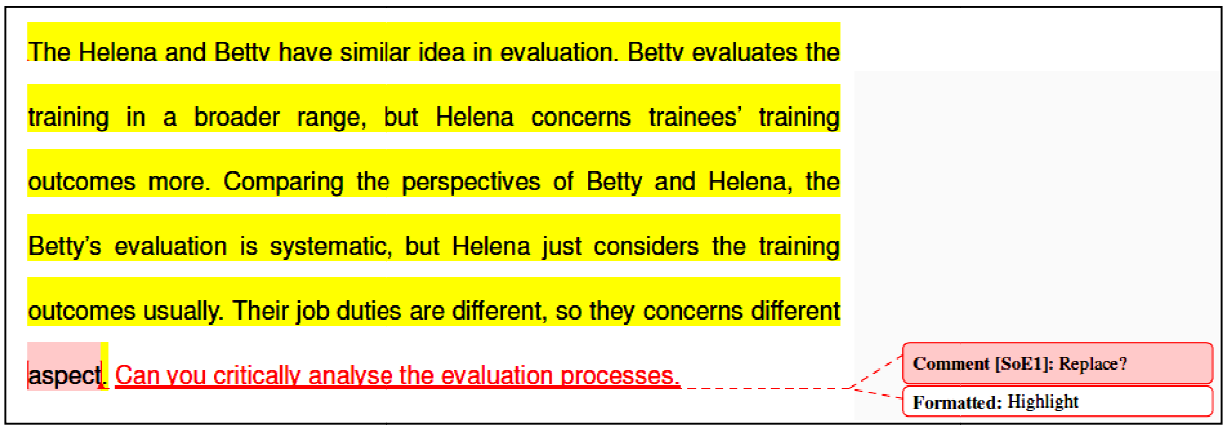

While the previous question deals with how the students want to learn the information, this question~~s~~ deal~~s~~ with the actual learning methods used in class. Both public and private schools uses class discussion the most, and this is the same as~~to~~ what the students want. The p~~P~~ublic school uses more textbox exercises than private school, where it it useful to assess the student's process (do you mean progress?). You could relate this to how highly the students rated this particular method. You could comment on the fact that the pie charts are showing the teachers are using a variety of methods and how the learners in each institution might benefit from this. You could comment a bit on the difference in the use of audio-lingual method and perhaps include a referenced benefit of that method. Why might it be more commonly used in the private school and how might it help the students?

Figure 5.5: [C-SS3, data analysis chapter, p. 16]

The teacher commented that the student should keep going by giving more explanation in order to justify her arguments. A similar kind of inability to analyse from the student's own point of view can be seen in C-SS4's writing. Although critical analysis has been strongly emphasised in previous literature, as well as in government policy documents (Ramsden, 2007; QAA, 2008), it is notable from the students' written drafts that they do not have sufficient skills of analysis, for example:


The Helena and Betty have similar idea in evaluation. Betty evaluates the training in a broader range, but Helena concerns trainees' training outcomes more. Comparing the perspectives of Betty and Helena, the Betty's evaluation is systematic, but Helena just considers the training outcomes usually. Their job duties are different, so they concerns different aspect. Can you critically analyse the evaluation processes.

Comment [SoE1]: Replace?

Formatted: Highlight

Figure 5.6: [C-SS4, data analysis chapter, p. 4]

C-SS4 has compared the evaluation process by Helena and Betty, but fails to provide any critical commentary about the evaluation process in her analysis. Presenting one's own voice in a critical manner is a vital aspect of academic writing pedagogy (Scanlon, 2006), but great numbers of respondents reported this as a problem. For example, IS2 thought that "The main

problem we people face in academic writing is explaining ideas and express them in own words and formulate our arguments on the basis of that analysis." While some students reported their inability to examine different ideas and compare different authors' points of view, the majority of the responses also show that they were unaware of such practices in their home countries. This was also strongly pointed out by the English teachers; for example, T5 reported that "Students' written work should be analytical rather than descriptive; they should explain what is right and what is wrong on the basis of evidence, not simply describe the process." Some students view their problem as shown below:

> "To analyse the different point of views in order giving the reasoned argument is main writing problem for me and my teacher mostly commented with lack of critical analysis" (IS19).
>
> "In academic writing you don't just write but you really need to analyse critically with pros and cons before giving you own argument which is very difficult for me to handle in my assignments" (S-RS8).

Problems with the lack of analytical skills not only hindered the international students' academic writing development, but also led them towards failure in meeting "institutional literacy expectations" (Zhu, 2004). One student stated: "I am very weak in analysis and this is the reason I always get less marks in my assignments" (S-RS26). Similarly, IS3 reported that: "I did not get good grades in my assignments because of the lack of enough critical analysis and this is very stressful for me as I am already facing homesickness." Students also explain the reasons behind this as follows:

> "I think the main problem is critical analysis in terms of examining one's ideas to sort out that which point arguments should build in and then you make sure your judgement that should I stay here and why I should not stay there. What kinds of shortcoming and limitations you need to handle because it is a cultural problem for us" (S-RS22).

Similar reasons were stated by T11, for example: "the main problem from my experience is that they may not be aware and understand what critical thinking is. They are not used to doing such kind of tasks before, so it is difficult for them to understand what is actually required for academic writing," while a powerful description was given by the CST3 in these words:

> "One of the main problems of international students in demonstrating critical thinking is that they may not realise what it actually requires of them. They are expected to do it, but what it is they are expected to do is often not explained or

> demonstrated. It can in fact be difficult to explain and guide students in developing this skill, but once it is made clear to them what is required, most international students can (within their own academic abilities) apply it. When students have been raised in a society that is largely centrally controlled, and where challenging bureaucracy and the ideas from the centre are overtly discouraged, it can be very difficult for international students to 'switch on' such ability and to limit its application to an academic context."

Although students and teachers view the characteristic features of critical writing such as, inferential relationships among statements, concepts and ideas; examining ideas; identifying arguments, and analysing arguments etc., all of which are highly necessary to achieve the purpose of university level academic writing, their statements also support the arguments of Casanave (2002) and Lun (2010), who have viewed academic writing as *culturally-specific*. In similar vein, T2 reported that "most of the students write about the topics rather than analyse the topic assessing it critically, so the biggest problem for students." These responses are worrying because this may result in students' "emotional and physical" stress, as discussed by Braine (2002).

5.2.2.3. Lack of critical evaluation

Evaluation is the process of weighing up the strengths and weakness of a logical argument, or the robustness of evidence supporting an argument or theory, or the extent to which evidence does actually support the argument it is attached to (Paul & Elder, 2006). Therefore, students' written work should be highly relevant and logically organised according to the themes of a given topic or task, and key concepts should be presented in a clear and comprehensible way in order to identify the significant issues. The lack of such skills is obvious in the students' writing sample, for example:

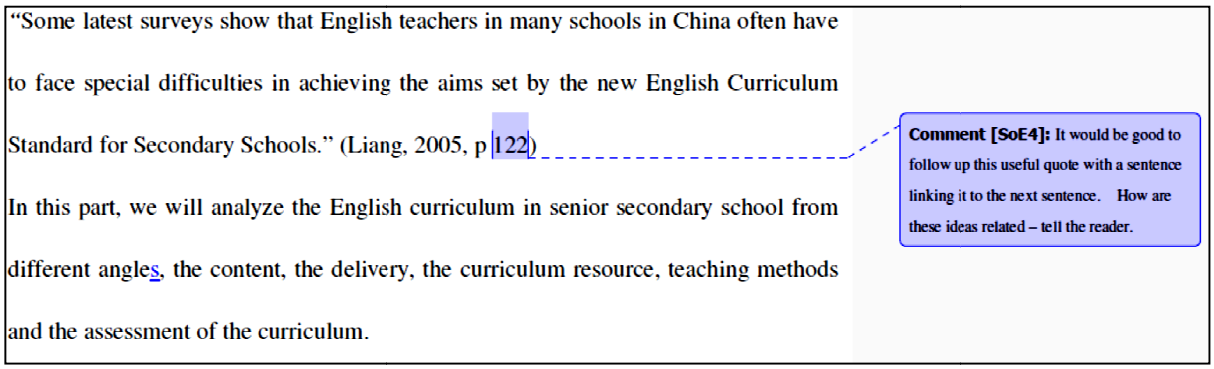


Figure 5.7: [C-SS2, introduction section, p. 4]

The studies referred to above also suggest that linking theories to practice is an important component of CT. Similar views can be seen in the teacher's comment on the writing draft of C-SS3, as below:

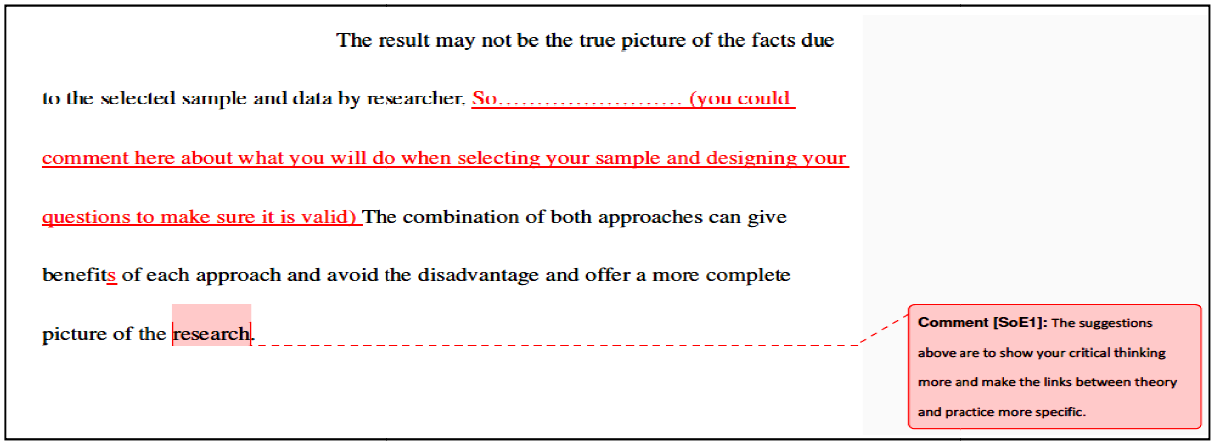


Figure 5.8: [C-SS3, research method chapter, p. 2]

Arguments must be followed by the supporting evidence in effective and logical writing (Durkin, 2008), but this was largely found to be missing in the students' work. Logical organisation is not simply giving reasons for the arguments, but also the ability to maintain sentences and paragraphs in a logical order as well. Another example of the lack of logical organisation can be seen in C-SS5's writing:

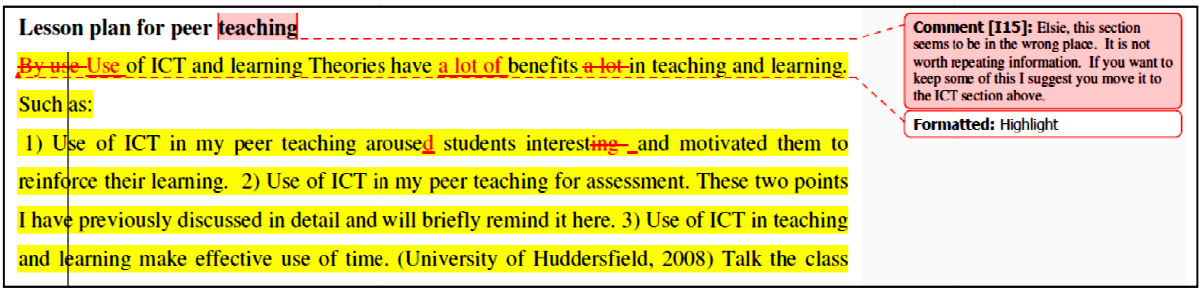


Figure 5.9 [C-SS5, conclusion section, p. 22]

In academic writing, students need to possess a certain level of critical evaluation skill, because this is one of the four key academic writing criteria (Elander *et al.*, 2006). However, a significant number of participants reported that they had problems in terms of assessing arguments, ideas, claims or assumptions, and also with comparing the strengths and weaknesses of different perspectives and drawing credible conclusions. For example: "I don't understand how to evaluate my arguments and statements to judge what is right and what is

wrong in order to make decisions" (S-RS23). Other participants also reported their problems regarding a lack of critical evaluation, for example:

> "In our assignments we have to make compares and contrast of each idea so it seems hard to me to explain and express the information with many different angles which is my main writing problem" (IS18).
> "Judging the strengths and weaknesses of the argument either my own or other authors, in order to assess its credibility is one of my weak points and sometime it makes me stress to handle it" (S-RS41).

Failure to demonstrate evaluative skills is also common with domestic group of students but international students drew our attention to the important cultural issue of *unfamiliarity* with UK academic conventions. This clearly supports the view of Braine (2002), who claims that international students are not adequately prepared for Western academic life. For example:

> "My teacher always comments on my assignments drafts with the "lack of proper evaluation, give strong arguments to support your views and evaluate critically etc", but I do not know actually how to do evaluation and formulate proper arguments because I never taught about evaluate critically and basically I was never been asked such kind of writing in my home country but in the UK, it is one of the main writing requirements I think, so it is my main problem" (IS27).

The above responses from the students' interviews and self-reports were interrelated with those of the English teachers' views. T3 reported that: "the main problem of international students is to form the systematic arguments and critical analysis, and it is in my point of view just because of their culture, that does not encourage such kind of thinking. I think there is need to transfer more formal setting that everything that published is not necessarily true." This was supported by Bizzell (1982), cited in Kelley (2008), who notes that deficiencies in students' previous writing training can hamper their abilities to succeed in the Western academic environment. The students also further suggested that critical evaluation should be taught explicitly, because sometimes students are unable to understand the meanings clearly. For example, S-RS36 stated that "I am unable to "evaluate critically" as my teacher comment usually, but actually I do not know what is critical evaluation and how to do it and this is worrying situation for me." Similarly, another reported:

> "For me, main problem in writing my assignment is to evaluate all the good and bad points critically and to provide trustworthy summaries on the basis of our arguments. My teachers always comment like "poor arguments", "evaluate

> critically", "lack of your own judgements about the issues" and "lack of alternatives" etc, but you know majority of us do not know properly about those feedback comments. I think teachers should first teach us about *critical evaluation* rather than ask to do it" (IS14).

Some other students argued that: "critical evaluation is not only difficult but very complex in nature so how can we do that?" (IS40). This supports the view of Elander *et al*., (2006), who also suggests that evaluation is a complex skill. Supporting the above argument, CST2 stated that she used the university's honours marking sheet as follows: "I'm using my judgement to identify the extent to which the student has produced writing that puts forward a coherent logical argument with critical commentary relevant to the chosen assignment title; using the marks sheet helps to ensure that my 'A' is comparable with other tutors' "A' grade." Therefore, familiarising students with the assessment criteria could be very beneficial, in fostering their CT skills.

5.2.2.4. Lack of supporting evidence

Another highly important consideration in relation to CT, and one which should help to prevent students from committing plagiarism, is the development of the ability to provide proper evidence in support of arguments. Students may not always appreciate that an argument which is not supported by any reliable evidence is just an opinion and cannot be a claim (Stapleton, 2001). Lack of supporting evidence was seen as another common CT-related problem, as can be seen in C-SS2's writing. This student is critiquing teacher-centred teaching methods, but without supporting evidence, as shown below:

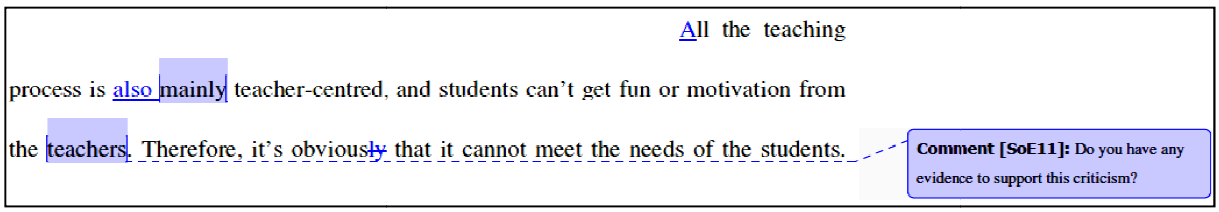


Figure 5.10: [C-SS2, literature review section, p. 4]

Providing proper evidence not only supports arguments, but also helps to justify arguable and controversial claims (Stapleton, 2001). He explains that if sufficient evidence is not provided to support one's point of view, then the writing will lack a clear direction. Another important issue of referencing is that only reliable resources should be used as supporting evidence,

rather than Wikipedia or similar, for example. Students may give many references to support their arguments but those should be well founded. The quotation cited below is an example of "un-authoritative web-based evidence" evidence, which does not have any author's name, date or page number etc.

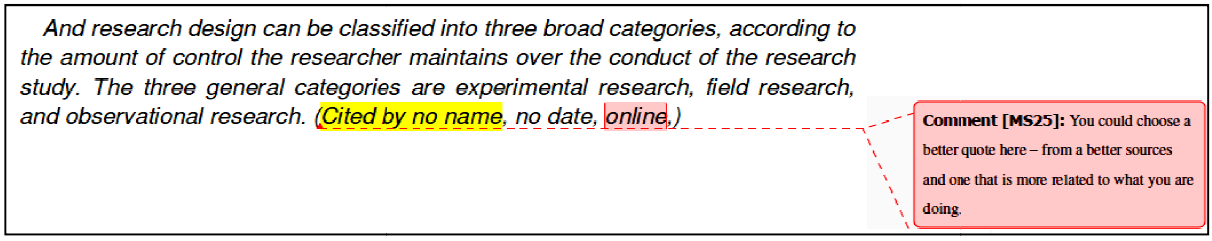


Figure 5.11: [C-SS4, research method chapter, p. 6]

It is important to ignore such kind of references, because they would not be acceptable for academics because of their unreliability. As ELT8 stated "I would focus on their feeling for what's written in an essay or any piece of text, which kind of source material they use and how they evaluate it." This shows that source material matters. A similar problem was also faced by C-SS5, and the teacher commented in this way:

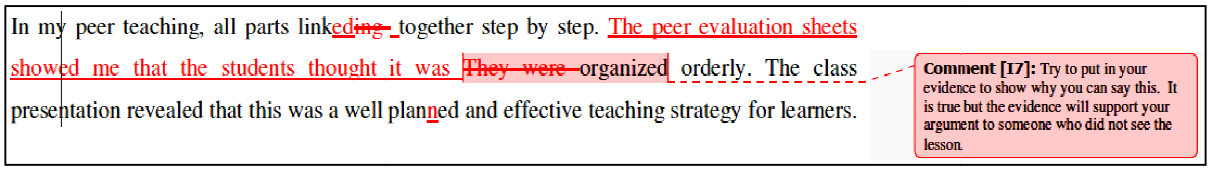


Figure 5.12: [C-SS5, lesson plan, part two, p. 7]

It is characteristic of academic discourse that supporting evidence needs to be logically linked with arguments, claims or opinion (Scanlon, 2006), a factor which was ignored by C-SS5 in the extract shown above. Studies show that if there is any logical fallacy in the evidence provided, then it does not demonstrate CT, and this happens when a reference does not support your viewpoints (Davis & Davis, 2000). According to the interviews and the self-reported sample, the students encountered problems with appropriate referencing, for example: "problems in referring others' work" (IS13); "lack of paraphrasing others' ideas" (IS25); "Lack of supporting evidence" (S-RS24), and "support your views with proper reference" (S-RS37) etc. They also explain how these problems lead them to plagiarism, but the reason is that they are basically unaware of this kind of writing practice. Some stated:

> "A main problem that I face in L2 academic writing is to show the evidence properly to justify my view point because I do not have guidance to refer

> others' work appropriately and in my back home country writing assessment is totally different from here UK" (IS14).

T4 reported that: "When students are coming through they may not properly reference others work and sometimes they repeat and copy. They cannot show their own voices, their own points of view, when they go around the problem to tackle the problem," which causes them trouble. Similarly, CST1 stated: "If students gave a reason for making a statement to me that would be a sign of criticality and if they disagreed with a writer's point of view and then justified it with evidence that would be fantastic."

On the other hand, some students stressed that it was difficult for them to "paraphrase the other's quotes and then relate those ideas with their own work" (S-RS40). Another said: "In my country we are not used to write in our own words because our teachers demand quantity of writing rather than quality so how can we write longer essays in our own words" (IS42). Norris (2007) and Hu (2001) also support this view. Another student said:

> "Referring other scholars' work is problematic for me because it is very different from China. It is considered much respected to pick up the ideas from good scholars' work and show it as it is in your writing" (S-RS29).

Similar kinds of reasons behind plagiarism issues in Japanese students' writing were examined in the study of Rinnert and Kobyashi (2005). On the other hand, Liu (2005) blames *"linguistic matters"* for student's poor writing skills. Participants' views in the present study, however, demonstrate *"cultural attribution"* for their problems, rather than language issues.

5.2.2.5. Lack of precision and drawing conclusions

According to Paul & Elder (2008), precision includes responding to the following questions: Could you be more specific? Could you give more detail? Could you be more exact? The inclusion of precise information while writing academically would persuade readers, but analysis of the students' writing in this study shows that they are facing challenges in terms of making given information specific and summarising it well, for example;

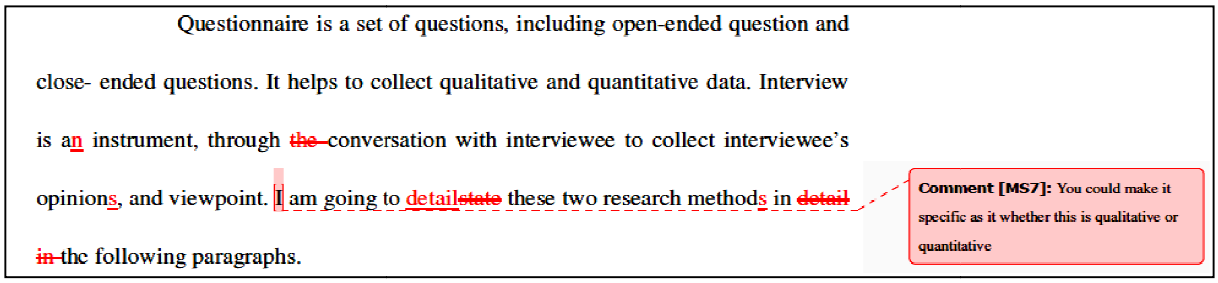


Figure 5.13: [C-SS1, research method chapter, p. 3]

In the extract above the student is attempting to discuss qualitative and quantitative research methods, but seems unable to specify which methodological approach she has used in her study, and how. This was another main problem found throughout the case study sample, and imprecision was frequently pointed out by their teacher in comments such as: "Could you make it specific?" or "Could you explain a bit more?" This was because the students may have skipped the answers to questions like what, why, how and which? This is obvious from the written sample of participant C-SS5, an extract of which is given below:

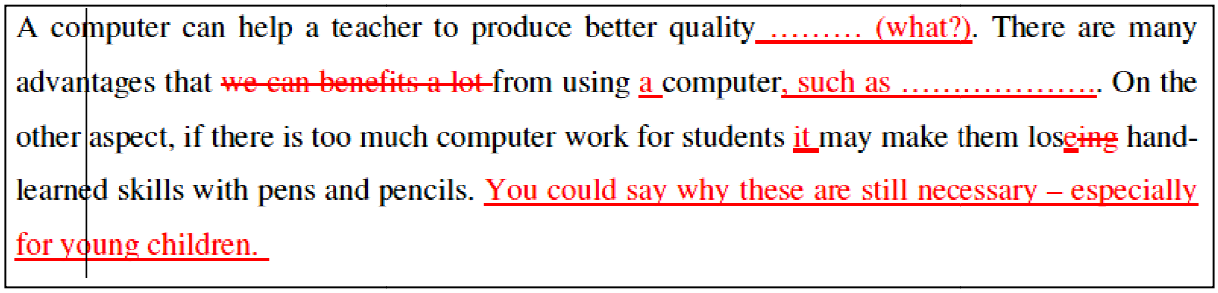


Figure 5.14: [C-SS5, conclusion section, p. 17]

Academic writing demands the ability to make valuable judgements about what has been written (Swales, 1990), yet international students show an inability to discuss and evaluate issues from different perspectives, or to explain implications and summarise their writing task, and these issues were highlighted by their teacher. An extract from C-SS3's written work is illustrated below:

I bought some useful books about this topic to better fulfil my research. However, there is not too much detailed information about my topic in the books that I found but I can know from what the authors implied. Can you delete this and give us a summary of what you have read are the necessary elements for effective HR (tell us what you found out not where you found it)

Figure 5.15: [C-SS3, analyses section, p. 9]

These inabilities are directly linked to poor decision-making and judgment. On the other hand, although these problems were not directly reported by the students or teacher participants, some evidence of the interrelatedness of these issues with other problems were found. For example, IS45 said:

> "My main writing problems in relation to CT are looking for the reasons and justifications for making a statement or argument in order to draw a valid conclusion."

Similarly, T6 responded that staff "would like students' engagement of deep and critical thinking through their interpretations, analysis, synthesis and referencing," while T12 stated that: "How they analyse, synthesise, evaluate, combine and conclude information coherently and cohesively shows their CT." Another teacher reported wanting to see if students could synthesize the text in their own words, for example:

> "Good critical thinking shows in written work for me because it has a clear line of argument; it is informed by wide reading, good level of synthesis, it presents a balanced and informed set of perspectives, it critically challenges the concepts in the essay and can make clear and critical connections with practices, beliefs and values in their own society. They can critically engage with the knowledge and evaluate it in the real context of their own countries" (CST1).

Apart from these CT-related writing problems, students also mentioned some other problems related to the use of language, writing structure and writing style, but to analyse these was beyond the scope of the present study. The National Council for Excellence in Critical Thinking Instruction (2003) claims that CT is based on universal intellectual values, which

are: clarity, accuracy, precision, consistency, relevance, sound evidence, good reasons and depth. Therefore the lack of these universal intellectual values in students' writing could lead to failure in terms of global competition. Of the 8% of the student participants who were categorised as "others", two of them responded that they were very good critical thinkers and did not think they had any problems related to CT, which is an arguable response because thinking critically is not just thinking, but involves "logical reasoning" (Bailin *et al.,* 1999). Three participants were unable to identify their CT-related problems in their writing, while three other students answered with disappointment that thinking critically is very difficult and they could not do it, which seemed a clear sign of de-motivation.

It is, however, ascertained from the analysis of the present research question that international students encountered severe writing difficulties due to the absence of CT. The next research question was sought to identifying barriers which influence students' writing performance.

