

Critical Thinking Skills: A Case Study of the English
Foundation Program at a higher education institution in
Oman

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degree of Doctor in Education

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Statement of Original Authorship

The work contained in this thesis has not been previously submitted to meet requirements for any other award or credit at this or any institution of higher education. To the best of my knowledge, the thesis is wholly original and all material or writing published or written by others and contained herein has been duly referenced and credited.

Maha AbaSaid

Date: 19/08/ 2018

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Abstract

Critical thinking is a key feature of the organizational cultures of higher education institutions, given its multiple impacts on graduates' academic, professional and personal levels. This holds true for the Arab Gulf region. Most of the region's higher education institutions' strategic plans state, implicitly and explicitly, objectives related to achieving critical thinking skills.

Regrettably, most of the Arab world students' performance in international standardized aptitude tests, is below expectations. This was reflected in the results of Trends in International Mathematics and Science Study (TIMSS) and the Programme for International Student Assessment (PISA). One of the reasons for the Arab students' low performance is that such assessments need higher order of thinking skills, such as critical thinking.

Consequently, education policy-makers, in the Arab Gulf region, are concerned about students' low performance in such assessments, despite the continuous reforms and the hefty budgets allotted to education. Therefore, different approaches that do not require heavy budgets and hard infrastructure reforms should be considered. Such approaches should focus on the transformative role of higher education, where the teaching of soft skills, like critical thinking, ought to be a priority.

The purpose of this study is to investigate how the learning-teaching process in the English Foundation Program at the College, a higher education institution in Muscat, fosters critical thinking teaching. In view of this, a qualitative intrinsic case study fits well the exploratory and explanatory nature of this research, because it reflects on practicing professions and it investigates critical

thinking in its natural context. The methodology examined four data sets in the English Foundation Program learning -teaching process. These data sets are the English Foundation Program textbooks, the College's strategic plan, in-depth semi-structured interviews with ten professors and a fifteen-student focus group interview of the English Foundation Program's four levels.

Furthermore, Littlejohn's framework for analysing teaching materials and a qualitative thematic analysis, are both employed to investigate critical thinking in the English Foundation Program textbooks. A qualitative thematic analysis is applied to the other sets of text data, which are the College's strategic plan, the semi- structured interviews with the professors, and the focus-group interview with the students. Such analysis identifies the implicit and explicit themes related to critical thinking in the English Foundation Program learning-teaching process. The constructed themes answered the posed research questions. It was found that there are implicit and explicit elements of critical thinking in the English Foundation Program textbooks and the College's strategic plan that could be enhanced. The English Foundation Program's professors have their own interpretations of critical thinking, but not for the concept's impacts outside classrooms. Such professors believe in the attainability of critical thinking and their role as facilitators enriching teaching the concept in their classrooms. Despite that, the English Foundation Program's professors openly referred to the disparity between their espoused beliefs and enacted practices, in terms of teaching critical thinking, because of their students' resistances. The students' perceptions of the concept concurred with their expectations of their College's learning- teaching process. The English Foundation Program high achievers expect to gain professional competencies, better academic performance, and personal growth.

This research presents practical valuable pedagogical and institutional implications to enhance CT teaching and practice in higher education institutions in Oman and the other Arab Gulf states. Another contribution of this study is that it closely explores the English Foundation Program professors' and the English Foundation Program students' perceptions of critical thinking, two important areas that are unexplored.

The study concludes with recommendations for further research, where such research should focus on the reasons for the disparities between espoused practices and enacted practices, in relation to critical thinking teaching. In view of this, the research refers to the importance of implementing Bloom's taxonomy, through the EFP textbooks, as an implication of practice to help address such disparity and to enhance CT teaching, where the language barrier is a major constraint.

Furthermore, the study recommends educators and reformist, in the Arab Gulf region, to investigate students' low performances at higher education as an outcome of their pre-university education systems drawbacks.

Key words

Higher education in Oman, critical thinking skills, case- study methodology, Littlejohn's framework for analyzing language teaching materials, qualitative thematic analysis, Bloom's taxonomy

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List of Abbreviations

- CT: Critical thinking
- EFP: English Foundation Program
- PF: Post Foundation Program
- HE: Higher Education
- ESL: English as a Second Language
- ELC: English Language Centre
- MoM: Ministry of Manpower
- PF: Pedagogical framework
- GCC: Gulf Cooperation Council
- SQU: Sultan Qaboos University

Chapter one

Introduction

1. Contextual background

Globally, critical thinking (CT) is an integral concept in the philosophies of most pedagogies and social fields. CT is a fundamental feature of higher education (HE) institutions. Such concept is reflected implicitly and explicitly in HE institutions' organizational cultures and strategic plans respectively. Despite the domination of CT in literature, there is no agreement on a precise definition of the concept. Therefore, several scholars such as (Moore,2013; Petress, 2004; Davies, 2015) agreed on the fluidity of the concept. With the beginning of the 20th century, CT has started to have a substantial presence in educational contexts, especially in HE, because of its multiple impacts on students' academic, social and political realms. Because of the importance of such impacts, this research aims to study how the English Foundation Program's (EFP) learning-teaching process fosters CT teaching at the College.

To understand the nature of this research, it is important to have a solid idea of this study's contextual backgrounds. This chapter describes the contexts of this study represented through the College, a HE institution in Muscat, and the EFP as one of the College's programs. It discusses the definition of CT, referring to its academic impacts on students. Also, this chapter presents the rationale of this study, its aim and the research questions. The final section of this chapter gives an overall view of this thesis. The two sections, hereunder, set the two contexts of this study; the College and the EFP.

1.1 The College

The College, a pseudonym for the context of this study, is the second largest HE institution in Muscat, Oman. It was established in 1984 with a capacity of 200 students. Currently, the College accommodates around 12,000 students studying in different programs. The College's

facilities have expanded from three buildings to a built-up area of 49,700 m². It has more than 975 staff and an annual intake of around 2000 students into its four levels' EFP.

The College is under the Ministry of Manpower (MoM) in the Sultanate of Oman, so it is directly related to the industry. It was founded as part of the initiative of His Majesty Sultan Qaboos to offer HE to Omanis, instead of sending them for scholarships abroad. The College's mission is to implement educational programs offering different specializations such as Engineering, Information Technology (IT), Applied Sciences, Business Studies and Fashion Design.

Such programs provide Omani youth with the skills and knowledge to face the challenges of the new era, and to be part of globalization and technological advancements. In view of this, Al-Mahrooqi and Tuzlukova (2014, p.473) referred to the importance of teaching English to Omani students stating that, "English has been recognized as a necessary tool for advancement and the acquisition of knowledge and technology". Therefore, HE institutions in the Arab Gulf region, including the College, have English Language Centres (ELC). Such centres offer EFP to improve students' English linguistic proficiency before they join their specializations in the Post Foundation Programs (PFP). It is important to note that English is the medium of instruction in all scientific specializations in the Arab Gulf region's HE institutions.

1.1.2 The EFP at the College

EFPs, designed for the new students' intakes, are integral programs in HE institutions in the Arab Gulf region. For example, colleges such Bahrain Polytechnic (Bahrain Polytechnic, n.d.), Algonquin College in Kuwait (Algonquin College, n.d.) and the College in Muscat offer EFPs. In addition to teaching English language, the EFPs teach IT and mathematics to ensure that HE students are well equipped with the language skills, computer skills and mathematical skills that they need in their PFP specializations.

As for the College's EFP, such program lasts for four semesters, where the duration of each one is approximately 14 weeks. The EFP consists of four levels and according to the students' scores in the College's in-house Placement Test, they are placed at one of the four levels. For the EFP's levels 1, 2 and 3, the English language modules for such levels cover the four language skills: writing, reading, listening and speaking. The EFP's level 4 covers the abovementioned skills, in addition to the Projects and Presentations module.

On the College's website, the ELC director urges the EFP's students to seek knowledge, to apply such knowledge to new situations and to have a role in extra-curricular activities. Furthermore, the ELC director relates the advantages of having such knowledge and skills to the students' employability opportunities. He refers to the impacts of CT teaching on students, in terms of being active thinkers, having social responsibilities and acquiring professional competencies. In view of this, the following section presents the definition of CT and the controversy around such definition in literature.

1.2 Definition of CT

CT is a controversial concept, with no consensus on its definition in literature and education research literature. Petress (2004, p.1) defined the concept as "a pervasive academic literature term". Likewise, Lloyd and Bahr (2010, p.1) stated that CT is "neither clearly nor commonly understood".

Thus, the reason for this conceptual diversity is because CT is studied in several scientific disciplines and applied to multiple contexts (Almeida & Franco, 2011). To escape "this state of puzzlement", Moore (2013, p.508) explained that the concept should not be defined in a one-line definition or in isolation, as this could not help in the comprehension of its meaning. Moore (2013) cited other scholars such as (Clinchy, 1994; Barnett,1997), who all together shunned the idea of a unitary definition of the concept. Alternatively, they considered a multiple-faceted perspective for a comprehensive definition of the concept.

Moore (2013) referred to Clinchy and argued that CT is better defined within the context of a certain discipline that would term its meaning. The latter scholar classified CT, that is required in the academia, into two types; a ‘separated knowing’, and a ‘connected knowing’. The ‘separated knowing’ has the qualities of ‘detachment’ and ‘impersonality’, whereas the ‘connected knowing’, which is concerned more with an empathic understanding; in other words – trying to ‘get into the heads’ of those ones who wish to understand.

Accordingly, Moore (2013) reported seven CT definitional strands, from experienced academics in three fields; history, philosophy and cultural studies. The definitional strands, in terms of CT, are related to judgment, scepticism, simple originality, sensitive readings, rationality, engagement with knowledge and self-reflexivity.

Other definitions of the concepts referred to the autonomous entity of the individual in the active process of CT, defying the negative consequences of passive thinkers. For instance, Duron, Limbach and Waugh (2006, p.160) cited Norris’ definition of CT from the perspective of the individual as “deciding rationally what to or what not to believe”. Likewise, Paul and Elder cited in Petress (2004, p.2) described the active thinkers’ role in improving “the quality of his or her thinking by skilfully taking charges if the structures inherent in thinking and imposing intellectual standard upon them”. Also, Siegel cited in Moore (2013, p.507) defined the term as “the educational cognate of rationality’, and a critical thinker as ‘the individual who is appropriately moved by reasons”. Obviously, there is no single definition of CT, however there is an agreement that CT is one of the most important 21st century skill that needs to be taught for its multiple impacts. Because of the importance of CT teaching, the following section focuses on the definition of CT from an educational perspective relying on Bloom’s taxonomy.

1.2.1 CT in education within Bloom's taxonomy

In view of such controversy in relation to the definition of CT, Lai (2011) referred to many researchers such as Ennis, Facione and Halpern who are from different schools of thought like philosophy and education. Lai (2011, p.9) stated that despite the abovementioned scholars' areas of disagreements on a definition of CT, such scholars "agree on the specific abilities encompassed by the definition". Hence, CT is an umbrella term that is applied to different forms of learning styles and to approaches of thought processes. However, the abovementioned scholars agreed on the processes that occur when individuals apply CT. In addition to such processes, Lai (2011) referred to other CT relevant processes that scholars such as Ennis, Willingham and Tindal and Nolet have identified. Such processes are identifying assumptions, predicting and seeing both sides of an issue.

Moreover, Lai (2011) affirmed the role of higher order of thinking skills such as analysing, evaluating, interpreting, synthesizing information and applying creative thoughts to form arguments, solve problems, or reach conclusions. Consequently, Lai (2011) referred to Bloom's taxonomy as means of information processing skills. Furthermore, Lai (2011, p. 8) stressed the role of this taxonomy when it comes "to teaching and assessing higher-order thinking skills".

In addition to Lai (2011), other scholars such as Adams (2015) and Athanassiou, McNett, and Harvey (2003) related the importance of Bloom's taxonomy to CT teaching. In this view, some scholars such as Huitt (1998) stressed that CT is an integral part of higher order of thinking skills. The scholar referred to the importance of going through the six levels defined by Bloom, i.e. knowledge, comprehension, application, analysis, synthesis and evaluation, to reflect the variation in the cognitive levels.

In this context, Huitt (1998) described the higher levels of the taxonomy such as analysis and evaluation as the domains where CT enters. Such higher levels help individuals to go beyond

basic observations and memorisation. At higher levels of the taxonomy students tend to make their assessments or judgments based on an analysis of statements or propositions to look at parts and relationships (analysis) and then to put these together in a new original way (Huitt, 1998).

Previously, Dewey, as an education reformist, referred to thinking and reflecting skills as essential components of education. He stated that the education's role is beyond the content knowledge's attainment. Hence, education should be associated with the practical aspects of life such as social changes and democracy (Dewey, 1933). To achieve the above stated role of education, one should be active and persistent, in addition of being aware of beliefs and the supposed forms of knowledge (Dewey, 1933). Therefore, individuals should be engaged in an 'active process', where they think for themselves, raise questions and reflect on issues before they can reach good judgments.

Despite such disagreements on the definition of CT, there is conformity in the literature on the concept's positive academic impacts on students. In their study, Ghazivakili, Nia, Panahi, Karimi, Gholsorkhi and Ahmadi (2014) stated that the learning styles and CT teaching are closely associated with the students' academic performance. Likewise, Nasrabadi's and Mousavi's (2012) study affirmed that the role of CT approaches and cognitive learning styles in the students' academic achievement is inevitable. In view of this, Paul and Binker (1990) think that CT should be in the heart of educational reforms. In addition to achieving higher academic attainments, there are other impacts of CT teaching such as enhancing individuals' professional competencies and individuals' citizenries. As I believe in such significant impacts of CT teaching on individuals, the following section discusses my positionality or my stance as an insider researcher reflecting my perceptions behind conducting this research.

1.3 My positionality and power relations in the EFP

Kezar and Lester (2010) referred to the concept of positionality as the intersection of different aspects of individuals' identity, such as race, class, and gender. Furthermore, the abovementioned scholars referred to the impacts of such aspects on the individuals' perspectives and social constructs of the world. Throughout the process of this research, such aspects did not influence this project. While conducting this research, my race, class and gender did not create any issues related to positionalities. Hence, in the process of this qualitative research the narratives that were formed were influenced by my position as a faculty member and my experience as a researcher in relation to the participants (Greene, 2014). In view of this, my positionality as a faculty member and an insider researcher was the capacity that helped me to create a shared space shaped by both the participants and me (Bourke, 2014). So, my insider positionality helped to experience some of the advantages that were mentioned by Chavez (2008). For example, my position as a faculty member for five years at the College and my familiarity with the participants aided me in establishing insights and good rapport with them in the interviews. Also, another important point that helped me in this research is some aspects related to my personality. In this view, Moser (2008) defined the researcher's personality as the new positionality. The scholar affirmed that the researchers' social skills, interests and emotional responses affect their access to the participants and the degree to which such participants open up. In this context, such positionality and my interest in the concept had an impact on the EFP participants' stories and the material gathered in the process of this research.

In terms of other components of positionalities such as, power relations in the research context, it's the research process that defines the level of power sharing and the academic relationships (Muhammad, Wallerstein, Sussman, Avila, Belone & Duran, 2015). Likewise, Karnieli-Miller, Strier and Pessach (2009) referred to the role of qualitative inquiries in reducing power differences between the researcher and the participants. In this view, there was no kind of

power imbalance in this research process between the participants and me. In their capacity as participants; neither the EFP professors nor even the EFP students were in a less power position in the institution's academic environment. Similar to other qualitative research, the process of this research was democratized. The lack of power imbalance differences encouraged disclosure and authenticity between the participant and me (Karnieli-Miller et al., 2009). Such disclosure and authenticity in the EFP participants' narratives gave more insights into such participants' perceptions, experiences and CT teaching in the College and in the region. Thus, these insights shaped my rationale behind this research. In this view, the following section presents the rationale and aim for this study.

1.4 The rationale, aim and the research question for this study

Many scholars criticized the hefty budgets and hard infrastructure reforms in the affluent Arab Gulf region for not meeting such reforms' expectations, regionally and internationally alike. For example, Cheema (2014) referred to Qatar and highlighted the discrepancy between the high budget's education reforms and the students' low performance in international standardized tests that require higher order of thinking skills. Also, Al-Mahrooqi (2012) referred to the Omani experience in education reforms and the disappointing results of students in HE institutions' entry tests.

Consequently, the rationale for this study is to consider education reforms from a different perspective. Thus, this study highlights the drawbacks of the present reforms and, alternatively, focuses on the impacts of CT teaching in fostering students' academic, personal and soft skills as means of reforms. Subsequently, the rationale for this study stresses the impacts that CT teaching may have on the College's students' academic performance, in terms of enhancing their higher orders of thinking skills. This study draws the attention of reformists and education policy-makers in the Arab Gulf region to the importance, and the multiple impacts of CT teaching, focusing on its academic impact. It is important to note that CT is still in its infancy

in the region, even among educators. Alazzi's (2008) study indicated that social studies teachers have little familiarity with the definition of and the teaching strategies related to CT.

CT teaching has significant impacts on students' academic, professional and personal realms. So, because of CT impacts, teaching the concept should be of a priority to educators, in the Arab Gulf region, especially at this present time of economic and political instability in the region. Consequently, the aim of this explanatory and exploratory study is to investigate the teaching and the practice of CT in the EFP. Moreover, the study hopes that such investigation would contribute to enhancing CT teaching in the EFP learning-teaching process. Hence, to examine CT teaching in the EFP, I crafted the following research question:

How does the learning- teaching process in the English Foundation Program at the College foster critical thinking teaching?

1.5 An overall view of the thesis

This thesis consists of six chapters, and this chapter describes the contextual backgrounds of the study and presents a brief overview of the thesis. Chapter two is the literature review chapter, and it reflects the conceptual background of this research in three sections. The first section gives a brief history of education in Oman focusing on educational reforms. The second section reports on the present HE systems' status in the Arab Gulf region, including Oman, and the discouraging outcomes of such systems. The third section presents CT in its capacity as the key concept in this study and its impacts on students' performance, inside and outside classrooms. This section discusses CT teaching, focusing on the professors' role as facilitators and constructivism's role as a learning theory that helps in constructing the concept in classrooms.

Chapter three describes the methodology employed in this study and presents this research as a qualitative case study and the rationale for adopting such approach. It refers to the methods applied throughout this case study such as documentary analysis, semi-structured interviews

and a focus-group interview, to collect data as well as the rationale for using such methods. Chapter three discusses the procedures used for analysis, which are Littlejohn's framework of analysis for language teaching materials in the EFP (Littlejohn, 2011) and a qualitative thematic analysis (Braun & Clarke, 2006). Also, it discusses the limitations of this case study and the ethical considerations addressed in this research.

Chapter four reports on the analysis process of this study's four data sources and presents the findings from the qualitative thematic analysis. Chapter five discusses such findings in terms of the literature reviewed and constructivism as a learning theory in enhancing CT teaching. Chapter six gives a summary of this study's findings presenting the pedagogical, institutional implications of the research and the implications for practice. Also, it provides the limitations of this study and the recommendations for enhancing CT teaching in the Arab Gulf region, and it gives further suggestions for future research in this relatively unexplored area of CT.

Chapter two

Literature Review

2.1 Introduction

This chapter sets the conceptual framework for this research in three sections. The first section presents the educational reforms in Oman, focusing on the disappointing outcomes of such reforms in the national and international tests. The second section reviews the present status of HE in Oman, and explains the challenges that such system faces, despite the high budget allotted for education reforms. The third section describes the role of CT in education and its multiple impacts on individuals. This section examines CT in the College's strategic plan, discusses its attainability and the challenges that are related to teaching the concept. In view of this, this section focuses on professors' role as facilitators and on constructivism as a learning theory to enhance CT teaching as a threshold concept.

2.2 Part One: Educational reforms

2.2.1 Educational reforms and the Basic Education System

Before the 1970s, the illiteracy rate in the adult population in Oman was staggering. According to the United Nations Educational, Scientific, and Cultural Organization's statistics, the illiteracy rate was 65.7% (Al Hinai, 2010). 1970 was the year His Majesty ascended to power and it is a turning point in the history of education in Oman. In his first speech, His Majesty affirmed that "he would give education urgent and special attention" (Al Ani, 2015., p.4).

In the 1970s, the first national education system, known as the General Education System (GES), which was implemented for thirty years, shared similarities with other Arab countries' curricula. In 1998, under 'Vision 2020', the GES was replaced by the new 'Basic Education System' (BES): a reforming education system. BES promotes quality of education reflected in inquiry and investigation, rather than adhering to rote learning (Martin, 2007).

Despite the huge finances that have been allotted to the BES, the outcomes are still not up to expectations. Al-Issa and Al-Bulushi (2012) used figures to prove that the majority of students, who spent 12 years studying English under the BES, have low English language proficiency. This is a serious issue, as English in Oman is the only foreign official language and it has institutionalized domains such as business and education (Al-Issa & Al-Bulushi, 2012). Also, English is the only medium of instruction in scientific specializations in HE institutions. Al-Issa's and Al-Bulushi's (2012) study revealed an alarming fact that should urge education policy-makers to advocate reforms. Both scholars underlined the discrepancy between the extensive twelve years of learning English and mathematics at schools, and the secondary schools' graduates' low attainment in the compulsory English and mathematics entry exams into HE institutions.

In the same context, Al-Mahrooqi and Asante (2010) concluded that the BES has not yielded gains that are worth the huge investments. Both scholars relied on the Omani school graduates' low performance level to voice their point. Al-Mahrooqi (2012, p.263) expressed her concerns about such students' low performance stating that, "students continue to graduate from schools with inadequate English language proficiency and the majority therefore require remedial or intensive courses in a 'foundation' program in English before beginning tertiary level study". Therefore, educators start to question the reasons behind students' low performance in national as well as in standardized international tests.

2.2.2 Performance of the Arab Gulf students in standardized tests

The Arab Gulf states' students' performance in general, and Oman in particular, in standardised international tests is disappointing. Scholars questioned the reasons behind such poor performance in global standardized testing, such as Trends in International Mathematics and Science Studies (TIMSS) and the Programme for International Student Assessment (PISA). For example, Andreas Schleicher, PISA chief statistician, described the attainment

level of Arab Gulf states' students in the PISA tests as "deeply disturbing" (Plackett, 2014, p.1). Taking Qatar as an example, Cheema (2014) referred to the inconsistency between the education reforms' high budgets and the students' low attainment in PISA and TIMSS.

One of the reasons for the low performance of the Arab Gulf region's students in standardized tests, is that such tests focus on higher order skills such as CT (Smith & Szymanski, 2013). Therefore, scholars in the region, such as Cheema (2014) in Qatar and Al-Issa and Al-Bulushi (2012) in Oman, criticized the pre-university education system, where the schools' syllabi are teacher- centred and are far from enhancing CT skills.

Lee, Lee, Makara, Fishman and Hong (2015) asserted the impact of pre-university education on acquiring generic skills, such as CT, in HE. Eventually, on joining HE institutions, the students' approach continues to reflect their schools' cultural organizations. Seyabi and Tuzlukova (2014) criticized the Omani schools' learning-teaching processes for relying massively on memorization, rather than developing problem-solving techniques and CT skills. Likewise, Alkhausi, Yahmadi, Al-Kalbani, Clayton, Al-Barwani, Al-Sulaimani, Otherine & Khan, (2015) referred to the large discrepancy between schools' and universities' academic systems for being responsible for the students' low competency in their first year in HE.

Therefore, researchers have long been concerned about the Arab students' low attainment in national and standardized tests. Barber, Mourshed and Whelan (2007) regarded such concerns as a wake-up call for the region's education policy-makers. Likewise, Abdel-Moneim (2015) described the Arab Gulf students' poor performance in international standardized tests as alarming. Subsequently, reformists advise education policy-makers to avoid hard infrastructure reforms, and focus on qualitative measures, such as the teaching quality and the teaching materials. Moreover, researchers urge policy- makers in the region to examine the status quo of education and address the challenges students face.

2.3 Part Two: Higher education system

2.3.1 Current status of higher education in the Arab world

Researchers such as Faour (2011) and Davies (2015) expressed their concerns regarding the accelerating level of expenditure on educational reforms across the Arab Gulf region without meeting the expectations at the regional and international levels. Masri and Wilkens (2011) demarcated the quality of HE in the Arab world for failure to keep pace with global standards. Thus, the failure of quantifiable measures reforms has urged educators investigate the matter from a different perspective. Educators looked at the status of education from a comprehensive perspective. One of the drawbacks of the present education systems is the theoretical ‘antiqued curricula’ (Davies, 2015). Such curricula lacked the human components of moral and citizenship education and critical approaches (Faour, 2011). Al-Rashdan (2009, p.77) stated that “international organizations consistently release mostly negative and sometimes deeply pessimistic reports about the state of higher education and research in the Arab world”. Therefore, the following sections focus on the importance of HE to global economy and the challenges that face such system.

2.3.2 Importance of higher education to the Arab Gulf region at the present time

Oman has become part of the global economy, after signing the General Agreement on Trade in Services in 2002. Hence, Oman has taken serious steps to modernize HE, in terms of quality and quantity. HE is the avenue to develop human resources for the workforce. Being part of the global economy, this has been an incentive for Oman to give more attention to HE in order to cope with the economic changes in the global market (Donn & Issan, 2007).

With the region’s political instability and the decline of oil prices, the Omani government has launched reforms and strategic initiatives in HE (Al Abri, 2015). Thus, the policies of the HE system in Oman are adjusted to meet the national, regional and global demands. At the national level, the demands of the labour market, schooling system, political and social contexts are the

driving forces for policies and reforms. Regionally, the Gulf Cooperation Council (GCC), which consists of Bahrain, Kuwait, Oman, Qatar, the Kingdom of Saudi Arabia (KSA) and the United Arab Emirates (UAE), plays a role in shaping the policies of HE in the whole region. For HE in Oman to meet the global challenges, many aspects have been considered, such as attention to English language, introducing employability skills, information technology literacy, global ranking, international HE providers and accreditation.

Huson (2015) referred to the efforts exerted by the Omani government to improve the academic quality. There are different features of reforms, for example Oman renounced a copy-and-paste adoption of Western-style approaches in its education system. Therefore, Oman modified, and tailored, strategies adapted to the Omani context. Hence, Oman is not playing the role of a passive recipient of change (Huson, 2015). Furthermore, in 2002 the Oman Accreditation Council and the Quality Plan were established (cf Carroll, Razvi, Goodliffe & Al-Habsi, 2009). HE institutions' accreditations undergo two stages; the first is the institutional quality audit and the second is the institutional standard assessment such as the Approach, Deployment, Results and Improvement (ADRI) cycle, to ensure the teaching and learning quality level. Formal evaluation procedures, using automation software platforms or management systems to collect students' feedback for review at the institutional level, seem to have been implemented successfully to provide long-term data for quality assurance. Despite all these reforms and efforts to modernize HE in Oman, it still faces serious challenges.

2.3.3 Challenges facing higher education in Oman

Oman is trying to ensure quality in its education system by devoting hefty finance and establishing governing bodies such as the Quality Assurance Council. However, several studies criticised HE in Oman for failing to meet the needs of the private and public sectors. This is due to its inability to equip HE students with knowledge and soft skills, such as CT skills and problem-solving strategies. In their study, Baporikar and Shah (2012) pointed to the outmoded

pedagogical practice, the challenges of learning in English and the students' unprepared mindset for HE as factors behind the students' low performance. Baporikar and Shah (2012) investigated the reasons behind HE students' poor attainment and lack of CT from a sociocultural perspective. They referred to the students' low motivation mindset as the main reason for not acquiring the academic and transformative criteria of HE. Both scholars concluded that students seek HE to pass exams and to obtain degrees as required credentials. Baporikar and Shah (2012, p.17) spoke up for autonomy- supportive HE institutions where students should act as thinkers and planners and "teaching should aim to encourage learners to develop a capacity for critical thinking and taking control over their own learning". Likewise, James and Kumar (2015) evaluated CT in Nizwa University in Oman and stressed the importance of acquiring such concept in HE because its crucial impacts on individuals' careers. James and Kumar (2015) strongly recommended teaching CT skills to be part of the curriculum of HE institutions. Both scholars blamed the poor schooling system and the gap between secondary education and HE for being the main reasons for graduates' low performance at the academic, personal and professional levels.

Most students approach HE with a teacher-centred approach as a continuation to their schooling system. Therefore, some HE institutions such as Caledonian College in Muscat offer Personal Development Planning (PDP) programs to equip their students with the soft skills required by the labour market. In the PDP program, students are offered modules to help them enhance their CT skills and improve their personal capacities to be prepared for their professional careers (Goodliffe, 2005).

James's and Kumar's (2015) and Baporikar's and Shah's (2012) studies concur with the findings of this study. The College's students approach their HE with the same traditional school pedagogy. Students face many challenges at the academic level, such as understanding instructions, being active learners, facing cognitive challenges and applying soft skills. For such students to overcome these challenges, they need to be active thinkers and acquire CT

skills. Evidently, such challenges are the overlooked factors behind students' low performance. Based on this assumption, I set up this study to investigate CT teaching in the EFP learning-teaching as it contributes to students' academic, personal and professional performance. As already stated, Goodliffe's (2005) study stated that PDP program for enhancing CT has a positive impact on students' performance. Consequently, the PDP programs should be considered by other HE institutions in Oman. Many graduates struggle with competencies, simply because they lack soft skills such as CT. The following section focuses on examples related to the impacts of the lack of CT teaching on individuals' intellectual and professional proficiencies.

2.3.4 Higher education and professional challenges

Another area of concern to educators in the Arab world is the drawbacks of HE in relation to the graduates' professional competencies. Weerakkody, Al-Esmail, Hindi, Osmani, Irani and Eldabi (2015) presented the findings of The Global Human Capital Trends report and other related studies conducted by Ernst and Young that address the challenges facing the workforce in the Arab world. It was found that learning and development, human resources management, leadership, and culture and engagement are the top four drawbacks. Weerakkody et al., (2015) blamed the education system for not providing the right environment to create the professional skills to deal with such drawbacks.

Educators, in the region, blamed the education system for the drawbacks students and graduates face in their academic and professional performances. Al-Harhi (2002) criticized the education system for producing a power relationship in classrooms, where teachers have the sole authority. The scholar blamed such system of 'banking education' and the rigid hierarchy in classrooms for discouraging CT teaching. In this system, teachers act as disseminators of information, where there is little regard for students' output (Choy & Cheah, 2009). Under such circumstances, it is unlikely to create the right environment that fosters CT

teaching. To enhance CT teaching, AliaKbari and Allahmoradi (2012) emphasised the importance of having a democratic classroom environment.

2.3.5 New perspectives in higher education reforms in the Arab Gulf

Reformists in the Arab Gulf region are starting to adopt different perspectives to tackle the challenges created by the education systems. Changes have started to take place with a slow increase in research, in relation to CT. However, a strong tendency for appreciating its outcomes in different areas of education is growing. In a study conducted at the Nursing School in the UAE, Kaddoura (2011) pointed out the importance of teaching CT skills in the field of healthcare; firstly, as an essential nursing competency since 1979, and secondly for equipping nurses with the ability to provide safe patient care.

In the same context, the KSA is known for its religious and traditional educational approaches, where “the culture is predominantly one of uncritical submission to authority” (Allamnakhrah, 2013, p. 205). Nonetheless, scholars in the KSA support educational reforms as a priority. For instance, Allamnakhrah (2013) supported the necessity of educational reforms, where CT teaching should be incorporated in the education program. Allamnakhrah (2013, p.198) underscored the importance of CT teaching beyond enhancing the academic achievement. He referred to CT skills as “tools for cohesive social function”. A similar view was echoed by Kurfiss (1988, p. 8), who characterized CT as “an essential capacity of citizens in a healthy democratic society”. In view of the importance of CT, the following sections present the elements related to CT in the College’s strategic plan and to the challenges and theory related to teaching the concept.

2.4 Part three: CT and education

2.4.1 CT in the College’s strategic plan

Attaining generic skills such as CT is one of the most important learning outcomes of HE (Stassen, Herrington & Henderson, 2011). Therefore, the College’ strategic plan emphasises

CT teaching. For example, the College's graduates' attributes urge its students to implement CT skills in their academic, professional and personal aspects of their lives. In the College's strategic plan, under graduates' attributes, Attribute 3 states explicitly that graduates are expected to be able to think critically, analyse and solve problems. Likewise, Attribute 9 reflects the impact of CT on the concept of citizenry. Attribute 9 ensures that graduates develop into socially responsible citizens that have positive contributions to their society.

Evidently, acquiring CT is an integral part of the College's written and unwritten attributes. Nevertheless, CT skills teaching and assessments are demanding for students and teachers. Ali's (2012) study at a HE institution in Muscat, focused on the challenges that English as a Second Language (ESL) professors face when teaching CT. Ali (2012) defined the challenges as being pedagogical and conceptual. He reflected on the traditional teaching methodologies and the professors' focus on core subjects, rather than generic skills as part of the challenge.

A point of concern that Ali (2012, p.47) raised regarding generic skills teaching is the professors' "lack of understanding how to teach them, and they are often too de-disciplined and decontextualized". Likewise, Ngoc Du (2015) stressed some constraints that hinder CT teaching in educational institutions. The scholar defined such constraints as the limited school democracy, low teacher autonomy and traditional pedagogy. Nevertheless, the College's website refers to constructive teaching methods such as collaborative and cooperative learning to enhance CT teaching. Also, the College's strategic plan reflects other values such as creativity, communication and flexibility that enhance CT teaching.

Moreover, the pedagogical framework (PF) is another medium for understanding the College's organizational culture. Such PF reflects the College's pedagogical philosophy, where the teaching, learning and assessment processes revolve around it. Unquestionably, CT is stated in the College's PF, however the concept is reported briefly as part of the learner-centred approach, with weak emphasis. Furthermore, there are some important CT criteria that are

overlooked in the College's PF. For example, the explicit reference to CT within the College's frame, the methodologies to enhance CT teaching and the assessment of the concept are not stated. Nevertheless, Elder (2004b) stated that to attain CT, it is important to place the concept in institutions' official documentations.

The College's university culture, or "the personality of an organization" (Fralinger & Olson, 2007, p.86) and its values act as a "latent guide" (Kleijnen, Dolmans, Muijtjens, Willems & Van Hout, 2009, p.234). Referring to the College's values, one can perceive the traditional culture of the institution. For example, professionalism in the College "is associated with power and legitimacy" (Martimianakis, Maniate & Hodges, 2009, p.833). In this case, professionalism in the College's context is geared towards the modes of delivery and the teaching quality, rather than offering a transformational change or innovation. Likewise, the College's values are related to how to "manage ethics" (Moore, 2006, p.416), and to explain "the way things get done around here" (Van Kemenade, Pupius & Hardjono, 2008, p.178). Evidently, the traditional organizational culture is dominating the College's learning- teaching process. Scholars in Oman such as Al-Issa and Al-Bulushi (2012) and Al-Mahrooqi and Tuzlukova (2014), stated that traditional pedagogies are common features in EFPs. This is a challenge that faces CT teaching in EFPs in HE institutions in Oman.

2.4.2 Challenges of CT teaching in the EFPs

Ali's (2012) study referred to the importance of teaching CT to students to equip them with personal and professional attributes. Ali (2012) raised a salient point; despite the use of the ADRI cycle in the operational plan to implement CT skills, there are still challenges that could affect the teaching of the concept. He added that such challenges could hinder the learning-teaching process for students and professors. To emphasize his point, Ali (2012) cited McLean where the latter compared the teaching and learning of discipline knowledge to the acquisition

of generic skills such as CT teaching. Ali (2012, p.45) claimed that “teaching and learning discipline knowledge is believed to be easier than teaching and acquiring generic skills”.

Mehta’s and Al-Mahrooqi’s (2015) research in the EFP at Sultan Qaboos University (SQU) agreed with Ali’s (2012) study. Mehta and Al-Mahrooqi (2015) and Ali (2012) referred to the challenges that the students face in learning generic skills in the EFPs. Mehta and Al-Mahrooqi (2015) highlighted such challenges from a different perspective; a point that could be of importance to other EFPs in HE institutions. At this challenging stage of learning English language, acquiring CT skills is not a priority for the ESL learners. For many students the EFP is a challenge, as this could be their first intensive encounter with the English Language. Furthermore, for many EFP students, this could be their first mixed-gender classes, having foreign or western professors and studying English in a cultural frame.

The EFP students are going through sudden changes, so their main focus at this stage is just to pass the EFP. The EFP is a compulsory prerequisite for the students to embark on their specialisation at the PFP. Consequently, many students, with the help of their EFP professors, adopt surface learning strategies so they may be able to pass across the EFP’s four levels. Students adopt surface learning approaches because of their fear of failure (Perkins, 2006). Therefore, learning CT is not a priority to the EFP students at this stage.

2.4.3 CT teaching

Despite the abovementioned challenges that face CT teaching, we as educators should teach CT for many reasons, mainly for its impacts. Ennis’ article, ‘A Concept of Critical Thinking’, is considered as a major contribution to CT in education. Ennis (1962) focused more on the concept’s practical aspects asserting that CT practice is often unnoticed. Ennis (1962, p.81) defined the concept as the “correct assessing of statements”. The scholar sketched out 12 aspects of CT. These aspects are related to the use of logic and reasoning in assessing statements and clarifying ambiguities. Other aspects are related to “identifying assumptions,

judging the adequacy of a definition, and discerning if an assertion made by an alleged authority is acceptable” (The foundation for Critical Thinking, n.d., p.1). Rotherham and Willingham (2010, p.17) defined CT and problem- solving as 21st century skills, emphasising that such skills have been the “components of human progress throughout history”. Both scholars recognized the concept within education and stressed that CT teaching and knowledge teaching are equally important, as both components are intertwined. Consequently, Rotherham and Willingham (2010) urged education policy- makers to consider CT teaching and assessments to ensure the concept’s attainability despite the possible challenges.