5.3. Inhibitions to international students' critical thinking performance

Academic adjustment is seen one of the main problems of culturally and linguistically diverse students (Egege & Koteleh, 2004). It was ascertained from the analysis of the above research question that students were experiencing major difficulties related to CT in academic writing. These included poor analysis of the arguments, lack of critical evaluation, poor logical organisation and inability to generate their own ideas, lack of synthesis and poor judgements and so on. This follows the views as argued by Major (2005) that non-western students always encountered with difficulties adjusting Western culture where "questioning, criticizing, refuting, arguing, debating and persuading" are the common learning features (p. 85). Other studies have also mentioned the factors that influence student cultural adaptation (Campbell, 2008; Mehdizadeh & Scott, 2005), such as; previous learning experiences, cultural values and beliefs, motivation and language skills (Berno & Ward, 2002). It was therefore, important to determine the kinds of barriers which are responsible for students' poor development of critical thinking and writing at the higher educational level. Influencing factors were identified in the three broad categories of the themes such as; 1) development of CT, 2) promotion of CT and 3) application of CT as given below;

5.3.1 Factors' affecting students' development of CT

The development of university students' CT appeared consistent with how the CT development has been emphasised in the literature (e.g., Pither & Soden, 2000; Elander. *et al.*, 2006; Scanlon, 2006; Cosgrove, 2009). The following responses were elicited in answered to the general question of "what factors affect international students' development of CT". International students as well as English-language staffs' responses can be classified such as, 1) familial factors which included; parental education, respect of elders and parents' fear of Childers' independency and 2) institutional factors included; dual education system, authoritative learning environment, poor English language foundations and lack of enough efforts from colleges and universities. Themes are given in the Figure 5.16 below.

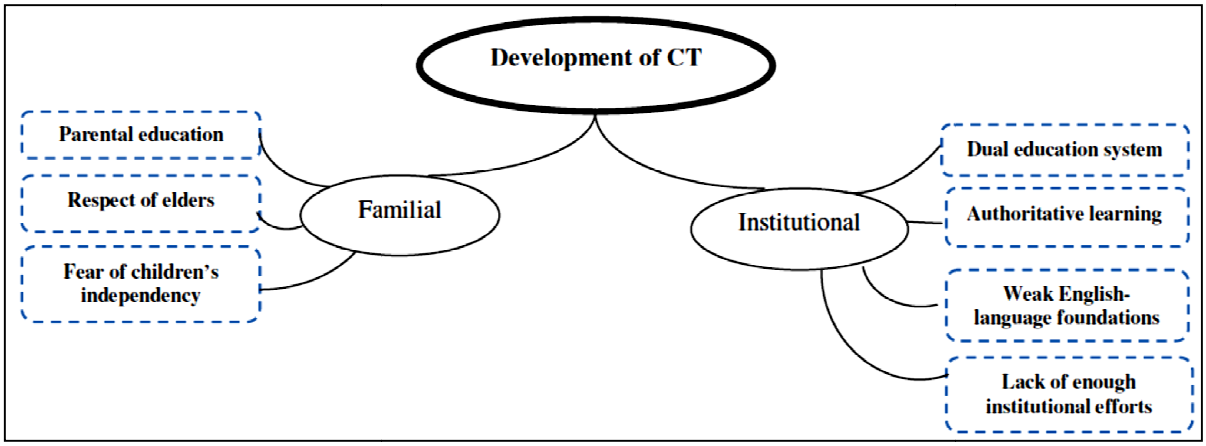


Figure 5.16: Concept map of the factors affecting "Development of CT"

5.3.1.1. Parents' educational background

The participants from both students as well as tutors' samples reported that parents' education is one of the greatest hindrances to the students' CT development. This is perhaps because of the limited knowledge and limited exposure of the social experiences. Therefore, parents might feel the need to understand what a person means and how to evaluate ones' arguments in order to judge the truth. Both sets of participants (students-tutors) were agreed upon the incredible importance of the development of CT because; it is essential part of the university study in UK (T2), it is central to academic writing (T5), CT is the core writing assessment criteria (CST3), without CT one cannot judge what to believe or not (IS6), without CT one cannot get good job (IS32), CT helps to compete with globally (S-RS19) etc. Students and teachers reported as follows:

> "Initial development and learning of the children's starts from home so the development of CT as well but for this purpose parents should be educated enough to develop CT skills of their kids" (T8)
>
> "For me when I think about my poor CT abilities, it comes in my mind that this may be because my parents are not much educated. My mother's education is primary and father with undergrad so I think they were unable to push me to think critically" (IS20)
>
> "I think parents are responsible for developing basics of children and one of them should be thinking critically and creatively. But parents of that time were not educated enough to accept such behaviours I think" (S-RS47)

The majority of participants reported that CT development starts from home at the early childhood level and parents are the main source of children's development at that stage. Parents' education was, therefore, cited one of the main factors in the students' development of CT.

5.3.1.2. Respect of elders

Students and teachers both revealed that why international students are less critical in their approaches to study, and respect of the elders was found another main factor in the development of students' CT. Responses suggested that passivity is deeply set in the students' home cultures deeply. They seemed "psychologically dependent on the in-group" (Richmond, 2007), for example;

> "The "self revolves" concept is very different in the non-western cultures in my experiences as I have spent more than 10 years in Asian countries in teaching international students. Children are expecting not to be out-spoken because of the elders respect" (T5)
>
> "We are been taught our elders' respect since our birth so we are not allowed to do according to our desires basically. This might affect our development of CT as it involves questioning and critiquing" (T9)
>
> "Interestingly I always have to listening my parents and siblings as I am younger in the family and the disadvantage is that I am unable to argue them for whatever they say due to their respect" (S-RS28)

Although responses above support the arguments of Ng (2001), who noted that "the cultural emphasis on filial piety means that children from traditional Asian families are raised in terms of whether their conduct meets some external moral criteria e.g. not being rude to one's

parents or not treating them in a disrespectful manner..." (p. 29), the case was found similar of many other cultures rather than only Asian students.

5.3.1.3. Fear of children's independency

Some of the student participants also reported that parents in non-Western cultures kept their children under rigid control because of the fear of their independence. As Ng (2001) argues, "dependence of the child on the parents is encouraged, and breaking the will of the child, so as to obtain complete obedience, is considered desirable" (p. 29). Some of the responses are illustrated as below;

> "Actually majority of the parents (especially from rural backgrounds) believe that if their children would be thinking independently than they might be neglected. These kinds of beliefs do not students let independent ever and this could be an important factor in the children's development of CT" (S-RS41)
>
> "As parents play very important role in the children's initial development, they could mould their children's behaviours and thinking either dependent or independent. This further might affect their learning the way they brought up" (IS25)
>
> "Elders at home specifically parents want their kids listen them, respect them and do not make their own decisions so they keep them under control which is bad for their development" (IS9)

The responses above showed that dependency is emphasised in some cultures rather than self-reliance, in contrast to Western educational theorists who have emphasised "individual uniqueness" in terms of following their own interests (Richmond, 2007).

5.3.1.4. Dual education system

Institutional factors were also reported by both of the samples in terms of the hindrance of CT development. Dual education system (such as private and Government education systems) was found one of them, which might affect students CT development. For example, private schools are more focused on students' creativity (IS62), students in private schools are more active than state schools (IS35), the education system of private schools is good in terms of quality of education I think (S-RS34). Some of the participants said that;

> "In my country (China) two education systems private and GOVT are in practice. It is general perception that students in private schools are clever

> and active. One of the reasons is that teachers pay individual attention to the students but this might an assumption" (S-RS8)
>
> "In Pakistan there are some very good private schools but only elite class can access them. I personally think that education system is much better in some private schools not all and they might be well in developing CT as well" (IS12)

Similar kind of views was seen from one of the teacher such as "elites in Asian countries have realised that education is more than memorisation therefore, they always send their children either to the West or to quality private schools" (T6). As Richmond (2007) also noted that "Western-style private schools have mushroomed in Asian capitals" (p. 3).

5.3.1.5. Authoritative learning environment

Authoritative learning environment in the schools is another main factor emphasised by students as well as teachers. It is a firm belief in the modern world that learning cannot occur through solely authoritative approaches (McVeigh, 2002; Richmond, 2007). One of the participant teachers reported that "I get the feelings that the school system in many countries doesn't give students these skills and this may be because of their authoritative nature. Many students are unable to think even out of their work so this is the root of this problem I think" (T1). Similarly a student said; "not only home culture but when we start school teacher also show and keep their full hold on students and same at colleges and university levels. I think teachers should accept students' independent point of views. This would help" (S-RS38). It has been noted that authoritative environments often promote a passive learning environment which in turn leads to the poor development of analytical thinking in students (Somwung & Sujiva, 2000). As one of the students pointed out "in schools we are not allowed to ask some questions because teachers considered this in the misbehaviours. They want us as "yes man" that is not good for our future learning habits" (IS29).

5.3.1.6. Weak English-language foundations

Performing thinking related tasks is considered to be difficult in second language (Takano & Noda, 1993; Lun, 2010). Proficiency in the English as a second language was also perceived one of the leading factors behind international students' lack of CT in the Western academic environment (Clifford *et al.,* 2004; Halpern, 2006; Paton, 2005). International students as well

as English teachers stated that the weak foundations of English as a second language in the non-English speaking cultures play an important role in the students' poor development of CT. Some of the responses are given below;

> "In home country, background of English language was not good at all. We don't learn English as a second or dominant language of the world but just to pass it as compulsory subject in our exams so academic writing is totally a neglected skill so this may affect in developing CT in second language" (IS10)
>
> "In our English language classes, we were never asked for practice of any of skills in home country. Our teachers should develop skills including writing and thinking not simple teaching lessons from books" (S-RS28)

Paul and Elder (2008) noted a strong relationship between positive performance in thinking and writing. One of the teacher participants extended students' views in the following words "I think that some students who are weak at writing in English may well be able to think critically in Mandarin or Cantonese, but may not be able to express the complexity of their thoughts in the target language of English. Sometimes these students have written their assignment first in their home language and then tried to translate it, and that for a variety of reasons, does not allow them to convey the quality of their thinking in English: an awful lot gets lost in translation. On the other hand, some students who do not think critically could be fluent in English in the sense that they can structure sentences and paragraphs, but they could write mainly descriptive assignments: that's a different problem" (CST2). This showed the relation of thinking and writing and language do not perfectly correspond. English language foundations was indicated as the most powerful and main barrier. This study suggested that implicit practices and procedures (reported by the students) in the learning process are the inhibitions to the development of critical writing skills.

5.3.1.7. Lack of enough institutional support

A few students also mentioned that their school, colleges and even universities are not doing enough to develop students' study skills both general, and CT skills in particular. For example one respondent stated; "we do not have good libraries and internet facilities properly like here in UK, so we just have to consult with course books. At colleges and university levels, at least enough materials should be available to get information from many different ways" (IS50). Another student reported; "background was not quite good, main reason for me is like that I used to study in communication and not education so I need to aware that which kinds of

differences and similarities of series behind the education phenomenon that is I think across discipline. I think the way we learn language in home country because there are a lot of problems in Chinese English learning because our institutions do not effort to make us aware of things" (IS3).

5.3.2. Factors affecting the application of CT

Influencing factors were reported not only in the development and promotion of CT but in applying these skills as well. Both student and teacher samples held their views relatively and consistently. Both the samples found three kinds of factors, namely; 1) familial factors, which included fear of confrontation; 2) individual fact, which were further categorised in the two contexts native and non-native. Native institutional factors included passive learning environment, lack of CT awareness and lack of valuing CT; on the other hand, non native institutional factors included a lack of proper understanding of the concept of CT, differences in academic conventions and requirements and language abilities. Related themes are given below in Figure 3 in order to provide a clear picture of identified categories of influencing factors;

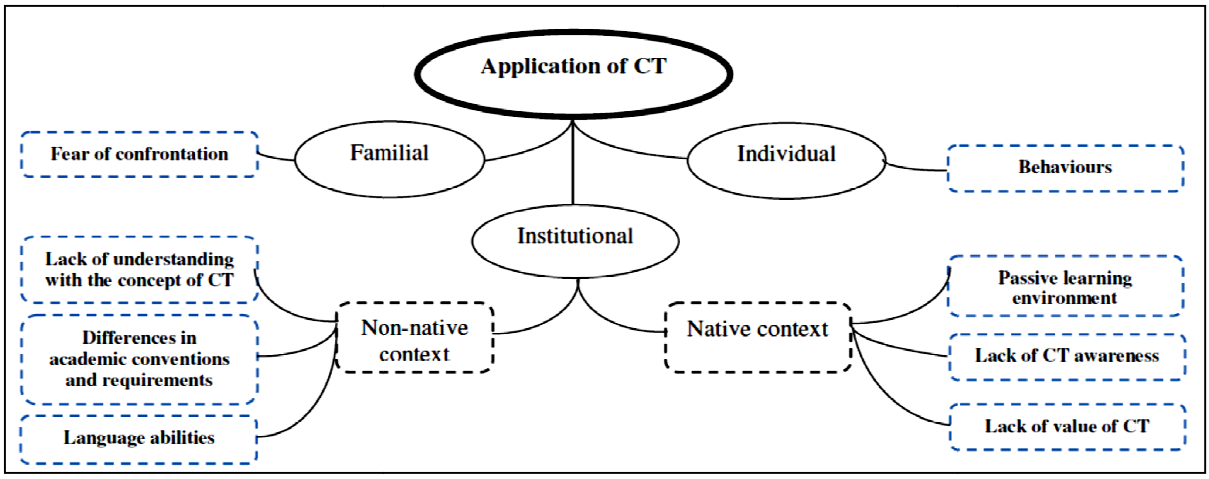


Figure 5.17: Concept map of the factors affecting "Application of CT"

5.3.2.1. Fear of confrontation

Fear of confrontation was found to be the only familial factor which was seen as more important in applying CT at home and which further coincided with the institutional practices. This was clearly illustrated by one of the student participants in the following extract: "home is the first institution for the children where they start learning different things which shapes

their conceptions so the process of the application of critical thoughts also start there but as we are strongly emphasised to respect of authorities which develops a fear of confrontations with others when applying argumentative thoughts" (S-RS22). Similarly some other said;

> "It is difficult to apply CT easily because we are brought in very passive way and now even if I am studying in the university but still I am unable to express my thoughts freely because I feel that might it hurt someone or might it is offensive for someone to critique his/her thoughts" (IS45)
>
> "We are always taught to be obedient to elders and never argue for anything because it is rude attitude to other and I think CT can be applied in free, open and friendly environment not like where children are brought up under tight rules of obedienceness etc so there is major risk to apply such thinking because of the fear of confrontations with elders" (IS10)

Some of the participants suggested that there is an urgent need to change students' beliefs concerning, and concepts of, CT in order to apply them; "students' conceptions are developed differently in non-English speaking countries than UK. Environment there is very congested in terms that you have to think about many people before speaking something because nobody likes outspoken persons and similarly the educational environment stick on which is strictly need to change to form students' conceptions" (S-RS11).

5.3.2.2. Negative attitudes towards learning

Students' attitudes towards learning are another factor which could affect their application of CT negatively as well as positively. As students' attitudes are strongly linked to learning a language. According to Karahan (2007: p. 84) "positive language attitudes let learner have positive orientation towards learning English". Therefore, attitudes may play a very crucial role in applying critical thinking abilities in the target language. On the other hand, in the present study, two of the students also argued that learning depends on students attitudes totally, because some students do not take learning seriously and just pass their times in the classes; "let me tell you about one of my friend when I was in middle grades, one of my friend was used to come to school to escape from house chores and she never tried seriously to learn something. She was used to bunk the classes and go back home so I think it depends much on ones' behaviours and attitudes for learning and especially active learning which involve CT as well" (IS5). Similarly another said that;

> "It is true that our education system promotes passive learning but some students have quest to explore something new and it does not matter that if you get chance in

> classroom or not, there are too many ways to apply CT. On the other hand some students do not like even to think so. They love to pass their times in classes rather than learning and thinking" (IS33)

This supports the views of McVeigh (2002 who stated that "some students had negative attitude towards those who answered in the class because they think that such students are imprudent and showing off that they are bold" (p. 99).

5.3.2.3. Passive learning environment

Passive learning environments in native cultural-educational context were targeted as the other important barrier to students' application of CT by both the samples. Whereas active and critical learning is a major current emphasis of the higher education in the English speaking countries (Lun, 2010; Pither & Soden, 2000), the passive academic style is still an inheritance of most non-English speaking cultures where CT is implicit rather than explicit, and educational background could not provide students sufficient attention to improve their study skills. One of the teacher participants reported for example;

> "It is very cultural thing, I have experience with some Middle Eastern students in the degree of sociology and religious education in their dissertation, I mean they believe that everything they have read from books is correct but like Western they are not active to interpret and look with different angles. So I got the expression that education system in those countries are less flexible and do not encourage students to think critically. Secondly their English language background, they never been taught academic writing and how to use their thinking skills creatively in second language so on. It's mixed cultural and educational" (CST1)

One of the students pointed out the passive learning in relation to lecture methods: "lectures are the common teaching methods in my country and students have to sit quietly to listening teachers only so there is not active engagement with learning" (S-RS24). As reported by Meyers, (cited in Richmond, 2007), that "the lecture tradition generally fosters passive learning in which critical thinking is taught either implicitly or not at all" (p.3). Another student noted that "I am not against the traditional methods of teaching, as they are also used in the UK but here students are provided with tutorials which are usually based on critical discussion but not at all in my back education system. For me this is the main reason of being passive in new educational environment" (IS16). Foreign students' reluctance to participate in group activities has been often pointed out by Western academics (Kelley, 2008).

5.3.2.4. Lack of CT awareness

The current sample of university students illustrated that CT featured less in their previous educational background than in the UK. Being critical is considered very differently, not in the sense suggested by Halpern (1998), that criticality of thinking involves "evaluation and judgements" in order to improve one's thoughts. Lack of CT awareness was reported as an important consideration by the student sample in terms of the application of CT. Some of the participants responded as follows;

> "I think it is necessary to have full awareness of what is CT and then how to apply it. In my point of view it is very new concept out of UK or English speaking world. I have been never realised and taught in my 16 years of my previous education that what is critical thinking so how can we apply it" (IS19)
> "If you do not know what is CT than how can it be developed promote and apply. It is the thing need to make of aware first than you can expect its outcomes" (IS44)

In a sense mentioned in the responses above, it is necessary to make the academics at least aware of the notions of CT, and that debate around its appropriateness could be suggested. Another participant stated that "I got to know about CT after coming here, I do not think so that our teachers are enough open-minded and know about CT and how to teach it well" (S-RS13).

5.3.2.5. Lack of valuing CT

International students' responses showed that CT did not seem to be valued in their cultural-educational context of origin. Students reported that teachers in their back home countries never focused on the critical academic engagement. They also felt that they were never provided with opportunities which engage intellectually. This can be seen in the students' response such as, "I personally think that CT has not yet been as much important as here because the concepts like critical analysis and critical evaluation might be new (IS20). The skills of critical analysis and critical evaluation have been called assets of CT in the research literature (Lun, 2010; Cosgrove, 2011). Another said; "for me the main barrier in applying CT is my previous language learning background, which did not value CT skills and so here we are having troubles to apply those skills in our studies" (S-RS5).

5.3.2.6. Lack of understanding of the concept of CT

Lack of familiarity with CT notion was found to be an important barrier in applying CT in non- native educational context by both the samples. A powerful example was given by CST3. She reported that international students may not realise what it actually requires of them. They are expected to do it, but what it is they are expected to do is often not explained or demonstrated. She explained; "students have commented in the past that we comment on their assignment that they need to show more critical thinking, but they can't really understand what it is we are expecting them to do, it can be very difficult for international students to 'switch on' such an ability and to limit its application to an academic context.
It can in fact be difficult to explain and guide students in developing this skill at the higher level of education, but once it is made clear to them what is required, most international students can (within their own academic abilities) apply it. Similarly one of the students said; "it is difficult to apply the skills which are never been encouraged and developed students' own cultural and academic norms" (S-RS38). Similar kinds of views were found in the study of Huang (2006) but in terms of quite different perspectives and context.

5.3.2.7. Differences of academic requirements between native and non-native context

The fact that there are cultural influence on students' CT skills and related capacities is not new in the literature. The findings of the present study, however, confirm that culture was one of the main barriers in the students' application of CT. The surrounding non-Western educational culture played a marginal role in students' use of CT skills in order to write academically. As indicated above, the students do not necessarily come from a culture (academic and social) where critical thinking is the norm, or encouraged. Similar views were found in students as well as teachers' responses for example;

> "When students have been raised in a society that is largely centrally controlled, and where challenging bureaucracy and the ideas from the centre are overtly discouraged, it can be very difficult for international students to 'switch on' such ability and to limit its application to an academic context. Applying it more broadly can be regarded as seditious" (CST3)

Although writing is the hallmark of UK higher education, conventions and standards vary between different cultures (Kelley (2008; Lillis & Turner, 2001). Consequently, international

students face challenges in applying CT skills when come in the English universities for the purposes of higher education. This can be seen in students' responses; "I have taken some English language courses in my home country to improve my academic writing skills. Although our teachers were from UK graduates but they also didn't told us how to write academically and actually system here is totally different from home country where we read and then write as it is. We were not guided about the differences in academic writing conventions such as critical analysis, evaluation and sound arguments etc" (IS6). Similarly some other students reported that;

> "I found big differences in academic writing requirement in between UK and my background educational culture. In my previous education our teachers mostly focused on the quantity of writing not writing quality. We do not have to show our critical thinking skills like in the UK". (S-RS15)
>
> "I think difference in educational system in both countries my home and UK because I don't have idea of critical thinking sometime our teachers gave us advantages and disadvantages and sometime compare things but not specifically about critical thinking. I don't think that this can help in developing critical thinking skills. Its cultural difference maybe that's why, like sometime I know the things but don't know how to use it or express it in this culture" (IS8)

5.3.2.8. Insufficient English language abilities

English language proficiency was considered an important factor related to international students' application of CT. One of the teachers said "the barrier is not having the ability to read and understand in the first place and then not having the language skill to express their ideas critically. The problems for International students will multiply because of the language barrier" (T12). This quotation clearly shows the second language teachers' perceptions and understanding of the students' previous linguistic backgrounds. Interviewee T4 also clearly stated that the main barrier is students' previous linguistic background in the sense that it could not provide them with the sufficient attention to improve their study skills in;

> "Previous educational background and enough practice of study skills in target language in my opinion, basically they are struggling with two different languages, language they are thinking and language they are writing. This makes them unable to structure their thinking in target language".

Some of the students reported that the issue was not language proficiency but thinking in the second language. She stated "I have studied in the English medium throughout my education, for me the issue is not the language proficiency but how to structure my thinking in English as a second language"(S-RS45). This view reflected the Kabilan's (2000) communicative approaches to language teaching which emphasises using CT in the target language as well just knowing about it.

5.3.3 Factors' affecting the promotion of CT

Both international students and English teachers perceived that the cultural-educational context in non-English speaking countries have not made enough efforts to promote students' CT. Aspects of this included; lack of CT encouragement from home, lack of modelling of CT at home, poor teaching writing methods, the prevalence of unqualified teachers in English as a second language, outdated curriculum, lack of questioning and lack of debates and discussions in the classrooms. The influencing factors found in the present study were related to the traditional cultural practice. My findings showed that students' promotion of CT was also heavily affected by cultural elements such as discouragement and de-motivation for using CT from the childhood and home. The studies of Robertson *et al.* (2000) and Lun (2010) have investigated the prominent role of culture on the international students' perceptions, the relationship between language abilities and CT and other related issues. Lun (2010) has found somewhat similar kinds of related themes in terms of the Chinese students' promotion of critical thinking. The related themes are shown in the Figure below;

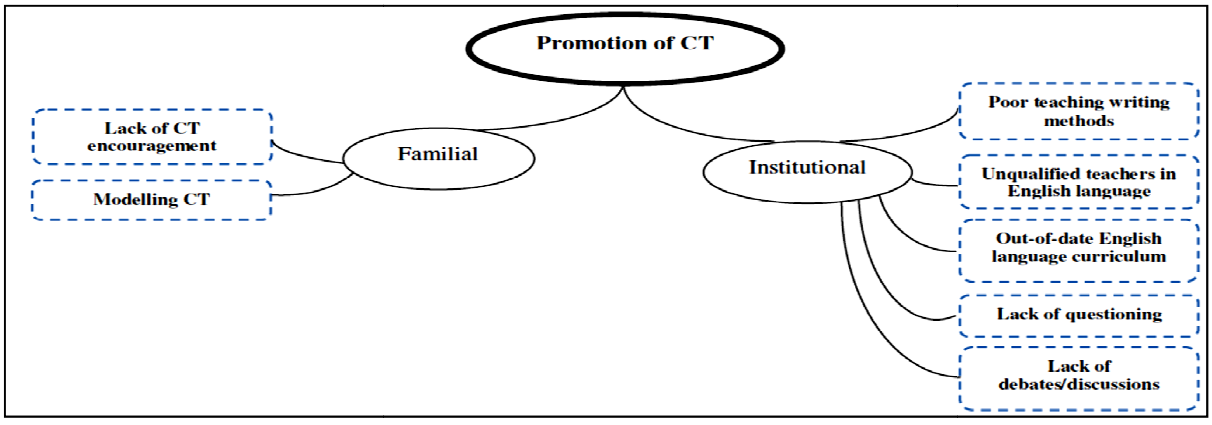


Figure 5.18: Concept map of the factors affecting "Promotion of CT"

5.3.3.1. Lack of critical thinking encouragement

Both the participants were concerned about encouraging environment in order to promote students' CT. Some second language staff members highlighted students' cultural backgrounds and stated that these represented a major barrier to their critical thinking development. Interviewee 14 emphasize that cultures in non-English speaking countries do not encourage critical thinking like western cultures. She stated that "the students do not necessarily come from a culture (academic and social) where CT is the norm, or encouraged at home or schools, colleges and university levels. Their way of doing might be the new concept for them; actually they are the coming from the background where you do not question the answer. It seems they do not want to question because they think that it would be very rude to question". Although the findings of the present research support the results of Lun's (2010) study, she investigated the different problems in different context. One of the students also noted that their culture never encouraged them to think in a critical way. Interviewee IS37 pointed out that:

> "In our culture we just read book and start writing from books, no motivation to think well n order to explore something deeply. Basically our culture never encourages us to think like Western and to critical. I am sure if we have encouraging environment than CT is not difficult to foster".

Lun (2010) argued that "an encouraging environment is to provide students a positive reinforcement in order engaging them in critical thinking" (p. 100). Similar kind of views can be seen from another students' response for example;

> "I strongly agreed that if we are encouraged for thinking critically from home, we would be able to express our own independent ideas and thoughts to our teachers freely if they accept or reject but at least we would be confident to show and promote our own voices" (IS19)

In the present study, both students as well as teachers reported the significance of an encouraging family environment but this could be strongly encouraged by institutions also as was reported in the study of Lun (2010).