Facione (1998) elaborated on CT impacts on individuals differently. The scholar raised attention to distracting issues, apart from education, that arise when people are incapable of applying CT to their life. Divorce, poor achievements and other pressing issues are the consequences of failing to think critically. Another aspect of the importance of CT teaching is its transformative effects on the personal, political and social perceptions of individuals. Due to that fact, CT has been a dominant concept in philosophy and science for its apparent impacts on individuals and, thus, the society. Consequently, scholars such as, Faour (2011), expressed their concerns for the absence of CT from the Arab region’s schools’ curricula with apprehension. Faour (2011) acknowledged explicitly the necessity of teaching CT to ensure the concept’s impacts on better education, citizenry and peace. However, CT is a challenging, time-consuming and a pressing concept to teach. In view of this, the following section discusses the role of applying Bloom’s taxonomy to facilitate teaching such concept.

2.4.3.1 Applying Bloom’s taxonomy to teach CT

Because of the vitality of CT impacts on individuals, the structured teaching of such concept should be of priority to educators. The teaching of such a demanding concept could be achieved through the implementation of Bloom’s taxonomy. Such taxonomy consists of six learning categories that reflect a number of skills which are essential to the process of CT teaching. The

taxonomy's six learning categories are divided into lower- order and higher order of thinking skills. Such categories range from the simple recall or recognition of facts, as the lowest levels, to more complex and abstract mental ones, as the highest levels (Forehand, 2010). Krathwohl (2002) referred to some categories such as knowledge, comprehension and application to reflect lower orders of thinking skills. However, categories such as analysis, synthesis and evaluation reflect higher order of thinking skills (Krathwohl, 2002). In this context, Athanassiou, McNett, and Harvey (2003) perceived Bloom's taxonomy as a way to reinforce teaching aspects that reflect higher order thinking skills. Moreover, the abovementioned scholars added that integrating such taxonomy in teaching helps classrooms to be more student-centred.

Consequently, the integration of Bloom's taxonomy can enhance CT teaching, as the categories of this taxonomy contribute to the achievement of such concept. To build CT skills it is important to have a vast domain of knowledge and to be exposed to different fields (Zwaagstra, 2016), as knowledge is one of the first categories in Bloom's taxonomy. Adams (2015) referred to this category as a foundational cognitive skill which involves the retention of information like facts and definitions. In the same context, Forehand (2010) described the hierarchical taxonomy as a stairway that encourages the students to approach higher levels of thought. By the same token, Lai (2011) placed Bloom's taxonomy with 'comprehension' at the bottom and 'evaluation' at the top and its three highest levels which are analysis, synthesis, and evaluation as gradual processes to CT.

However, such process is a challenging one, since CT teaching is known to be demanding and time-consuming, where time and dedication are fundamental. Despite such challenges that face CT teaching, most of the HE institutions' strategic plans refer, explicitly and implicitly, to the concept as one of their goals to be achieved. Thus, professors must ensure CT teaching in their learning- teaching processes. Subsequently, it is important to consider the learning theory that underpins the teaching of a threshold concept.

2.4.4 Constructivism and CT teaching

Learning theories, as conceptual frameworks, describe how learners process and retain knowledge in their learning- teaching processes. Therefore, Ertmer and Newby (2013) referred to the importance of linking research to educational practices. Both scholars affirmed that learning theories should be translated into practice, so as to deal with practical learning issues and to facilitate learning.

To teach threshold concepts such as CT, there are some measures that need to be considered. Vong and Kaewurai (2017) listed these measures as the following: the appropriate instructional methods, curriculum materials, active learning strategies, explicit CT instructions and student-to-student as well as student-to-instructor interactions. In view of such measures, adopting constructivist principles would help in enhancing CT teaching in classrooms. The first principle of constructivism centres itself upon the nature of knowing, whereas the second one emphasises the learner's active role (Jones & Brader-Araje, 2002). Hence, applying the two abovementioned constructivist principles contributes to enhancing CT teaching. In support of this, Maudsley and Strivens (2000) stated that approaches such as valuing prior knowledge and encouraging the learners' responsibility explicitly foster CT teaching.

Another principle of constructivism is that the theory does not deal with passive knowledge. Learners construct and reconstruct knowledge to enhance CT teaching by being active, social and creative learners (Perkins, 2006). Based on such principles, learners are active participants, whereby they develop their cognitive schemas through their interaction with others, with the environment and their prior knowledge. Likewise, Smith (1999) commended constructivism as it regards learning as a dynamic approach of knowledge-building where the learner is actively engaged with his/her surrounding environment and other learners. Chen (2001) referred to constructivism as the learning theory to underpin CT teaching. The scholar added that to teach CT, educators need to view students as active and self-regulated constructors of knowledge,

where they can go beyond information. Consequently, constructivism fosters CT teaching as such theory supports the learners' autonomy and their capability of constructing knowledge. Also, collaborative learning (Gokhale, 1995) and learning-teaching contexts (Bloomer & Hodkinson, 2000) are two vital principles of constructivism that are essential to enhance CT teaching.

Furthermore, Topolovcan and Matijevic (2017) stated that CT cannot be taught in teacher-centred classes, because the practice of the concept needs student-centred ones. Likewise, constructivist learning principles focus on student-centred classes, where activities are based on lower and higher order of thinking skills. Such activities require the learner to go beyond the factual levels of information and apply higher orders of thinking skills such as problem-solving skills and CT skills.

Constructivist principles enhance CT teaching, as the learners are expected to cooperate, collaborate and to use their prior knowledge to construct and reconstruct new knowledge. Consequently, such learners will have a "better retention, understanding, and active use of knowledge" (Perkins, 2006, p. 35). To reinforce the above theory, such collaboration, as a principle of constructivism, enhances CT teaching. Gokhale (1995) cited Vygotsky to prove that learners in collaborative situations perform better at higher intellectual levels. In the same context, and based on their study, Topolovčan and Matijević (2017, p. 47) confirmed that "critical thinking is by far the most prominent dimension of constructivist learning". Likewise, Chen (2001) cited Ennis to affirm that research suggests that constructivist approaches are integral to CT teaching.

In view of this, the application of the constructivist theory's principles enhances CT teaching, hence, CT is an attainable concept. However, there are some contradicting views which imply that CT is not an attainable concept. Such views define CT as a social practice related to western

cultures. The coming sections discuss the ongoing debates of defining CT as a western concept and the possibilities of attaining the concept.

2.4.5 CT: Is it a Western concept?

Despite their geographical locations, most HE institutions prioritize CT skills attainment as one of their goals. Even so, Barnett cited in Moore (2013.p. 508) synonymized CT as “one of the defining concepts of the Western University”. Barnett’s CT constrained association with western HE institutions brought up the “the stereotypical argument of eastern versus western learning approaches” (Lee et al., 2015, p.132).

Lee et al. (2015) gave examples of some comparative studies that reflect on eastern and western students’ attitudes. The scholars explained the findings of these studies that the Asian learners think less critically, in comparison to westerns who use formal rule-based reasoning. However, Lee et al. (2015) asserted that the reason for such findings is not the superiority of the western culture. The scholars stated that there are other factors that enhance CT and they are often overlooked in such arguments. Subsequently, Lee et al., (2015) presented a strong counter argument citing other researchers who counted on other factors that move beyond the role of culture to enhance CT. For example, Lee et al., (2015) referred to Becher and Trowler for underlining the effect of disciplines. Also, the scholars mentioned Cortazzi and Jin for highlighting the role of language, and they referred to Biggs for emphasising the impact of pre-university education. Furthermore, Hofer (2008) accentuated students’ epistemological beliefs as strong influences on learning CT skills. Thereafter, Hofer (2008) acknowledged the equal influence of social and school cultures on students’ epistemological beliefs. The scholar elaborated on his stance arguing that even the cultural aspects of CT that are embedded in individuals’ epistemological beliefs can be shaped or changed by education. As evident from this discussion, “critical and creative thinking are more highly influenced by educational environment than by individual factors” (Lee et al., 2015, p.143).

2.4.6 CT attainability

Previously, Atkinson (1997) defined CT as a social practice, rather than a decontextualized cognitive skill. He discouraged ESL professors from adopting CT teaching in their classes. Atkinson (1997) rested his argument on two facts; the first one is that CT is a social practice that is hard to teach. The second fact is that CT is unfamiliar, and even unaccepted, in ESL classes, in conservative contexts that are governed by cultural and religious conformity (Atkinson, 1997). The scholar rationalised his views stating that the concept has strong cultural components. It is a non-overt social practice, rather than a teachable pedagogy. Atkinson (1997) continued to affirm his views averring that CT is learned intuitively without depending much on the context of instructions.

More recent studies turned out to be contradictory to Atkinson's (1997) views. For example, Van Gelder (2001) disproved the definition of CT as a tacit social practice, rather than a concept that can be taught and improved. Van Gelder (2001) cited a study that proved that the students, who received focused instructions in CT, performed better than those who did not receive such instructions. Eventually, Samson (2016) referred to Deal' and Pittman's study that showed similarities to Van Gelder's study. Such researchers reflected that purposeful instructions, student-centred approaches, effective teaching methodologies and diverse learning activities influenced higher levels of CT and improved the students' learning outcomes. Despite that, both studies made known that the differences in CT attainment were not of major significance. Still, such studies prove that there are ways to teach and improve higher thinking skills. Both studies' findings suggest some "comprehensive and rigorous studies to further identify ways to improve the development of critical thinking" (Samson, 2016, p.151).

Fahim's and Bagheri's (2012), study in Iran, agreed with Atkinson on one aspect of his argument, which is the limitations of teaching CT in fundamentalist contexts. Both scholars viewed teaching CT skills in Iran as a perilous attempt, because of the imposed political and

religious constraints. Even within these restrictions, the scholars stated that CT teaching could be practiced in Iran's fundamentalist context by discussing less threatening topics that are not associated with "religious or political matters" (Fahim and Bagheri, 2012, p.1125).

Kuek (2010) investigated the possibility of CT teaching to ESL students in Southern Sudan. He questioned Atkinson's inferences that affirmed ESL students' incompetence in attaining CT skills. Kuek (2010) raised an invigorating argument on whether or not the reasons for such drawbacks are because of cultural aspects, cognitive abilities or linguistic deficiencies. Mehta and Al-Mahrooqi (2015) shared the same concerns as Kuek's (2010). Both scholars concluded that attaining CT skill is not a priority for ESL learners in SQU in Muscat, as students are already struggling with the cultural and linguistic aspects of the language. To reinforce his views, Kuek (2010) cited Franklin who concluded that the students' low performance in acquiring higher thinking skills tends to improve when their familiarity with the task material progresses. In his argument, Kuek (2010, p.28) proposed a significant question, "Is it possible that, in any part of this planet, there are communities who perform their daily activities without applying any kind of rational judgments to their actions?". To strengthen such concept, CT is valued as part of human disposition. Hence, CT could be acquired, and nurtured, provided that the right environment and the right teaching methods are available. In this context, the following section addresses the professors' role in facilitating CT teaching.

2.4.7 Professors' role and perceptions in CT teaching

One of the ongoing debates is whether to teach CT formally, as part of the curriculum, or not. An example of this is Sternberg's and Williams's (2002) and Duron's et al., (2006) contradicting views. Sternberg and Williams (2002) stated that students do not have to be taught to think critically, as it is a natural process that everyone experiences. In contrast, Duron et., (2006) adopted an opposite stance. Duron et al., (2006, p. 160) affirmed that thinking is a natural process but it cannot be left to itself, because "excellence in thought must be cultivated".

Hence, Duron et al., (2006) believe that it is the professors' responsibility to foster CT teaching. Likewise, Aliakbari and Allahmoradi (2012) agreed on professors' role in enhancing CT. Both scholars explained that professors should have less authority and share knowledge with students to enhance CT teaching. Furthermore, Choy and Cheah (2009) approved of professors' active role in fostering CT in their students. However, for CT to be practiced, Choy and Cheah (2009) stated that it is important to consider the influence of professors' perceptions of themselves and of their students. Professors' perceptions influence their behaviours in classrooms. Choy and Cheah (2009) affirmed that the way the professors perceive themselves as disseminators of information, or mediators of learning, plays a key role in students' CT acquiring skills.

However, scholars such as Polly and Hannafin (2011) and Taylor and Dirkx (2002), referred to studies, to prove that despite professors' espoused beliefs, the implementations of such beliefs is governed by classroom contexts. Hence, there is a misalignment between professors' espoused practices and enacted practices. Polly and Hannafin (2011) gave reasons for this misalignment such as the unsupportive school environment to adopt reform-based instructional practices, lack of students' motivation and the control of didactic teaching.

Nevertheless, Flessner (2014) looked into such misalignments differently. Flessner (2014) referred to the misalignment between university-based method courses in teachers' education and the schools' classrooms' realities. The scholar stated that the gap between research and practice and the differences between school teachers' and university professors' cultural orientations are the causes for such misalignment. In this context, Argyris (1995, p.20) highlighted the "fundamental, systematic mismatches between individuals' espoused and in-use designs". Furthermore, the scholar commended the role of action science in providing actions or solutions required to create the propositions in the real world.

Evidently, there is extensive literature on different aspects related to CT such as its definition, attainability and its impact on individuals and society. However, there is paucity in educational research and in research related to CT teaching, in particular, in the Arab world. The following section addresses the knowledge gap in this area of research in the Arab world.

2.4.8 Knowledge gaps in CT research

Abu-Orabi (2013), the Secretary General of the Association of Arab Universities, described the research output in the Arab world as weak and modest. To reinforce his statement, Abu-Orabi (2013) cited statistical data from the Arab Knowledge Report of 2009. The data showed that the Arab world's investment in research is 0.2-0.3% of its Gross Domestic Product. Abdelqader (2016) agreed with Abu-Orabi's statement on the paucity of research in the Arab world. However, Abdelqader focused on educational research and raised two points in relation to such research in the Arab world. The first point is the limitedness of such research on the development of education and its inadequacies. The second one is the importance of educational research, because of its impact on effective teaching processes. Abdelqader and Abu-Orabi reflected on the research gap in the Arab world where there "is lack of clear focus in research priorities" (Abu-Orabi, 2013, p. 21).

Even though CT is a key element in the majority of HE institutions in the region, the literature is still very limited on the concept. Chouari (2016, p.461) referred to the paucity of literature on CT, in the Arab world, as a serious issue for a concept that is "preparing students for their future life". Likewise, Aliakbari and Sadeghdaghighib (2013) referred to the rarity of research relevant to CT in Iranian contexts. Geographically, Iran is not considered as part of the Arab world. However, Iran shares religious and cultural features with the Arab world. Some of the issues that Aliakbari and Sadeghdaghighib (2013) had addressed in their study reflected aspects of the EFP learning- teaching process. Research in the area of CT can be applied to contexts that share similar cultural backgrounds.

There is an apparent lack of research in CT in the Arab world. Consequently, my aim is to research and add to knowledge in relation to CT in the region. Moreover, I expect that this research, similar to other educational research, will improve CT teaching and practice at my workplace.

In this study, I have investigated how the EFP's learning- teaching process fosters CT teaching. I have examined the concept in its natural setting within these four data sets; the EFP textbooks, the College's strategic plan, the professors' perceptions of CT and the students' perceptions of the concept. To reach the aim of the study, I adopted a new approach to knowledge. I relooked at CT from the perspective of the aforesaid four data sets to fill the gaps in these areas. As for the EFP textbooks and the College's strategic plan, I researched CT explicit elements, as well as the implicit ones and the underlying meanings of the concept. Based on such approach, I aim for in-depth knowledge of CT in the EFP textbooks and the College's strategic plan. Such profound knowledge of the EFP textbooks and the College's strategic plan can help the EFP professors in CT teaching. Choy and Cheah (2009) affirmed that professors need to have in-depth knowledge of CT to be able to teach it.

Furthermore, I conducted an in-depth investigation of the professors' perceptions and students' perceptions of CT. Both data sets are often un- researched despite their importance. Saginak, Scofield, Saginak, and Reljic (n.d.) asserted that there is a lack of research exploring professors' perceptions and students' perceptions of CT. Hence, I address all these gaps to contribute to the existing knowledge. Moreover, I refer to an important knowledge gap in relation to the conceptualization of CT in Islam. In the coming section, I elaborate on such point.

2.4.9 CT in Islam

CT conceptualization in the 'Arab-Islamic' culture is another area where there is a knowledge gap. There is a distorted belief that in the 'Arab-Islamic' culture there is no acceptability

towards CT, since in Islam there is a tendency to passivism. Richardson (cited in Clarke and Otaky, 2006) claimed that reflective practice and CT should not be part of teachers' education in the UAE as such practices are incongruent with the value of 'Arab-Islamic' culture. Nevertheless, Clarke's and Otaky's (2006) study gave evidence of Emirati student teachers embracing "critical thinking and reflective practice, demonstrating considerable self-awareness of their capacity for growth, development and change" (Clarke & Otaky, 2006, p.118).

Another misconception of CT in the 'Arab-Islamic' culture is that Islam is a religion that does not embrace thinking. In contrast, Islam is a religion that urges people to think, raising the presence of the Islamic concept of Ijtihad (Khan, 2006). Ijtihad, the ability of individuals to think independently and systematically, is a pillar concept of Islam. Ijtihad is often marginalized, mainly for political reasons, in authoritative regimes, especially over the last three decades. In support of thinking in Islam, Fahim and Bagheri (2012) cited some verses from the Holy Quran that exhort people to think and encourage them to understand diverse views. One of such verses is; "signs for people who think deeply" (Quran: Chap. 16, verse 69). Likewise, Fakhry (2004) referred to the acceptability of theological rationalism and scholastic theology as strong values in the roots of Islamic thinking. Both values encourage the approach towards controversial issues that are related to philosophy and dogma. Wilkinson (2014) acknowledged the importance of a fresh look at Islam, so that people may be able to understand how the Islamic faith relates to contemporary success and post modernity. Wilkinson (Video, 2015) gave an example referring to the concept of citizenry, where Islam praises democracy as the finest governing regime.

2.5 Is CT the Arab nation's panacea?

The young Arab generations had expectations for political and economic reforms that they have expressed in the Arab Spring. Unfortunately, the deeply-rooted dictatorship and despotism suppressed the expectations of such generations for accommodating differences and

appreciating sectarian diversities. There are unexplained political turmoil and brutally bloody conflicts in Syria, Libya, and other countries in the region. Diplomatic endeavours and even military confrontations turned out to be failures. Elder (2004a) referred to ‘native egocentrism’ as a reason for provoking such conflicts. The scholar confirmed that conflicts arise when individuals value others disrespectfully and they apply their own ideologies. Therefore, Elder (2004a) stressed the importance of CT teaching as a solution to such diversity. CT teaching can help individuals develop intellectual integrity by which they can analyse, evaluate and assess the reasoning of others (Elder, 2004a).