5.3.3.2. Lack of the modelling of critical thinking

Lack of the modelling of the CT approach was found to be another familial influence on the students' development of CT. providing a model that supports CT would appear to be a key

factor. A modelling approach would be really useful to increase the students' motivation level. The idea was best illustrated by some of the student participants such as S-RS15 reported "critical thinking is not whatever we say openly but under limits so it would be best help if some of our elder like siblings or uncle etc should be role model for us". While of the teacher participants said this way "I think there are several reasons; I think some cultures encourage critical thinking than others like western cultures, European cultures. I think critical thinking is the central in any cultures and that transit in to the education system like British" (T2). Similarly another student stated;

> "Some families like mine do not accept change easily but I can give you an example of my friend's family environment which is very friendly and her older sister is really supportive and encouraging. She tells her what is right and what is wrong and how to convince somebody with arguments. I think if we all have any role model like her it is good to promote our way of thinking" (IS18)

These kinds of familial influences through role models were also seen in the study of Lun (2010) but in different contexts. Similarly, some others related CT modelling to educated persons only for example; " I think promoting CT by providing role modelling is good but only educated people can do that because if someone is not educated enough or thinker, how can he be a role model to present CT in positive way" (IS47). The familial influences mentioned, seemed fundamental in promoting students' CT.

5.3.3.3. Poor methods of teaching writing

Teaching methods always influence one's CT promotion by offering active instructional support which is crucial (Kelley, 2008; Richmond, 2007), but the finding of the present study does not support these arguments and show inadequate instructional support from teachers in non-Western educational-cultures. Student as well as teacher samples reported that majority of the teachers are unqualified for English-language teaching and unable to promote CT. They seemed to teach English not as the second language and how to use it but just help students to pass their exams. For example, McBride *et al*., (2002) found American teachers more motivated in using CT skills than those of Chinese. Interviewee student IS16 responded;

> "Academic writing is taught with traditional methods by just telling not use any critical activities and any group work so in academic writing classes they

> just use to write questions and tell answers that's main problem. I did my Bachelor degree in English language but my academic writing is still poor".

Most of the students' stated that in their previous experiences of English language learning were limited to grammar and vocabulary learning because their teachers mostly focused on these linguistic skills rather than teaching of how to use the language in different ways. Interviewee IS5 stated that;

> "For me the main barriers are my previous language learning background, it was not helping. Our teachers don't think and teach about critical thinking and how to critique and etc. Our English was limited to just some vocabulary and some grammar".

On the other hand one of the teachers reported "most of the students do not have critical thinking skills when they arrive here. I think their previous learning experience in which they are not asked or taught to think critically about things so it's difficult for them to thinking in the way that required here for academic writing and also some cultural elements, because it plays a part in your learning experiences" (T7). This, however, leads to the "lower level of endorsement of CT skills" (Kelley, 2008; Scanlan, 2006), also these kinds of attitudes are directly linked to the students' inabilities to generate and develop ideas for critical writing. This resulted in passive learning in the case of the majority of students, few students, on the other hand, might be able to cope with the critical writing issues effectively.

5.3.3.4. Unqualified teachers in English as a second language

Teachers' qualification in teaching English as a second language was found to be another important institutional factor mentioned by some of the students' participants only in order promoting their CT skills. In short, the majority of the students become acquainted with their teachers' English language qualification in order teach them and have considered it to be the main reason for their promotion of CT. Therefore it is suggested that course materials for teaching English as a second language should be designed carefully in order to improve existing educational practice. One of the other students said;

> "We don't learn English as a second or global language but just to pass it as compulsory subject so academic writing was especially a neglected skill. One of the reasons is that our teachers are not well educated and qualified in English language and they only teach us Grammar and sentences which are

> not enough for academic writing. I think my previous experiences are the main barriers in promoting CT" (IS10)

Students seemed dissatisfied with the qualification of their teachers. As S-RS24 pointed out that, "Educational background was not good because teachers were not qualified and up to date in teaching English such a level so I am not satisfied. Experience of academic writing was not like here because they were not focusing on academic writing, they teaching just some written instructions for writing stuff and giving some information". The findings of the current investigation, however, showed that non-Western teachers might hold different attitude towards CT. These differences might then influence their teaching-learning practices in order to developing their CT skills. Previous literature (Howe, 2004; McBride *et al.,* 2002) has focused on the Asian teachers' lower level of motivation and emphasis on CT skills.

5.3.3.5. Poor English-language curriculum

Student participants reported that it should be important goal of any educational system to develop and enhance students' ability to think critically and it should be a main focus of curriculum, either in native language or in English as a second language but unfortunately in my country English language curriculum is really old and useless so how can we improve our skills in academic writing. One of the students stated that "our education system has failed to prepare us for the changing world and the reason is that our curriculum are not well developed and up to date" (IS1). Similarly another student said;

> "English language curriculum we were taught from early educational level until college level is not at the satisfactory level because still old kind of lessons are in practise and not different kind of activities to promote our thinking skills in relation to the academic writing" (S-RS2)

As the role of English language is becoming important in most of the developing countries in the world (Abdulkader, 2009), and is a global and dominant language. It is also suggested, however, that CT should be one of the main learning outcomes in order to meet the needs and requirement of the competitive world like UK where a great number of the students come every year for the purpose of higher education.

5.3.3.6. Lack of questioning habits

Apart from the poor curriculum material available to teach all four skills generally and academic writing specifically, limited or absent practice in questioning also influences the development of one' CT abilities. CT is often driven by questioning not by answers (Paul & Elder, 2008). Questioning is considered one of the reflective practices of UK higher education (Soden, *et al.,* 2008) but is still neglected in most of the non-English speaking context. Students and teachers responses confirmed this point as for example when one of the students said that " students are never encouraged for questioning to the teacher no matter what happens, we understand the lecture or not, questioning is not thought as good behaviours" (S-RS42). One of the teachers reported her views in the detail in the following way;

> "I think the first reason is that the way of doing it is the new concept for them, I think very often they are the coming from the background where u expects the teachers to tell you the answer and you do not question the answer. I think that's the impression I get, could be wrong but it seems to me that they want to question the teachers answer but they think that it would be very rude to question the teachers. I think it's a cultural problem. It is a reality I think everybody has the ability to think critically, and the students themselves doing always looking at different courses to find that what is good, what is not, that's not helping me maybe they are wrong but certainly thinking critically. I think there is need to transfer more formal setting that everything that published is not necessarily true. I think that is the first step, teachers and professors should encourage students to questions and think the both aspects of the question" (T9).

A response of the English-language teacher showed that questioning is one of the main teaching-learning practices which are missed in most of the non-English students' background education, and questioning has a strong relationship with CT, as argued by Paul & Elder (2008) and Lun (2010) . Some other students reported that it is very cultural thing that they are not allowed to interpret and look with different angles. So it gives the impression that non-English-speaking cultures are less flexible and do not encourage students to think critically.

5.3.3.7. Lack of debates and discussions

Another major reason for weaknesses in developing international students' CT is the lack of debates and discussions in their back countries classrooms, which were also, pointed out some of the student participants for example "I think another drawback of education system in non-Western countries are the lack of debates and discussions which fail to promote CT" (S-RS38). As Kennedy (2007) pointed out that debates promote students' active engagement with learning, though unfortunately these kinds of activities are still lacking in most of the non-English speaking countries. Similarly another student noted that;

> "Education system in the countries we belong is still having traditional lectures and not other like discussions, specially group discussions and debates which lead students to the completive and critical learning and this could be very useful to emerge in teaching-learning methods in Pakistan" (IS30)

Discussions and debates were not only suggested as vital components in teaching-learning practice but it was also argued that it should be compulsory for every student to participate at the higher educational level in order to enhance students CT skills. As one of the student stated that "for me classroom debates and group discussions are best way to learn knowledge critically and this would be the best teaching strategy to prepare students for higher level studies in the English countries but unfortunately in my country there is still no efforts to start such activities so how can CT be promoted" (IS13). These views support the claim of Vo and Morris (2006) who stated that the short-term objective of acquiring knowledge should be tempered with the long term goal of training the mind to think analytically and critically.

5.4. Discussion of results

The response to the first research questions reveals that students from non-Western traditions are very different in terms of approaching CT tasks, which seems to affect their academic performance adversely. The findings of the present study are best contextualised by indicating the students' CT-related writing problems, such as: lack of clarity; lack of transition between theory and practice; lack of critical analysis of arguments; lack of critical evaluation, and trouble with making sound judgements/conclusions. The results showed surprising gaps between the Western educational expectations indicated by English teachers, and the

difficulties that students from non-Western cultures encounter as a result of the fact that university students must be able to present an integrated discussion, with a strong and consistent thread or line of argument that links understanding, knowledge, ideas, references and a personal and critical perspective. Through examining the international students' problem areas in writing, it is expected to reveal the possible influence of levels, as described in the SOLO taxonomy, on university students' practice of critical thinking.

From the teachers' as well as the international students' experiences, it seems that one of the main problems in demonstrating CT in their academic writing, is that they may not realise what it actually requires of them. They are expected to do it, but what it is they are expected to do is often not explained or demonstrated. They also explained that, though it can in fact be difficult to explain and guide students in developing this skill, once it is made clear to them what is required, most international students can (within their own academic abilities) apply it. The spectrum of achievement in this is quite varied, as it is with home students, but the challenge of operating in a manner which is against their own cultural and academic norms is quite difficult. When students have been raised in a society that is largely centrally controlled, and where challenging bureaucracy and having ideas which diverge from the centre are overtly discouraged, it can be very difficult for international students to 'switch on' such ability and then to limit its application to an academic context. This is because, as students and teachers reported, British university education shows a relatively stronger and more explicit emphasis on CT development than those in other cultures. These findings suggest that the educational expectations of students' development in critical thinking, in terms of the higher order thinking levels of SOLO taxonomy, may be more explicitly valued in the British academic context.

Based on the analysis of the Research Question Four, international students and English-language teachers showed similar views about the influencing factors on the students' development, promotion and application of CT. Their views were supporting the findings of the studies available in the literature. Interestingly, the barriers identified by students and teachers were somewhat similar to those identified in the previous studies and supports the results of their findings (Phillips & Bond, 2004; Huang, 2006; Kelly, 2008; Lun, 2010). Both the samples pointed out that CT is strongly affected by cultural aspects of the non-English speaking countries which involve familial, institutional and individual factors. The findings of the present Research Question found that international university students who had completed their education (whatever level of education) from non-English speaking regions in order to maximize the possibility of their cultural-educational experiences. It is, however, argued that

students' writing approaches are strongly influenced by the cultural-educational barriers. Although majority of the students were never been engaged with CT, encouraged for CT or been taught explicitly, no one can dispute on their adoptive nature (see also Durkin, 2008; Lun, 2010). Both the samples agreed that parents' educational background, extreme emphasis on the elder's respect and parents fear of children's independency were important familial influencing factors in developing CT, while institutional influences included; dual education system (private and GOVT), authoritative learning environment, weak bases of English-language and the lack of enough institutional support.

It was also interesting to note that some of the participants reported that individual behaviours could be also the significant barriers in the application of CT. Apart from these the institutional factors were perceived in the two different educational context native and non-native. Passive learning environment, lack of CT awareness and lack of valuing CT were found the influencing factors on the CT application in the native context of international students, while lack of understanding of the concept of CT, differences in academic requirements and academic conventions and language abilities were perceived to be the main barriers in the non-native educational context. Inhibitory factors also highlight that the instructional context in the cultural context is different to the British academic culture and they do not similarly endorse higher-order cognitive skills as educational objectives.

On the other hand, lack of CT encouragement and modelling of CT were found to be powerful familial factors which play an important role in hindering the development off CT. At institutional level, poor teaching writing methods, unqualified teachers and poor English-language curriculum were also pointed out as main barriers in cultural-educational context. Although participants highlighted the increasing importance of questioning, critiquing and debating activities in order to promote students CT, these instructional strategies were found to be absent from students' background educational cultures. Both the samples of students and teachers also perceived the similar kinds of barriers in the application of CT. The most significant barrier reported by the student participants only lay in the fear of confrontation with elders. In fact, respect of authority/obedience has been strongly emphasised in the majority of non-English speaking countries, which hinders students' analytical and critical abilities. However, it has been evident clearly from the responses that the identified barriers are the attribution of the cultural values.

CHAPTER 6: SUGGESTIONS TO MOVE STUDENTS TOWARDS CRITICAL THINKING

6.1. Introduction

The previous chapter presented an in-depth analysis of students' academic writing problems related to CT It was ascertained from the initial analysis in Chapter 4 that international students' conceptions of CT are still undeveloped and majority of the students prefer surface approaches to writing rather than deeper constructive approaches. Hence, it was established that international students will be expected to conform to unfamiliar norms in developing their CT skills. International students will also highly appreciate the assistance provided by the host institutions. Therefore, the present chapter seeks to elicit the students' and teachers' suggestions as to how it might be possible to move students towards CT in order to minimise their CT related writing challenges at the higher level of education in UK universities. The use of the SOLO taxonomy showed that competency in terms of CT development does indeed exist within the context of academic writing from undergraduate to postgraduate level, as emphasised by the NQF (National Qualification Framework, 2008). However, it seems illogical to explore students' and teachers' suggestions without considering the role of English for academic purposes (EAP) language learning modes, which are specifically designed to address and serve international students' problems and needs related to their course of studies. For this purpose, my Third Research Question was qualified by two subsidiary research questions: 1) what is the role of EAP language learning modes in contributing to CT practices? and2) what possible suggestions/models would help to facilitate international students' experiences of CT? The first research question is addressed by mean of interviews and self-reports, complemented by the use of learners' diaries, which are considered an important tool for studying language classes and programmes in order to explore students' learning experiences and processes which may be 'hidden' or 'inaccessible'. The second research question, on the other hand, is addressed through the students' and teachers' interviews and self-reported methods only.

The provision of EAP courses and the analysis of students' and teachers' suggestions in order to tackle CT-related initial challenges to academic writing would not only be valuable for culturally and linguistically diverse students, but also for teachers of English as second or foreign language, in order to be able to understand and comprehend issues successfully.

6.2. Role of EAP language learning modes in fostering critical thinking

The purpose of EAP courses is most commonly to attempt to develop a broad level of academic literacy including reading, writing, oral presentations, note-taking and study skills. According to Kelley (2008) academic writing courses are designed to prepare second language international students for the kinds of writing they might be expected to produce in their respective programs (p. 9). As academic writing in UK academic culture requires argumentation, analysis, evaluation, reflection, synthesis and summary (Lillis & Turner, 2001), international students might not be familiar with, or fully prepared for, grappling with new academic norms. Thus the main objective of EAP courses is to introduce students' to such academic conventions and help to facilitate their writing challenges through teaching and practicing cohesive writing of different genres, writing and re-writing, paraphrasing and synthesising (Ferris & Hedgcock, 2004). Therefore, it was important to investigate that to what extent, EAP language modes help in fostering CT in academic writing classes.

To gain insight into the EAP courses, eighteen (18) learner diaries were formulated and then students were requested to take and complete them regularly after each session of academic writing. Some diaries were kept for ten, others for six weeks (depends on EAP courses length). At the beginning of the EAP (Pre-sessional or In-sessional) courses, students were given small files which contained diaries and were also given guidelines as to how to write diaries. They had to complete pre-formed sentences after every academic writing session. These sentences help students to write only relevant information within the given framework. The analysis of student' diaries help to explain the scenarios that prevailed in EAP courses. Learners' diaries were then triangulated with students' interviews and self-reported responses to investigate students' in-depth understanding with the role of EAP language modes in relation to CT. The implication of the responses in terms of the help and supports related to CT provided in the EAP courses is shown as under;

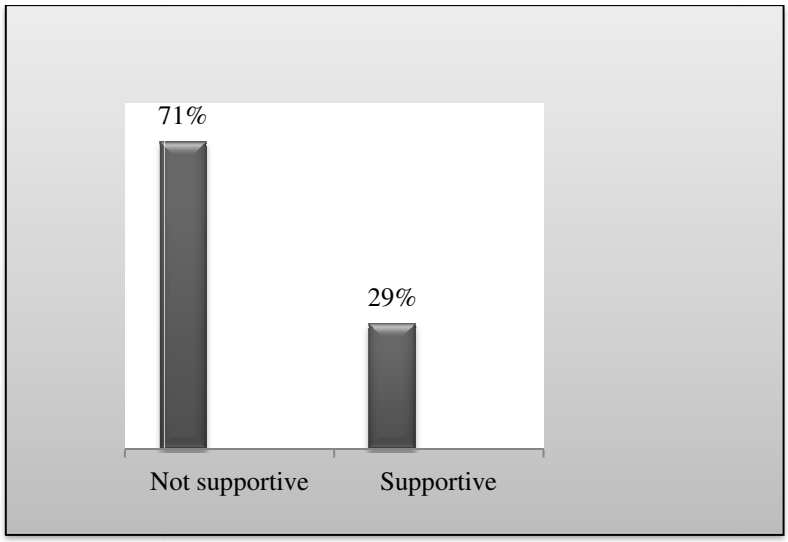


Figure 6.1: International students' perception of EAP language modes in terms of fostering CT

Disappointedly, seventy one percent (71%) students perceived EAP courses negatively and only twenty nine (29%) responded with positive perceptions. The categories of students' perceptions (either positive or negative) of EAP courses are given below in Figure 6.2:

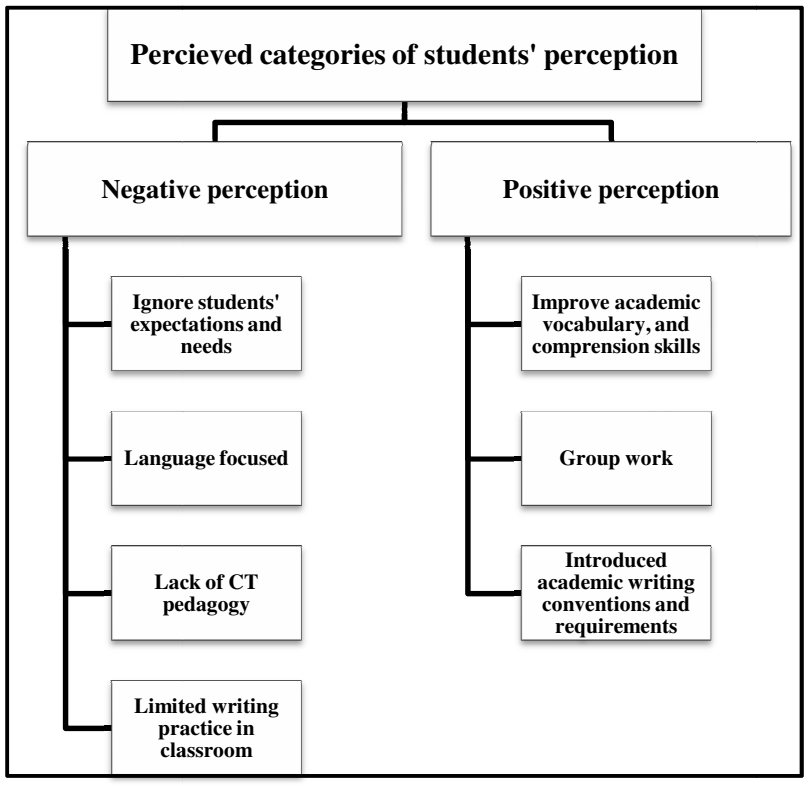


Figure 6.2: Perceived categories of international students' perception of EAP courses

Among the negative perceptions were the following; the lack of relationship between students' expectations and needs and EAP writing practice, the exclusive focus on language, the lack of

critical pedagogy and limited opportunities for classroom practice in academic writing. On the other hand, positive perceptions included the view that EAP courses help to improve academic vocabulary, grammar and comprehension skills, the support provided by group work and the introduction of conventions used in the UK academies for academic writing.

6.2.1. Negative perception of EAP courses

It can be seen from the above chart that most of the perceptions about fostering CT were negative inside the EAP class domain. Details are as follows:

6.2.1.1. Ignore students' expectations and needs

Among the negative perceptions which were reported, the majority of the students reported that EAP courses were not helpful in terms of CT development. They stated that students come to EAP classes with the expectation that they will improve their study skills in order to utilize them in their assignments, projects, reports and thesis. However, unfortunately they did not find EAP supportive in relation to the CT required for academic writing in their studies. Interviewee IS17 stated for example that "it was absolutely a bad experience; they do not care students' needs for academic writing. I just wasted my time. They are just passed some popular information. They don't focus on specific needs". Similarly, some other specified their needs and explained that;

> "EAP course did not improve my skills that I was expecting to help me in my academic studies. Course also did not help me how to use my CT abilities in writing my MSc project" (S-RS15)
>
> "This course was very simple and just some repeated materials, not anything new and constructive that could help me in my assignments and projects" (S-RS3)
>
> "As EAP pre-sessional language course was a part of my admission in the university, I was expecting some helpful activities for my course assignments but I did not get anything. My assignments were very demanding in the sense that, they should be coherent and argumentative, which I was not able to understand properly as it was my new experience of such kind of writing in the UK, but I was happy to get into the EAP course to learn these conventions there, which made me very disappointed later on because nobody focused on such kind of writing issues" (IS18)

It is clearly seen in the students' responses above that academic writing is a difficult and challenging skill for them, which supports the argument of Murray and Moore (2006: p. 6) that "writing involves starting, progressing and finishing a complicated, challenging combination of tasks. It requires you to activate lots of different skills and orientations, sometimes at different stages and phases in the process, sometimes all at the same time". But students' views presented do not support the argument of Aktas and Cortes (2008) in terms of EAP courses, who claimed that "one of the most important objectives of writing in an academic environment is to create texts that are coherent and cohesive in order to establish successful communication within an academic community" (p. 3).

On the other hand, some students demonstrated that EAP courses should be linked to their study needs; "as I have mentioned in my earlier answers that usually we (international students) come from passive learning backgrounds and with limited writing practice and we realise our difficulties soon after starting our studies because of different and advanced educational environment of UK. Therefore, majority of us join EAP courses either pre-sessional or in-sessional for our skills improvement but majority stay dissatisfied with EAP experience especially in relation with academic writing because there is a big difference between the writing requirement at university level for our assignments and dissertations, and EAP academic writing course" (IS22). Some other students reported in a similar vein for example:

> "I think academic writing for our courses is very different from those we are taught in the EAP courses. Writing for the course requires our abilities to analyse and evaluate the information as well as we have to show and justify each and every comment and argument. Therefore, we need a lot of practices of these skills but in EAP courses we are taught writing processes not the skills improvement strategies. So we have to learn our own, even we (students) do not get proper feedback on our written stuff from EAP teachers" (S-RS15)
>
> "Writing courses of EAP is not the same I need for actual writing for my study. It is just a language course in which teachers are not much concerned to improve students writing abilities and most of the times students are waiting for their feedback but no response till weeks and so…." (IS29)
>
> "In my point of view academic writing is not an easy skill, which needs not only proper guidance but also some kind of moral support to complete it. But unfortunately it is missed from EAP portfolio. I personally do not feel that it can fulfil academic writing needs" (IS31)

Writing has also been considered to be one of the most difficult skills in a previous study of Levine's. He argues that "writing can be experienced as one of the most difficult of all skills, requiring an intricate combination of neurological, physical, cognitive and affective competencies" (cited in Murray & Moore, 2006: p. 6). Students' views above are similar to those of Klapper (2006: p. 307), who stated that "students usually end up tackling written tasks on their own without the moral and linguistic support of a partner or interlocutor, as in oral work, and that any feedback students receive on their written work tends to be delayed". Students not only emphasised the role of EAP courses but also the teachers' role within those courses. According to McDonough (2007) "the teacher's role in all of this is central and difficult. It goes far beyond the provision of reward. It involves providing a supportive and challenging learning environment, but also facilitating the development of the learner's own motivational thinking, beyond simply identifying their original orientation" (p. 370). Cohen (1998: p. 97) also stated that the teachers should be as *facilitators* and *partners in the learning process*, which is not supported by the international students in the present study.

Another student reported here has differentiated academic writing in both the native and non-native countries as follows: "academic writing process is very different in my home country from the UK, so I basically need to improve academic writing skills like how to analyse and evaluate different point of views, but there was nothing to do with it in the pre-sessional courses." (IS23). This referred to the Lillis and Turner's (2001) articulation of the differences of academic writing conventions in different academic cultures.

6.2.1.2. Language focused

Although the goal of EAP is not only to improve students' academic language proficiency but also to develop their study skills (Terrachke & Wahid, 2011), preparatory courses for UK study have tended to focus more on t language improvement and not on the academic skills and CT, according to the majority of international students reported in the present study. Interviewee IS10 remarked that; "basically writing material is not of good quality, there are just bogus activities that don't match for academic writing needs at all. They give us lots of useless activities such as match/mismatch, grammar accuracy and advantages and disadvantages etc in very short time that never helps us in academic writing but some kind of language learning". Similarly some other students said;

> "Pre-sessional course was just waste of time and money. There was not even little help to improve or promote our critical skills that are really necessary for academic writing. Still they focusing on grammatical rules and sometime compare and contrast small activities. No practice of academic skills improvement at all" (IS12)
> "Mostly activities emphasizes on language but not thought provoking. Some activities like comparing and contrasting activities helped to think critically. But they are doing just few. In my opinion course improved our language skills but didn't any help to improve our critical thinking ability which we need most and more than language in academic writing" (S-RS2)

As it has been confirmed by previous research literature that international students' problems are not simply language based, but also come as a result of differences in academic norms such as critical and analytical thinking (Egege & Koteleh, 203). Some other students reported that "honestly, EAP help to improve language but not critical thinking. Most of activities were just language based nothing to improve our academic writing skills. They told us little bit about writing style and structure it. I really liked the one assignment our tutors gave us as home work. I need this kind of writing and then teachers' feedback to improve my writing but they just gave once at the end of the course" (IS17) and "it's not good unfortunately. They gave us topics to write essays every week but don't tell that how to analyze information and evaluate critically. This course helped to improve our English but not critical thinking ability for academic writing. They don't use any kind of strategies for critical skills. They still teach us tenses and their explanation of what is academic writing not how to write" (IS8). The students' responses reinforce the emphasis on the necessity of teaching CT skills in EAP courses by Davies (2003) who has emphasised that the main aim of EAP language mode is not only to improve students' language proficiency but also study skills and academic conventions.