In the same context, Carnegie Middle East Centre (2011, p.1) clearly stated that the “Arab countries will only become economically competitive and reliably democratic if they start teaching youth to think critically and respect different points of view”. Certainly, reaching the practical outcomes of CT teaching will be challenging and time-consuming. However, the hope for attaining such an outcome was echoed in Halpern’s (2003, P.4) statement, where he asserted that “an educated thinking citizenry is the best way, perhaps the only way, to ensure world peace and adequate resources”.

2.6 Summary

In view of the abovementioned literature, the purpose of education is to equip individuals with tools for good thinking. Hence, the outcomes of education are good students and qualified professionals as well as responsible citizens, who are desperately needed in this present perplexed world. Therefore, several scholars start to support reforms that do not necessitate hefty budgets. For example, Faour (2011) openly expressed his concerns regarding the Arab Gulf students’ low achievement and performance in standardized tests, despite the heavy budgets allotted to education. Educators start to search for practical solutions within the existing contexts. Such educators encourage pragmatic reforms that can help the students inside the academic and non-academic contexts. Hence, many scholars emphasized CT teaching in

schools and HE institutions for its multi transformative impacts on individuals. Osana and Seymour (2004) insist on CT teaching as a vital component of education.

Chapter three

Methodology

3.1 Introduction

This chapter presents the research design and the methodology applied in this study. Firstly, as a researcher, I define and rationalize my stand point in approaching knowledge. I have adopted the constructivist paradigm to unpack knowledge within this study. Regarding the conceptual methodology, I state the reasons for adopting a qualitative case study and how it fits within the frame of this research. This chapter refers to the methods I used, such as documentary analysis, semi-structured interviews and a focus-group interview, to collect data as well as the rationale for utilizing such methods. I discuss the sampling strategy for this case study and the rationale behind it. Afterwards, I present the rationale for employing Littlejohn's framework of analysis for language teaching materials in analysing the EFP textbooks' physical aspects and design. I applied a qualitative thematic analysis to construct codes and themes to analyse the raw data in accordance with the research questions. Also, I refer to the limitations of this case study as a scientific method of research and how I addressed such limitations. I end this chapter stressing the importance of adhering to ethical issues at the different stages of this inquiry.

3.2 The research's philosophical paradigm

In this study, the main research question is to investigate how the EFP learning- teaching process fosters CT teaching. To address this research question, I decided to use a constructivist paradigm. Hereunder, I explain the research paradigm, methodology and methods that help me to address such research question.

Fuller (2009) referred to Kuhn to define research paradigms as a set of beliefs that helps researchers to understand and address a problem. Research paradigms reflect the researchers' epistemological, ontological, and methodological premises (Denzin & Lincoln, 2005). The

researchers' ontology is "their perceptions of how things really are and how things really work" (Scotland, 2012, p.9). Meanwhile, researchers' epistemology mirrors their holistic views in relation to the nature and form of knowledge, and how they come to know about such knowledge (Cohen, Manion & Morrison 2011). In view of this, epistemological assumptions focus on how knowledge can be created, acquired and communicated (Cohen et al., 2011). To discover such knowledge, researchers rely on methodological strategies or particular methods. Crotty (1998) defined these particular methods as the techniques and procedures used for data collection and analysis.

Before I decided on the research paradigm, I examined the research question within the ontological, epistemological and methodological premises (Denzin & Lincoln, 2005). Guba and Lincoln (1994) described such premises as the foci around which positivism, post positivism, critical theory and constructivism are analysed, compared and contrasted.

Krauss (2005) referred to the epistemological research posture and how it relates to the ontological and the methodological stances. In this inquiry, the ontological assumption is that there are existing elements of CT in the EFP learning- teaching process. As a researcher, I investigated these elements, so they could be defined and pragmatically utilized to enhance CT teaching in the EFP. Based on Guba's and Lincoln's (1994, p.108) characterization of an ontological question, I formed my epistemological posture by establishing a subjective relationship with what can be known at an early stage of the inquiry (Guba & Lincoln, 1994). To explore CT elements in the EFP, I postulated an objective posture throughout the course of the inquiry. Hence, as a researcher, my posture is one of an "objective detachment or value freedom in order to be able to discover "how things really are" and "how things really work." (Guba & Lincoln, 1994, p.108).

3.2.1 The constructivist paradigm

After I examined the research question within the ontological, epistemological and methodological premises, I decided to use a constructivist paradigm in this study for three different reasons. First, O'Connor (2015) commended such paradigm for understanding data differently and highlighting the participants' perceptions. Second, Guba and Lincoln (1994) acclaimed the constructivist paradigm for its practical impacts on the nature and accumulation of knowledge of a single concept within a context. Third, such paradigm defines my role as a passionate practitioner and advocate at my workplace (Guba and Lincoln, 1994).

Moreover, the constructivist paradigm reflects the practical aspects of the research as has been outlined by Guba and Lincoln (1994). Thus, I analysed the EFP textbooks and the College's strategic plan. Also, I analysed the EFP professors' and the EFP students' responses in relation to CT teaching. Consequently, I utilized such paradigm to reach the aim of this study by establishing a comprehensive understanding of CT teaching in its natural context, relying on the individuals' constructions. These constructions that the participants and I already hold were reconstructed by means of interpretations.

3.2.1.1 The researcher's role and accumulation of knowledge through the constructivist paradigm

The constructivist paradigm echoes my voice as a passionate practitioner and advocate. Through such paradigm I acted as a facilitator in this inquiry, while renouncing an authoritative role. To avoid the authoritative role of a researcher, I adhered rigorously to the ethical guidelines, where I followed Dadds' (1998) advice for practitioner researchers. Dadds (1998, p.42) advised researchers "to seek, democratically, to understand others' perceptions and experiences" and to approach the respondents with care and integrity.

Moreover, the constructivist paradigm allows me as a researcher to act as an advocate. Hence, in the literature review, I drew attention to the serious issues that face the Arab Gulf region

such as the lack of quality education, the subsequent limited employability skills and disrespect for diversity. I pointed to the poor results of the Arab graduates in national and international tests. So, through this paradigm I touched on HE as a transformative domain, where CT skills can be introduced to achieve a constructive impact on graduates.

Considering the nature and accumulation of knowledge, another reason behind selecting a constructivist paradigm is because it is transactional and subjective (Guba & Lincoln, 1994). Miller and Crabtree (1999) acknowledged the paradigm's emphasis on the importance of the subjective humans in creating meanings. Hence, I interacted with the EFP professors and the EFP students through the semi-structured interviews and the focus-group interview respectively. I constructed the findings throughout the interaction and the collaboration, that I had with the participants. Miller and Crabtree (1999) referred to this collaboration as one of paradigm's advantages. The respondents revealed their own views of realities related to CT teaching and application in the EFP. Hence, as a researcher I had a better understanding of the respondents' perceptions and interpretations of CT.

The constructivist paradigm accumulates knowledge relying on the hermeneutical and dialectical process (Guba and Lincoln, 1994). As I have previously stated, knowledge is constructed by interacting with, and among, the respondents. These varying constructions and reconstructions are analysed by means of conventional hermeneutical techniques (Guba and Lincoln, 1994). Therefore, in this inquiry I adhered to a qualitative methodology despite the claim of some scholars of the superiority of the quantitative methodology. Guba and Lincoln (1994) presented a strong argument in favour of qualitative approaches, and part of this argument concurs with this study. A major part of this study is to investigate the respondents' perceptions of CT. Sequentially, to understand the human subjects in this study, I utilized a qualitative methodology. Additionally, I implemented this methodology to uncover the insights of the respondents, where I relied on interactive interviews.

Besides, this approach provides rich insights when it comes to human subjects, as there is a focus on individual cases, rather than generalizations, which agrees with the aim of this inquiry.

3.3 The aim of the research

In this research, I achieved one of my aims by employing my role as a scholarly practitioner. Being a researcher and a professor at the EFP, I have a dual role at my workplace. During the process of this research, I continue with my teaching position as an ESL professor in the EFP. At the same time, I implement my role as a researcher in the EFP. Like other scholarly practitioners, I am more “interpretive and reflective” (Hebert, 2010, p. 34). This helps me to have a better understanding of the College’s organizational culture and of CT teaching from the perspective of the EFP professors and the EFP students. I gained close awareness of the practice of other professors in the EFP, in terms of CT teaching. As a scholarly practitioner, I touch on the world of academia and the world of practice by understanding the deeply hidden meanings of a phenomenon (Hebert, 2010). Hence, I aim to investigate CT teaching in the EFP for restructuring or renewing the practice of the concept.

My other aim is to focus on HE and to highlight its transformative characteristics. HE acts as an avenue to the national and the global markets. HE shapes the academic, personal and professional aspects of its graduates by nurturing ideas and concepts. For example, Behar-Horenstein and Niu (2011) emphasized the role of HE in cultivating CT in its students. In this context, there are always continuous reforms to develop HE in accordance with international standards, where Oman is no exception. Despite all the efforts and high budget reforms, educators and education policy-makers describe the outcomes of HE in Oman as discouraging (Mehta and Al-Mahrooqi, 2015). In this study, I aim to look at the dissatisfactory status of HE differently. I believe that education policy-makers should look at the drawbacks of HE from a different standpoint. It is time to renounce continuous high budget reforms and consider feasible ones that focus on the soft and generic skills such as CT.

3.4 The research questions

To achieve the above stated aims, I followed one of O’Leary’s (2004) criteria for a good research question, which is that such question should support the field of research. Hence, I crafted the following research questions carefully, so that they contribute to HE and enhance CT teaching and practice in the EFP. I started from the broad topical interests and followed O’Leary’s (2004) steps to design researchable questions. O’Leary (2004, p.33) stated that personal experience “can give insights worth exploring”. My first encounter with CT was at one of the EdD programme modules where my interest in the concept started to develop. O’Leary (2004) advised researchers not to rely on their idiosyncratic interest as the only incentive for their studies. I focused on CT not only because of my interest, but also because I believe that CT should be of a prevailing interest to the community. The main reason for choosing CT as a topic for this research is the strong impact of the concept on students’ academic performance. Moreover, CT teaching has solid impacts on the students’ professional competencies and citizenships.

Hence, I was driven by curiosity to explore CT teaching in the EFP learning- teaching process. Afterwards, I defined the angle through which I explored the topic and I worked on narrowing the topic by only investigating the boundaries for this case in its natural setting. I designed the research questions so they define the direction of my research and acts as guidelines throughout the stages of inquiry. Finally, I articulated a bounded, precise research question that unfolds the research (O’Leary, 2004). Accordingly, I stated the main research question as follows:

How does the learning- teaching process in the English Foundation Program at the College foster critical thinking teaching?

In order to investigate how the EFP learning- teaching process fosters CT teaching, I set four data sets to direct the course of this research. These data sets are the EFP textbooks, the

College's strategic plan, the EFP professors' perceptions and the EFP students' perceptions of CT. I selected such data sets as they are the core of the EFP learning- teaching process.

The first data set is the EFP textbooks. Like other English teaching programs, textbooks play a significant role in learning-teaching processes (Akhgar, Talebinejad & Ansari,2017). Similarly, the EFP textbooks are very important in the EFP learning-teaching process. The reason for such importance is that one of the EFP policies for the professors is that teaching should be mainly based on the EFP textbooks. The use of supplementary materials should be kept to a minimum. I set the textbooks as one of the data sets to find out how they foster CT teaching implicitly and explicitly in the EFP learning-teaching process.

The second data set is the College's strategic plan. As the EFP is one of the College's programmes, it adheres to the same strategic plan of the College. I selected the College' strategic plan, because it presents the institution's organizational culture (Fralinger & Olson, 2007). Strategic plans define the approaches of graduates to learning, knowledge, their own development and the world around them (The University of Edinburgh, n.d.).

The third data set is the professors' perceptions of CT. Professors play a major part in any educational system. The way they perceive CT, and the possibility of teaching the concept, direct the learning- teaching process in their classrooms (Choy & Cheah, 2009). It is important to understand the EFP professors' perceptions and their knowledge base of CT, because as Larrivee (2000) affirmed that such perceptions and knowledge reflect the professors' beliefs in their teaching philosophies.

The fourth data set is the students' perceptions of CT. I set such data set as it reflects the students' expectations of their EFP learning- teaching process, in relation to the impacts of CT teaching. Chouari (2016) referred to the importance of considering students' needs to enhance their learning- teaching processes.

Based on the abovementioned data sets, I designed four questions as a means to address the main research question. Hereunder, I listed the four questions that acted as a drive for my study.

- 1) What are the elements of CT in the EFP textbooks?
- 2) What are the elements of CT in the College's strategic plan?
- 3) What are the EFP professors' perceptions of CT?
- 4) What are the EFP students' perceptions of CT?

In terms of the first question, I used it as a fundamental core in this study. I employed the first question to investigate CT implicit and explicit elements in the EFP textbooks. Without reporting the findings at this point, I defined CT implicit and explicit elements in the EFP textbooks. I intended to draw the administration's, and particularly the professors' attention, to the existing CT implicit and explicit elements in the EFP textbooks. Consequently, such elements could be supplemented to improve CT teaching and practice at the EFP, thereby enhancing the students' academic, personal and professional attainments.

To address the second question, I analysed the College's strategic plan's components. I investigated CT implicit and explicit elements in such components to define the concept in the EFP. I examined the College's strategic plan to reflect on CT teaching and practice as embraced by the institution.

To answer the third question, I designed three sets of questions that I implemented in the semi-structured interviews with the EFP professors. I relied on these questions to construct, with such professors, their understanding and appreciation of CT. In the first set of questions, I referred to CT explicitly where I elicited the professors' familiarity with the concept. I centred some of the questions on their definitions of CT. I used the other sets of questions to examine the professors' knowledge regarding the impact of CT outside the classroom contexts and the

importance of CT as an educational component. Such responses helped me to reconstruct the EFP professors' perceptions of CT.

My approach to the fourth question varied if, and when, compared to the third one. In terms of the students' questions, I crafted such questions without explicitly referring to CT or its impacts. I designed my questions so that I investigate the EFP students' expectations of their College's learning- teaching process. I relied on such expectations to infer the EFP students' perceptions in relation to the impact of CT teaching. I depended on the EFP students' responses that are related to their academic and personal expectations of their College's learning-teaching experiences for such inferences. In the discussion section, I explain the reasons for investigating the students' expectations of their EFP learning-teaching process, rather than asking them direct questions in terms of CT teaching.

As for the first set of students' questions, I focused on the academic and personal changes that such students have experienced after joining the College. One of the questions is related to the students' contributions to their communities. I designed the second set of questions to elicit their perceptions of CT. I crafted the questions around the impact of the teaching materials and the College's organizational culture. The questions required responses that reflected CT elements. So, in their responses, the EFP students articulated their expectations of their College's learning- teaching process. Without referring to the findings at this point, I relied on my role as a constructivist subjective researcher and constructed such students' perceptions of CT, depending on their responses. Under the discussion section, I discuss the role of each of the abovementioned data sets in fostering CT in the EFP learning- teaching process.

3.5 A qualitative case study: The methodology and the rationale

A qualitative methodology is implemented in this case study, because the research question is the main point of reference. Its exploratory and explanatory character implies a qualitative approach. Qualitative research questions often begin with how or what, where there is a

profound understanding of what is going on in relation to the investigated question (Seidman, 2013). The study aims to explore, and explain, how the EFP learning-teaching process fosters CT in its natural context. The method supports exploring CT in documents, such as the EFP textbooks and the College's strategic plan. This helps to find relationships between raw data and addressing views (Creswell, 2014) which concurs with this study.

Feagin, Orum and Sjoberg (1991) commended such methodology, as it investigates the research inquiry in its natural setting, within an in-depth strategy. Yin (1994) defined a case study as an empirical inquiry that focuses on a contemporary phenomenon in its real-life context relying on multiple sources of evidence. Such definition concurs with the requirements of this study, as I aim to investigate CT teaching, in its natural context, in the EFP learning-teaching process depending on different sources. Moreover, Yin (1994) acclaimed such methodology for its strengths in practicing professions, which is identical to the organizational context of this research. Hence, this simple-through-complex intervention helped in the reconstruction of different phenomena (Baxter & Jack, 2008) that defined CT in its natural setting.

Another incentive for implementing a case study is that Meyer (2001) and Baxter and Jack (2008) acclaimed its advantages for a deep exploration of the issue, allowing several facades of the phenomenon to be disclosed and understood. Likewise, Patton and Appelbaum (2003) stated that a case study gives a holistic view of the whole situation. Consequently, for implementing a case study, the findings from this method can define CT teaching and how the concept is fostered in the EFP learning- teaching process.

Moreover, another reason for employing a case study is its ability to define the case as a unit (Gerring, 2004). To ensure that the study is within the scope of the research, several scholars, such as Miles and Huberman (1994, p.25), defined a case as “a phenomenon in some sort occurring in a bounded context”. Baxter and Jack (2008) stressed the importance of binding a

case, as it directs researchers to contain broad research questions and topics that have various objectives. Thus, I focused on CT teaching in the EFP learning- teaching process as my case, and, from there, I started to construct my boundaries outwardly as has been advised by Miles and Huberman (1994). For example, the EFP textbooks are one of the boundaries. Also, the College's strategic plan is another boundary. Some of Swanborn's (2010) sets of boundaries are employed, such as individuals, who are the ten EFP professors and the fifteen EFP students. Tellis (1997) and Stake (1978) commended a case study for exploring participants' views relying on data sources and for reflecting such participants' tacit knowledge to establish new meanings.

In view of this, as a researcher, a qualitative methodology allows me to examine phenomena, such as the EFP professors' and EFP students' perceptions. Such phenomena are difficult to investigate when applying other research methods (Strauss & Corbin, 1998). Thus, a qualitative approach helped me "to understand the way people think about their world and how their definitions are formed" (Bogdan & Biklen, 1998, p.32).

Another significant advantage for a qualitative methodology is its characteristics that scaffold this intrinsic case-study. Graebner, Martin and Roundy (2012) defined such characteristics as being flexible, exploratory and able to get the interpretations and experiences of the organizations' members. Also, using such methodology results in new emerging data, adding in-depth perspectives to the collected data and different angles of interpretations. Strauss and Corbin (1998) elaborated on the popularity of the methodology among researchers over years. Likewise, I have adopted a qualitative methodology expecting that my work will have relevance to academic and non-academic audiences bringing vision to reality in the hope for change. Likewise, Simons (2009) praised the methodology for its capability of studying the singular and the unique phenomena. Hence, the intent of the case study is to have a better understanding of a single case within its bounded context (Baxter & Jack, 2008). Accordingly, an intrinsic case study is the most convenient type of case studies in this research

3.5.1 Intrinsic case study

I relied on an intrinsic case study to address the research questions, because Grandy (2010) acclaimed such case study as the study of a case, where there is an interest in exploring and in knowing more about it. Such case could be a study of a person, group or a department as Grandy (2010) has defined it. In view of this, the case in this research is under the category of ‘a department’ (Grandy, 2010). The purpose of this research is to explore how the EFP learning-teaching process fosters CT teaching. Hence, the basis for this case study is the EFP, which is an English language remedial program. The EFP is considered one of the College’s departments. The College’s strategic plan to which the EFP adheres, refers to achieving CT as one of its goals. However, little is known about CT teaching in the EFP. Therefore, I depended on the explanatory and exploratory aspects of an intrinsic case study to investigate how the EFP learning-teaching process fosters CT teaching, within its contextual boundaries. Therefore, a case study is a good approach to reflect on CT teaching, as Flyvbjerg (2006) commended the role of such approach in human learning.

As a researcher, one of my incentives for this study is the interest in the multiple impacts of CT teaching on individuals. Hence, I adopted an intrinsic case study in this research. Baxter and Jack (2008) recommended an intrinsic case study, when there is an interest in the particularity and ordinariness in the case itself, with no further intention to understand a generic phenomenon or to build a theory. In relation to this case, having a profound understanding of CT and its application, within its institutional context, can enhance the teaching of the concept in the EFP learning- teaching process.

I use the EFP as a base for this case-study to highlight critical issues related to education, in general, and to CT teaching, in particular, in the Arab Gulf region. The methodology is known as an eye opener to a problem and its dimensions. Evidently, a case study has clear strengths in educational and social sciences research. Accordingly, I approached this case study focusing

on its practicality. I followed Brennan's and Teichler's (2008, p.260) description of research as "scientific questions of long term strategic concern to the future of higher education" to define my aim in this study. I conducted this study to create a systematic influence, where a culture of inquiry can advance (McNiff, 2014) at the College and at other HE institutions.

Although several scholars, such as Hamel, Dufour & Fortin (1993), referred to the limitations of a case study as a research methodology, such methodology served this research well. One of the limitations of a case study is that the approach is too subjective, incapable of representativeness, lacking rigour and reflecting biases (Hamel et al., 1993). Regarding such limitations, Flyvbjerg (2006) referred to Francis Bacon's earlier writings. Bacon affirmed that biases toward verifications are not limited to case studies, as believed, as they are rather a fundamental human characteristic. Hence, subjectivism and biases are not only restricted to qualitative methods. Flyvbjerg (2006) cited Campbell, Ragin and Geertz to support the application of case study in research. Such scholars affirmed that this critique is fallacious, because a case study has its own strict measures. Likewise, Tellis (1997) praised Yin, Stake and other scholars for setting robust procedures for case studies that, as well, were developed and tested as procedures related to scientific fields.

In this research, I tackled such limitations of subjectivism and biases by one of the strengths of a case study. Hence, I adhered to the use of multiple data sources as a means of constructing validity (Yin, 1994). I designed this case study to employ different data sources such as documentary analyses of the EFP textbooks and the College's strategic plan. Also, I relied on the EFP professors' semi-structured interviews and the EFP students' focus-group interview as other data sources for data collection. I employed such sources to investigate CT within the boundaries of the EFP. Moreover, I followed two robust procedures to examine the above stated data sources objectively and to avoid biases. Such procedures are Littlejohn's framework of analysing teaching materials (Littlejohn, 2011), and a qualitative thematic analysis (Braun & Clarke, 2006).

I used Littlejohn's framework (2011) to identify certain aspects in the EFP textbooks such as the physical features and the design or the thinking underlying such materials (Littlejohn, 2011). I integrated Littlejohn's framework (2011) to identify such aspects as the framework maintains the EFP textbooks' objectivity. In reinforcement, Haghverdi and Ghasemi (2013) stated that Littlejohn's framework is free from any impressionistic ideas, being objective rather than, subjective. In view of this, I first employed Littlejohn's framework to analyse the EFP textbooks' publication and design. Such analysis presents a sense of the overall coverage of the EFP textbooks, by identifying these aspects.

Furthermore, I have employed thematic analysis to maintain objectivity (Braun & Clarke, 2006). I utilized such method to analyse the EFP textbooks' physical features and the design, the College's strategic plan, and the respondents' interviews. I used thematic analysis, because Mayring (2014) defined the approach as a bundle of rule-guided techniques that are used for systematic text analyses. Therefore, I followed Mayring's (2014) seven basic research steps that are valuable to qualitative inquires. First, I specified a clear research question. I linked such question to hermeneutical methods as a basic procedure for interpretations, also I defined the research as an explorative one. In view of this, I decided on the research's sampling, the methods of data collection and analyses. Finally, the presentation and the discussion of the study are two points that I have considered seriously to address the research questions.

However, some scholars, such as Meyer (2001), stated that qualitative approaches are often accused of lacking rigour and quantification, if, and when, compared to quantitative ones. In view of this, I relied on Mayring's (2014) counter argument, where the scholar stressed the role of the convergence of the data sources to secure objectivity. In the same context, the scholar referred to the role of the constructivist paradigm and hermeneutical approaches in formulating rules of interpretation to gain objectivity. Likewise, I adopted a constructivist paradigm to construct and reconstruct meanings from the four data sources. I relied on the agreement between the different individual meaning constructions to maintain objectivity in this research.

Moreover, the analyses of such constructions into codes and, then, into overarching themes kept the objectivity of the research.

In view of this, the following sections discuss the systematic procedures that maintain objectivity in this study such as the data collection process starting with the sampling of the EFP ten professors, as well as the sampling of the EFP fifteen students. The other sections focus on the documentary analyses of the EFP textbooks and the College's strategic plan. The final section presents the ethical considerations strictly followed to reflect this research's rigour and objectivity.

3.6 Sampling

Cohen et al. (2011, p. 143) referred to the importance of the "suitability of the sampling strategy" at an early stage of investigation. Thus, in this study, the sampling strategy was thoughtfully considered for being a focal factor for a good research. In view of this, two samples of the respondents were recruited to address the research questions. The first sample involved ten ESL professors from the EFP with different demographic backgrounds. The second sample included fifteen students representing the EFP four levels.

3.6.1 The EFP ten professors' sampling

For the first sample, I interviewed only ten professors from the EFP, as Cohen et al., (2011, p.156) specified that "too large a sample might become unwieldy. I decided on a non-probability or a purposive sampling for the semi-structured interviews. Cohen et al., (2011, p.157) described purposive samplings as an access to "knowledgeable people". I used this technique when selecting the EFP professors to give in- depth information, representativeness and divergence. There was a gradual accumulation of data from different sources due to a purposeful sampling (Cohen et al., 2011). Sandelowski (2000) stated that the goal of purposeful samplings is to obtain information-rich cases for qualitative research. Likewise, this case is dense and important as it implies critical issues such as CT teaching multiple impacts.

The common criterion among the participants is having the ESL teaching experience for the EFP four levels. The professors' teaching experience ranged from five years to thirty years. I based the professors' sampling on the variation of their demographic details. When selecting the professors, I made sure that there is a diversity in the years of experience, the geographical and the educational backgrounds. Hereunder, Table 3.1 illustrates the EFP professors' countries of origin and the years of teaching experience.

Table 3.1 The ten EFP professors' sample

Professors	Country of origin	Years of teaching experience
Professor 1	Jordan	8 years
Professor 2	United States of America	10 years
Professor 3	India	15 years
Professor 4	Egypt	20 years
Professor 5	Egypt	30 years
Professor 6	Oman	5 years
Professor 7	Oman	20 years
Professor 8	Iraq	20 years
Professor 9	India	25 years
Professor 10	United States of America	10 years

3.6.2 The EFP fifteen students' sampling

As for the students' sampling, I relied on snowball sampling (O'Leary, 2004). I designed this sample to include fifteen students, in the age-group of 18 -20 years, representing the EFP four levels. I used snowball sampling for an ethical consideration, which is not to include any of my students in this research. Therefore, I built this sample through referrals (O'Leary, 2004). I approached five professors in five different groups in the EFP four levels: two professors at Level 4 and one professor at each of Levels 1,2 and 3.

Of the sampled students, I intended to have six students from Level 4, because they have more experience with the College's organizational culture. As I could not identify the participating students' performance levels, I asked five professors to assist me in the sampling process. The professors explained the purpose of the study to their students and asked for volunteers. The three chosen participants from each of the five groups were selected from the volunteers. Out of these volunteers, the professors selected three students representing the three performance academic levels. As such, there was a high achiever, an average achiever and a low achiever in each group. Hereunder, Table 3.2 illustrates the EFP fifteen sampled students' different academic levels and their academic levels of performance.

Table 3.2 The EFP fifteen students' sample

Student	EFP level	The EFP students' academic performance level
S1	Level 4	Low achiever
S2	Level 2	Average achiever
S3	Level 4	High achiever
S4	Level 4	High achiever
S5	Level 3	High achiever
S6	Level 2	High achiever
S7	Level 1	High achiever
S8	Level 3	Average achiever
S9	Level 1	Average achiever
S10	Level 4	Average achiever
S11	Level 4	Average achiever
S12	Level 1	Low achiever
S13	Level 4	Low achiever
S14	Level 2	Low achiever
S15	Level 3	Low achiever

3.7 Data collection procedure

To achieve the aim of this qualitative study, I applied three methods for data collection, which I discuss in the following sections. In view of this, Onwuegbuzie & Leech (2005) support the use of flexible methods to investigate research questions and provide useful data. Hence, in this study I used semi-structured interviews with ten professors and a focus-group interview with fifteen students from the EFP four levels, because of the flexibility of such interviews. Through the respondents' views of realities, I had an understanding of their perceptions of CT from their own perspectives. I used the constructivist paradigm to understand, and reconstruct, the elements of CT in the respondents' responses. Also, I employed documentary analysis for the EFP textbooks and the College's strategic plan as an investigating tool to explore CT in both data sets. The abovementioned methods helped me to address the research questions.

3.7.1 Semi-structured interviews with the EFP ten professors

With the EFP ten professors I have chosen semi-structured interviews, because Drever (1995) referred to the suitability and flexibility of the technique in case studies. Longhurst (2003, p.143) defined semi-structured interviews as "informal, conversational or soft interview". Such characteristics were constantly reflected, while conducting the interviews with the EFP professors. DiCicco-Bloom and Crabtree (2006) described semi-structured interviews as a technique that can delve into social and personal matters. Such technique helps to elicit data related to the respondents' perceptions of CT and its extended impacts.

I designed three sets of open-ended questions that prompt discussions and require in-depth responses in a predetermined order. The first set was related to the professors' personal experience with CT, the second one questioned the theoretical and practical aspects of CT at the College, while the last set focused on the professors' role in CT teaching. Many of the issues were addressed by the respondents, which is one of the advantages of the method as has been affirmed by Longhurst (2003). This gave me a closer feel of the respondents' insights, as

they based their responses on their personal views and teaching experience in the EFP. Therefore, I developed a wider perspective in approaching the emerging data, which resulted in redesigning and rearranging some of the questions. Although there were other means for communication, I preferred conducting the interviews face to face with the respondents to take advantage of the social cues. Opdenakker (2006) listed the benefits of social cues, such as body language, intonation and voice etc. as adding clarifications to the verbal answers.

After I had decided on the sample of the ten professors, I sent detailed e-mails explaining the topic, study design and the purpose of the research to them. In these e-mails I referred to the administration's approval and the confidentiality of the study. Only eight professors agreed to be part of the study, hence two other professors were approached to achieve the designed sample.

Afterwards, the professors signed their written consents and individual appointments for the interviews on the College's premises were scheduled. I booked the Conference Hall for the interviews with the professors in accordance with the agreed-on schedule. Each interview lasted for approximately twenty minutes; I recorded all the interviews electronically using my smart phone after having the respondents' approvals. One of the constraints of audio-recording is its inability to make the respondents feel at ease. Using non-probing questions at the beginning of the interviews, and already having a good rapport with the professors as colleagues, helped in creating a friendly atmosphere during the interviews. Throughout the process of interviewing, there was note-taking to write key points and to investigate further themes in the transcribing stage. I transcribed each interview immediately on the same day to avoid memory lapses. Transcribing is not a straightforward technical task as it seems, and, as Bailey (2008) affirmed, it requires judgements regarding which details to include. Although it is a time-consuming procedure, I decided to do it myself, as it requires elements of close interpretation of data by repeated listening.

3.7.2 A focus- group interview with the EFP fifteen students

The focus group consisted of fifteen students whom I was not teaching during the time I was conducting the research to avoid pressure on the participants. There were ten male students and five female students in the group. I expected to have a higher ratio of male students as it is common for female students, from the conservative Omani culture, to be reluctant to participate. Because of the small number of female participants, in this study, it was not possible to have more than one focus-group. Having one or two female participants in a small group with male participants would have not been comfortable for such reserved females. Also, it was not possible to have all the female participants in one focus-group, as this study is not gender-based. Thus, I decided to have one focus-group so the five female participants can be together and feel at ease to participate.

Before assigning a date for the focus group interview, I scheduled a brief meeting with the students to inform them about the academic purpose of the research and the administration's approval for conducting this study at the College. During the meeting, I explained to the students, in Arabic, the Participant Information Sheet (PIS). I addressed their concerns, assuring them of their right to withdraw at any stage of the research. The participants were given five days to review the PIS before signing it. All students, especially the male ones, agreed enthusiastically to be part of the research and showed good interest in participating in the interview.

As a method of collecting data in this research, a focus group interview was preferred to an individual interview for many reasons. However, focus group interviews have been criticized for being inefficient in covering maximum depth on a particular issue. Furthermore, such method has been blamed for the possibility that the members may not express their own opinions. Breen (2006) stated that such members may be hesitant to express their thoughts, especially when their thoughts oppose the other participants' views.

In view of this, scholars such as Acocella (2012) and Stalmeijer, Mcnaughton and Van Mook (2014) referred to the probability of the participants' conformity to the most popular views and not expressing their own opinions as one of the disadvantages of focus group interviews. On the contrary, such disadvantages of focus group interviews did not affect the process of this study. The main reason is that the subject of this research and the focus group interview's questions were not of a sensitive nature. Furthermore, such research topic and questions did not pose any threats to the participants. Most of the interview's questions reflected on the participants' individual experiences at the College, without referring to any criticism in relation to the administration's policies or any key figures in the institution.

Despite such criticism towards focus group interviews, I relied on this method for different reasons. First, Onwuegbuzie, Dickinson, Leech and Zoran (2009) commended focus- group interviews for being fast and efficient. Also, the informal discussion in the focus group interview unexpectedly yielded important data, spontaneous responses and personal contributions from the students, especially from the usually reserved female students. This method fits the exploratory aspect of the research, as the participants examined each other's' views, giving me the chance to collect more realistic accounts (Bryman, 2008).

Moreover, the main advantage of selecting a focus group is to ensure a sense of belonging to the group (Onwuegbuzie et al., 2009). That created a sense of cohesiveness with which the respondents felt safe enough to share their thoughts and opinions. The focus- group interview reduced the sense of authority, thereby encouraging the students to respond openly to the sensitive questions related to the organizational culture, the teaching material, the professors' methodologies and assessments at their institution. My role was restricted to being a facilitator, so as to ensure that the meanings emerging from the respondents were objective (Ivanoff & Hultberg, 2006). As a facilitator, I maintained an environment of free open discussion, where the students took the lead to build on their experiences encouraged by the wagon band effect.

To maintain such environment, I strongly preferred to conduct the EFP students' focus-group interview in Arabic for different reasons. Firstly, there were six students at Levels 1 and 2 whose English language proficiency level was far below average at that stage. Secondly, I did not want the language barrier and the inability to express in a foreign language to impede the flow and flexibility of such interview.

Using Arabic in the interview, encouraged the respondents to share their experiences and interactions, which helped me, as a researcher, to construct new knowledge related to the theoretical framework of the study. Referring to Ivanoff's and Hultberg's (2006) views, the focus group's shared assumptions, through social constructivism, the meanings, connections and knowledge, were constructed based on the interaction with others.

3.7.3 Documentary analysis

In this research, I examined two documents: the EFP textbooks and the College's strategic plan. I researched both documents to investigate CT elements and to augment the theoretical framework of the research. Moreover, I analysed the EFP textbooks and the College's strategic plan to ensure thick description, to elicit richer data and to contribute to the process of triangulation (Punch, 2013). Decrop (1999) stressed the importance of triangulation in qualitative research, as it strengthens the findings. Likewise, Bowen (2009) listed the objectives of triangulation as a means of generating credibility, avoiding biases, validating and corroborating data obtained during the study, thereby providing an overall pattern of the case study. The triangulation approach is important for giving a comprehensive understanding of the phenomenon and for checking the validity of the data derived from different data sources (Carter, Bryant-Lukosius, DiCenso, Blythe & Neville, 2014).

Besides the contribution of documentary analysis to the process of triangulation, there are other reasons for using such method in this research. First, this method is an unobtrusive and a non-reactive technique, hence the process is not affected by the course of the research nor is the

information examined distorted (Corbetta,2003). Second, Bowen (2009) acclaimed the approach for its stability, efficiency, availability, exactness and coverage of many events and settings. Third, documentary analysis is capable of defining the meanings, having a deeper understanding and developing empirical knowledge from the documents, which often provide background and context related to the research (Bowen, 2009).

Furthermore, because of the explanatory and exploratory nature of the research, documentary analysis contributed to this case study. Fitzgerald (2012) stated that documentary analysis locates underlying themes and analyses them in the scope of theoretical arguments. Therefore, I employed such method to explain and interpret the documents, whereby I constructed an argument to create a convincing analytical narrative in the report writing phase (Braun & Clarke, 2006). To have a deep understanding of the text data, the documentary analysis included “reading (thorough examination), and interpretation” (Bowen, 2009, p.33) of the EFP textbooks and the College’s strategic plan.

To have more insights into this research and to unpack the respondents’ thoughts, I employed a qualitative analysis. In view of this, the following sections discuss the two methods applied to analyse this research’s four data sets.

3.8 Data analysis procedure

My research question is to investigate how the EFP learning- teaching process fosters CT teaching. To answer such question, I first needed to address the above stated four questions, under the research question section. I have crafted such four questions in relation to the research main question. Hence, I analysed CT elements in the EFP textbooks and the College’s strategic plan. Furthermore, I investigated the EFP professors’ perceptions and the EFP students’ perceptions of CT. Based on the abovementioned four questions, I applied two methods of analysis in this study. First, I applied Littlejohn’s general framework to identify the EFP textbooks’ physical features and the design of the materials (Littlejohn, 2011). Then, I

employed thematic analysis, developed by Braun and Clarke (2006) to examine the EFP textbooks' physical features and the design of the materials. Likewise, I relied on such analysis to analyse the College's strategic plan, the EFP professors' responses and those of the EFP students. I analysed the aforesaid four data sources in relation to CT teaching. Hereunder, I discuss both methods of analysing in detail.