6.2.1.3. Lack of critical thinking pedagogy

Although CT pedagogy entails CT elements in teaching methods/instructions as well as in curriculum/course materials (Hyland, 2006), some of the students also reported that EAP courses lacked CT pedagogy such as critical discussions on the given topic before writing, tutors teaching-writing techniques and writing materials. This can be seen in the students' responses for example Interviewee IS19 commented "I am shocked ....we still could not improve our academic writing even after completing the language course like pre-sessionsl

EAP; it did not fulfil the needs for our academic writing preparations. The reason for me is that tutors were not interested to focus on the skills development. They introduced us with writing styles, writing conventions but never taught us how to analyse the arguments etc" Similarly some other student participants criticized such as;

> We are just provided with some papers for information. Most of activities were like label the diagram, compare/ contrast/ advantages /disadvantages so. They inform us that plagiarism is unfair in writing but did not teach proper way to write in academic study and proper referencing and paraphrasing (S-RS11)
>
> Classes were very large and our tutors always introduced us with academic writing but not how to do the analysis and use proper evidence and arguments (S-RS44)

The development of these aspects of academic writing have been strongly emphasised by Benech (2001) and Gieve (1998). But students' quotations have demonstrated their dissatisfaction with the capacity of EAP programs to foster CT pedagogy and practice in classrooms. As noted by another student that: "I think if teacher uses questioning techniques in teaching all the language skills not for only academic writing, this would help to turn our thinking from passive to active. They should engage us in active writing assignments" (IS4).

6.2.1.4. Limited writing practice

As academic writing has been considered to be one of the most difficult skills (Hyland, 2006) its practice seemed an important factor in students' CT development. Perhaps allocating more time would be appropriate in order to cultivate and enhance the skills of critical thinking and writing. However, the idea was not supported in the EAP and students felt that they need enough practise to deal with the complex skills but EAP did not provide enough time for writing practice. Some students stated;

> "In EAP course, there were very limited writing practices. Tutors sometime teach us the note taking skills exercises but you imagine can these kinds of skills be improved in just one or two exercises. But they had allocated very short time to teach writing skills therefore they only focus on different kinds of little exercises but not writing practice of essays and reports because they demand more time" (S-RS15)
>
> "I think skills of academic writing can be improved only through lots of practices which are totally ignored in the in-sessional courses for academic writing" (IS12)
>
> "You see that students are not satisfied with academic writing courses of pre-sessional and in-sessional programs and the reason is that they do not give any

> preferences to students' needs for their writing but just tell some rules. I strongly recommend writing more and more practices to develop theses skills are necessary for academic writing" (IS30)
>
> "For me more practises would help students to develop their thinking and confidence in writing to achieve academic success" (IS4)

The above quotation has highlighted the fact that the EAP tutor focused on useless and short exercises. It also demonstrates that self-confidence plays a positive role in learning as emphasised in previous studies. For example, Cavani (2001: p. 35) notes that "clearly self-confidence also has a major role to play in encouraging any student to stay on the path leading towards their ultimate goal". A similar point was emphasised by another student;

> "It is true as my friend said that in there is very limited time for academic writing practice in EAP course, I think writing is a lengthy exercise and takes time but teachers spent very short time on it so how can they teach the skills we needed. But I've much experience to learn academic writing on language websites. I think they are good source to improve our English language and academic writing because there are lots of samples of argumentative essays and techniques to evaluate and analyze critically and much more activities to improve these skill" (IS25).

In general, most participants did not seem satisfied within their EAP experiences in terms of the extent to which the courses had assisted in developing their CT skills. Therefore, they have proposed the internet as a better resource to support the acquisition of academic writing skills. These findings do not support the findings of the previous research literature which has emphasised on the creativity and criticality of these language modes (Hyland, 2006; Davies, 2003).

6.2.2. Positive perceptions of EAP courses

On the other hand, twenty nine percent (29%) students perceived EAP as a positive influence on their CT skills. The positive experiences reported by student participants included the following;

6.2.2.1.Improvement in academic vocabulary and comprehension

Parker (2004) noted that that students' positive experiences of language learning always have an equally positive influence on their general learning and this must be considered in teaching

EAP. Interviewee IS24 stated that course was very helpful in terms of academic vocabulary for example;

> "Course was supportive especially in terms to improve my academic vocabulary which is very necessary to write a good essay and assignments as well" (IS24)
>
> "Course was so so....generally but very good in terms of improving my academic vocabulary. You know when I came here [UK] I was very naive to use academic words in my writing and my writing always look so simple kind of, but after having academic course in EAP, I personally think that at least it improves my vocabulary" (IS13)

The students' responses given above draw our attention towards the academic vocabulary approach, which was proposed by Coxhead and Nation (2001) in order to improve students' academic vocabulary. Although academic vocabulary is an important aspect of academic writing, this approach was seen as a narrow model because academic writing occurs at sentence level and macro-structure and therefore concerns more than vocabulary.

Some students reported that EAP course helped them to improve their comprehension skills, "course was very good and we were given very useful activities such as we were given some reading passages and we have to understand them properly and then find out the appropriate answer for the given questions. These kinds of exercises help me to improve my thinking skills" (S-R24). Other students commented for example:

> "I am shocked that why some students complain for language courses. I tell you truth that they are 100 times better than that of my home countries. They improve language very much for example language comprehension and sometime paraphrasing skills, they also teach academic vocabulary and tell us how to organise our writing. I think it was good course" (IS30)
>
> "It was good, I am happy that its improving my language skills very much. Teachers are very co-operative and they listen and tell us everything we need for our academic studies" (IS4)

These students' views do not support the findings of the studies Alderson 92000) and Green (2005) which have blamed EAP courses for being problematic in terms of skills development, for example their focus on preparing students for language development.

6.2.2.2. Group work

Some participants with positive perceptions of EAP academic writing courses have illustrated the way EAP helped them a lot to improve their critical thinking/writing such as IS14, IS27 and IS48, who pointed out that;

> "Course was helpful and good in some points like group work was very good in doing group work. All students liked it. These kinds of activities promote active learning and so enhance thinking skills because in group work we had an opportunity to discuss issues with each other's".
>
> "I liked group work in my pre-sessional course. This provides many interesting experience to working on the same issue together. Our teachers divide all students in small groups, then give collaborative work like reading passage and we have to find out the answers. We can discuss the issues together than write right one on the paper. Similar some teachers do this in the speaking classes and we prepare our topic together to debate with other friends"
>
> "Group work was very excited for me because I was not used to do such kinds of activities in my country [Oman], so I liked it, its good one"

These views support the argument of Vo and Morris (2006) who claimed that group discussions are key aspects of active learning and critical thinking. Similarly another student reported that "in the EAP courses we were given different kinds of topic to discuss with each others to write our assignments, which was really helpful to motivate me for thinking on different perspectives on the same issue. It also helped me to improve my language skills for writing well" (S-RS13)

6.2.2.3. Introducing with academic writing notions and writing requirements

Some other students also stated that EAP was really useful in terms of introducing academic writing conventions and writing requirements at the higher level of education in UK. One of them responded that "I was came here for undergrad studies with limited knowledge of UK academic writing and I got to know about critical thinking, critical analysis etc in the EAP courses" (S-RS2). While other noted that;

> "Academic writing sessions introduced us with what is critical thinking and evaluation and what would be required from us in assignments and projects, which I was not familiar before" (IS31)
>
> "I noted that there were some very good exercises in this course, which have introduces us with the terms that we are used to do in our assignments writing" (S-RS22)

Interviewee IS46 found EAP a useful and different learning method from those prevalent in his home country. He said that the "course was good and introduced me the idea of critical thinking. It is new learning method for me so I found it useful". While another reported that "I did not know what kind of writing is needed for my studies and what the writing criteria

means how to practice according to the given criteria. This all was told in EAP academic writing courses. I found it very useful but this is not enough for academic writing. As EAP is called the Bridging Programmes so they should do beyond this and taught us exactly what we needed and how to write it in order to succeed in our exams" (S-RS35). Students answered that at least they get to know the conceptions of CT in this course.

Students' positive perceptions were somewhat encouraging that EAP courses might be on the way to achieving their goal of developing not only language competencies but also study skills and academic writing conventions as well, as emphasised by Hyland (2006), Davies (2003) and Gieve (1998). According to Rimiene (2002: p. 18), EAP courses should focus on CT development, which could also influence students' motivation significantly. The next research question sets out to investigate students' and teachers' perspectives on the process of moving students towards critical thinking.

6.3. Possible suggestions to move students towards critical thinking

International students as well as English language teachers were asked about their suggestions as to how to overcome their CT-related academic writing challenges in UK universities. They had various answers which included many useful suggestions. Students' and teachers' responses can be categorised into two different categories such as; 1) native context, and 2) non-native/ British higher educational-context context as below:

6.3.1. Native context

Student participants placed a very strong emphasis on the need for educational change in their home countries. Students suggested that in the native context, familial as well as institutional support is necessary to encourage students to think critically from their childhood because CT is not limited to academic writing but is rather taught through encouragement initially from home, followed by giving students tasks in the classes that required CT. They were also agreed that CT should be the main learning goal of HE, CT should be inherent in the pedagogical practice, writing exercises should be based on writing and re-writing with teachers proper feedback rather than the 'product' approaches which were often prevalent. Finally they suggested that writing assessment criteria needed to be changed.

6.3.1.1. Encouragement for thinking critically

The majority of the students reported that students' CT behaviours should be necessarily and initially encouraged from the early age: generally at home but specifically in the institutional level. The majority of the student participants accepted in response to the previous Research Question (RQ4) that they belonged to cultures where passivity was favoured, and where they were not allowed to ask enough questions in home as well as cultural-educational context in order to satisfy their curiosity. It was recognised that these kinds of attitudes are not helpful in fostering CT, and that therefore students definitely need institutional support and encouragement to foster CT behaviours.

> "Students should be encouraged for critical thinking at home as well as institutional level. I know parental support is also necessary but it is the basic responsibility of schools, colleges and universities where we go for learning. Learning environment should be very flexible and focused" (IS13)
> "Encouragement is very important to motivate students to be open-minded and flexible" (S-RS4)

On the other hand, one of the students said that "our teachers need to be patient when I want to ask something; they should encourage us for showing our own point of views" (S-RS15). Similarly another student reported "If our education systems really want to prepare us for the global competition, they need to encourage their students to thinking creatively and positively" (IS22).

6.3.1.2. CT should be the main learning aim

Considering the importance of CT overall and its placement in the course of studies and its role in knowledge building, key learning objectives are vital to identify in order to know students' exhibited as well as target behaviours, including the target skills of academic writing. According to Duron, *et al.,* (2006) "a well-written lesson plan should target a specific behaviour, introduce and allow for practice of the desired behaviour, and end with the learner exhibition of the behavioural response and the development of well-written questions will greatly accelerate a learner's movement into critical thinking" (p. 162). A moderate number of student participants reported in the following vein;

> "I think that CT should be the main aim of learning in our native cultures as it is here in UK because when we go English countries for higher education it is basic requirement" (IS7)
>
> "As CT included analysis and evaluation skills, if these skills would be the main objectives of any educational system, students could use them more easily everywhere they need" (IS20)

On the other hand other students responded differently: "for me learning is only to get some knowledge and information but how to use them in our everyday life. I think to make students able to be critical about themselves and around should be the main goal of learning" (S-RS34). This view was complemented by another student who argued that "students should not be provided with knowledge only but how to use that knowledge critically in problem-solving" (IS2). Two of the student participants also reported that once they had developed CT then it could be easily applicable towards targeted skills such as reading, writing, speaking and listening successfully. For example as reported by these students:

> "Critical thinking skills are not only necessary for academic writing but also for reading, speaking and listening. And if once students learn and develop these abilities they can apply on other areas too" (S-RS3)
>
> "The main problem is that no efforts were made from our universities to make us aware of skills that are highly required in the foreign countries. I think that thinking abilities should be developed in the way that they become ultimate. I believe that if once these skills are developed properly than students would be able to use them in the new learning context as well" (S-RS16)

Considering this importance, CT should be the key learning aim in order to make it happen in the classrooms as well as to assess students' writing at the higher level of education.

6.3.1.3. Active teaching/ learning engagement

A great number of the students also suggested that learning practices in their home educational-cultures need to be changed from passive to active. It can be seen in the following student response: "teachers should not only teach through pre-packaged lessons in the books but they should use questioning techniques and questions should be developed purposefully and effectively" (IS33). While self-reported student (S-RS12) extended this view: "teachers should realise that no learning happens by just sitting in the classes and listening to them, therefore they need to engage us with learning through thought provoking questioning". As questioning is one of the crucial parts of fostering CT (Duron *et al.,* 2006) it should therefore,

be the crucial part of teaching and learning process. While some other students reported for example;

> "Students must give chance to discuss the ideas with each other and with teachers. Tutorials are the best way to engage students towards critical discussions in order to move them think critically" (IS31)
> "Students need to be provided with the opportunities of critical discussions and classroom debates to move them curiosity and creativity" (S-RS18)
> "In order to improve students' critical thinking skills, the best way is that a forum should be created at university level where students can have opportunities to discuss their ideas and put them into practises" (IS2)

Some of the participants suggested that the subject matter needed to be reformed because there is a big gap between the curriculum they are currently being taught and the skills required for HE in the English speaking world, especially in the UK. One of them averred that the "curriculum we people are being taught does not seem relevant with our needs, which does not help us to move towards innovations and creativity"(S-RS2). Similarly another said that curriculum needs to be changed towards a more practice-based model;

> "Subject matters usually based on the very lengthy and boring exercises which do not support active learning. I suggest exchanging those with some practice-based activities and specifically questioning techniques, which would help students to extend and apply their knowledge in life problems" (IS10)

This support the results of a study by the World Bank (2005) which claimed that secondary curriculum in the developing countries is "abstract, fact-centred, de-contextualized and irrelevant, which is one of the great obstacles to successful expansion of the secondary education" (pp. 77-78). The questioning technique suggested by the student above to be essential was also cited by Duron *et al.,* (2006) who claim that "questioning techniques allow the teacher to establish what is already known and then to extend beyond that to develop new ideas and understandings".

Other students respond that "active classroom engagement not only depends on teachers but students as well, students should be responsible for their studies and should not leave everything to the teachers" (IS46). Similarly, another student reported that "the problem is that students want to be "spoon fed" but this is very wrong concept I think. They should learn their own: they should use their efforts to improve their own writing, they should practice alone and ask for help where it is needed" (S-RS5). These views support the argument of

Copland (2004: p. 42) who has stated that students have as much responsibility for the learning process as the teacher.

6.3.1.4. Teaching writing through pre-writing, drafting, re-writing and feedback

Some student participants clearly appreciated that thinking critically is a vital part of academic writing and allows the students to establish a link between previous experiences and development of new ideas. Paul and Elder (2008) have categorised thinking in eight overlapping parts. They elaborate that "whenever we think, we think for a purpose, within a point of view, based on assumptions, leading to implications and consequences. We use concepts, ideas and theories, to interpret data, facts, and experiences (information) in order to answer questions, solve problems, and resolve issues. Supporting these arguments, one of the students suggested that;

> "Students should provide enough time before writing like we do in UK. In my country we have to hand writing assignments in very short time and we just write them whatever we find useful and submit them. Teachers should give enough time to students to think carefully about the purpose of what they are going to write" (S-RS19)

Students also suggested that in order to write critically they need writing practice such in the form of drafting and re-drafting. One of them said "the way writing is teaching in our country is wrong and writing should be process-based for example pre-writing, writing and re-writing then we can improve it effectively "(S-RS38). Another reported that;

> "As I have mentioned in the earlier questions that we are always been taught what to write, not how to write? Writing is a process and it is been best teaching in UK. I want the similar process in my own country for example here before writing we are been told writing criteria clearly which helps to think what and how we have to manage the writing tasks, then writing and submission, then we are given feedback then we re-write and then submit it final draft" (IS42)

One of other students mentioned that "we are asked to write only once, no chance to improve our writing further because teachers do not return us with feedback and in mostly cases they just marked it without checking properly"(S-RS44).

6.3.1.5. Writing assessment criteria need to be reviewed

The quotations discussed above demonstrate that international students are quite impressed with the academic writing teaching style and want the similar kind of approach implemented in their native cultural-educational context. They further suggested that writing assessment criteria need to be changed. They argued that;

> "Writing assessment is being done very bogusly; in most of the cases teachers never read our assignments carefully and mark it. It should be changed and teachers should not only focus on the presentation but they should assess our arguments and clarity of writing" (IS25)
>
> "Writing assessment is very different from the UK, you know our teachers never care for our own point of views which should be the basic principle of students writing that how we presented our own ideas" (S-RS45)

Students drew our attention towards the Intellectual Standards of Paul and Elder (2008) in terms of their writing assessment. This could be very helpful for the teachers as well as students themselves in order to assess their writing for example they could strive that "is the presented information clear, accurate, important, relevant, precise, coherent and logical? Does the writing deal with the complexities in the issue and has alternative viewpoints are considered? And to what extent is the author using manipulative language or other intellectual trickery to convince the reader that the argument is sound? (cited in Cosgrove, 2011: pp. 11-12). Following these patterns to monitor students' writing, the teacher can look for the incorrect responses and find out the possible underlying causes.

6.3.2. British higher educational-context

Academic writing (assignments, dissertations, thesis and reports etc) at the university level in the UK is highly demanding in terms of students' deeper understanding, interpretations of secondary literature, critical awareness and sound judgements (Elander *et al.,* 2006). Although today's higher education has much emphasis on curiosity, self-expression and critical thinking (Pithers & Soden, 2000) international students' limited CT abilities are bound to be highlighted (Kelley, 2008). This does not mean at all that international students are not bright, talented, observant and critical but rather that the analysis of the First four Research Questions indicated that they surely had "very limited practice of critical thinking" because of the limited CT awareness and value in their cultural educational context, which has been

evaluated as unfavourable according to the Western educational standards (Watkins & Biggs, 2001). However, it was important to explore what can help to facilitate international students CT -related difficulties in the UK academic environment.

Students and tutors suggested many steps which could help ease the transition from descriptive to critical writing. Both the samples suggested that there it vital to understand international students' cultural background. Both sets of participants also agreed that CT should be integrated into the EAP language modes. Students and teachers strongly emphasized the encouragement, modelling and reinforcement of CT in the classes delivered in a non-native educational context. Both suggested that writing assessment criteria should be defined and communicated clearly and in detail before assignments. Finally both the samples suggested that feedback should be constructive rather than judgemental. These steps were shaped into the following Model;

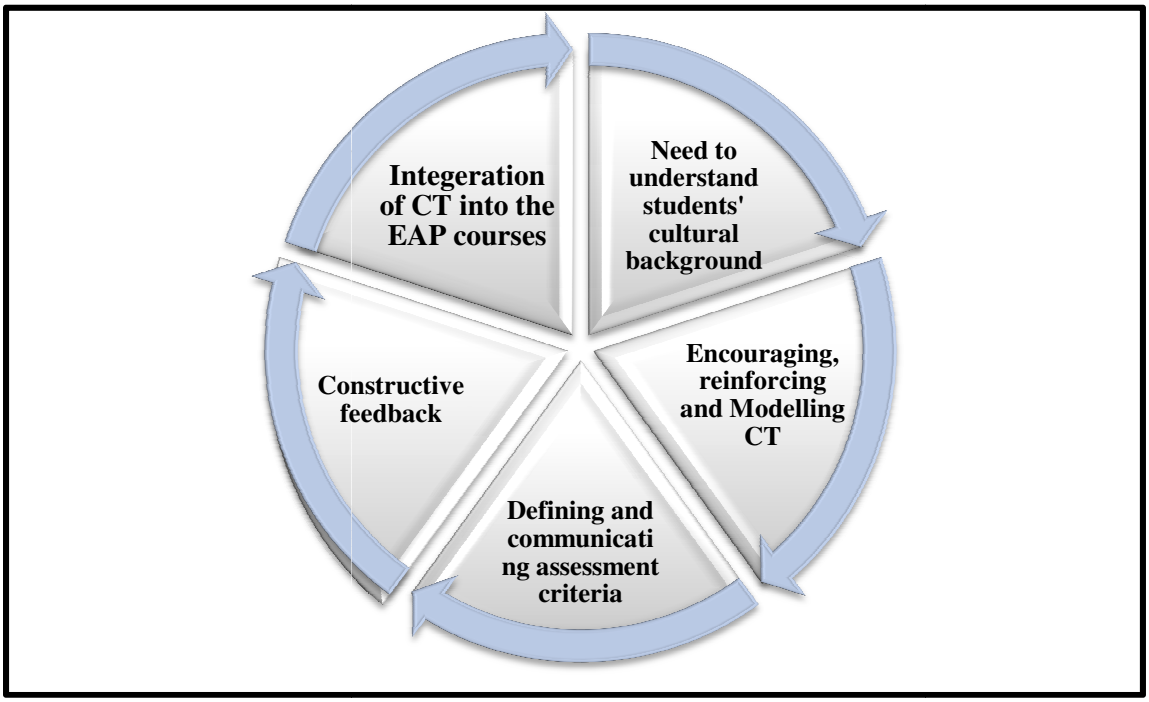


Figure 6.3: Suggestions to facilitate international students' CT related writing challenges in UK HE

6.3.2.1. Need to understand international students' cultural-educational background

The findings explored in RQ4 illustrated that the cultural-educational context of the non-English speaking students induces a clear focus on knowledge acquisition rather than the development of CT abilities. The majority of the students in the present study reported culture as a real challenge for their development of critical writing skills. Therefore, it is important to

analyse what can help to facilitate international students in their efforts to meet CT related writing challenges at the higher level of education in UK. For this purpose, students and teachers' suggestions were combined to develop recommendations as to how to help students to improve their writing. The first step evolves by understanding international students' cultural-educational learning experiences in order to relate their previous knowledge and experiences with new ones. Teachers reported that;

> "I think understanding students' cultural background at the first place is very important because constructivism is widely endorsed in 'western' education, but for international students from a different cultural, social, political, economic and academic context, tutors may fail to really understand their existing 'mental models'" (CST3)
>
> "Understanding international students' background experiences are really very necessary for me in order to make links to that which they already know or have experienced in their own country" (CST2)

Similarly, student participants strongly emphasised the need to develop understanding of their cultural background; "it would help to understand students' writing background" (IS4), "teachers could be able to note students' weaknesses easily to target them" (IS23), " this would be helpful to linkage our previous knowledge with new one" (IS14), "to extend our previously learned knowledge" (S-RS8) and "it would be helpful for the teachers to understand students particular problems to improve it" (S-RS35). These suggestions might help to draw the educators' and teachers' attention to the important issue of cultural differences and avoid expectations that they are similar to home students: this could help students to overcome anxiety and other related barriers in the way of writing in the mode required at the higher education level in the UK HE. These views are also supporting the findings of the study of Duron, *et al.,* (2006) who have suggested the five-step model to move students towards critical thinking.

6.3.2.2. Encouraging, modelling and reinforcing CT

At this stage students need to be encouraged and reinforced for CT. Students reported that "teachers should encourage us to move towards CT because it is new for us" (IS10), "we need to be encouraged from staff members and EAP teachers where do we practice our skills and also teachers should present some samples of previous assignments which have shown CT" (S-RS26), "students should be given some examples of phrases and analysis to apply them"

(S-RS45). Teachers should then introduce a model of critical writing: for example apiece of work in the written form that motivates the students' curiosity.

Teachers on the other hand stated that "students should be guided with some good academic writing books for outlining what is meant by CT skills and how to build these into academic writing for example Fisher (2001) 'Critical Thinking an introduction', Bailey (2006) 'Academic writing: a handbook for international students', Reinder (2008) 'The international student handbook' and Cottrell (2003) 'Study Skills Handbook' and another (2008) 'Critical Thinking Skills: Developing Effective Analysis and Argument", but it is suspected that that without tutor explanation and encouragement their use may be limited. Similarly some others responded giving their own examples;

> "Students need to be encouraged to think critically during the classes, and then to develop that style in their writing. For example I try to set class activities that encourage critical thinking about a particular educational issue so that students start to realise that there is often no wrong or right answer, but that they must produce evidence and support their perspective" (CST3)
>
> "It is taught through encouraging and giving students tasks in class that require them to think. I encourage them to listen to each other and to debate different view: often students think that it is only the tutor who should be listened to. This can be difficult when teaching the first module, when students are usually more used to listening to a lecture, rather than being prepared to debate in class" (CST2)

I think these suggestions would be very helpful in indicating international students' challenges in meeting expectations of academic writing in the UK and specifically would help in critically analysing the data the authors have collected in their research.

6.3.2.3. Defining and communicating writing assessment criteria

The Fourth important stage is to show and explain writing standards and criteria. Duron *et al.* (2006) reported in their study, "teachers should spend ample time helping students to understand what the criteria and standards are and what they mean" (p. 162). At this stage students should be provided with some time in order to discuss important features of critical writing with their peers as well as with the tutors. That would might be help them in generating the main ideas for writing, forming their own arguments, providing proper evidence to defend their arguments, analysing, evaluating and synthesising the written

information and many other features that are necessary to write critically. C-ST presented the powerful description for example;

> "Prior to setting an assessment task should be given to the international students quite structured writing frames and oral (and sometimes written) guidance on expectations in terms of showing their own thinking about the issue presented. The assignment topics should be written in a way that requires students to make a link between theory and practice in their own country, and thus to demonstrate some of their critical thinking. I usually give students examples of what I expect them to do to show their critical understanding of what they have read and good practice in academic writing. This can be oral or in writing, or both. I would not say I have mastered this, but I try to continue to develop new ideas".

Another teacher reported that international students need to be motivated to read chapters and/'or sections that focus specifically on an issue that is being discussed. She stated "many of the Chinese B.Ed students have what I would call a textbook mentality: they expect to be given one textbook that will have all the knowledge they need to pass the module. Instead, I'm trying to encourage them to read several different writers discussing the same topic" (IT10). Defining writing criteria also help to move students towards debating different views and focusing specifically on an issue that is being discussed. It is also important to give students tasks in class that require them to think. In order to move towards CT as an individual, students have to continue thinking, and reading, and preferably discussing the issues too as reported by the student participants; "if we know and understand the criteria clearly, it would easy to move towards critical writing" (S-RS34), "teachers should explain the criteria in detail that what we have actually do in assignments" (S-RS16).

The responses of the both the samples showed that students need to see examples of work that displays good skills of CT and also examples where CT is lacking. They need to do small written activities…half a page on giving their point of view and justifying it on a subject that is quite controversial, preferably something within their experience.

6.3.2.4. Constructive feedback

Teachers' feedback and assessment of writing is an effort to evaluate and enhance the writing quality of students in terms of their performance. Previous research suggests that teachers should be thoughtful and purposeful when providing feedback to the students. Teachers responded as under;

> "First getting students statements which are illogical and place feedback asking them to discuss in pairs what is wrong with the statement and why…that are the first step to critical thinking" (CST1)
>
> "Teachers should provide constructive feedback frequently for whatever they are expecting from their students in order to assess their learning" (T8)

On the other hand, some students also emphasised on teachers' feedback in the following words: "Teachers should feedback properly and comprehensively; this would be helpful to improve our writing" (IS38). Similarly another student reported that "teachers should provide feedback frequently to keep their students focused" (S-RS22). Participants' views support the arguments of Wlodkowski & Ginsberg, who state that "teachers should provide feedback that is informational rather than controlling, based on agreed-upon standards, specific and constructive, quantitative, prompt, frequent, positive, personal, and differential" (as cited in Duron *et al*. 2006: p.162).