3.8.1 Littlejohn's general framework of analysis for analysing teaching materials

I used Littlejohn's framework because it goes beyond giving a detailed description of the EFP textbooks. Such framework "allows the material to speak for themselves" (Littlejohn, 2011, p.182). Such objectivity in the materials is achieved through two descriptive aspects; the first aspect is the publication, while the second one is the design of the materials (Littlejohn, 2011). I relied on the publication to identify the tangible features of the EFP textbooks as such features presented the materials as a complete set. I also identified the EFP textbooks' design to understand the thinking underlying such textbooks.

I identified the aspects related to the EFP textbooks' physical features and design, such as the division, subdivision, continuity, sequencing and selection of the materials (Littlejohn, 2011). I relied on such aspects as they reflected CT implicit elements that are embedded in the EFP textbooks. In addition to that, the abovementioned aspects explained the characteristics, arrangements, connectedness and predetermined order of the physical features of the EFP textbooks. Furthermore, the EFP textbooks' physical features and the design provide a detailed analysis of the materials that helps educators to utilise the materials to their maximum potentials (Littlejohn, 2011).

In view of this, Table 3.3 displays the seven aspects related to the EFP textbooks' physical features and the nine aspects related to the design of the materials. These aspects reflect the arrangement of the EFP textbooks as a complete set. It is important to have a deep understanding of the EFP textbooks as a complete set revealing CT implicit elements. Such understating of the textbooks and the CT implicit elements helps in enhancing CT teaching, especially in ESL classes, where the English language is a major barrier. In view of this, I elaborate on ESL students' language barrier in hindering CT teaching in the discussion chapter.

Table 3.3 Aspects of the EFP textbooks' analysis

Publication	Design
<ol style="list-style-type: none"> 1. The position of the EFP textbooks 2. The published form of the EFP textbooks 3. Subdivision of the EFP textbooks into sections 4. Subdivision of sections into subsections 5. Continuity 6. Route 7. Access 	<ol style="list-style-type: none"> 1. Aims 2. Principles of selection 3. Principles of sequencing 4. Subject matter and focus of subject matter 5. Types of teaching/ learning activities 6. Participation 7. Learners role 8. Teachers role 9. Role of the material as a whole

To continue with the analysis of the EFP textbooks, I applied a thematic analysis to the physical aspects and the design of such textbooks. It would not have been possible to apply a qualitative thematic analysis directly to the EFP textbooks before employing Littlejohn's framework to investigate the materials. The reason for applying such framework first is that Littlejohn's framework reflected CT implicit elements through the physical features and the design of the EFP textbooks. Such implicit elements are important in enhancing CT. Rezaei, Derakhshan and Bagherkazemi (2011) referred to the importance of CT explicit and implicit instructions in teaching the concept.

Based on the importance of CT teaching, I analysed CT implicit and explicit elements in the EFP textbooks' physical features and the design of the materials (Littlejohn, 2011). In Table 3.3 I listed the publication's and the design's aspects in the EFP textbooks that I have examined (Littlejohn, 2011). I applied thematic analysis to such aspects to generate repeated codes in the EFP textbooks. Then, I gathered the similar codes under relevant themes that are related to the research question. The following sections explain the process of employing a thematic analysis to analyse the EFP textbooks' physical aspects and design, the College's strategic plan, the EFP professors' semi- structured interviews and the EFP students' focus-group interview.

3.8.2 Qualitative thematic analysis

In this study, I employed a qualitative thematic analysis to analyse the data sources for different reasons. Such approach is known for its empirical and methodological controlled analysis of texts, because it retains the context of communication and strictly adheres to systematic content analytical rules (Mayring, 2014). Moreover, I relied on a thematic analysis because of its characteristics that fit well the purpose of the research. Graneheim, Lindgren and Lundman (2017, p.29) held back from defining such methodology as a "counting game" of codes and themes. On the contrary, such analysis can deal with the manifest content and interpret the latent content of communication objectively (Graneheim & Lundman, 2004). For that reason,

the scholars affirmed the interpretative features of such analysis within the qualitative paradigm.

In addition to that, I employed a thematic analysis because my research is in the qualitative realm, and Graneheim et al. (2017) defined the qualitative content analysis as a method of analysing qualitative data. Also, Graneheim's et al., (2017) description of such analysis's epistemological basis and its focus on subject and context concur with my study. I approached the text data with the epistemological basis that the text has multiple meanings. To define these meanings, I had to decide on the data to be examined. So, my initial step in the stage of data analysis was to cut down on the bulks of data texts. I relied on the concept of condensation of data, rather than the concepts of reduction and distillation. I preferred condensing the data texts, mainly because this process shortens the texts without changing their core (Graneheim & Lundman, 2004). I refrained from employing the concepts of reduction and distillation because of their limitations. Graneheim and Lundman (2004) criticized the concept of reduction as it decreases the size of data without referring to the quality of what remains. Likewise, both scholars stated that the concept of distillation focuses on the abstracted quality of the data texts, which is a further step in the process of data analysis.

Before conducting the data analysis procedure, I decided to refrain from using computer software to perform the coding process. Alternatively, I preferred to work manually, reading the data line by line and moving back and forth systematically. I relied on the manual coding, because it facilitated my familiarization phase with the data as has been suggested by Braun and Clarke (2006).

Like the transcribing procedure, the coding process of the text data was extremely time-consuming. I proceeded in this process and selected the codes to define the exploratory scope of the research questions. I conducted this study within a constructivist framework, where I

focused on some of its aspects such as the socio-cultural context, structural conditions and implicit themes, as has been outlined by Braun and Clarke (2006).

I applied a thematic analysis to the four text data sources: the EFP textbooks' physical features and the design of the materials (Littlejohn, 2011), the College's strategic plan, the EFP professors' and the EFP students' transcribed interviews. I relied on a thematic analysis to interpret meanings from codes, which are derived from the content of the data texts (Hsieh & Shannon, 2005). All the constructed codes in the data texts were related to CT explicit and implicit elements. I relied on such codes to arrange the analysed data into an analytical narrative (Braun and Clarke, 2006), in the realm of the research questions.

Once I had finalized the chunk of the data to be coded, I decided to utilize a qualitative thematic analysis approach to gather the similar codes into meaningful themes. I adopted such analysis not only because it is the most common one in qualitative research, but also because it is known for its flexibility to fit the research questions and the data (Braun & Clarke, 2006). Thematic analysis helped me to construct themes related to CT implicit and explicit elements in the four text data sets. Such analysis fits the aim of the research as it is compatible with the constructivist paradigm (Braun & Clarke, 2006). The coming section discusses the application of the six systematic phases of thematic analysis, developed by Braun and Clarke (2006), as a frame to describe the phenomenon in its natural context and to address the research questions by relying on meaningful patterns.

Phase 1: familiarization with the data

As Braun and Clarke (2006) recommended, I immersed myself in the data to be familiar with their contents' breadth and width. I had read thoroughly through the four data sets before I started the coding process, to have an overall view of the entire sets. At this stage, I did not start coding as I followed Guest's, MacQueen's, and Namey's (2012) advice to keep reading without elaborating on any theories.

Phase 2: generating initial codes

I generated the initial codes having the research questions as a reference to code around. Led by the theory - driven approach, I aimed to code only particular features of the data sets that are in accordance with the phenomenon (Braun & Clarke, 2006). This phase was a challenging one, as I had to examine each of the four-text data sets separately.

I started the second phase by breaking each of the text data sets into chunks of data. I preferred to analyse the four data sets manually, reading line by line, to have a closer feel of the data. In each data set, I searched for the smallest meaningful segments in each sentence or a group of sentences. I looked for segments that had interesting features in relation to the research questions. I generated small codes from the segments such as a word or short phrase codes. I ensured that these varied codes reflected their own segments. Eventually, I ended up with too many codes, that I had to reduce them down only to the ones which represented the essence of the research, as has been advised by Schulz (2012).

As for the respondents' interviews, I transferred all the codes that are related to the research questions to separate columns on an A3 sheet of paper under their anonymous identifiers. I used this visual cue to help me present the data into recognizable patterns. On the same A3 sheet of paper, I followed the same coding pattern related to the EFP textbooks and the College's strategic plan. Hence, I placed all the codes from the four data sets on one A3 sheet of paper. This mode of presentation made it easier for me to overview all the codes related to the research questions. I read the whole A3 sheet of paper repeatedly to look for connectedness and to decide on the commonalities between the codes. Within each set of data, I highlighted similar codes of the same colour to connect them to their respective themes.

Phase 3: searching for themes

I gathered the codes that showed similar patterns under potential themes. Then I arranged the cluster of the relevant data under the related themes. On an A4 sheet of paper, I clustered the

similar coloured codes, within each data set, into groups. So, I related these repeated codes that reflected patterns and commonalities and I employed such commonalities to construct themes. Afterwards, I followed Schulz's (2012) characterization for constructing themes. Hence, I ensured that all the overarching themes were exhaustive, sensitive to the data and reflective of the research purpose.

Phase 4: reviewing themes

I have to say that this phase, the refinement of themes, was quite challenging. After I had designed the themes, I encountered some of the matters that Braun and Clarke (2006) have listed. I had to change some of the themes, as they were too broad, while some collapsed into each other. Hence, I had to rework and create new themes, where such themes were related to their respective codes.

Afterwards, I used a mind map to arrange the long list of different codes under the related themes (Braun and Clarke, 2006). This thematic map helped me to visualize "the relationship between codes, between themes, and between different levels of themes" (Braun and Clarke, 2006, p.20). Ultimately, I rearranged the thematic map few times till I got to the result, where I reached an overall story that tells about the data, as has been suggested by Braun and Clarke (2006).

Phase 5: defining and naming themes

As expected, some of the themes required further refining, after which I gave them working titles and concise names that would be discussed in detail in the findings chapter. Within this framework, Figure 3.1 illustrates the process of analysing qualitative data to examine the four text data sources and to construct the overarching themes. Such figure lists the four data sources, which are the EFP textbooks, the College's strategic plan, the EFP professors' transcribed interviews and the EFP students' focus group transcribed interview. The data chunk of each of the abovementioned sources was separately broken into meaningful segments

like words, or phrases or short sentences. Such segments are addressed under certain codes to describe them. Similar codes are grouped together under subthemes, then into the main themes that reflect the content of the research.

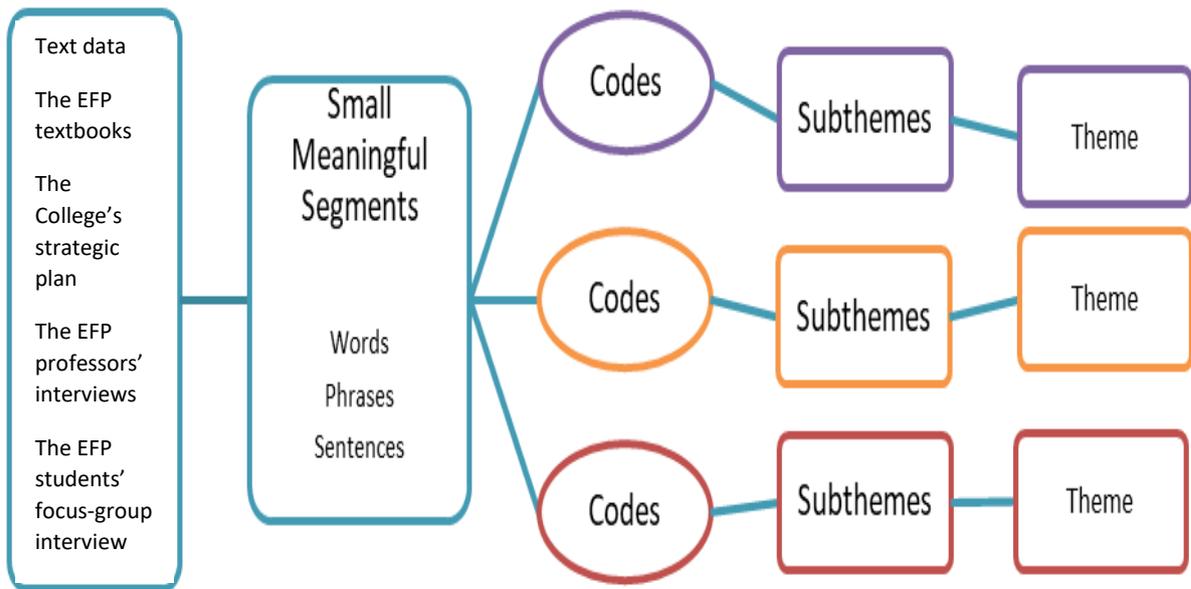


Figure 3.1 Breaking text data into codes, subthemes and themes

Phase 6: producing the report

As a passionate practitioner I aim to investigate CT teaching in the EFP learning- teaching process. Hence, such investigation into a relatively new concept in the Arab Gulf states can create a better understanding and hope for enhancing CT teaching at the College and other HE institutions in Oman and the region. Therefore, one of my aims for this research is to reach as many people as possible such as educators and education policy-makers. To attain this aim, I relied on one of the characteristics of the thematic analysis that Braun and Clarke (2006) stressed in this phase. Hence, I counted on the report phase and presented the analysed data and the findings of the study in a concise analytic narrative where there is a convincing story within, and across, the themes. In view of this, Figure 3.2, adapted from Braun and Clarke (2006), summarizes the thematic analysis's six phases.

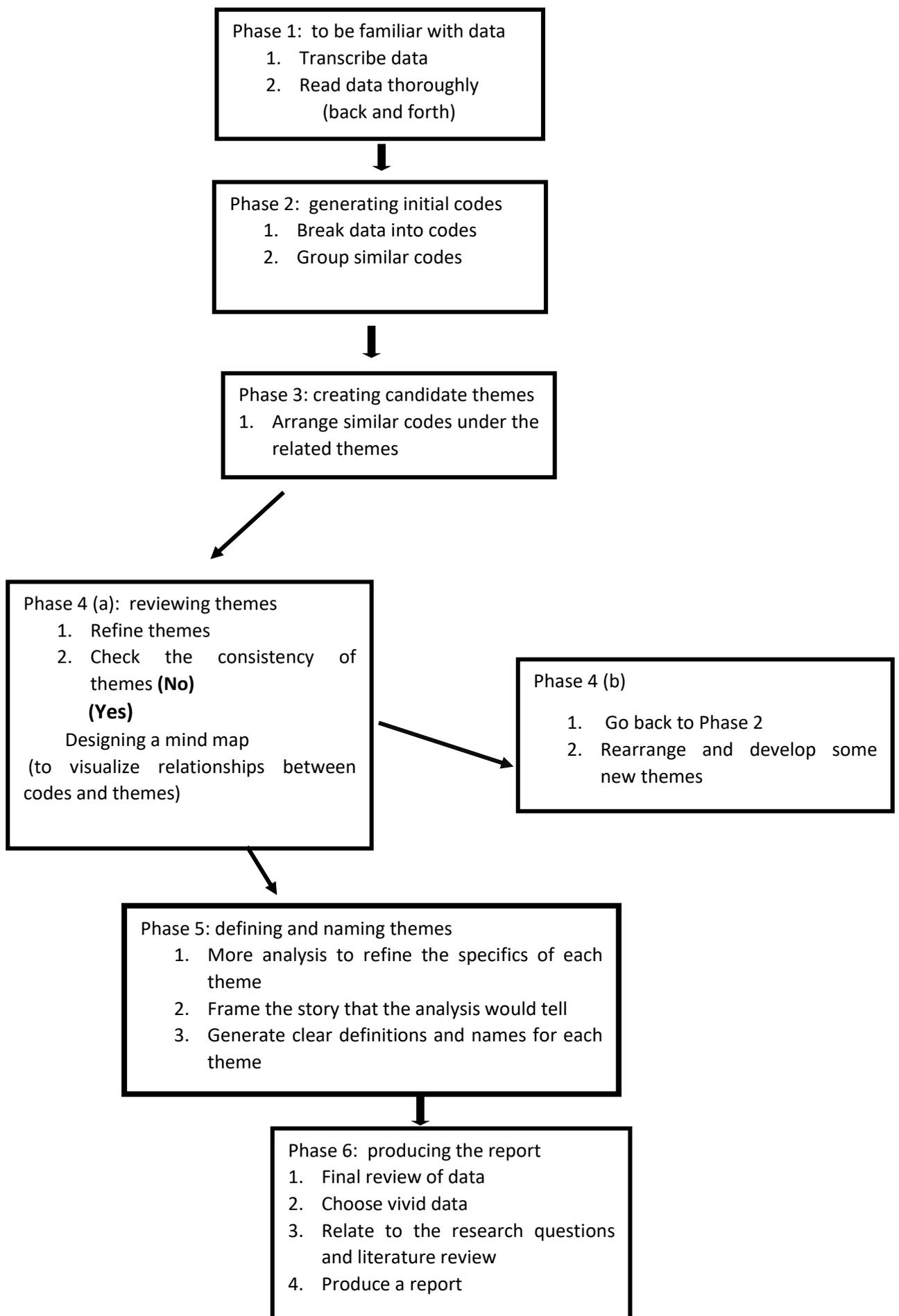


Figure 3.2 The six phases of thematic analysis (adapted from Braun and Clarke, 2006)

3.9 Ethical considerations

Research ethics is an integral part of any study to ensure its ethical standards, to monitor the researchers and to protect the respondents. As my research involves human participants, I had closely followed different ethical strategies throughout the process of the data collection. I was fully aware of my ethical responsibilities because of my dual position in this study; an ESL professor and an insider researcher at the EFP. Nolen and Putten (2007) expressed their concerns regarding ethical issues related to insider researchers. Because of that, I strictly followed Resnik's (2015) and O'leary's (2004) ethical implications as guidelines. I approached all the research's stages with integrity and rigour. I adhered to the ethical norms for promoting knowledge, truth and avoidance of error. Furthermore, I considered all the ethical issues before, during and after the data collection stages. In the upcoming sections, I explain in detail how I worked within the ethical parameters at the three different stages of the data collection.

3.9.1 Ethical considerations before commencing the data collection stage

As an initial step, before commencing the research, I filled in all the mandatory ethical forms that the University of Liverpool assigned. This study proceeded only after I had obtained the formal ethical approval from the International Online Research Ethics Committee. During the research, I followed the detailed Ethics Response Forms as directing guidelines regarding ethical considerations. One of the guidelines that I followed is that before contacting the volunteering participants, I had to approach the EFP administration for different reasons. First, I had to obtain the stamped letter of authorization from the Head of Department and the Dean of the College authorizing me to conduct the research on the College's premises. Second, the EFP administration's approval was mandatory before contacting the professors and the students at the College. Oliver (2003) pointed to the importance of the administration's approval in hierarchical organizations to reassure the participants regarding their involvement in the study.

Informing the participants about the research project is a key feature of social research ethics involving human subjects (Oliver, 2003). Accordingly, I sent invitation e-mails to the professors, while I chose to have a brief meeting with the students. I sent detailed e-mails to the ten selected professors. In these e-mails, to which I attached the PIS, I stated the topic, aim, venue and procedure of the study asserting the EFP administration's approval and the ethical considerations that I would adhere to during the process of the research. Five days were given to the professors to give their voluntary consent whether to participate, or not, in this study. As in all case studies, there is no intention to manipulate human participants' behaviour (Baxter & Jack, 2008).

As for the focus-group student participants, I held a face-to-face meeting. I preferred a meeting with such group, rather than sending e-mails, because Oliver (2003) criticized the brevity of e-mails for their possible effects on the meanings. In the meeting with the students, I ensured that the level of communication reflected clarity and reassurance, in relation to the research. The main objective of the meeting was to inform the students about the academic aim of the research and to announce the EFP administration's approval for conducting the study at the College. Relevantly, the PIS was well-explained to the students, in Arabic, where "esoteric and specialized" language was avoided (Oliver, 2003, p.28). I reassured such that I would carefully address and attend to their concerns, and questions, during the whole course of this study. In such meeting, I stressed my respect for all the ethical issues related to anonymity and confidentiality in this study. I clearly explained to the students the process of de-identification of their biographical details and the pseudonyms assigned to them and to the institution. I assured the participants that throughout the process of writing the research, I would maintain their individual and institutional privacy.

Another point that was of importance was the data storage and destruction. Oliver (2003) referred to the concerns often associated with the ease of the transmission of digital data. Therefore, I confirmed to the respondents the electronic secured storage of data, using my own password, where no third party would have access to the data under any circumstance. Oliver (2003) notified researchers regarding the potential consequences for the participants. So, I intend to retain the paper-based and electronic data for some time after the completion of the thesis. Nevertheless, there are questions to be raised by the participants or other bodies. I had informed all the participants regarding the process of securing, and storing, the data after the completion of the study, before I started interviewing them.

Before starting the data collection, I had explained to the students that they would have the right to participate, or to withdraw, at any stage of the research without any consequences. The students were given five days to review the PIS before signing the consent form for participation. I informed them that I would be available at my office to answer any questions. I made it a point that none of the students that I taught during that semester would be part of the sampling to avoid any kind of pressure on the participants. The possibility that I would teach one of the student participants in the future is minimal, because of the high number of students' enrolment at the EFP. Even if I were to teach any of the participants in the future, this would be unlikely to create pressure on the students for two reasons. The first one is that the research is not of a sensitive nature, and the second reason is that the EFP has an open-door policy, where students can report to the management any unfairness on the part of the professors.

3.9.2 Ethical considerations during the data collection stage

Oliver (2003) stated that the data collection phase is the closest phase of interaction between the researcher and the respondents. It is most likely that predicted, and unpredicted, ethical issues are to arise at this stage. As I am aware of that, I relied on developing rapport, especially with the EFP professors, rather than friendship, to ensure the objectivity of communication with

the respondents on one hand, and to create a fairly formal environment of trustworthiness, on the other hand.

As my research is not of a sensitive nature, no major ethical issues emerged at this stage. I still considered some matters seriously. For example, I preferred to record the interviews, rather than to videotape them. Videotaping is more expressive, even though it could be intimidating to the respondents. I respected the respondents' autonomy and that's why before I started interviewing them, I had notified them of their total control over the continuation of the recording procedure (Oliver, 2003). Behi and Nolan (1995) asserted the interviewees' right to privacy by maintaining the respondents' anonymity and confidentiality. Hence, during the interview recordings, I addressed the respondents anonymously, still with respect, though, to maintain their pseudo identities. During the whole process of data collection, I followed Smythe's and Murray's (2000) guidance and refrained from treating my research participants just as a source of data. I acknowledged their own distinctive individuality as human beings throughout the research.

3.9.3 Ethical considerations after the data collection stage

Here, as well, I continued with my ethical position and responsibilities at the stage of data analysis. At this stage, I was aware of other ethical issues like the multiplicity of narrative meanings as have been stated by Smythe and Murray (2000). Also, I was aware of my possible subjective assumptions, as a researcher. Eventually, Behi and Nolan (1995) and Day (2007) raised the issues of preserving scholarly integrity and adhering to scientific rigour as uncompromised ethical aspects. Hence, I employed a thematic analysis methodology to interpret the EFP professors' and students' interviews. I used this rigorous and systematic measure to preclude any chance of misinterpretations of the participants' responses. As Pope, Ziebland and Mays (2000) stated, I kept the data in their textual forms and, from there, I developed analytical codes. I arranged such codes into themes relying only on the existing data

and evidence. I constructed the themes around CT; its definition and implementation at the EFP learning- teaching process from the respondents' perspectives. I applied thematic analysis, not only because it well-matched the research questions, but also because this methodology maintained the ethical aspects of the study. Such methodology guided me to fairly present the data, as it is an interpretative approach that makes "valid inferences from the text" (Weber, 1990, p.9).

3.10 Summary

This study is a qualitative case study that aims to investigate the CT teaching in the EFP learning-teaching process at the College. The research question is how the EFP learning - teaching process fosters CT teaching. To address this research question, four data sources were used, i.e. the EFP textbooks, the College's strategic plan, the EFP professors' perceptions of CT and the EFP students' perceptions of CT. I used three methods for data collection. These methods are documentary analysis, semi-structured interviews, and focus groups interview. Furthermore, I employed Littlejohn's framework to analyse the physical features and the design of EFP textbooks. Also, I relied on the six phases of thematic analysis developed by Braun and Clarke (2006) for the text data analysis. At the end of this chapter, I discussed the ethical considerations and guidelines assigned by the University of Liverpool that I have adhered to throughout the research. The following chapter presents the findings related to CT teaching and practice in the four text data sources.

Chapter four

Findings

4.1 Introduction

In this chapter, I report on the findings that address the research questions. The chapter is divided into two sections. The first section focuses on the two aspects related to the analysis of the EFP textbooks (Littlejohn,2011). Such aspects helped to identify the EFP textbooks' physical features and their design, to give a vivid description of the EFP teaching materials and to apply a qualitative thematic analysis on such materials.

Furthermore, the second section presents the analysis of the four data sources, which are the EFP textbooks' physical features and the design of the materials, the College's strategic plan, the EFP professors' responses and the EFP students' responses. This section focuses on the findings from the thematic analysis of data sources. I applied such analysis to investigate CT implicit and explicit elements in each data source separately. Consequently, thematic analysis aims to explore how the four data sources foster CT teaching in the EFP learning- teaching process.

4.2 Littlejohn's framework for analysing language teaching materials

I relied on Littlejohn's framework's two aspects of analysis to examine the EFP textbooks. The first aspect is the publication and the second one is the design of the materials (See Table 3.3). The EFP textbooks' publication reflects the layout of the materials, where the focus is on the tangible features of such materials. On the other hand, the EFP textbooks' design reveals the thinking underlying these materials. The findings from Littlejohn's framework of analysis shed light on CT implicit and explicit elements that are embedded in the EFP textbooks' physical features and their design.

The following sections present the analysis of the EFP textbooks' publication depending on the seven aspects and the EFP textbooks' design relying on the nine aspects as listed in Littlejohn's framework (2011) respectively (See Table 3.3). Such analyses of the EFP textbooks' publication and the design of the materials help to investigate CT implicit and explicit elements in the materials. The coming section presents the analysis of the EFP textbooks' publication of the materials.

4.2.1 Analysis of the EFP textbooks' publication and design

I employed the seven aspects that Littlejohn (2011) has developed in his framework to identify the EFP textbooks' publication or their physical features. I used such features to identify CT explicit and implicit elements in the EFP textbooks. Hereunder, I list the seven aspects that I have employed to identify the EFP textbooks' publication (Littlejohn, 2011).

The first and the second aspects of the analysis are the position of the EFP textbooks within the other sets of the materials and the published form of the materials respectively. The third and fourth aspects are the division and the subdivision of the materials into sections and subsections to maintain the sense of coherence in the materials. I focused on the fifth aspect, which is the EFP textbooks' continuity, and the sixth one, which is the EFP textbooks' route, as they reflect the materials' predetermined order. The last aspect explains the access to the EFP textbooks and how such textbooks are supported.

In the same context, the following section presents Littlejohn's (2011) framework's aspects that are related to the EFP textbooks' design. To report on the EFP textbooks' design, the coming section discusses the nine aspects developed by Littlejohn (2011). Such aspects are represented as the pedagogical devices that enhance CT teaching, and such point will be elaborated on in the discussion chapter.

The EFP textbooks' publication's analysis has its own limitations, as it only examines the tangible features of the materials (Littlejohn,2011). Therefore, I examined the EFP textbooks'

design, as such analysis reflects the content and the thinking underlying the materials (Littlejohn,2011). Upon examining the EFP textbooks' design, I focused on the nine aspects developed by Littlejohn (2011) to analyse the essence of the materials. I relied on the first aspect to examine the EFP textbooks' apparent aim and the subject matter. The second and third aspects discuss the principles of sequencing and selection, and the rationale behind such principles in enhancing CT implicit and explicit elements. The fourth and fifth aspects examine the EFP textbooks' content and the EFP learning-teaching activities. Moreover, the following three aspects are related to the EFP textbooks' learning-teaching activities, and such aspects are the modes of participation and the students' roles and the professors' roles. To sum up the EFP textbooks' design's analysis, the final aspect examines the role of the materials as a whole in enhancing CT implicitly and explicitly. In view of the above, the following section describes the EFP textbooks, relying on the materials' physical features' and the design's analyses as such analyses have been developed by Littlejohn (2011).

4.2.2 The EFP textbooks' description

Textbooks play a focal role in high quality education, besides the students' learning efforts and teaching methods (Meyers & Nulty, 2009). Therefore, the EFP textbooks are vital elements in the EFP teaching-learning process. Consequently, the EFP textbooks are one of the data sources in this study, as they are the only teaching component in the EFP learning-teaching process. Thus, the EFP textbooks significantly shape the EFP learning-teaching process.

Accordingly, at each level of the EFP, students are assigned two textbooks to cover the four language skills in addition to CT. The title of the first textbook is Reading, Writing and Critical Thinking Skills. The title of the second one is Listening, Speaking and Critical Thinking Skills. The two textbooks are the complete, and the only, set of the teaching materials for each level in the EFP. Hence, other aspects that Littlejohn (2011) listed to access textbooks such as wordlists, indexes and hyperlink are not part of the EFP teaching materials. The reason for that

is that one of the EFP administration's guidelines to the EFP professors is to adhere to the EFP textbooks as the only source of teaching materials. Moreover, the EFP textbooks aim to introduce general English to the EFP students. As one of the tangible aspects, each textbook is divided into ten units. These units cover a variety of topics following different academic paths using authentic materials. Through this variation of academic paths, ranging from Sociology to Earth Science, the teaching materials fulfil their aim by introducing general English to ESL students reflecting their different interests.

Furthermore, the EFP textbooks' published form reflects the same form and layout. Such textbooks are paper print, durable and bound. Each textbook is divided into ten units. Each unit's theme focuses on an academic content related to students' interests such as technology, business and environmental issues. EFP textbooks' units start with unit openers, listing the objectives of the unit. Also, on each unit's opening page, there are open-ended questions and general questions to encourage discussion. Likewise, different authentic visual cues, such as real situations photos, authentic charts, maps and graphics are employed, as central parts of the unit's opening page. Such images and charts help students predict the unit's content, think critically and share ideas about the unit's topic.

In the above discussion, I described the EFP textbooks without referring to the publisher or the textbooks' titles. I have refrained intentionally from identifying the EFP textbooks, as part of adhering to the ethical guidelines, thereby maintaining the confidentiality of this study. Also, it is important to note that the EFP four levels use the same textbooks' series for the four skills of the English language. The series is designed to gradually elevate the EFP students' language proficiency from one level to the following one. Accordingly, there is a continuity and uniformity in the layout of the textbooks with a standard pattern in the design, size, typeface and the presentation of the content. Because of this consistent standardisation along the EFP four levels textbooks, I analysed such textbooks collectively using a qualitative thematic analysis. Consequently, I applied such analysis to the aforesaid EFP textbooks' physical

features and to the design of the materials. In view of this, the following section reports on the findings related to the EFP textbooks' thematic analysis.

4.3 Findings based on the qualitative thematic analysis

In this study, I employed thematic analysis as such approach helped me to code patterns and commonalities in the EFP textbooks, the College's strategic plan, the EFP professors' responses and the EFP students' responses. I relied on the findings of such analysis and constructed overarching themes that helped me address the research questions.

In terms of the EFP textbooks, I constructed two themes as follows: the first theme is CT explicit elements and the second one is CT implicit elements. I investigated both themes in relation to how they can foster CT teaching in the EFP learning-teaching process. The coming sections report on the findings related to the EFP textbooks' CT explicit elements which are the unit's sequencing and the learning-teaching activities respectively.

4.3.1 The EFP textbooks' CT explicit element

4.3.1.1 The EFP textbooks' unit's sequencing

In terms of the EFP textbooks' unit's sequencing, there is a repeated pattern in the EFP Reading textbooks' and the EFP Listening textbooks' units' order, divisions and subdivisions across the EFP four levels (See Figures 4.1 &4.2). The EFP Reading textbooks' units are divided into Lessons A, B and C, whereas the EFP Listening textbooks units are divided into Lessons A and B. In both textbooks, there is a gradual progression across the units' lessons. For example, Lessons A focus on concrete knowledge reflecting the lower categories of Bloom's taxonomy, where students are required to remember and understand facts. However, Lessons B require students to focus on the higher categories of Bloom's taxonomy, where such students show abstract knowledge by applying it to new situations or by analysing such situations. By the end of Lessons B, there are explicit CT tasks, where students are supposed to analyse, synthesize and critically evaluate ideas and information in the text. In the same context, the Reading

textbooks' Lessons C focus on the highest category of such taxonomy which is creativity. At this level, the students are required to write an essay based on the unit's theme, where students should apply the new acquired language and voice their own views.

In both EFP textbooks, Lessons A end with pre-reading tasks for Lessons B. Lessons A are followed by a viewing task of authentic materials videos that are based on award-winning films' collections. These videos serve as content- bridges between Lessons A and Lessons B. Before starting Lessons B, students are required to use their CT skills to link the videos' contents to the previous reading texts in Lessons A as such videos consolidate the Lessons A contents.

In view of this, the sequencing of the units' lessons, per se, reflects a logical progression within the EFP textbooks and across the EFP four levels. Such logical progression throughout the EFP textbooks' sequencing enhances the students' CT skills, as the sequencing of each unit gradually elevates the students' lower order of thinking skills to higher ones, following Blooms' Taxonomy (Forehand, 2010). Moreover, such logical progression is maintained through three types of consolidated tasks (Beaumont, 2010). These types of tasks are similar to the EFP learning-teaching activities. The first type of tasks is the pre- reading or the pre-listening tasks. The second type of tasks focuses on the reading texts or the listening track. The third type of tasks is based on applying the new acquired knowledge to learning-teaching activities.

4.3.1.2 The EFP textbooks' learning-teaching activities

The EFP Reading textbooks' and the EFP Listening textbooks' learning-teaching activities proceed from the lower levels of thinking skills to the higher ones, reflecting Blooms' taxonomy of learning domains (Forehand, 2010). For example, in both textbooks, under Lessons A (See Figures 4.1 & 4.2), students are required to apply the factual levels of Blooms' taxonomy which are knowledge, comprehension and application to their learning-teaching

activities. However, in Lessons B, students move to higher levels of thinking skills. In such lessons, students are required to apply higher orders of thinking skills such as, analysis, synthesis and evaluation to a higher set of activities. Moreover, in both textbooks, the final questions require the students to evaluate arguments based on the lessons' contents. In such arguments, students give examples from their own experience, and they attempt to apply the new vocabularies to their discussions. Hence, this gradual elevation, in the EFP textbooks' activities, helps the EFP students to express themselves and build up their own CT skills. EFP students apply such approach to activities that require them to give their opinions, and to relate new information to ones' experience, and also to evaluate and to synthesise information.

Moreover, the EFP textbooks' Lessons A include ten high-frequency vocabularies and exercises so that students practice and expand the vocabularies and listening activities under formal conversations. Based on the units' themes and on Lessons A, there are explicit CT learning-teaching activities at the end of each unit. Such learning-teaching activities are integrated in every unit to engage students and develop their academic skills. For instance, note taking is an explicit CT listening activity, where students listen to, and consolidate, key information, allowing them to think critically about the information they hear. Based on the units' themes, students perform collaborative speaking activities in pairs or groups that enhance their communications and CT skills.

Besides the above mentioned EFP textbooks' CT explicit elements, there are other CT implicit elements in the EFP teaching materials. The following sections report on the EFP textbooks' CT implicit elements such as visual literacy, continuity and learning-teaching activities.

4.3.2 The EFP textbooks' CT implicit elements

4.3.2.1 Visual literacy

Upon analysing the published form of the EFP textbooks, one of the repeated physical features is the extensive use of images and audio-visuals such as, real situations photos and award-

winning videos respectively (See Figure 4.3). In addition to that, authentic charts such as, maps and graphics are other dominant features across the EFP's four levels textbooks. Such realistic visuals, as the abovementioned ones, help students to develop their visual literacy. Shabiralyani, Hasan, Hamad and Iqbal (2015) described these realistic visuals as motivational tools for enhancing students' learning and conceptual thinking. The use of visual imagery helps the students to get connected with the materials, rather than depending on text-based textbooks. Hence, such images and audio-visuals are used as one of the ways of introducing EFP students to academic contents in English. For example, the EFP textbooks' units start with visual introductions that introduce the learners to the units' themes, through discussions and application of CT skills. Such visual introductions are based on authentic images that connect the students to the real world.

Another example of enhancing CT teaching is the use of the EFP textbooks' award-winning videos. Videos enhance students' learning-teaching processes, as they attract the students' attention, engage them and enhance their communicative language competence (Bajrami & Ismaili, 2016). After viewing the EFP textbooks' videos, students are required to do sets of activities based on such videos. Hence, videos and authentic images, such as real situations photos, charts and graphics are presented to support the main texts and to help the students to understand the main ideas underlying the materials and apply such acquired knowledge to new situations.

In the same context, the EFP textbooks' authentic images and videos can address the different categories of Bloom's taxonomy. Tillmann (2012) referred to the possible alignment between visual literacy proficiency, on one hand, and Bloom's taxonomy's framework of levels of thinking, the cognitive and the student-centred sets of principles, on the other. The scholar extended the definition of visual literacy from just the basic levels of cognition to strategies that can build more complex CT skills and reasoning skills. Because of the importance of such alignment, I will elaborate on this point under the discussion section.