6.3.2.5. Need to integrate CT in EAP: the bridging programs

International students placed more stress on the cultural factors behind the absence of CT in their academic writing and the negative consequences of this. Students' responses also provided an insight as EAP learners, and this provides an insight into their approach to study (Walters, 2007: p. 56), which reflects the students' understanding of academic conventions and their values 'as the basis for discussion about the expected outcomes of the course, and the … aspects required for meaningful and successful study at higher education level' (Walters, 2007: p. 61). With regard to the current study, students' and their teachers' suggestions are generated by their need for university level writing which mainly required CT skills. The majority of participants proposed the integration of CT skills integration into EAP because language and thinking are inter-related skills and could be best taught through integration in the way they are perceived For example;

> "I think CT and language integration would be helpful: learning languages could involve learning to solve problems, working independently, working together, and being a member of a team and so on. I think learning to be fluent in another language in it-self lays the foundation for critical thinking: being able to express thoughts in a different language means that you are expressing thoughts that are different, and taking on board difference is an aspect of critical thinking" (CST2)

Similarly another teacher reported that "in my point of view both skills are interrelated and we should focus on students needs that they require for their course of studies. Critical thinking skills are more important than simple language activities" (T12). While T1 said "I think language doesn't mean grammar and vocabulary. It is development process that makes someone able to express their thoughts in target language" (T9). Almost all the teachers were agreed on the need for CT integration with EAP but majority of the language teachers indicated the reasons that why they are unable to do it for example T6 reported the following; "Yes I agree with you but because of the shortage of time we cannot cover everything. That's limited; I do try to cover but can no". On the other hand, one of the students pointed out that;

> "First of all EAP tutors should help us to develop reading habits of international students because usually we have limited knowledge about the subject this would help to improve critical thinking when we will look at the issues on different perspectives. Secondly Tutors should use questioning techniques frequently in classrooms. They should present different examples of arguments used in other essays and issues or topics and then give us to write same on another topics. They should not teach us the rules of writing but how to write practically in academic world" (IS29)

In the sections above, the majority of students were found to be dissatisfied with the type of activities and support EAP classes are providing currently. Students further emphasised on the need-basis academic writing practice and strongly emphasised on the integration of CT and EAP. Finally, the assessment of the proposed suggestion/model itself, is important to note. Direct quotations of students' and teachers' provide an immediate and significant source of information for its effectiveness in order to use it to continually improve students CT skills for their course of studies. It is believed that critical thinking and writing can provide basis for integrated learning in this way. The author believes that these suggestions would definitely help international students to cope with the writing challenges they and their tutors have reported. These findings raise the following questions for future research; what are the implications of these findings for the different people involved? What are the consequences of the findings in the short and long term? Does something need to change? If so, who should change it and why?

6.4. Discussion of results

In the first part of the present chapter, the analysis of students' perceptions of EAP language learning modes for academic writing was delineated. The research literature shows that the main aim of EAP courses is not only to improve students' language abilities but also to develop their study skills (Stroch & Tapper, 2009). But international students' responses have produced varying results, with a noticeable improvement in their language learning but not in their skills development. The majority of the student respondents perceive academic writing courses in EAP modes to be not-supportive specially in terms of fostering CT in their classes. The students also noted that this does not help them in their writing in their courses of studies. According to the majority of the students, EAP courses are totally language focused and this focus does not help with skills development. They highlighted the fact that teachers as well as writing teaching materials were not facilitating their academic writing needs. The students' responses support the findings of the previous studies of Green (2005) and Alderson (2000). Students also clearly reported that EAP language programmes were more focused on the lower level thinking skills, for example the ability to define, remember, describe, enumerate and paraphrase etc., as categorised in the SOLO taxonomy. Some students perceived EAP courses positively as well, and these students observed a great improvement in the development of academic vocabulary and comprehension skills. They also appreciated the group work strategies and wherever teachers introduced them with academic writing conventions. However, the overall role of EAP in fostering CT was perceived negatively by the international students, which would be help to explore the new dimensions of EAP in the higher educational research and development.

The analysis of the final research question based on the students' and teachers' suggestions was presented in an analysis of two different learning contexts: native and non-native. Important factors in the suggested solutions to problems raised by the international students' native context are as following: students can be more motivated if the objectives of critical writing are explained clearly. For instance, it looks inappropriate to ask students to write for academic purposes without an objective especially in a second language learning setting. Presently in non-English speaking cultures, the way academic writing is taught seems designed just to complete a question answer exercise in certain time. No matter whether they plan, research and critique or not, they only required completing a largely descriptive essay. While in critical writing, students need to write creatively and reflectively. The process of

critical writing includes proper planning, research, analysis, and the use of supporting evidence and synthesis. Re-writing in the process of critical writing supports students' development of clear and accurate ideas. Re-writing further develops and improves depth, breadth and significance in students' writing. As for the purpose of academic writing, the skills of analysis and reasoning demand high levels of CT practice, and unfortunately questioning approaches in class are avoided in most of the non-English speaking countries. If the cultivation of such skills is deemed necessary, it would be important to familiarise students with CT and the behavioural norms of these CT skills. As critical writing is a complex process it requires more writing practice and therefore a critical writing/modelling approach implies spending more time spent on writing in the second language classrooms. Students should also be provided with proper constructive feedback from their teachers. It is believed that positive and thought-provoking comments can go a long way help in developing students' critical writing abilities. Formative as well as summative feedback and assessment is also suggested.

On the other hand, in the foreign or non-native context, a model was built on the students-tutors suggestions that the critical thinking approach in writing is complementary and assures the improvement of critical writing skills in a second language context. Therefore, there is strong need to understand students' cultural-educational background. Modelling of CT encourages students to brainstorm, gather, generate, organise, analyse and synthesise information. Therefore, the implementation of these higher order cognitive skills within the SOLO levels might hopefully result in a clearer explanation of students' surface or deep engagement with writing tasks.

Defining and communicating the writing assessment criteria was also strongly recommended by both the sample of students and teachers. Teachers' constructive feedback was another important area of suggestion, which was highly emphasised by both teachers and students in order to enhance the quality of students' learning and performance and this, will also help students to assess and improve their own performance. Teacher feedback, like assessment, compares criteria and standards to student performance in an effort to evaluate the quality of work. However, the purpose of feedback is to enhance the quality of student learning and performance, rather than to grade the performance, and, importantly, it has the potential to help students learn how to assess their own performance in the future. Feedback allows the teacher and student(s) to engage in dialogue about what distinguishes successful performance from unsuccessful performance as they discuss criteria and standards (Fink, 2003). Finally, both the samples suggested integrating CT into EAP language learning modes. In their view, this would not only help them to improve their English proficiency but would help to develop

their study skills generally, and writing skills particularly.

Previous literature (see chapter two) at one point suggested CT practice in written communication is needed to reduce these difficulties and the implication is that if students practice more CT tasks in second language writing, they would be more able to perform relatively better and better day by day. Otherwise the writing of students with les experience of CT tasks would be lacking CT skills. In the presented modelling approach, the role of the teacher is to facilitate their experiences of difficulties, guide them properly and provide them with helpful feedback. The adaptation, the author believe, would help to ease critical writing difficulties in the higher education context.

CHAPTER 7: CONCLUSIONS

7.1. Introduction

The present study has sought to explore the nature and extent of the challenges faced by international students in relation to their academic writing and how they express critical thinking in text. Critical and analytical expressions of thought are widely endorsed in the UK HE system, but have presented tremendous challenges for international students coming from different cultural-educational backgrounds. Whilst that is also a demanding expectation for many 'home' university students, especially in the context of widening participation, it means that international students are dealing with 'multiple challenges' new knowledge accessed through a second language, often delivered at speed and using (colloquial) vocabulary that can hinder accessibility, and then being expected to apply critical thinking to their assignment task. Therefore, an evaluation of their academic writing approaches was undertaken to identify the value and actual practice of CT in the cultural-educational context. This study, then investigates the specific difficulty areas of students' writing as well as possible suggestions as to how to facilitate students' writing experiences.

Overall, the present investigation considers the role of CT in writing for academic purposes and its link to deep learning as defined by the SOLO taxonomy. The hierarchies of the SOLO taxonomy as defined in the cognitive skills domain were examined in relation to the NQF UK Framework (National Qualification Framework, 2008) to deepen the theoretical basis for the analysis of the present study. Whereas academic assessments in UK universities (and in 'Western' higher education) tend to assume that students have developed these abilities, international students are not generally used to extensive writing that requires the structuring and building up of a logical and coherent argument using higher order thinking skills. The study suggests that CT development must be placed at the heart of the education system by offering worthwhile academic writing provisions and ensuring that students with CT abilities would be able to show their expertise not only in the field of academic writing but throughout their career development.

International students from three different non-English speaking cultures, i.e. Asian, Middle Eastern and African, were involved in the present study, which also comprised participants who varied in terms of age range, gender, educational level, subject group and whether they were doing their first or second degree in a UK university. Regarding the associated

methodology, a qualitative approach was used for collecting and analysing data, in order to provide richness and depth in the responses and in order to allow for the exploration of different interpretations of CT. The multi-methods strategy comprised semi-structured interviews, self-reports, learners' diaries and a case study. The sample included 50 interviewees and 50 self-reported and 15 diaries keepers international students. The informants also included 12 English teachers, who were interviewed individually and face-to face. The Study was conducted in two UK universities which are coded for the purposes of anonymity: 1) University A, and 2) University B. On the basis of the findings a number of recommendations were made: for example, the staff and students were encouraged to consider the importance deep learning engagement and the development of higher order reflection in order to evaluate quality of students' writing. An analysis of the results further showed that the key factors in improving the quality of student thinking were the reinforcement of active learning rather than passive and an institutional culture of feedback and assessment. Below is a reiteration of the research questions addressed in the study:

1 i. How do international students and English-language teachers (ELT) conceptualise CT?

ii. What approaches do international students utilize or prefer to utilize towards writing?

2 i. What are the initial CT-related academic writing problems experienced by international students?

ii. What are the inhibiting factors to fostering international students' CT skills?

3 i. What is the role of EAP language learning modes towards CT practices?

ii. What possible suggestions/models would help to facilitate students' experiences of CT?

The present chapter will provide and discuss an overview of the main research findings, issues arising from the findings, original contributions to the research, limitations of the study, implications and future directions of the study and conclusion.

7.2. Overview of the main research findings

Below is the discussion of the main research findings in relation to the proposed research questions.

7.2.1. Regarding international students' approaches to academic writing

The combination of qualitative methodology in the present study produced a holistic picture of the international students' understanding of *critical thinking*, and their approaches to academic writing. The confirmatory evidence shows that students' familiarity with this notion is still vague and at an abstract level. International students from many different non-Western regions have a relatively narrow view of CT, an issue which mainly resides in their previous cultural domain. While some of the views expressed resemble important features of the conceptions of other well-known educators, such as Ennis (1987), Paul (1990) and Lipman (1995), they also indicate key differences. The reasons stated for not being fully aware of the concept may be unfamiliarity with it in their native cultures. Asian countries have an exam-based system which promotes rote learning. This view was also confirmed by some of the students in this study. Therefore, it does seem to be a cultural practice which emerges from their early learning experience. The students' learning experiences in the early stages could probably help them to consolidate many basic issues in using their CT skills, by setting up some simple principles.

It has been confirmed that effective learning can only take place when students are encouraged to use new ideas and theories, but as the above findings show, a large number of new entry students in UK universities come with no clear understanding of this concept. Though, developing students' academic skills and abilities are a major responsibility of any education system, it was neglected in the international students' previous academic writing experience. It was also surprising to note that about one third of participants clearly answered that they did not know what CT was. It was noted that participants who replied with 'don't know' and 'not sure' seemed reserved, silent and less expressive about discussing CT, and this could be a possible attribute of their cultural values of social harmony. The majority of the tutors, on the other hand, who were experienced in teaching international students, were fully aware of the issues and had a well-formed and deep understanding of the concept of CT. The teachers not only highlighted the crucial issues related to CT which they encountered when tutoring international students, but also articulated the deeper value of teaching CT. They expressed the significant value of CT in terms of cognitive abilities as well as in terms of CT dispositions.

In relation to the students' writing approaches, the findings of the study support Biggs' (1993) theoretical work on processing strategies, based on deep and surface-level processing and corresponding to the different levels of the SOLO taxonomy of learning. The students who preferred to use deep approaches did this thorough understanding, seeking for meaning, looking for logical connections, and making critical judgments. In the case of the surface learners,

however, attention was directed towards reproduction of received material, memorisation, rote learning and passive strategies. Some other students preferred to utilise achieving approaches by making efforts and time management strategies. It was found from the analysis of evidence that most international students preferred to take a surface approach to writing, whereas the academic writing outcomes demand deep learning (NFQ, 2008).The present study found that the majority of university students defined and approach critical thinking tasks with surface strategies or methods (revision, defining, memorising, describing and paraphrasing etc.), and strongly agreed that learning involved knowledge construction rather than knowledge telling. In contrast, teachers demand a deep engagement with writing tasks, usually focused on cognitive development. The students' preferred approaches showed the lack of value/importance placed on CT in writing. The data indicated that these kinds of approaches make students less motivated, but a positive aspect is that they are also fully aware about the issue of using such approaches in British Universities.

The present findings have increased and enhanced knowledge by investigating the direct relationship between students' writing approaches and their academic writing performance. In terms of the significant relationship between deep approaches and CT skills, the study further showed that students who reported that they chose deep writing approaches were generally more likely to express fewer CT-related problems in writing for academic purpose. On the other hand, some students can also achieve good grades in their studies by working hard through note-taking strategies, putting in efforts to attend extra sessions and seeking help from their tutors. Interestingly, the students who utilized achieving or strategic strategies demonstrated both higher and lower CT skills. Overall, the findings indicated an association between writing approaches and cognitive engagement, leading to the understanding that frequent use of upper levels of SOLO learning can enhance the quality of thinking. The present study, however suggests that improving the standard of teaching writing could be a significant lever for increasing the quality of academic writing as acknowledged by international students. For example, the critical and deep engagement seemed to facilitate students' writing performance by enabling them to have a better understanding of the written text. This exposed the actual reasons for the difficulties inherent in international students' lack of a CT approach towards their studies. The findings also indicate that it would be a serious mistake to expect and require the same approach to learning from international students as from the home student.

7.2.2. Regarding problem areas of students' writing

The analyses of students' and teachers' perspectives indicate international students as being very poor in terms of CT competency, which is reflected in their CT-related difficulties, such

as: lack of clarity; lack of logical organisation; lack of critical evaluation and critical analysis; failure to provide proper evidence to support arguments, and failure to develop synthesising arguments. The results showed surprising differences between UK academics' expectations and the difficulties that international students encountered. Although academic conventions such as CT are treated as "common sense" in Western educational cultures (Kelley, 2008), a great majority of the students reported their own inability to understand the language used in common feedback from their teachers, such as "clarify", "support your argument", "analyse" or "evaluate critically", etc. This is because international students may have a completely different understanding of these conventions (Lillis & Turner, 2001), arising from pedagogical practices in their own cultural-educational context.

The students' and teachers' responses show that, in academic discourse, learning occurs when there are opportunities for students to use and share their ideas and opinions, to link them with theories and to lead them to practical implications, which can be feasible only by using critical thought. Students at higher educational levels must be able to think critically, not only for educational purposes, but in order to enhance their life and employability skills. Students' difficulties related to the lack of CT seemed to make them enormously confused in the Western academic context, and the resulting struggle in coping with an unfamiliar academic approach was reported by both students and teachers. The lack of CT practice in their previous cultural-educational context was reported as one of the main reasons for this by both the students and their teachers. The students' responses also show a mismatch between teacher training programs of teaching writing between their countries of origin and academic writing requirements in the UK HE system. As today's higher education has placed much emphasis on curiosity and self-expression, international students' limited writing abilities are bound to be deficient, and this might be because university teachers are strongly concerned about scholarly writing, as reported by the teacher participants.

The results showed surprising gaps between 'British' educational expectations indicated by English teachers, and the difficulties that students from non-Western cultures encounter as a result of the fact that university students must be able to present an integrated discussion, with a strong and consistent thread or line of argument that links understanding, knowledge, ideas, references and a personal and critical perspective. From the teachers' as well as the international students' experiences, it seems that one of the main problems in demonstrating CT in their academic writing, is that they may not realise what it actually requires of them. They are expected to do it, but what it is they are expected to do is often not explained or demonstrated. They also explained that, though it can in fact be difficult to explain and guide

students in developing this skill, once it is made clear to them what is required, most international students can (within their own academic abilities) apply it. The spectrum of achievement in this respect is quite varied, as it is with home students, but the challenge of operating in a manner which contradicts their own cultural and academic norms is problematic. When students have been raised in a society that is largely centrally controlled, and where challenging bureaucracy and having ideas which diverge from the centre are overtly discouraged, it can be very difficult for international students to 'switch on' such ability and then to limit its application to an academic context. When the students and their tutors were asked about the barriers to students' CT development, previous language learning experiences were indicated as the most powerful barrier. This study suggested that implicit practices and procedures (reported by the students) in their native learning process are the main inhibitions to the development of CT. Teachers' support, in terms of an instructional context, is crucial, yet the findings of the present study show inadequate instructional support from teachers in non-Western educational cultures.

The students also reported that the majority of the teachers in their home countries were unqualified for English language teaching and never taught them about CT skills and their importance. They seemed to teach English, not as a second/foreign language and how to use it, but just to help students to pass their exams. This resulted in passive learning in the case of the majority of students. These responses clearly indicated that the cultural-educational focus is more related to the lower level cognitive skills such as memorising, paraphrasing and comprehension of learnt information, comprehending main idea, describing and enumerating etc., rather than deep processing of relating to principle, applying: near problems, explaining and arguing, reflecting, applying for problems and hypothesising. In the context of the current study, CT is deemed to take place when students are required to perform in the relational and extended abstract levels (Biggs, 1999: p.55). Therefore, the education system must have the teachers with high quality skills and experience to deliver excellent academic writing teaching programs in order to improve students' abilities to cope with CT related challenges.

A few students, on the other hand, might be able to cope with CT issues effectively. In short, the majority of the students regarded their previous English language learning experiences in their home countries as the main reason for problems in their CT development. Therefore it is suggested that course materials for teaching English as a second language should be designed carefully, in order to improve existing educational practice in non-Western academic cultures.

7.2.3. Recommendations

The final research question set out to determine the students' and tutors' suggestions for overcoming and minimizing students' CT related challenges at the higher level of education. In order to answer the final research question, the findings of research questions one to four (students' CT conceptions, problems, utilized approaches and cultural-educational barriers) were analysed carefully. The lack of CT skills does affect the academic writing performance of international students; this study provides significant insights into their challenges at British universities. There is a need for greater understanding of students' academic writing challenges. University faculty should make pedagogical adjustments to support the learning needs of international students. Interventions should be designed to specifically address the needs of international students by demonstrating cultural-educational awareness.

The students and tutors both suggested that one should be encouraged to think critically from childhood. Both the samples agreed that teaching and learning should be designed to meet the students' needs, and should provide them with proper guidance and appropriate practice. They also suggested that CT must be the main aim/goal of any HE system, and CT should be taught through presenting and modelling CT examples in the classroom. For this purpose, Continuing Professional development (CPD) programs based on the 'reflective practice' are highly emphasised for language teachers in order to enhance teaching academic writing quality. English language staff that have teaching experience with international students across disciplines have identified an urgent need to develop their critical thinking skills in order to design appropriate support. As the material often focused on language issues rather than skills development, students did not feel it met their needs. They also preferred more focus on CT skills such as critical analysis and evaluation. Another approach to improving students' CT skills involved the embodiment of academic writing content and CT instructions. Universities need to establish support services to assist international students learning experiences. These include academic writing courses and supplemental training that focuses on specific CT skills. These interventions will help to determine their effects on international student academic writing performance. Evidence suggests that the instructional context in terms of curriculum and teaching methods may affect CT skills and retention.

Furthermore, the students and tutors reported that the numbers of students in writing classes should be reduced, and that students should be taught writing through quality materials (curriculum improvement) in order to enhance their CT skills. Questioning techniques and group work should be focused on, and CT skills must be embedded in, English language

courses generally and EAP (English for Academic Purposes) courses specifically. The implication is that if students practised more CT tasks in their L2 (second language) writing, they would be more able to improve their performance day by day. As for the purpose of academic writing, the skills of analysis and reasoning demand a high level of CT practice, and unfortunately questioning and other methods to cultivate CT are very much avoided in most non-English speaking countries. If the cultivation of such skills is deemed necessary, it is important to familiarise students with CT and to encourage the practice of these skills as behavioural norms.

Given these insights, university personnel can take steps focused on the transitional challenges of international students within current provision by giving additional training and redesigning of existing academic writing courses. Although such kinds of interventions for international students have not been widely reported, those reviewed in the present study are excellent examples of what can be accomplished. Another key area to international student adjustment is faculty training in fostering CT in their classes. Long term and strategic faculty training programs should be started to improve innovation and skills in teaching writing professions. Finally, helping international students to be successful requires universities to be proactive in demonstrating their commitment and belief in the contributions of international students by engaging in related research and offering appropriate programmes and services. To provide the best possible learning experiences to students, teachers should provide opportunities to engage in the higher order levels of the SOLO taxonomy, where CT takes place. The following model will be helpful once implemented in any classroom in order to move students' towards critical thinking. Teachers should enhance active learning approaches to engage students and make the course more enjoyable. Active learning involves students in activities that cause them to think about what they are doing, it also enhances the overall learning experience of students by enabling them to reflect on the meaning of their learning experience. Fink (2003) states that, in reflective writing, students should address the following questions: What am I learning? What is the value of what I am learning? How am I learning? What else do I need to learn?

In an attempt to recommend a possible suggestions model for critical writing, based on the students' and tutors' suggestions, it was felt that the critical thinking approach is complementary to writing and greater instruction in this would assure an improvement in critical writing skills in both first and second language contexts.

7.3. Issues arising from the findings

The findings of the current study show that social, cultural and educational backgrounds could have important implications for students' CT development. This section, however, focuses on the issues arising from the findings, and the possible implications of the current research in relation to theory and practice are discussed. It was noted that the majority of the students were unable to express CT because of their lack of awareness of the notion, which further led them to encounter challenges in terms of critical thinking and writing in their courses of study. This reflected on the educational-cultural practices in non-Western regions, where there has not yet been an emphasis on developing and practising CT skills. This results in the promotion of descriptive forms of writing rather than creative, reflective and critical writing. The same situation was reported by the majority of the students from almost all of the three non-Western regions represented. It is clear that little effort is made to encourage CT development in these regions, and nothing is apparently being done to amend the situation. The difficulties which students confronted, in the students' and teachers' views, included: students' inability to generate their own ideas and formulate their own arguments; inability to analyse ideas, information, concepts and arguments from different perspectives; inability to evaluate arguments critically; lack of logical organisational skills, and an inability to synthesise and conclude information.

The surface-oriented approaches towards academic writing used by many of the students were inappropriate to the discursive nature of critical writing in the UK academic context. This led to the failure of non-native speaking students, in the new educational environment, to achieve the objectives of university education. Focus on what to write rather than how to write was extremely noticeable in the students' descriptions of their previous learning, with the result that the skills of analysis, evaluation, argumentations had been ignored and critical thinking/ writing had been replaced with descriptive writing. To understand the students' lack of CT development, therefore, it is necessary to understand their cultural-educational barriers. Furthermore, the students, in their home contexts, were not allowed to ask enough questions to satisfy their curiosity. This is somewhat shocking but is nevertheless a fact expressed by a range of international students about their cultural-educational context. These kinds of attitudes are not helpful in developing the skills of CT. Students not only need parental support to encourage CT behaviours, but teachers' feedback is also crucial and most

beneficial. Summative feedback was mostly used by teachers in the non-Western educational cultures described, and this was criticised by the international students.

It was also found from the students' responses that the examination based method were generally not designed in the way to assess students' critical thinking and cognitive skills, and this promoted rote learning rather than deep learning. They also responded that their teachers demanded quantity in writing rather than quality. It is obvious from the students' responses that the teachers' feedback and assessment methods had a negative impact in terms of developing the students' skills of CT and writing. Unfortunately, the curriculum for ESL/EFL was inadequate to fulfil the students' critical writing needs. Repetitive and out-dated exercises were used in practice for teaching second language writing in many of the non-Western countries. The students' responses showed disappointment, and they reported that insufficient efforts were made to develop their CT skills and prepare them for the world of work as a global citizen.

7.4. Original contribution of the research

Universities in the UK have aspired to the ambitious goal of diversity in representing the world's different cultures in their student bodies, but in-depth understanding is still limited in terms of the major differences in cultural ideas that mean students make sense of the world in totally different ways. The current investigation seeks to make a modest contribution to the development of knowledge and the existing body of research in the field, by identifying the phenomenon of the lack of CT in different cultural-educational contexts. The current study aims to reveal international students' familiarity with the notion of CT, as well as their approaches to academic writing. This study may also draw the attention of educators and curriculum developers of the non-Western countries towards making their students aware of these highly demanding and essential components in order to compete in the globalized world. It is the general consensus that once students are able to understand academic conventions in their native language, it is likely that this can be applied or transferred into a second language or perhaps to a third language as well.

The study also contributes by presenting a strong picture of non-English students' problems in approaching CT tasks. This study confirms that almost all the non-English speaking and non-Western countries have the same educational culture. The findings of the current study indicate that it would be a serious mistake to expect and require the same approach to learning

from international students as those of the home student. It is also important to note that some students who had reported themselves as successful writers in their home countries, also stated similar problems when studying in UK universities, and this could possibly be a consequence of *rote learning and imitation*. This also clarifies the misjudgement which has been indicated in the previous research literature (Buck & Hatter, 2005; Granello, 2001), that writing skills are easily transferable from the undergraduate to other levels without cultural-educational consideration.

The present investigation is crucially important for curriculum developers, educators and teachers of many different non-English speaking cultures, to help them review the current issues of higher education at a policy level, especially with regard to the development of academic writing, both in general terms in the students' native language, and more particularly where English is a second/foreign language. Solutions suggested by international students themselves and by English teachers would help in the re-design of syllabi and in improving writing instruction in order to promote CT in university level education, in line with properly addressing students' needs and developing CT pedagogy. In order to provide outstanding learning experiences, this study contributes and provides a reference point for the curriculum developer and educators. It is hoped that when it is realised, in cross-cultural contexts, that there is a need to teach CT in order to tackle the obstacles to academic writing, most of the problems associated with this aspect of second language (L2) writing could largely be solved.

Specifically, this study contributes to knowledge in an academic perspective, because the current issue of international students' familiarity with the concept of CT and its relationship to the background variables has never been researched so far. On the other hand, the difference in the role and value of CT between non-English speaking cultures and the UK can perhaps be best understood as a mismatch of educational cultures, whereby in one culture CT is strongly required, and in the other it is poorly neglected. This does not mean in any sense that international students are not bright, talented, observant and critical, but they have probably had little CT exposure in their native learning environment, a factor which will be researched intensively in the next stage. Finally, of pedagogical importance, is that Western educators and policy makers should consider the developmental nature of these study skills when dealing with culturally diverse students.

7.5. Limitations of the study

The present study, however, is not without its limitations. First of all, the current study was limited to the specific group of international students; this could be expanded to both home and international students in order to make comparisons between the experiences in different cultural-educational context. Secondly, there are limitations resulting from the sample included in the current study which has hindered the consideration of perspectives from a wider range of study levels. Although the sample was gender balanced, it also involved many different disciplines, levels of education and assessed having first or second degree in the UK, therefore representativeness on these variable bases could not be evaluated due to the large amount of qualitative responses. Further, as the majority of the students were Arabic-speaking, asking about their experiences in their first language could be an advantage.

7.6. Implications and directions for the future research

The important factors of the suggested solutions, as described in the previous chapter, would, I believe, help to ease CT related difficulties in the native educational context of non-Western countries. Moreover, the academic norms of CT that were justified in the research literature could be applied in non-Western educational contexts in terms of the teaching and learning process. For example, teaching and assessment methods at university levels could be re-thought. This would help in the re-design of syllabi and in improving writing instruction in order to promote CT in university level education, in line with properly addressing students' needs and developing CT pedagogy. Developing the higher order skills of the SOLO taxonomy of learning objectives can be managed by developing appropriate questions, designing specific learning activities, and giving feedback on and assessing student learning outcomes (Duron *et al.,* 2006). Therefore, teachers should give consideration to current pedagogical issues by implementing the CT framework suggested mutually by both international students and their English teachers. Following Fink (2003) feedback can be used to enhance the quality of student learning and performance, rather than to grade the performance, and, importantly, it has the potential to help students learn how to assess their own performance in the future. However, teachers should provide constructive, positive and specific feedback not controlling (Ginsberg, 1995). Deep learning is also linked to the nature and quality of how teachers structure their lessons to allow the opportunity for deep processing.

Tasks should be set that encourage the development of active learning processing, and provide feedback and challenges for students to attain such deep processing.

Pedagogical change can occur only if institutions are interested in CT development, application and promotion. To achieve this effectively, they might need monetary investment to send their teachers' teams to conferences and workshops in the English-speaking countries where CT is fundamental. They could also import those ideas used by English academics to develop CT, in order to achieve innovation. It has been found that effective strategies could be developed even through small changes (Cosgrove, 2009; Scanlan, 2006; Cordingly, 2005a). Alternatively, a team of external experts could be brought in to support the application of CT. Curricula should be re-assessed in order to determine the CT standards. The current study has illuminated many different possible future directions. For example, on the one hand it has shown that long-term efforts are needed from both students and teachers to cultivate CT in their native cultural-educational contexts. On the other hand, it has confirmed international students' difficulties in approaching CT and suggested the students' engagement in active learning. The current study has also emphasised the teacher training programmes required to best foster CT instruction in order to develop students' abilities and traits of mind. This research has highlighted the obstacles to developing and implementing CT, but also raised many questions about how teacher training programmes should be structured and designed to support the need for CT. This important issue should be discussed in future research.

Improvements could also be made by placing greater emphasis on the need to understand international students' cultural background in the non-native context of UK universities. Both groups of participants agreed that CT should be integrated into EAP language modules. Both students and teachers strongly emphasized the encouragement, modelling and reinforcement of CT in classes in a non-native educational context. Both groups suggested that writing assessment criteria should be defined and communicated clearly and in detail before setting assignments. Furthermore, techniques for promoting CT should not be limited to academic writing. Students need to be encouraged to think critically during classes, and then to develop that style in their writing in order to produce evidence to support their perspective. Through class discussions and activities they can be required to develop and apply critical thinking. Good use of questioning skills as a tutor can be an effective tool for helping students to develop CT skills.

Having researched this field, the present study has explored the new dimensions of the research in the higher education. Future research could employ mixed methods to investigate

the students' perspectives. This study argue for the improvements, which could be made through non-Western countries arranging a variety of collaborative study programmes with Western universities, where students can practice CT according to the Western academic conventions. The exploration of the suggested applications could be crucial in the students' development of CT skills, in order to bridge the study-skills gap between Western and non-Western teaching and learning in higher education. Moreover, it would inform the educators and policy makers about the importance and implications of CT, so that future courses would be developed accordingly, which would help to enhance students' learning experiences and better prepare them for a global context which is culturally and linguistically diverse.

7.7. Conclusion

The present study analyses international students' writing approaches, and problems related to critical thinking which international students initially face in their academic writing. This study also addresses the possible suggestions to facilitate them. The findings reveal that students from non-Western traditions approach and perform CT tasks differently, which seems to affect their academic performance adversely. The results of the study suggest that these difficulties can be attributed in large part to students' lack of cultural-educational practice in intellectual skills. Therefore, it is recommended that explicit efforts should be made to raise awareness of the need to enable overseas students acclimatise to the new academic environment, so that they might become more productive and effective users of second language. These findings call for a more comprehensive understanding of the extent to which international students feel able to realise critical thinking in their own writing.

BIBLIOGRAPHY

Abdulkader, A. (2009) *A sociolinguistic study of postgraduate students' perceptions of using English for academic purposes* (Doctoral thesis). University of Wales, institute Cardiff.

Abeyasekera, S., Lawson-McDowall, J., & Wilson, I. M. (2000) *Converting ranks to scores for an ad-hoc procedure to identify methods of communication available to farmers.* Case-Study paper for DFID project on. Integrating qualitative and quantitative approaches in socio-economic survey work. Available at www.reading.ac.uk/ssc/.

Adeyemi, A. D. (2008) *Approaches to teaching English composition writing at junior secondary schools in Botswana*. Doctoral Thesis.

Aktas, R. N., & Cortes, V. (2008) Shell nouns as cohesive devices in published and ESL student writing. *Journal of English for Academic Purposes*, 7(1), pp. 3–14.

Alderson, P., eds. (2000) *Children as Researchers. In Research with Children.* Christensen P, James, A. Falmer Press: London: pp. 241-257.

American Philosophical Association (1990) *Critical thinking: A statement of expert consensus for purposes of educational assessment and instruction*. The Delphi Report Executive Summary: Research findings and recommendations prepared for the committee on pre-college philosophy. (ERIC Document Reproduction Service No. ED315423)

Andrews, R. (2003) The end of the essay? *Teaching in Higher Education,* 8, pp. 117-28.

Angelova, M. & Riazantseva, A. (1999) If you don't tell me, how can I know? A case study of four international students learning to write the US way. *Written Communication Journal*, 16 (4), pp. 491-525.

Ashman, A. & Conway, R. (1997) *An introduction to cognitive education: Theory and applications*. London & New York, Routledge.

Atkinson, D. (1997) A critical approach to critical thinking in TESOL. *TESOL Quarterly, 31*(1).

Bacha, N. (2002) Testing writing in the EFL classroom: Student expectations. *English Teaching Forum,* 40 (2), pp. 14–19.

Bailey, K. M., & Ochsner, R., Eds. (1983) A methodological review of the diary studies: Windmill tilting or social science? In K. M. Bailey, M. H. Long, & S. Pec, *Second language acquisition studies*, pp.188-198. Rowley, M.A.: Newbury House

Bailey, K. M., eds. (1990) *The use of diary studies in teacher education programs*. Cambridge: Cambridge University Press.

Bailin, S., Case, R., Coombs, J. R., & Daniels, L. B. (1999) Conceptualizing critical thinking. *Journal of Curriculum Studies*, 31(3), pp. 285–302

Ballard, B., & Clanchy, J. (1997) *Teaching international students: A brief guide for lecturers and supervisors.* Canberra: IDP Education Australia.

Barnett, R. (1997). *Higher education: a critical business.* Buckingham: The society for research in higher education & Open University Press.

Barker, M., Child, C., Gallois, C., Jones, E. & Callan, V. J. (1991) Difficulties of overseas students in social and academic situations, *Australian Journal of Psychology,* 43 (2), pp. 79-84.

Barrie, S. C. (2004) A research-based approach to generic graduate attributes policy. *Higher Education Research & Development, 23*(3), pp. 261-257.

Bataineh, R.G., & Zghoul, L. H. (2006) Jordanian TEFL graduate students' use of critical thinking skills (as measured by the Cornell Thinking Tests, Level Z). *The International Journal of Bilingual Education and Bilingualism,* 9 (1), pp. 33–50

Bauer, K. W., & Liang, Q. (2003) The effect of personality and precollege characteristics on first-year activities and academic performance. *Journal of College Student Development,* 44, pp. 277-290

Baxter-Magolda, M. B. (1992) *Knowing and reasoning in college: Gender-related patterns in students' intellectual development*. San Francisco:Jossey-Bass.

Beatie, V., Collins, B., & McInnes, B. (1997) Deep and surface learning: A simple or simplistic dicotomy? *Accounting Education*, 6 (1), pp. 1-12.

Beatty, W., Goodkin, D., Monson, N., & Beatty, P. (1990) Implicit learning in patients with chronic progressive multiple sclerosis. *International Journal of Clinical Neuropsychology,* 12, pp. 166–172.

Belcher, D., & Connor, U. (2001). *Reflections on multiliterate lives*. Clevedon, UK: Multilingual Matters

Bell, J. (2005) *Doing your research project.* Buckingham: Open University Press

Benesch, S. (1999) Thinking critically, thinking dialogically, *TESOL Quarterly,* 33 (3), pp. 573-579.

Benesch, S. (2001) *Critical English for academic purposes: Theory, politics, and practice*. London: Lawrence Erlbaum Associates, Publishers.

BERA Ethical Guidelines (2004). http://www.bera.ac.uk/publications/pdfs/ETHICA1.PDF? Accessed online 13/ 7/ 2010.

Berno, T. & Ward, C. (2002) *Cross-cultural and educational adaptation of Asian students in New Zealand.* Wellington: Asia2000 Foundation. [Online] http://www.asia2000.org.nz/about/programmes/research/various/Ward%20and%20Berno%20report.pdf [2003, Nov 12].

Bhatia, V. (1993) *Analysing genres: Language use of professional settings*. London: Longman.

Biggs, J. B. (1978) Individual and group differences in study process. *British Journal of Educational Psychology*, 48,266-279.

Biggs, J. B., eds. (1988) Approaches to learning and essay writing. In Schmeck, R.R. *Learning Strategies and learning Styles*. New York: Plenum.

Biggs, J. B. (1989) Approaches to the enhancement of tertiary teaching. *Higher Education Research and Development, 8*, pp. 7-25.

Biggs, J. (1994) Asian learners through Western eyes: An astigmatic paradox. *Australian and New Zealand Journal of Vocational Education Research,* 2 (2), 40-63.

Biggs, J. B., eds. (1996) Approaches to learning of Asian students: A multiple paradox. In J. Paudey, D. Sinha & D. P. Bhawuk, *Asian contributions to cross-cultural psychology,* 180-199. New Delhi: Sage Publication.

Biggs, J (1999) Teaching for quality learning at university (Buckingham: Open University Press)

Biggs, J. B., & Watkins, D. A., eds. (2001) Insights into teaching the Chinese learner. Comparative Education Research Centre, the University of Hong Kong.

Biggs, J. B. (2003) *Teaching for quality learning at university.* Berkshire: Open University Press.

Biggs, J. & Tang, C. (2007). *Teaching for quality learning at university*, (3rd ed.). Maidenhead; Open University Press

Bizzell, P. (1982) College composition: Initiation into the academic discourse community. *Curriculum Inquiry*, 12, pp. 191-207.

Blaxter, L., Hughes, C., & Tight, M. (2006) *How to Research*. Maidenhead: Open University Press

Bloom, B. S. (1956) *Taxonomy of educational objectives*. New York: D. McKay Co.

Bolger, N., Davis, N., & Rafaeli, E. (2009) *DIARYMETHODS: Capturing life as it is lived.* Annual Rev. Psychol. 54, pp. 579–616

Bonnett, A. (2001) *How to argue: a student's guide.* Harlow, Pearson Education.

Bowden, J., & Marton, F. (1998) The University of learning: Beyond quality and competence in higher education. London: Kogan Page.

Bowker, N. (2007). Academic writing: A guide to tertiary level writing. http://owll.massey.ac.nz/pdf/Academic-Writing-Guide.pdf

Bowles, K. (2000) The relationship of critical-thinking skills and the clinical-judgment skills of baccalaureate nursing students. *Journal of Nursing Education, 39*(8), 373-376.

Boyatzis, R. E. (1998) *Transforming qualitative information: thematic analysis and code development.* Sage.

Braine, G. (2002) Academic literacy and the non-native speaker graduate student. *Journal of English for Academic Purposes,* 1 (10), pp. 59-68

Braun, V., & Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2), pp. 77-101

Brinton, D. and Holten, C., eds. (2001) Does the Emperor Have No Clothes? A Re-Examination of Grammar in Content-Based Instruction. In J. Flowerdew and M. Peacock *Research Perspectives on English for Academic Purposes*. Cambridge: Cambridge University Press.

Brown, A., & Dowling, P. (1998) *Doing research/reading research: A mode of interrogation for education*. London: The Flame.

Buck, G. H. & Hatter, K. (2005) *Strategies for developing scholarly competence in beginning graduate students*. Paper presented at the 28th Annual Teacher Education Division Conference and 1st Annual Technology and Media Division and Teacher Education Division Conference. Portland, Maine.

Buckley, A. C., Pitt, E., Norton, B., & Owens, T. (2010) Students' approaches to study, conceptions of learning and judgements about the value of networked technologies. *Active Learning in Higher Education.* 11(1), pp. 55-65

Buranen, L., eds. (1999) But I *wasn't* cheating. In L. Buranen & A. Roy, *Perspectives on plagiarism and intellectual property in a postmodern world,* 6374.Albany, N.Y.: State University of New York Press.

Burgess, H., Sieminski, S., & Arthur, L. (2006) *Achieving your doctorate in education*. London: Sage publications.

Burns, A. (1999) *Collaborative action research for English language teachers*. Cambridge: Cambridge University Press.

Byrne, M., Flood, B., & Willis, P. (2002) Approaches to learning of European business students, *Journal of Further and Higher Education*, 26(1), pp. 19-28.

Cameron, D. (2001) *Working with Spoken Discourse*. London: Sage Publications.

Campbell, J., & Li, M. (2008) Asian students' voices: an empirical study of Asian students' learning experiences at a New Zealand university. *Journal of Studies in International Education*, 12 (4), pp. 375-396

Canagarajah, A. S. (2002) Multilingual writers and the academic community: Towards a critical relationship. *Journal of English for Academic Purposes, 1*(1), pp. 29-44.

Carpenter, J. H. & Krest, M. (2001) It's about the science: Students‟ writing and thinking about data in a scientific writing course. *Language and Learning across the Disciplines,* 5 (2), pp. 46-65.

Carroll, J. (2002) *Suggestions for teaching international students more effectively, learning and teaching briefing papers series,* Oxford Brookes University www.brookesac.uk/services/ocsd

Casanave, C. P. (2002) *Writing games: Multicultural case studies of academic literacy practices in higher education*. Mahwah, NJ: Lawrence Erlbaum.

Case, R. (2005) Moving critical thinking to the main stage. *Education Canada, 45*(2), pp. 45–49.

Case, J., Gunstone, R., & Lewis, A. (2000) *The impact of students' perceptions on their metacognitive development: A case study*. Paper presented at the annual meeting of the American Education Research Association, New Orleans, USA.

Castro, N. & Fernandez Lopez, S., (2005). Los movimientos internacionales de estudiantes como fuente de ingresos para las instituciones de educacion superior. Available at www.usc.es/conta/web_personal/fls/Publicaciones%20 last visited 11-7-11.

Cavani, J. (2001) Motivation in language learning: A Glasgow Snapshot. In G. Chambers (Ed) *Reflections on Motivation*. London: Cilt.

Chan, S. (1999) The Chinese learner – a question of style. *Education and Training* 41(6/7), pp. 294-304

Chandrasoma, R., Thompson, C., & Pennycook, A. (2004) Beyond plagiarism: Transgressive and non-transgressive intertextuality. *Journal of Language, Identity and Education*, *3*(3), pp. 171-93.

Chapman, S. B. (2001) Emphasizing concepts and reasoning skills in introductory college molecular cell biology. *International Journal of Science Education*, 23 (11), pp. 1157-1176

Cheng, X. (2000) Asian students' reticence revisited. *System, 28*, pp. 435-446.

Chin, C., & Brown, D. E. (2000) Learning deeply in science: An analysis and reintegration of deep approaches in two case studies of grade 8 students. *Research in Science Education, 30*(2), pp. 173–197.

Chiu, Y. C. J. (2008) Technical and pedagogical support for EFL online interactions. *Journal of Foreign Language Instruction, 2*(1), pp. 83-102.

Clark, A., & Moss, P. (2005) *Spaces to Play: more listening to young children using the Mosaic approach*. London: National Children's Bureau

Clifford, J. S., Boufal, M. M., & Kurtz, J. E. (2004) Personality traits and critical thinking skills in college students: Empirical tests of a two-factor theory. *Assessment, 11*(2), pp. 169-176.

Cohen, A. (1998) *Strategies in learning and using a second language*. London: Longman.

Cohen, L., Manion, L. & Morrison, K. (2000) *Research Methods in Education*. London: Routledge.

Cohen, L., Manion, L., & Morrison, K. (2007) *Research methods in education*. London: Routledge.

Collins, K. M., & Onwuegbuzie, A. J. (2000) *Relationship between critical thinking and performance in research methodology courses.* Paper presented at the annual meeting of the Mid-South Educational Research Association, Lexington, Kentucky.

Colucciello, L. M. (1997) Critical thinking skills and dispositions of baccalaureate nursing students- a conceptual model for evaluation. *Journal of professional nursing,* 13 (4), pp. 236-245

Copland, F., eds. (2004) In the classroom: the teaching and learning process. In H. Harnisch and P. Swanton, *Adults Learning Languages: A CILT guide to good practice*. London: CILT.

Corbin, J. A., & Strauss, A. (Eds) (2008) Basics of qualitative research, Thousand Oaks, CA: Sage.

Cordingley, P. (2008) Qualitative study of school level strategies for teachers' CPD. EPPI – Centre, London.

Cosgrove, R. (2009) *Critical Thinking in the Oxford Tutorial: A call for a more explicit and systematic approach*. In press.

Cosgrove, R. (2011) Critical thinking in the Oxford tutorial: a call for an explicit and systematic approach, *Higher Education Research & Development*, 30 (3), pp. 343-356

Costa, A. L., eds. (2001) *Developing minds: A resource book for teaching thinking.* Alexandria, VA: Association for Supervision and Curriculum Development.

Costello, J. P. (2007) *Writing reflectively and effectively: developing the skills of critical thinking, reasoning and arguments in higher education*. School of education and community. University research online http:// epubs.glyndwr.ac.uk

Coxhead, A. and Nation, P., eds. (2001) The specialised vocabulary of English for academic purposes. In J. Flowerdew and M. Peacock. *Research Perspectives on English for Academic Purposes*. Cambridge: Cambridge University Press.

Creme, P. & Lea, M. R. (1997) *Writing at university: a guide for students.* Buckingham, Open University Press.

Cresswell, J. W. (1998) *Qualitative inquiry and research design: choosing aAmong five traditions.* Thousand oaks: Sage.

Creswell, J. W. & Miller, D. L. (2000) Determining validity in qualitative inquiry. *Theory into Practice, 39*(3), pp. 124-131.

Crossley, M. (2000) Bridging cultures and traditions in the reconceptualisation of comparative and international education. *Comparative Education, 36*(3), pp. 319-332.

Davey, L. (1991) The application of case study evaluations. *Practical Assessment, Research & Evaluation*, 2(9). Retrieved September 24, 2012 from http://PAREonline.net/getvn.asp?v=2&n=9 .

Davidson, B. W. (1998) Comments on Dwight Atkinson's "A critical approach to critical thinking in TESOL": A case for critical thinking in the English language Classroom. *TESOL Quarterly, 32* (1), pp. 119-123.

Davies, D., & Dodd, J. (2002) Qualitative research and the question of rigor. *Qualitative Health research, 12*(2), pp. 279-289.

Davies, W. M., (2003) *A cautionary note about the teaching of critical reasoning: Higher education research and development society of Australia (HERDSA), Learning for an Unknown Future*. 2-9th July, 2003, Christchurch, New Zealand.

Davis, E. & and Davis, T.C. (2000) Traumatic brain injury: Mechanism of traumatic brain injury: Biomechanical, structural and cellular considerations. *Critical Care Clinics of North America*, *12*, pp. 447-456.

Davis, N.E., & Cho, M.O., & Hagenson, L. (2005) *Intercultural competence and the role of technology in teacher education. Editorial Contemporary Issues in Technology and*

Teacher Education [Online serial], 4(4). Available: http://www.citejournal.org/vol4/iss4/editorial/article1.cfm

Deakins, E. (2009) Helping students value cultural diversity through research-based teaching. *Higher Education Research & Development, 28*(2), pp. 209-226

Denscombe, M. (2007) *The Good Research Guide for Small-Scale Social Research Projects*. Maidenhead: Open University Press.

Denzin, N. K. & Lincoln, Y. S. (2000) (Eds) *Handbook of Qualitative Research* London: Sage.

Dewey, J. (1933) *How we think: A restatement of the relation of_reflective thinking to the educative process*. Boston: Heath.

Diller, K. C. (1978) *The Language Teaching Controversy*. Rowley, Mass: Newbury House.

Diseth, A., & Martinsen, O. (2003) Approaches to learning, cognitive styles, and motives as predictors of academic achievement. *Educational Psychology, 23*, pp. 195-207.

DfES UK (2007) Thinking skills embedded in the English curriculum - Dept of Education and Skills standards site Accessed March 2007 http://www.standards.dfes.gov.uk/thinkingskills/guidance/581458?view=get)

Dooey, P. (2010) Students' perspectives of an EAP pathway programme. *Journal of English for Academic Purposes, 9,* pp. 184-197.

Draper, S. W. (2009) Catalytic assessment: Understanding how MCQs and EVS can foster deep learning. *British Journal of Educational Technology, 40*(2), 285-293.

Dryden, L. eds. (1999) *A distant mirror or through the looking glass? Plagiarism and intellectual property in Japanese education.* Perspectives on plagiarism and intellectual property in a postmodern world Albany, NY: State University of New York Press, pp. 75-85.

Dudley-Evans, T., eds. (2001) *English for Specific Purposes*. The Cambridge Guide to Teaching English to Speakers of Other Languages. Cambridge: Cambridge University Press.

Duranti, A. (1997) *Anthropological Linguistics.* Cambridge: Cambridge University Press.

Durkin, K. (2008). The middle way: East Asian master's students' perceptions of critical argumentation in U.K. universities. *Journal of Studies in International Education, 12*(1), pp. 38-55.

Duron, R., Limbach, B. & Waugh, W. (2006).critical thinking framework for any discipline. *International journal of teaching and learning in higher education*. 17 (2), pp. 160-166

Egege, S., & Kutieleh, S. (2004) Critical thinking: Teaching foreign notions to foreign students, *International Education Journal*, 4 (4), pp. 75-85.

Elander, J. (2002) Developing aspect-specific assessment criteria for essays and examination answers in psychology, *Psychology Teaching Review,* 10, pp. 31–51.

Elander, J. (2003) A discipline-based undergraduate skills module, *Psychology Learning and Teaching*, *3*, pp. 48–55.

Elander, J., Harrington, K., Norton, L., Robinson, H., Reddy, P. & Stevens, D., eds. (2004) Core assessment criteria for student writing and their implications for supporting student learning, Oxford Centre for Staff and Learning Development.

Elander, J., Harrington, K., Norton, L., Robinson, H. & Reddy, P. (2006) Complex skills and academic writing: a review of evidence about the types of learning required to meet core assessment criteria, *Assessment & Evaluation in Higher Education,3 (1*), pp. 71-90.

Elder, L. & Paul, R. (2004) *The miniature guide to the human mind*. Foundation for Critical Thinking Press.

Elder, L., & Paul, R. (2006) Critical thinking and the art of substantive writing, part II. *Journal of Developmental Education, 29*(3), pp. 38-39.

Elder, L., & Paul, R. (2008) *The thinker's guide to intellectual standards*. Foundation for Critical Thinking Press

Elliott, J. (2004) Multi-method approaches in educational research' *International Journal of Disability, Development and Education* 51*,* 2: 135-149.

Elliott, J. (2007) Assessing the quality of action research, *Research Papers in Education*, 22:2, 229-246

Ennis, R. H. (1962) A concept of critical thinking, Harward educational review, 32, pp. 81-211

Ennis, R. H., eds. (1987). *A taxonomy of critical thinking dispositions and abilities. In J. B. Baron & R. J. Sternberg, Teaching thinking skills: Theory and Practice*. pp. 9-26. New York, NY: W. H. Freeman and Company.

Ennis, R. H. (1993). Critical thinking assessment. *Theory and Practice, 32*(3), pp. 179-186.

Ennis, R. H. (1996). *Critical Thinking*. Prentice Hall, Upper Saddle River, NJ. ELTC (2008) English language training centre http://www.uw.ac.uk/international/eltc/index.asp accessed online 10/ 2/ 2008.

Ennis, R. H. (1998). Is critical thinking culturally biased? *Teaching Philosophy, 21*(1), pp. 15-33.

Entwistle, N. J., & Ramsden, P. (1983). *Understanding student learning*. London: Croom Helm.

Entwistle, N. (1994) *Experiences of understanding and strategic studying*. ERIC Document Reproduction Service No. ED 374 704.

Entwistle, N. J. (1997) Reconstituting approaches to learning: A response to webb. *Higher Education*, 33, pp. 213-218.

European Commission (2008) http://ec.europa.eu/education/languages/language-teaching/doc236_en.htm accessed online 7/ 2/ 2009

Fabb, N., & Durant, A. (1993) *How to Write Essays, Dissertations and Theses in Literary Studies*. London: Longman.

Facione, P. A. (1990) *Critical Thinking: A Statement of expert consensus for purposes of educational assessment and instruction*. Millbrae, CA: The California Academic Press.

Facione, P. A., Facione, N. C., & Giancarlo, C. A. F., eds. (1997) The motivation to think in working and learning. *Preparing competent college graduates: Setting new and higher expectations for student learning* San Francisco, CA: Jossey-Bass Publishers.

Facione, P. A., Facione, N. C., & Giancarlo, C. A. F. (2000) The disposition toward critical thinking: Its character, measurement, and relationship to critical thinking skills. *Informal Logic, 20*(1), pp. 61-84.

Ferris, D., & Hedgcock, J. S., eds. (2004) *Teaching ESL Composition: Purpose, process and practice*. Lawrence Erlbaum.

Fink, D. L. (2003) *Creating Significant Learning Experiences: An Integrated Approach* to Designing College Courses. San Francisco: Jossey-Bass.

Fisher, A. (2001) *Critical thinking an introduction*. Cambridge University Press, Cambridge.

Flowerdew, J., & Peacock, M., eds. (2001) *Research perspectives on English for academic purposes*. Cambridge: Cambridge University Press.

Fox, H. (1994) *Listening to the world: Cultural issues in academic writing*. Urbana, IL: National Council of Teachers of English.

Freebody, P. (2003) *Qualitative research in education*: Interaction and Practice. London: Sage.

Frith, H. and Gleeson, K. (2004) Clothing and embodiment: men managing body image and using thematic analysis in psychology 99 appearance. *Psychology of Men and Masculinity*. 5, pp. 40-48.

Fujioka, M. (2001). Asian students' English writing experience. *Proceedings of 27th Annual JALT Conference.* pp. 185-194.

Gabler, I. C., & Schroeder, M. (2003). *Constructivist methods for the secondary classroom: Engaged minds.* Boston, MA: Pearson Education, Inc.

Gadzella, B. M., Ginther, D. W., & Bryant, G. W. (1997). Prediction of performance in an academic course by scores on measures of learning style and critical thinking. *Psychological Reports,* 81, pp. 595-602.

Gadzella, B. M. & Masten, W. G. (1998) Relation between measures of critical thinking and learning styles, *Psychological Reports,* 83, pp. 1248–1250.

Garside, C. (1996) *Look who's talking: A comparison of lectures and group discussion teaching strategies in developing critical thinking skills*. Commun. Educ., 45, pp. 212-227.

Gibbs, G. (2001). Learning and teaching strategies: What lessons can we learn about assessment?", *Keynote Lecture at a National Assessment Conference in Birmingham, UK,* LTSN Generic Centre.

Gieve, S. (1998) Comments on Dwight Atkinson's "A Critical Approach to Critical Thinking in TESOL": A Case for Critical Thinking in the English Language Classroom. A Reader Reacts. *TESOL Quarterly, 32*(1), pp. 123-129.

Gillham, B. (2000) *The Research Interview*. London: Continuum. Gillham, B. (2000B) *Case Study Research Methods*. London: Continuum

Glaser, B. (1992) *Basics of grounded theory analysis*. Sociology Press.

Glaser, E. M. (1941) *An Experiment in the Development of Critical Thinking*. Teachers College, Columbia University.

Granello D. H. (2001) Promoting cognitive complexity in graduate written work: Using Bloom's Taxonomy as a pedagogical tool to improve literature reviews. *Counsellor Education & Supervision,* 40, pp. 292-307.

Green, A. (2005) EAP study recommendations and score gains on the IELTS academic writing test. *Assessing Writing,* 10, pp. 44–60

Green, W. (2007) Write on or write off? An exploration of Asian international students' approaches to essay writing at an Australian university. *Higher Education Research and Development,* 26(3), pp. 329–344.

Haggis, T. (2003). Constructing images of ourselves? A critical investigation into approaches to learning research in higher education', *British Educational Research Journal* 29(1), pp. 89–104.

Hale, E. (2008) *A Critical Analysis of Richard Paul's Substantive Trans-disciplinary Conception of Critical Thinking*. Unpublished dissertation, Union Institute and University.

Halpern, D. (1993) Assessing the effectiveness of critical thinking instruction. *Journal of General Education, 42*, pp. 238-254.

Halpern, D. F., eds. (1996) *Thought and knowledge: An introduction to critical thinking.* Mahwah, NJ: Erlbaum.

Halpern, D. F. (1998) Teaching critical thinking for transfer across domains: Dispositions, skills, structure training, and metacognitive monitoring. *American Psychologist, 53*(4), pp. 449-455.

Halpern, D. F. (1999) Teaching for Critical Thinking: Helping College Students Develop the Skills and Dispositions of a Critical Thinker. *New Directions for Teaching and Learning, 80*, pp. 69-74.

Halpern, D. F. (2001) Assessing the effectiveness of critical thinking instruction. *The Journal of General Education, 50*(4), pp. 270–286.

Halpern, D. F. (2006) Critical thinking assessment using everyday situations: Background and Scoring Standards. *Unpublished Manuscript*. Claremont McKenna College.

Hammond, S. C., & Gao, H., eds. (2002) *Pan Gu's paradigm: Chinese education's return to holistic communication in learning.* Westport, Connecticut: Ablex.

Harris, M. J. (2006) Three steps to teaching abstract and critique writing. *International Journal of Teaching and Learning in Higher Education,* 17(2), pp. 136-146.

Hau, K. T., Halpern, D., Marin-Burkhart, L., Ho, I. T., Ku, K. Y. L., (2006) *Chinese and United States students' critical thinking: Cross-cultural validation of a critical thinking assessment.* Paper presented at the American Educational Research Association Annual Meeting, San Francisco, CA.

Hayes, N. (1997) *Theory-led thematic analysis: social identification in small companies*. *Doing qualitative analysis in psychology*. Psychology Press

Healy, M., & Perry, C. (2000) Comprehensive criteria to judge validity and reliability of qualitative research within the realism paradigm. *Qualitative Market Research*, *3*(3), pp. 118-126.

Higher Education Statistic Agency (2011) Higher education statistic agency http://www.hesa.ac.uk/.

Ho, E., Holmes, P., & Cooper, J. (2004 *Review and Evaluation of International Literature on Managing Cultural Diversity in the Classroom*. Wellington, New Zealand: Ministry of Education and Education New Zealand.

Hofstede, G. (1986) Cultural differences in teaching and learning, *International Journal of Intercultural Relations,* 10, pp. 301-320.

Hofstede, G. (1997). *Cultures and Organisations: Software of the Mind* (Revised ed.).New York: McGraw-Hill.

Hufton, N., Elliott, J. G., & Illushin, L. (2003). Teachers' beliefs about student motivation: Similarities and differences across cultures. *Comparative Education*, *39*, 367–389.

Holloway, I., & Todres, L (2003) The status of method: flexibility, consistency and coherence. *Qualitative Research.* 3, pp. 345-57.

Howe, E. R. (2004) Canadian and Japanese teachers' conceptions of critical thinking: a comparative study. *Teachers and Teaching: Theory and Practice, 10*(5), pp. 505-525.

Hu, J. (2001) An alternative perspective of language reuse: Insights from textual and learning theories and L2 academic writing. *English Quarterly, 3 (1)*, pp. 52-62.

Huang, R (2004. *The experience of mainland Chinese international students in the UK: A Tourism Perspective,* unpublished PhD thesis, University of Derby, Derby

Huang, R (2006) Chinese international students' perceptions on problem-based learning, *Journal of Hospitality, Leisure, Sport and Tourism Education*, 4(2), pp. 36-43

Hyland, F. (2003) Focusing on form: student engagement with teacher feedback. *System*, 3, pp. 217–230

Hyland, K. (2006) *English for Academic Purposes: An Advanced Resource Book*. London: Routledge

Izzo, J. (2001) English writing errors of Japanese students as reported by university professors. *Journal of Nazan Junior College,* 30, pp. 99-120.

Ivani , R. (2004) Discourses of writing and learning to write, *Language and Education,* 18(3), pp. 220–245

Jepson, M., Turner, T. & Calway, B. (2002) *The transition of international students into the postgraduate study: An international approach*, paper presented at the Australian Association for Research in Education (AARE) International Education Research Conference: http://www.aare.edu.au/02pap/tur02193.htm

Johansson, C. (2003) *Visioner och verkligheter. Kommunikationen om företagets strategies.* Visions and realities. A case study of communication on corporate strategy. Uppsala University.

Jones, F. R. (1994) The lone language learner: A diary study. *System, 22*(4), 441-454.

Jones, C., Turner, J., & Street, B. V., eds. (1999). *Student writing in the university: Cultural and epistemological issues*. Amsterdam: John Benjamins.

Jones, C., Reichard, C. & Mokhtari, K. (2003) Are students' learning styles discipline specific? *Community College Journal of Research and Practice,* 27(5), pp. 363-375.

Jones, A. (2005) Culture and context: critical thinking and student learning in introductory macroeconomics. *Studies in Higher Education, 30*(3), pp. 339-354.

Joppe, M. (2000) *The research process.* Retrieved February 25, 1998, from http://www.ryerson.ca/~mjoppe/rp.htm

Jordan, R. (1997) *English for academic purposes: A guide and resource book for teachers*. Cambridge: Cambridge University Press

Kabilan, M. K. (2000) Creative and critical thinking in language classrooms. *The Internet TESL Journal, 6*(6). http://itselj.org/Techniques/Kabilian-

Kagan, J. (2007) A trio of concern. *Perspective on Psychological Science*. 2, pp.361-376.

Kaplan, R. B. (1966) Cultural thought patterns in intercultural education, *Language Learning,* 16, pp.1-20.

Karahan, F. (2007) Language attitudes of Turkish students towards the English language and its use in Turkish context. Çankaya University, Faculty of Arts and Humanities *Journal of Arts and Sciences,* 7, pp. 73-87.

Kegen, R. (2000) *What "Form" transforms? A constructivist-developmental approach to transformative learning.* San Francisco, CA: Jossey-Bass.

Kelley, J. M. (2008) *The impact of weblogs on the affective states and academic writing of L2 undergraduates* (Doctoral thesis). The faculty of the curry school of education university of Virginia.

Kember, D. & Gow, L. (1991) A challenge to the anecdotal stereotype of the Asian students, *Studies in Higher Education,* 16(2), pp. 117–128.

Kember, D. (2001) Beliefs about knowledge and the process of teaching and learning as a factor in adjusting to study in higher education. *Studies in Higher Education*. 26 (2), pp. 205-221

Kember, D., Hong, C., Ho, A., (2008) Characterizing the motivation orientation of students in higher education: A naturalistic stud in three Hong Kong universities. *British Journal of Educational Psychology.* 78 (2) 313-329

Kennedy, M., Fisher, M. B., & Ennis, R. H., eds. (1991) Critical thinking: Literature review and needed research. New Jersey: Lawrence Erlbaum & Associates.

Kim, H.-K. (2003) Critical thinking, learning, and Confucius: *A positive assessment Journal of Philosophy of Education, 37(1)*, pp. 71-87.

King, P. M. & Kitchener, K. S. (1994) *Developing reflective judgment: Understanding and promoting intellectual growth and critical thinking in adolescents and adults*. San Francisco: Jossey-Bass.

Kirby, J. R. (1988) Style, strategy, and skill in reading. In R.R. Schmeck (Ed.) *Learning styles and learning strategies*. New York: Plenum Press.

Kumar, R. (1999) *Research Methodology: A step by-step guide for beginners*. London: Sage Publications

Kumar, R. (2005) *Research methodology: A step by-step guide for beginners*. London: Sage Publications.

Kumaravadivelu, B. (2003) Problematizing cultural stereotypes in TESOL. *TESOL Quarterly, 37*(4), pp. 709-719.

Kurfiss JG. (1988) *Critical Thinking: Theory, research, practice, and possibilities*. Washington (DC): Association for the Study of Higher Education.

Lai, R. E. (2011) Critical thinking: A literature review. Research report, Pearson. http://www.pearsonassessments.com/hai/images/tmrs/CriticalThinkingReviewFINAL.pdf

Lavelle, E. (1993) Development and validation of an inventory to assess processes in college composition. *British Journal of educational Psychology*, 63, pp. 489-499

Lavelle, E., & Zuercher, N. (2001) The writing approaches of university students. *Higher Education, 42*, pp. 373-391.

Lee, K. S., & Carrasquillo, A. (2006) Korean college students in United States: Perceptions of professors and students. *College Student Journal, 40*(2), pp. 442-456.

Leki, I. & Carson, J.G. (Spring, 1994) Students' perceptions of EAP writing instruction and writing needs across the disciplines. *TESOL Quarterly, 28 (1).*

Leung, Y. C. (2002) Extensive reading and language learning: A diary study of a beginning learner of Japanese. *Reading in a Foreign Language*. 14 (1), ISSN 1539-0578

Leung, D. Y. P. and Kember, D. (2003) The relationship between approaches to learning and reflection upon practice. *Educational Psychology,* 23(1), pp. 61-71.

Leung, D. Y. P., Ginns, P., & Kember, D. (2008) Examining the cultural specificity of approaches to learning in universities in Hong Kong and Sydney. *Journal of Cross-Cultural Psychology, 39*,pp. 251-266.

Lewis, A., & Smith, D. (1993) Defining higher order thinking. *Theory into Practice, 32*(3), 131–137.

Lewis-Beck, M., bryman, A., & Liao, T. (2004) *The sage encyclopaedia of social science research methods*. Volume 3. London: Sage Publications.

Li, J. (2002) Learning models in different cultures. *New Directions for Child and Adolescent Development, 96*, pp. 45-63.

Li, Y. (2006) A doctoral student of physics writing for publication: A socio-politically oriented case study. *English for Specific Purposes, 25*(4), pp. 456-478.

Liaw, S. S. (2007) Understanding computers and the internet as a work assisted tool. Computers in Human Behavior, 23(1), pp. 399–414

Lillis, T., & Turner, J. (2001) Student writing in higher education: Contemporary confusion, traditional concerns. *Teaching in Higher Education, 6*(1), pp. 57-68

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage.

Lipman, M. (1995). *Thinking in education*. Cambridge: Cambridge University Press.

Liu, D. (2005). Plagiarism in ESOL students: Is cultural conditioning truly the major culprit? *English Language Teaching Journal*, 59 (3), 234-241

Loyens, S., Rikers,M. M., Remy, M. J. P., & Schmidt, H. G. (2007) The impact of students' conceptions of constructivist assumptions on academic achievement and drop-out', *Studies in Higher Education*, 32, 5, pp. 581 – 602

Lun. C. M. V. (2010) *Examining the influence of culture on critical thinking in higher education*. Doctoral thesis. Victoria University of Wellington.

Magagula, C. (1996) The issues of paradigms in educational research. Keeping the debate alive. Mosenodi: *Journal of the Botswana educational research association*, 4(2), pp. 1-14

Major, E. M. (2005) Co-national support, cultural therapy, and the adjustment of Asian students to an English-speaking university culture‘, *International Education Journal,* 6 (1), pp. 84-95

Mamlin, N., Harris, K. R., & Case, L. P. (2001). A methodological analysis of research on locus of control and learning disabilities. *The Journal of Special Education*, *34*, 214–225.

Marlowe, B. A., & Page, M. L. (1998) *Creating and sustaining the constructivist classroom.* Thousand Oaks, CA: Corwin Press.

Marshall, C. and Rossman, G. (1999) *Designing qualitative research*. London: Sage Publications.

Marton, F. and Saljo, R. (1976) On qualitative differences in learning. II: Outcome as a function of the learner’s conception of the task’, *British Journal of Educational Psychology* 46, pp. 115–127.

Marton, F., & Saljo, R., eds. (1997) Approaches to learning. The experience of learning (pp. 39-58). Edingnurgh: Scotish Academic Press.

Marttunen, M., & Laurinen, L. (2001) Learning of argumentation skills in networked and face-to-face environments. *Instructional Science*, *29*(2), pp. 127–153.

Mattick, K., Dennis, I., & Bligh, J. (2004) Undergraduate medical education approaches to learning and studying in medical students: validation of a revised inventory and its relation to student characteristics and performance. *Medical Education,* 38(5), pp. 535-544.

Mauranen, A. (1994) “Two discourse worlds: study genres in Britain and Finland”. *Finlance*, 8, pp. 1-40.

Maxwell, J. (1996) *Qualitative research design: an interactive approach*. London: Sage Publications.

May, T. (2001) *Social research: issues, methods and process*. Buckingham: Open University Press.

McBride, R. E., Xiang, P., Wittenburg, D., & Shen, J. (2002) An analysis of pre-service teachers' dispositions toward critical thinking: a cross-cultural perspective. *Asia-Pacific Journal of Teacher Education, 30*(2), pp. 131-140.

McDonald, D. J. (2008) Measuring personality constructs: The advantages and disadvantages of self-reports and behavioural assessment. *ENQUIRE* 1(1), pp. 1-18

McDonough, S. (2007) Motivation in ELT. *ELT Journal*, 61 (4), pp. 369-371.

McCarthy, M. E., Pretty, G. M. H., & Catano, V. (1990) Psychological sense of community and student burnout. *Journal of College Student Development, 31*(3), pp. 211 – 216

McKenzie, K., & Schweitzer, R. (2001) Who succeeds at University? Factors predicting academic performance in first year Australian university students. *Higher Education Research & Development*, *20*, pp. 21-32.

McLean, M. (2001) Can we relate conceptions of learning to students’ academic achievement? Teaching in Higher education. 6(3), pp. 399-413

McPeck, J. E. (1981) *Critical thinking and education*. New York, NY: St. Martin's Press.

McPeck, J. E. (1990b). Critical thinking and subject specificity: A reply to Ennis. *Educational Researcher, 19*(4), pp. 10-12.

Mc Veigh, B. J. (2002) Japenees higher education as myth. Armonk NY and London: M.E. Sharpe

Mehdizadeh, N. & Scott, G. (2005) Adjustment problems of Iranian international students in Scotland‘. *International Education Journal*, vol. 6, no. 4, pp. 484-493.

Merriam, S. B. (1998) *Qualitative research and case study applications in education.* San Francisco: Jossey-Bass.

Merriam, S. B. eds. (2007) *Non-Western perspectives on learning and knowing*. Malabar, FL: Krieger Publishing Company.

Meyers, C. (1986) *Teaching students to think critically. A guide for faculty in all disciplines.* San Francisco: Jossy-Bass Publishers.

Miles, M.B., & Huberman, A.M. (1994) *Qualitative data analysis: an expanded sourcebook, second edition*. Sage.

Minbashian, A., Gail, F. G., & Bird, D.K. (2004) Approaches to studying and academic performance in short-essay exams *Higher Education* 47, pp. 161–176

Montgomery, C. (2007) Researching the socio-cultural context of learning: where many paths and errands meet. *Research Intelligence*, 101, pp. 22-23.

Moore, T. (2004). The critical thinking debate: How general are general thinking skills? *Higher Education Research and Development, 23*(1), pp. 3-18.

Moses, J. and Knutsen, T. (2007) *Ways of knowing: competing methodologies in social and political research*. Hampshire: Palgrave MacMillan.

Mosley, D., Baumfield, V., Elliot, J., Gregson, M., Higgins, S., Miller, J., & Newton, D. (2005) *Frameworks for Thinking*: A Handbook for Teaching and Learning. Cambridge University Press, Cambridge.

Moskowitz, D. S. (1986) Comparison of self-reports, reports by knowledgeable informants and behaviourals observation data. Journal of personality. 54, pp. 294-317

Murray, M. (2003) *Narrative psychology*. In Smith, J.A., editor, Qualitative psychology: a practical guide to research methods. Sage.

Murray, R. and Moore, S. (2006) *The handbook of academic writing*. Maidenhead: Open University Press.

Murphy, P.K. & Alexander, P.A.A. (2002) What counts? The predictive powers of subject-matter knowledge, strategic processing, and interest in domain-specific performance. *The Journal of Experimental Education*. 73(3), pp. 197-214.

National Committee of Inquiry into Higher Education. (1997).*Higher education in the learning society*. DFEE: London

Ng, A. K. (2001) *Why Asian are less creative than Westerners*. Singapore: Prentice-Hall.

Norenzayan, A., Smith, E. E., Kim, B. J., & Nisbett, R. E. (2002) Cultural preferences for formal versus intuitive reasoning. *Cognitive Science, 26*, pp. 653-684.

Norris, S. P., & Ennis, R. H. (1989) *Evaluating critical thinking.* Pacific Grove, CA: Midwest Publications.

Norris, S. P., eds. (1991) Assessment: Using verbal reports of thinking to improve multiple-choice test validity. Hillsdale, N.J.: Erlbaum.

Norris, W. R. (2007) Dealing with plagiarism at a Japanese university: a foreign teacher's perspective. the east Asian learner, 3 (1)

Norton, L. (2003) *Academic development: compliant behaviors or conceptual change?* Trigger paper for Cambridge Conference on Engaging with Academic Development, University of Cambridge.

North Report (1997) *Commission of inquiry report.* Oxford University Press, Oxford.

Nunan, D. (1992) *Language Teaching Methodology*, Hertfordshire. Prentice Hall International

O'Donoghue, T. (1996) Malaysian-Chinese students' perceptions of what is necessary for their academic success in Australia: a case study at one university, *JFHE, 20 (2)*, pp. 67-80.

O'Donovan, B., Price, M. & Rust, C. (2000) The student experience of criterion-referenced assessment (through the introduction of a common criteria assessment grid), *Innovations in Education and Teaching International,* 38, pp. 74–85.

OECD. (2009) *Education at a Glance*. OECD Indicators. Retrieved from http://www.oecd.org/dataoecd/41/25/43636332.pdf

O'Leary, Z. (2004) *The Essential Guide to Doing Research*. London: Sage Publications

Olson, C.B., & Land, R. (2007) A cognitive strategies approach to reading and writing instruction for English language learners in secondary school. *Research in the Teaching of English, 41, pp.* 269-303.

Onions, P.E.W. (2009) Thinking Critically: An introduction", working paper, available online at http://www.patrickonions.org/docs/academic/2009%20Thinking%20critically.pdf

Onwuegbuzie, A. J., Bailey, P., & Daley, C. E. (2000) The validation of three scales measuring anxiety at different stages of the foreign language learning process: The input anxiety scale, the processing anxiety scale, and the output anxiety scale. *Language Learning, 50(1)*, pp. 87-111

Oppenheim, A. (1992) *Questionnaire Design, Interviewing and Attitude Measurement*. London: Pinter Publishers.

Pain, R. & Mowl, G. (1996) Improving geography essay writing using innovative assessment, *Journal of Geography in Higher Education,* 20(1), pp. 19–31.

Paltridge, B. (2001) Linguistic Research and EAP Pedagogy. In J. Flowerdew and M. Peacock (Eds) *Research Perspectives on English for Academic Purposes*. Cambridge: Cambridge University Press.

Parker, L. (2004) Adults Learning Languages – The challenge. In H. Harnisch and P. Swanton (Eds) *Adults Learning Languages: A CILT Guide to Good Practice*. London: CILT

Pascarella, E. T. (1999) The development of critical thinking: Does college make a difference? *Journal of College Student Development, 40*(5), pp. 562-569.

Pascarella, E. T., Palmer, B., Moye, M., & Pierson, C. T. (2001) Do diversity experiences influence the development of critical thinking. *Journal of College Student Development, 42*(3), pp. 257-271

Pascarella, E. T., & Terenzini, P. T. (2005) *How college affects students: A Third Decade of Research (Vol. 2)*. San Francisco, CA: Jossey-Bass.

Paton, M., eds. (2005). *Is critical analysis foreign to Chinese students*? Auckland, New Zealand: Pearson Education New Zealand.

Patton, M. Q., eds. (1990). *Qualitative evaluation and research methods.*Newbury Park, CA: Sage.

Patton, M. Q., eds. (2002) *Qualitative evaluation and research methods.* Thousand Oaks, CA: Sage Publications, Inc.

Paul, R. W. (1993) *Critical thinking: What every person needs to survive in a rapidly changing world*. Santa Rosa, CA: Foundation for critical thinking.

Paul, R., & Elder, L. (2002) *Critical thinking: Tools for taking charge of your learning and your life*. Upper Saddle River, NC: Prentice Hall.

Paul, R. (2004) *Our concept of critical thinking*. Retrieved April 4, 2006, from http://criticalthinking.org/aboutCT/ourConceptCT.shtml

Paul, R., & Elder, L. (2006). *The thinker's guide to the art of asking essential questions*. Foundation for Critical Thinking Press

Paul, R., & Elder, L. (2008) *The thinker's guide to critical thinking: concepts and tools.* Foundation for Critical Thinking Press

Paulhus, D. P., eds. (1991) *Measurement and control of response bias*. San Diedo: Academic Press.

Paulhus, D. L., & Vazire, S., eds. (2007) *The self reported method*. In R. W. Handbook of research methods in personality psychology, pp. 224-239. London: The Guilford Press.

Peck, J., & Coyle, M. (1999) *The students guide to writing*, London, MacMillan

Pennycook, A. (2001) *Critical Applied Linguistics: A Critical Introduction*. Mahwah, NJ: Lawrence Erlbaum.

Phillips, V., & Bond, C. (2004) Undergraduates' experiences of critical thinking. *Higher Education Research & Development, 23(3)*, pp. 277-294.

Pithers, R. T., & Soden, R. (2000) Critical thinking in education: a review. *Educational Research, 42(3),* pp. 237-249.

Prosser, M., & Webb, C. (1994) Relating the process of undergraduate essay writing to the finished product, *Studies in Higher Education,* 19, pp. 125–138.

Prosser, M., & Trigwell, K. (1999) *Understanding learning and teaching: the experience in higher education*. Buckingham: Open University Press.

Punch, K. (2005) *Introduction to social research: quantitative and qualitative approaches*. London: Sage Publications.

Quality Assurance agency for Higher education (2008) *The framework for higher education qualification in England, Wales and Northern Ireland.*

Ramburth & McCormick (2001) Learning diversity in higher education: a comparative study of Asian international and Australian students. *Higher Education, 42,* pp. 333-350

Ramsden, P. (1991) A performance indicator of teaching quality in higher education: The Course Experience Questionnaire. *Studies in Higher Education,* 16, pp. 129–150.

Ramsden, P. (2003) *Learning how to teach in higher education*. Abingdon: Routledge Falmer

Ramsden, P. (2007) *Learning to teach in higher education*. Routledge Falmer, London.

Reed, J. (1998) Effect of a Model for Critical Thinking on Student Achievement in Primary Source Document Analysis and Interpretation, Argumentative Reasoning, Critical Thinking Dispositions, and History Content in a Community College History Course. Accessed online at: http://criticalthinking.org/research/index.cfm

Reid, J. (2006) *Essential of teaching academic writing.* Boston: Houghtom Mifflin. Kauchak, D., Eggen, P., & Carter, C. (2002). *Introduction to teaching: Becoming a professional.* Upper Saddle River, NJ: Pearson Education, Inc.

Richards, J. & Lockhart, C. (1994) *Reflective teaching in second language classroom*, CUP.

Richardson, C.T.E. (1994). Cultural specificity of approaches to studying in HE: A literature survey. *Higher Education*, 27 (4), p. 49.

Richmonds, E. D. R. (2007) Bringing critical thinking to the education of developing country professionals. *International education journal.* 8(1), pp. 1-29

Ridley, D. (2004) Puzzling experiences in higher education: critical moments for conversation. *Studies in Higher Education,* 29(1)

Riessman, C.K. (1993) *Narrative analysis*. Sage.

Rimiene, V. (2002) Assessing and developing students' critical thinking. *Psychology learning and teaching, 2*(1), pp. 17-22.

Rinnert, C., & Kobayashi, H. (2005). Borrowing words and ideas: Insights from Japanese L1 writers. *Journal of Asian Pacific Communications 15 (1)*, pp. 31-56.

Robertson, M., Line, M., Jones, S., & Thomas, S. (2000) International students, learning environments and perceptions: A case study using the Delphi technique. *Higher Education Research & Development, 19*(1), pp. 89-102

Rubin, H., & Rubin, I. (2005) *Qualitative interviewing: The art of hearing data*. London: Sage Publications

Robins, R. W., Tracy, J. L., & Sherman, J. W., eds. (2007) *What kinds of methods do personality psychologists use? A survey of journal editors and editorial board members.* . London: The Guilford Press.

Rust, S. R., Metz, K., & Ware, D. R. (2000) Effects of bovamine rumen culture on the performance and carcass characteristics of feedlot steers. Mich. Agric.pp. 22-26.

Ryan, J. (2000) *A Guide to Teaching International Students*. Oxford centre for staff development, Oxford Brookes University, Oxford.

Sadler, D.R (1987) Specifying and promulgating achievement standards. *Oxford Review of Education*, 3 (2), 191-207.

Sadler, D. R. (1989) Formative assessment and the design of instructional systems, *Instructional Science,* 18, 119–144.

Säljö, R. (1979) *Learning in the learner's perspective:* University of Göteborg, Institute of Education

Salili, F., & Hoosain, R., eds. (2007) *Culture, motivation, and learning: A multicultural perspective*. Charlotte, NC: Information Age Publishing, Inc.

Samraj, B. (2004) Discourse features of the students-produced academic research paper: variation across disciplinary course. *Journal of English for academic purposes*. 3, pp. 5-22

Samuelowicz, K., & Bain, J (2001) Revisiting academics beliefs about teaching and learning, *Higher Education*, 41, pp. 299-325

Satariyan, A. (2006) *On the relationship between Intensive reading and critical thinking.* www.totalesl.com/e_articles_print.php?id=395

Scanlon, S. (2006) The effect of Richard Paul's universal elements and standards of reasoning on twelfth grade composition. Accessed online at: http://criticalthinking.org/research/index.cfm.

Scardamalia, M., & Bereiter, C., eds. (1991) Literate expertise. Berlin: Max Planck Institute for Human development and Education.

Scheffler, I (1973) *Reason and Teaching*. Indianapolis: Hackett Publishing Company.

Schleppegrell, M. & Oliveira, L. (2006) An integrated language and content approach for history teachers. *Journal of English for Academic Purposes*, 5, pp. 254–268.

Schmidt, R., & Frota, S. N. (1986) Developing basic conversational ability in a second language: A case study of an adult learner of Portuguese. Rowley, MA: Newbury House.

Schwarz, N. (1999). Self-reports: How the questions shape the answers. American Psychologist, 54, pp. 93-105.

Scollon, R. (1997) Contrastive rhetoric, contrastive poetics, or perhaps something else? *TESOL Quarterly*, 31 (2), pp. 352-358.

Scouller, K.M., & Prosser, M. (1994) Students' experiences in studying for multiple choice question examinations. *Studies in Higher Education* 19(3), pp. 267–279.

Scouller, K. (1998) The influence of assessment method on students' learning approaches: multiple choice question examination versus assignment essay, *Higher Education,* 35, pp. 453–472.

Sells, S. P., Smith, T. E. & Newfield, N. (1997) Teaching ethnographic research methods in social work: A model course. Journal of social work education, 33(1) pp. 167-184

Shin, S. & Lee, C. (2000) Korean students' learning styles and lessons, Paper presented at the 5th American University Spring TESOL Conference, Washington, DC.April.

Siegel, H. (1990) *Educating Reason*. Routledge, London

Skelton, J. and Richards, K., eds. (1991) *How critical can you get?* London, Macmillan

Soden, R., & Maclellan, E. (2005) Helping education under graduates to use appropriate criteria for evaluating accounts of motivation. *Studies in Higher Education*, 30 (4), pp. 445-458.

Soden, R., Seagraves, L., & Coutts, G. (2008) *Evaluation of the arts across the curriculum project:* commissioned by the Scottish Government (formerly Scottish Executive) Education Department. Glasgow: University of Strathclyde

Somwung, P., & Siridej, S. (2000) Civics and values of education in Thailand: Documentary analysis. *Asia Pasific Journal of Educatin*. 20(1), pp. 82-92.

Spack, R. (1997) The acquisition of academic literacy in a second language: A longitudinal case study. *Written Communication*, 14(1), pp. 3-62.

Spandel, V. (2005) *Creating writers through 6-trait writing assessment and* instruction Boston, MA: Pearson.

Stake, R.E. (1995). *The Art of Case Study Research: Perspective in Practice*. London: Sage.

Stake, R. (1998). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies of Qualitative Inquiry*. (p. 86-109). Thousand Oaks, CA: Sage.

Stake, R.E. (2000) Case Studies, In Denzin, N. K. & Lincoln, Y. S. (Eds) *Handbook of Qualitative Research*, London: Sage.

Stapleton, P. (2001) Assessing critical thinking in the writing of Japanese university students: insights about assumptions and content familiarity. *Written Communication*, *18*(4), pp. 506-548.

Stenbacka, C. (2001) Qualitative research requires quality concepts of its own. *Management Decision, 39*(7), pp. 551-555

Sternberg, R. J., eds. (1987). *Teaching intelligence: The application of cognitive psychology to the improvement of intellectual skills*. New York: W. H. Freeman.

Sternberg, R. J., & Zhang, L., eds. (2001) Perspectives on thinking, learning and cognitive styles. London: Lawrence Erlbaum Associates Publishers.

Storch, M. (2009) The impact of studying in a second language (L2) medium university on the development of L2 writing .*Journal of Second Language Writing,* 18, pp. 103–118

Storch, N., & Joanna, T. (2009) The impact of an EAP course on postgraduate writing. *Journal of English for Academic Purposes,* 8, pp. 207-223

Strauss, A., & Corbin, J. (1990) *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications, Inc.

Strauss, A., & Corbin, J. (1998) *Basics of qualitative research: techniques and procedures for developing grounded theory*. Sage.

Suhor, C. (1985, May). Objective tests and writing samples: How do they affect instruction in composition? Phi Delta Kappan, 66, pp. 635-639.

Swales, J. (1990) *Genre analysis: English in academic and research settings*. Cambridge: Cambridge University Press.

Tagg, J. (2003) *The learning paradigm college.* Boston, MA: Anker.

Takano, Y., & Noda, A. (1993) A Temporary decline of thinking ability during foreign language processing. *Journal of Cross-Cultural Psychology, 24*(4), pp. 445-462.

Tanaka, J. (2002) *Academic difficulties among East Asian international graduates: Influences of perceived English language proficiency and native educational /socio-cultural background*. Unpublished doctoral dissertation, Indiana University, Bloomington

Tanaka, K. (2004) Changes in Japanese students' beliefs about language learning and English language proficiency in a study-abroad context. Unpublished PhD thesis, University of Auckland.

Tapper, J. (2004) Student perceptions of how critical thinking is embedded in a degree program. *Higher Education Research & Development* 23(2), pp. 200-222.

Tashakkori, A. & Teddlie, C. (2003) *Handbook of Mixed Methods in Social & Behavioral Research*. Thousand Oaks: Sage.

Ten Dam, G., & Volman, M. (2004) Critical thinking as a citizenship competence: teaching strategies. *Learning and Instruction, 14*, pp. 359-379.

Terraschke, A., & Wahid, R. (2011). The impact of EAP study on the academic experiences of international postgraduate students in Australia. *Journal of English for Academic Purpose,* 10(3), pp. 173-182

Te Wiata, I., Nightingale, P., Toohey, S., Ryan, G., Hughes, C., & Magin, D., eds. (1996) *Assessing learning in universities*. Sydney: UNSW Press.

Thayer-Bacon, Barbara (2000) *Transforming Critical Thinking: Thinking constructively*. New York: Teachers College.

Thomas, T., Kazlauskas, A., & Davis, T. (2004) Teaching first year students to communicate their reasoning. Dealing with diversity First Year in Higher Education Conference, Monash University, July2004 http://www.fyhe.qut.edu.au/past_papers/papers04.htm

Thomas, F. Nelson Laird, T. F., Shoup, R., Kuh, G. D., Schwarz, M. J. (2008) The effects of discipline on deep approaches to student learning and college outcomes. Research in Higher Education, 49, pp. 469-494.

Tiwary, A., Avery, A., & Lai, P. (2003) Critical thinking disposition of Hong Kong Chinese and Australian nursing students. *Journal of Advanced Nursing, 44*(3), pp. 298-307.

Turner, J. (2004) Language as academic purpose. *Journal of English for Academic Purposes*, 3, pp. 95-109.

Turner, Y (2006) Students from mainland China and critical thinking in postgraduate business and management degrees: Teasing out tensions of culture, style and substance, *International Journal of Management Education*, 5(1), pp. 3-11

Tsui, L. (2002) Fostering critical thinking through effective pedagogy: Evidence from four institutional case studies *The Journal of Higher Education, 73*, pp. 740-763.

Tsui, L. (2006) Cultivating critical thinking: Insights from an elite liberal arts college. *The Journal of General Education, 55*(2), pp. 200-227.

Tweed, R. G., & Lehman, D. R. (2003) Confucian and Socratic learning. *American Psychologist, 58*, pp. 148-149.

Uzawa, K. (1996) Second language learners' processes of L1 writing, L2 writing and translation from L1 into L2. *Journal of Second Language Writing*, 5, pp. 271–294.

Vandermensbrugghe, J (2004) The unbearable vagueness of critical thinking in the context of the anglo-saxonisation of education, *International Education Journal, (3).*

Van Gelder, T. (2004) Teaching critical thinking: Some lessons from cognitive science. College Teaching, 45(1), pp.1–6.

Van Rossum, E. J., & Schenk, S. M. (1984) The relationship between learning conception, study strategy and learning outcome. *British Journal of Educational Psychology, 54,* pp. 73–83.

Vazire, S. (2006) Information reports: A cheap fast and easy method for personality assessment. *Journal of research and personality*. 40, pp. 472-481

Vo, H., & Morris, R. (2006) Debate as a tool in teaching economics: Rationale, technique, and some evidence. *Journal of Education for Business, 81* (6), pp. 315.

Volet, S. E. (1999) Learning across cultures: appropriateness of knowledge transfer. *International Journal of Educational Research, 31*, 625-643.

Volet, S. E., & Kee, J.P.P. (1993) *Studying in Singapore—Studying in Australia: A student perspective* (Occasional Paper No. 1). Western Australia: Murdoch University, Teaching Excellence Committee.

Volet, S. E., & Renshaw, P. D., eds. (1996) Chinese students at an Australian university: Adaptability and continuity. Hong Kong: Comparative Education Research Centre.

Voss, C., Tsikriksis, N. & Frohlich, M. (2002) Case Research in Operations Management, *International Journal of Operations & Production Management* 22 (2) pp 196-291.

Walliman, N. (2006) *Social Research Methods*. London: Sage Publications

Walters M, Hunter S & Giddens E. (2007) Qualitative research on what leads to success in professional Writing. *International Journal for the Scholarship of Teaching and Learning* : http://academics.georgiasouthern.edu/ijsotl/v1n2/articles/walters/index.htm

Watkins, D. A. (1996) Learning theories and approaches to research: A cross-cultural perspective. In D. A. Watkins & J. B. Biggs (Eds.), *The Chinese learner: Cultural, psychological and contextual influences* (pp. 3–23). Hong Kong: Comparative Education Research Centre and Australian Council of Educational Research

Williams, R. L., & Stockdale, S. L. (2003). High-performing students with low critical thinking skills. *The Journal of General Education, 52*(3), pp. 199-225.

Williams, R. L., Oliver, R., Allin, J. L., Winn, B., & Booher, C. S. (2003) Psychological critical thinking as a course predictor and outcome variable. *Teaching of Psychology, 30*(3), pp. 220-223.

Willig, C. (2003) *Discourse analysis: a practical guide to research methods*. Sage,

Winter, G. (2000) A comparative discussion of the notion of validity in qualitative and quantitative research. *The Qualitative Report*, *4*(3&4). http://www.nova.edu/ssss/QR/QR4-3/winter.html

Wisker, G., eds. (2000) *Good Practice Working with International Students*. Birmingham: SEDA.

Wlodkowski, R., & Ginsberg, M. (1995) *Diversity and motivation*. San Francisco: Jossey-Bass.

Wong, J (2004) Are the learning styles of Asian international students culturally or contextually based? *International Education Journal, 4(4).*

Wong, W. (2006) Understanding dialectical thinking from a cultural-historical perspective. *Philosophical Psychology, 19*(2),pp. 239-260.

World Bank (2005) *Direction in development. Expanding opportunities and building competencies for young people*. A new agenda for secondary education. Washington DC.

Yang, Y.-T. C., & Chou, H.A. (2008) Beyond critical thinking skills: Investigating the relationship between critical thinking skills and dispositions through different online instructional strategies. *British Journal of Educational Technology, 39*(4), pp.666-684.

Yin, R. & Heald, K. (1975) Using the case survey method to analyse policy studies. *Administrative Science Quarterly*, 20, pp. 371-81.

Yin, R.K., (1984). *Case Study Research: Design and Methods*. Beverly Hills, Calif: Sage Publications.

Yin, R., (1994). *Case study research: Design and methods* (2nd ed.). Beverly Hills, CA: Sage Publishing.

Zhang, L. J. (2001) Awareness in reading: EFL students' meta- cognitive knowledge of reading strategies in an input-poor environment. *Language Awareness, 10*, pp.268–288.

Zeegers, P. (2004) Student learning in higher education: A path analysis of academic achievement in science. *Higher Education Research and Development,* 23(1), pp. 35-56.

Zhu, W. (2004) Faculty views on the importance of writing, the nature of academic writing, and teaching and responding to writing in the disciplines. *Journal of Second Language Writing, 13*(1), pp. 29-48.

APPENDICES

APPENDIX 1: List of guiding interview/self-reports questions (Students)

Pre-Interview Questionnaire

1. Name (Optional)...	
2. Email address...	
3. Gender...	
4. What is your age?	
5. What is your current study?	
6. Subject group?	
7. Nationality...	
8. Doing 1st or 2nd degree in the UK?	

Interview/Self-reports Questions

1. What is academic writing in your point of views and how was your academic writing experience in English in your home country?
2. How important is critical thinking to academic writing?
3. What are your conceptions of critical thinking?
4. What are your main approaches to academic writing?
5. What are your initial critical thinking-related academic writing problems?
6. What are the main reasons behind these problems in your point of views?
7. What is the role of EAP language learning modes towards critical thinking practices?
8. What possible suggestions/models would help to facilitate your critical thinking-related challenges in academic writing?

APPENDIX 2: List of guiding interview questions (Teachers)

Pre-Interview Questionnaire

1. Name (Optional)...	
2. Email address...	
3. Gender...	
4. What is your qualification?	
5. Current position?	
6. Teaching Experience	

Interview Questions

1. How would you explain the concept of critical thinking
2. How important is critical thinking to your teaching?
3. What are the initial critical thinking-related academic writing problems experienced by international students?
4. What are the inhibiting factors to fostering international students' critical thinking skills?
5. What is the role of EAP language learning modes towards critical thinking practices?
6. What possible suggestions/models would help to facilitate students' experiences of CT?

APPENDIX 3: Learners' diaries scheduale

Total session per week _____

Sessions you have attended _____

Length of writing activities _____ minutes per session

Complete these sentences
Overall students' engagement is....
Academic writing exercises include.....
My difficulties are.....
I would like to know.....
Critical thinking engagement....
Teachers' role in fostering critical thinking.....
I did not like.....
I appreciated.....

Appendix 4: Students' written sample

Chapter 3

3.1 Introduction

In order to gain the primary data including facts and opinions towards BU's students who major in HRM during 2004- 2009 in terms of curriculum, teaching and assessment methods, as well as teachers' attitudes, I have selected questionnaire and interview as the most suitable research methods for my dissertation research.

It would be useful here to outline the purpose and contents of this chapter

3.2 General methodology – approaches and strategy

The framework of whole research methodology is employed a mixed research approach. It combines qualitative research and quantitative research together. 'Mixed-methods research collects both quantitative and qualitative data because these researches believe that a combination of approaches results in a more complete understanding of educational problems'(Lodicao et al, 2000 p17). This was important in this study ~~I quite agree with this point~~ since the result of qualitative approach is literal data, and quantitative approach is numeric dada, so combine two kinds of data together, could provide~~s~~ me

Comment [MS1]: Is this in a list of acronyms or explained elsewhere?

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Comment [MS2]: What about strategies & approaches?

Comment [MS3]: tenses

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Comment [MS4]: It sounds better to 'depersonalise'.

an in-depth and breadth view of the research topic.

Within the methodology framework I will adopt case study as research stagey. A case study involveds a detailed exploration of a single instance of an individual or social group, or institution (Oliver, 1997 p 96). I will take BU as an example; I want to investigate its HRM professional education in detail, rather than other universities' HRM education. To carry out this strategy, I will employ two tactics - questionnaire and interview. Questionnaire is a set of questions, including open-ended question and close- ended questions. It helps to collect qualitative and quantitative data. Interview is an instrument, through the conversation with interviewee to collect interviewee's opinions, and viewpoint. I am going to detailstate these two research methods in detail in the following paragraphs.

Comment [MS5]: Where does quote start and finish?

Comment [MS6]: Better to use the correct research term

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Comment [MS7]: You could make it specific as it whether this is qualitative or quantitative

3.3 Research methods and study procedure

3.3.1 Questionnaire

A questionnaire canould gather a lot of information within a low cost in time and money. I have designed questionnaire that has 15 questions in total (See appendix 1). According to my research objectives, the questionnaire is consisted of four sections. The first section has 6 questions and it is about curriculum including internship, because I regard internship is part of curriculum. Two of the 6 question is are open-ended questions; the rest is are multiple choices. You could justify you choices in the open/closed issue. The second section is to collect data of teaching method in HRM professional teaching. I designed a big compound table, which contain 11 popular teaching methods, from presentation to problem-based learning to simulation.

Comment [MS8]: You could comment on the link to your particular research objective here, April

Students ~~is~~ are asked to mark how often teachers use ~~it~~them, and what is ~~students~~ their preference, if they like the teaching method or not in each item. The purpose of the question is fist to find out whether teachers ha~~s~~ve employed variety of teaching methods, to make the teaching much more efficiency and interesting or not; second, students attitude to the teaching method. If the students do not like the teaching method ~~those~~ teachers most like to use, the teaching quality will discount a lot. The third section on the questionnaire is assessment and consist~~ded~~ of three questions. Assessment is also an important part of teaching procedure and it influences students' further improvement. The purpose of the three questions is to see, whether the assessment method has a reliability and validity. If the assessment result could not correctly reflect the students' study level, itself is a useless instrument, and it may ha~~s~~ve negative function to students. The last section has four open-ended questions, these questions is to make sense of how the students evaluate their four years HRM study, and what are their recommendations towards the HRM professional education. The entire questionnaire is collecting quantitative dada most by multiple choice, and again qualitative data through fill in blanks and comments.

I ~~have~~ emailed this questionnaire to object students one by one and two weeks later, I have collected 30 valid feedbacks.

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Comment [MS9]: You could explain in here that these were your HRM classmates, so you had their email addresses.

3.3.2 Interview

Interview is one of the typical research methods in case study. Because can it provide detailed and specific data of the research topic. One –to-one interview is a good form

for interviewer to collect wanted information and easy to control the interview procedure. I will employ a telephone interview, for I am not able to overcome the geography distance, ~~is not able to overcome~~. The interviewees are three teachers of ~~teach~~ HRM in BU. The intention to do the interview is to collect information about teachers' standpoints on curriculum, teaching method, and assessment methods. When studying a topic~~,~~, to get the views from two sides has benefit to the research's credibility. Since education involves two groups- teachers and students. Only collect data from one side will bring inevitable preconception.

~~I interview~~ I want to do ~~is~~ a structured interview because ……..?. Before doing the interview, I will make a list of the questions that I am going to ask teachers. Besides asking the basic information about the interviewees, ~~teachers,~~ questions all around curriculum, teaching and assessment methods they adopt in their subjects' teaching, for instance, 'which subjects are you teaching, and why?', 'why you employ this teaching methods/ assessment method?' and because one teacher is charge for the HR laboratory, so I plan to ask more information about the HR laboratory, because ……..?

Comment [MS10]: You could mention triangulation here and include a Ref

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Comment [MS11]: This is a long sentence, April. I think the contents are fine, but can you break it up into sentences.

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3.4 Sample selection

Since this is a case study, the research objects have been limited in a certain scope. I selected the sample who major in HRM at~~in~~ BU and graduated between 2008 and 2009 ~~has~~for ~~–~~the following reasons. Firstly, the curriculum between 2008 and 2009 are almost the same, and teachers in HRM teaching are the same. (What do you mean 'the same", April?) Secondly, HRM is practical discipline, without any working

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for interviewer to collect wanted information and easy to control the interview procedure. I will employ a telephone interview, for I am not able to overcome the geography distance, ~~is not able to overcome~~. The interviewees are three teachers of ~~teach~~ HRM in BU. The intention to do the interview is to collect information about teachers' standpoints on curriculum, teaching method, and assessment methods. When studying a topic~~,~~, to get the views from two sides has benefit to the research's credibility. Since education involves two groups- teachers and students. Only collect data from one side will bring inevitable preconception.

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experience is not able to give any comments on its curriculum and practical teaching. The first two reasons are considered from research validity. Then, investigate students graduated in recent year, it is to keep the reliability of the research results for students may not remember clearly about what subjects they have studied and how teachers taught and assessed them several years later.

Comment [MS12]: Not sure what you mean here April.

Comment [MS13]: I get what you are implying here April, but this is an important point, so you could make it very clear how they are connected to validity.

Comment [MS14]: Good point

3.5 Research pilot

Before I sent all the questionnaires to the students, I selected two students who majored in HRM &? graduated in 2008 from BU. I asked them to do the questionnaire first, and give me some suggestion to improve my questionnaire. This process is to make sure whether students could correctly understand what I asked in questionnaire. And it helps me to collect maximum validity data through questionnaires. According to this pilot, I do changes in two places. One is in the format of the questionnaire, the first version is operate in a slow speed, and respondents require doing some setting on their Microsoft word before they filling the questionnaire. So I employed another way to design the questionnaire, finally, the second version is quick and convenient to fill in. Another change in questionnaire is about language expression. The original questionnaire is written in English, as the responders are Chinese, it is better to translate it into Chinese. The students, who did the pilot, said there are some sentences I expressed not clearly in Chinese questionnaire, so I check and make an improvement. OnceUntil the pilotlite students say it is fine, I began to do the formal questionnaire research.

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3.6 Inherent problems within the methodology

Even though this research methodology researches from quantitative to qualitative, from questionnaire to interview, research objectives cover students and teachers, there still several inherent problems within it. This may influence the research results' reliability and validity.

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Comment [MS15]: Is this bit necessary?

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3.6.1 Inherent problems in questionnaire

First a problem exist in questionnaire's design. As I have referreed most of the questions in questionnaire are multiple choices. And I planned the questionnaire according to my own experiences, so the choices ~~that~~ listed are limited, not cover ~~the~~ every situation. But~~Although~~ I give a blank column in each question, in case no prefer answer is listed, to let them write down their opinions. But this measure seldom works, as students do not want to do any writing or thinking besides ticking all the presented boxes. Therefore, when I design this questionnaire, I had tried my best to consider all kinds of situation, and to provide impersonal choices, reduce my own preconception.

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Comment [MS16]: So are you saying there was a problem here? I am not too clear.

Second, because I emailed the questionnaire to students, so I do know when and where and what mood they hold to fill in the questionnaire. By reason of there are too ~~much~~many ~~-~~questionnaires to ~~full fit~~fulfill~~l~~ in our daily life, people are already tired of questionnaires. Thus, when they fill in the questionnaire, how honest~~y~~ they are, is hardly known. What I did?~~could~~ do and check is when sending emails, I stressed on please be sure to fill every question, and leave no blanks ~~leaves~~.

Comment [MS17]: Not too clear

Comment [MS18]: You could make the connection to validity here

3.6.2 Inherent problems in interview

Interview is to collect qualitative data. One big problem with qualitative research is subjectivity. On the one hand the interviewees may not want to reveal their true~~ing~~

feelings, or give partial picture of the situations (Oliver, 1997 p 106). In this educational research, teachers are likely to avoid any negative aspects of their teaching or the faculty management. On the other hand, this is a telephone interview; when I received the information, record, dispose, my perception more or less impact I interpreting interviewee's opinion.

Comment [MS19]: Do you or prefer to give?

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Comment [MS20]: Not sure what you are saying here April.

3.7 Conclusion

This chapter is focus on which methodology I employed and how I did it. It is impossible to find a methodology with 100 percent objectivity, so the inherent problem of the methodology is also discussed. In this mixed approach, qualitative approach and quantitative approach do not go on simultaneously. Quantitative approach goes first, then qualitative approach, because this sequence is easy for me to control as they are two distinct stages. Questionnaire and interview are the research methods I employed to collect primary data. I also used document to collect secondary data. Combininge primary data and secondary data is to eliminate the subjectivity, and establish the validity and credibility of the research. Next chapter is going to state what data are collected through this methodology and how I analysis them.

Comment [MS21]: Do you mean objectivity? Validity?

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Comment [MS22]: But doesn't the questionnaire include some qualitative?

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Reference

Lodic, Marguerite G & Spaulding, Dean T & Voegtle, Katherine H (2006) *Methods in educational research : from theory to practice*. London: John Wiley and Sons.

Oliver. P (1997) *Research for business, marketing and education* London: Hodder & Stoughton

Tenses

Singular/Plural
Or – indicate the software you used the first time round
More theory – Refs
Limitations could go to Chapter 5