4.3.2.2 Continuity within and across the EFP textbooks

The EFP textbooks reflect topical syllabi that are based on universal and contemporary topics of interest to students, such as gender roles and social relations. Such topical syllabi maintain the continuity and the sense of coherence within the EFP textbooks at the same level and across the four levels of the program.

For example, Level 1 Reading textbooks' and Listening textbooks' first units are titled 'Our World' and 'Same and Different' respectively. As for Level 2, the Reading textbooks' and Listening textbooks' first units are titled 'Family Ties and Good Times', and 'Good Feelings', in that order. In terms of Level 3 Reading textbooks, the first unit is titled 'Happiness', while in the Listening textbooks, the first unit is titled 'Staying Healthy in a Modern World'. At Level 4, the Reading textbooks' first unit is titled 'Social Relationships' and in the Listening textbooks' first unit is titled 'Gender and Society'. Evidently, the abovementioned units' titles reflect the continuity across the EFP textbooks, as they discuss the same themes. However, such themes are presented from different perspectives in each unit. In addition to that, the EFP textbooks' continuity is maintained through the topics, similar key vocabularies and predetermined order of units' tasks in each textbook. Such pattern is followed to maintain continuity across the four levels of the EFP textbooks.

It is with view of the above, that Table (4.1) below lists the units' titles to mirror the units' continuity at the same level and across the EFP four levels. For example, Table (4.1)'s listed units maintain their continuity by adhering to the same academic tracks, where they are linked to the field of Sociology and Anthropology. The EFP textbooks' continuity is retained across the units by selecting similar academic tracks, vocabularies, concepts and information.

Hence, the EFP textbooks' materials' selection is a technique of maintaining such textbooks' continuity. For example, the EFP textbooks' topics are selected to reflect a variety of

contemporary issues from different academic tracks. This selection reveals similar academic tracks, such as psychology, science and economics in both of the EFP Reading textbooks and the EFP Listening textbooks within the same level and across the EFP four levels. Furthermore, such selection of academic tracks addresses the EFP students' interests and meets their needs. Also, the EFP textbooks' selected materials touch on controversial issues such as human migration, the impact of urbanization and gender roles, thereby reflecting the abovementioned academic tracks. Such controversy requires students to express their various points of view and to approach the materials critically.

The EFP textbooks' language's selection maintains the continuity within the materials. The presentation of a new language through vocabularies, contents and structures (Parrish, 2006) is shared across the EFP textbooks. Also, the Reading textbooks and the Listening textbooks integrate the four language skills: speaking, listening, reading and writing by using similar vocabularies and structures. Moreover, the EFP textbooks' lessons' contents reflect an extensive use of authentic language and unguided practice of language usage. The EFP textbooks' learning-teaching activities reflect the application of such new language in a predetermined order to maintain the continuity of the materials.

Table 4.1 Continuity within the themes of the EFP textbooks

EFP Levels	Reading, Writing and Critical thinking textbooks	Listening, Speaking and Critical thinking textbooks
Level 1	Unit 1: Same and Different	Unit 1: Our World
Level 2	Unit 2: Family Ties	Unit 2: Good Times, Good Feelings
Level 3	Unit 1: Happiness	Unit 1: Staying Healthy in a Modern World
Level 4	Unit 1: Social Relationships	Unit 1: Gender and Society

4.3.2.3 The EFP textbooks' learning- teaching activities

In terms of the EFP textbooks' learning-teaching activities, they are selected to reflect the unit's recycled theme (Parrish, 2006). Moreover, such activities require the students to apply the new language acquired, as new vocabularies and structures. The new language is based on the units' themes, where students apply such language to CT explicit and implicit learning- teaching activities (See Figures 4.1& 4.2). Students use knowledge, comprehension, application, analysis and evaluation skills to apply the new language to their textbooks' activities. In other

words, the EFP textbooks' learning-teaching activities are student-centred activities that are built on recycled themes, previous activities and students' prior knowledge. In view of learning-teaching activities, Littlejohn (2011) referred to the importance of examining other aspects simultaneously. The scholar defined such aspects as the learners' role, modes of participation, the professors' role, and the role of the materials. The following sections report on such aspects, in terms of enhancing CT teaching in the EFP learning-teaching process.

As for the learners' role, the EFP textbooks' learning-teaching activities require the EFP students to reflect elements of "process competence" (Littlejohn, 2011, p.184). Hence, students depend on the various domains of knowledge they acquired through the units' themes and different academic tracks to approach the EFP textbooks' learning-teaching activities. Moreover, such activities require students to interpret, deduce and express meanings using their writing, reading, listening and speaking skills. Consequently, the EFP textbooks' learning-teaching activities require active learning environments that necessitate students to work in pairs or groups in the class. Thus, student-to student interaction and collaboration are the dominant modes of participation in the EFP classes.

In this context, the EFP learning-teaching activities require a student-centred approach in classes. Tigelaar, Dolmans, Wolfhagen, and Van Der Vleuten (2004) argued that such type of activities requires adequate teaching competencies. Tigelarr et. al., (2004) constructed a framework for important teaching competencies. One of the domains for good teaching competencies is the professors' role as facilitators in learning-teaching processes. As facilitators, the professors support and assist the students in scaffolding their learning by giving them space for creativity and innovation. Furthermore, as facilitators, such professors are expected to build constructivist classes, where there is a mutual learning environment between the professors and the learners, and even among the learners themselves (Bada & Olusegun, 2015).

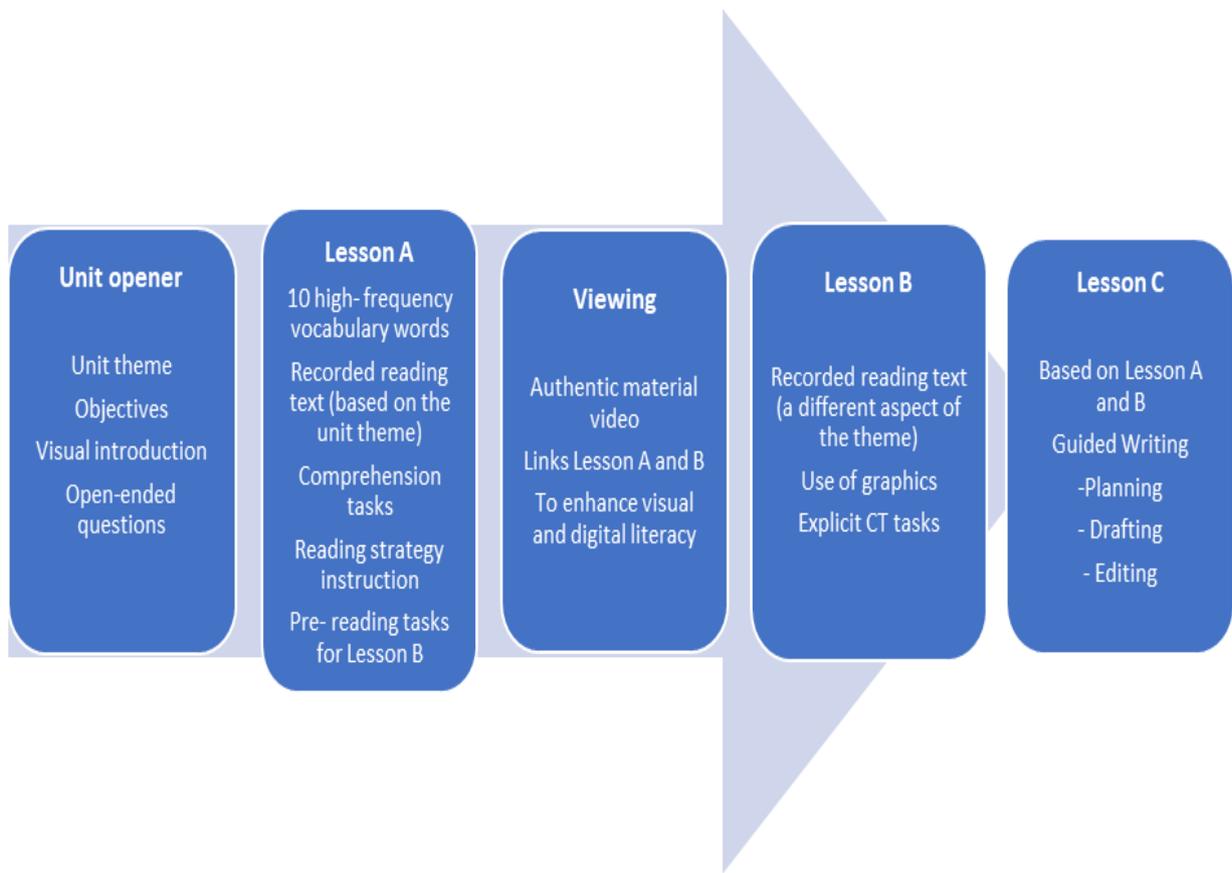


Figure 4.1 Reading, Writing and Critical Thinking Textbook: Units' divisions and sequencing

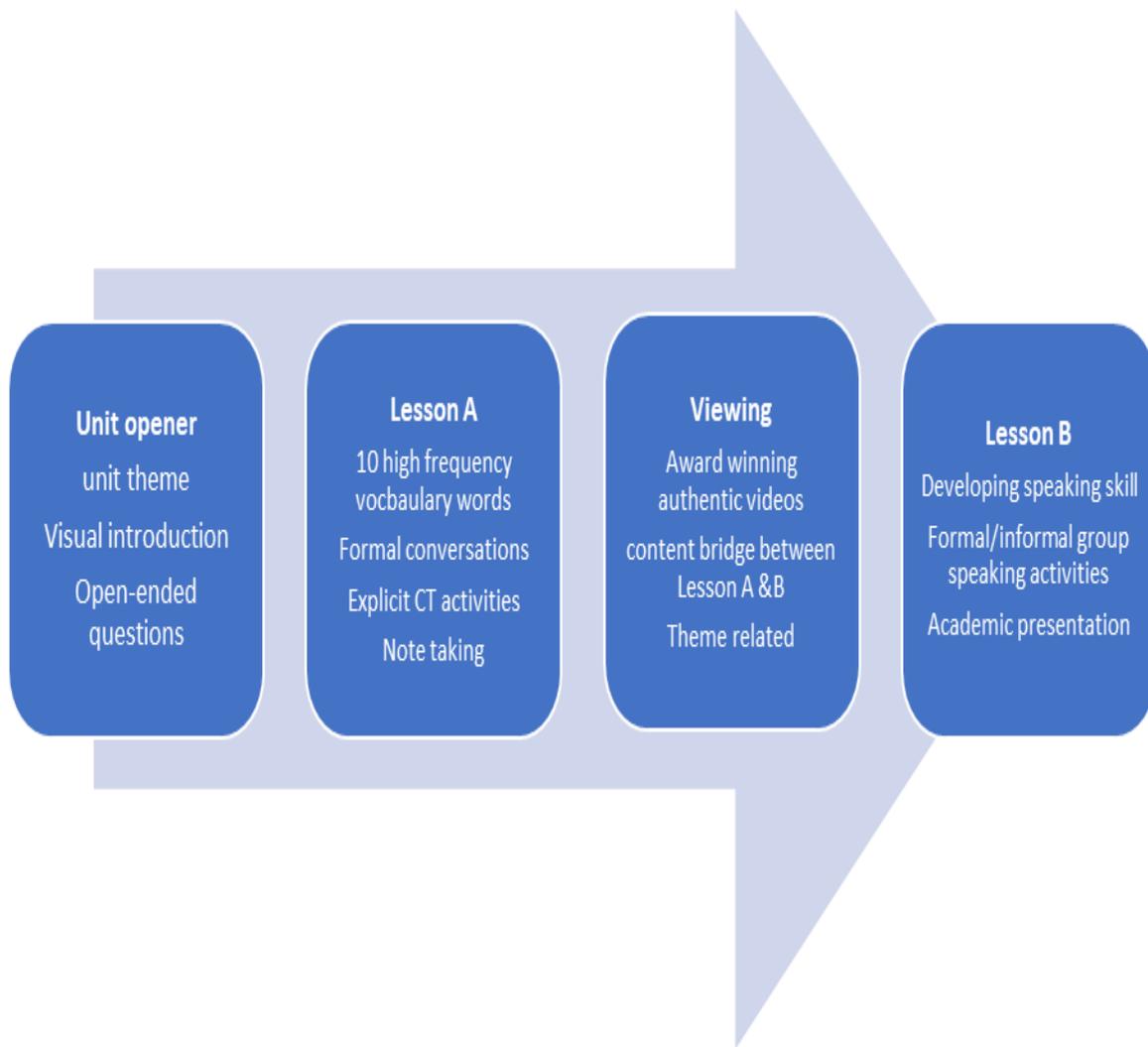


Figure 4.2 Listening, Speaking and Critical Thinking Textbook: Units' divisions and sequencing

Based on the abovementioned findings, I designed Figure 4.3 to illustrate the EFP textbooks' CT explicit and implicit elements. In terms of the EFP textbooks' CT explicit elements, the sequencing of the materials and the learning-teaching activities reflect such elements. The EFP Reading textbooks' and the EFP listening textbooks' units' sequencing progresses gradually from concrete factual knowledge, in Lessons A, to abstract knowledge, in Lessons B. In both textbooks, in Lessons B, there are explicit CT instructions, where students are required to critically analyse, synthesize and evaluate the information in the texts. Also, Lessons B and Lessons C target students' creativity, where these students apply the factual knowledge, they learnt in Lessons A, to new contexts where they can express their own opinions in such lessons. Likewise, such textbooks' learning-teaching activities proceed from the lower levels of thinking skills to the higher ones, reflecting the six categories of Bloom's taxonomy. In the textbooks' Lessons B and Lessons C students address higher order of thinking skills activities, where they analyse, synthesise and evaluate such activities.

As for the EFP textbooks' CT implicit elements, such elements are revealed through the visual literacy, continuity and the learning-teaching activities in the materials. The use of realistic visuals such as real-life images, charts and videos enhances students' conceptual thinking skills, as students apply this acquired knowledge to new situations. In the same context, the EFP textbooks' continuity, maintained through adherence to similar academic tracks, topic, vocabularies and prior knowledge, fosters CT teaching. To address the EFP textbooks' learning-teaching activities, there are certain aspects that students need to follow. Such students need to work collaboratively, to be active and to construct knowledge, where their teachers' role is more of facilitators that helps them to construct such knowledge.

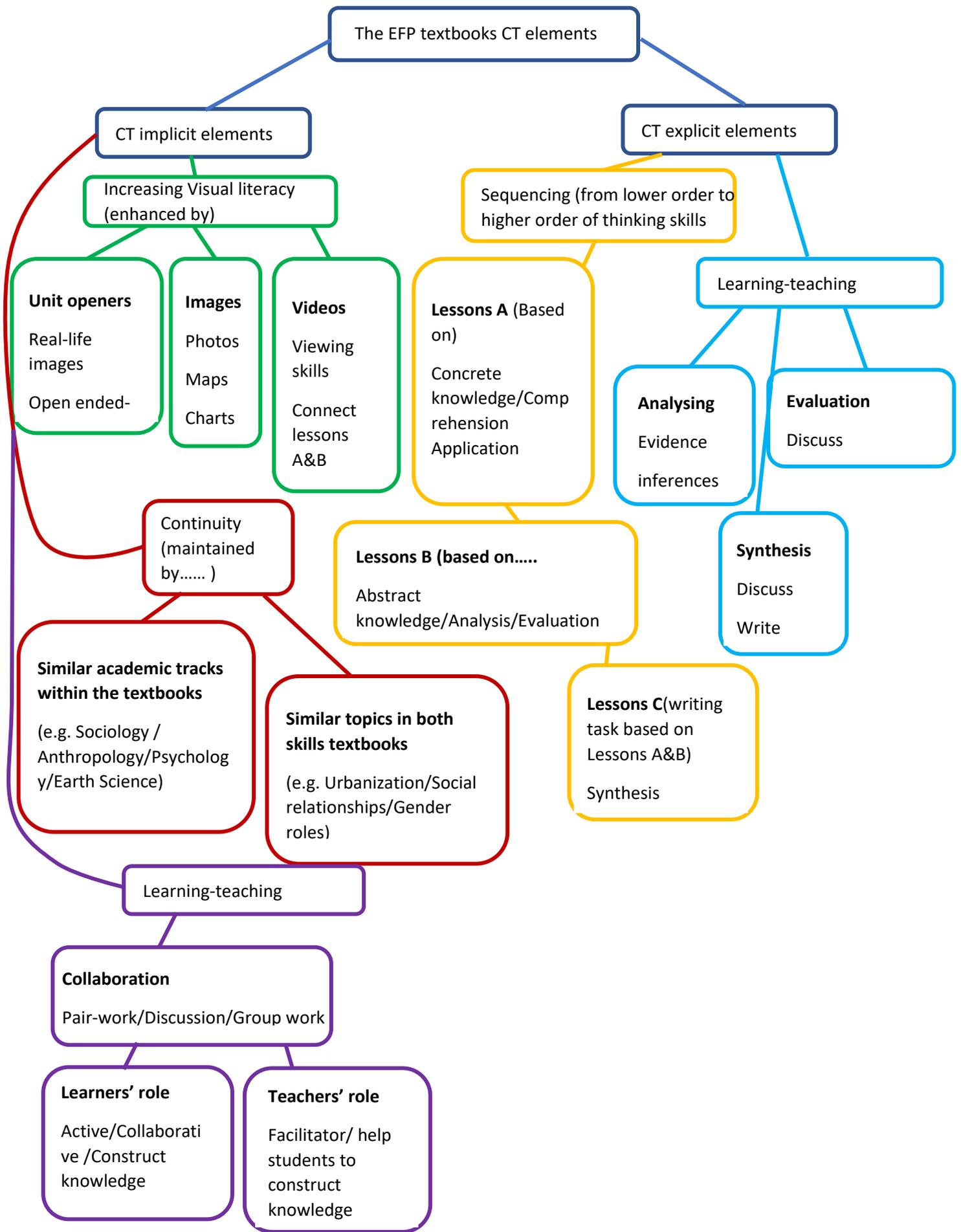


Figure 4.3: EFP textbooks’ CT explicit and implicit elements

4.4 Findings based on the College's strategic plan's analysis

The following sections report on the findings derived from the College's strategic plan's thematic analysis, the EFP professors' responses and the EFP students' responses. Such findings are presented within the framework of the research questions. The coming section discusses the findings related to the College's strategic plan, to which the EFP adheres. The College's strategic plan consists of the following components which are values, mission, vision, graduates' attributes and the PF. The hereunder sections report on the College's strategic plan's analysis and on the findings related to the analysis of each of the aforesaid components separately, as each one relates to the concept of CT in a different way.

In the process of analysing the College's strategic plan, I did not have to break down such components into smaller segments, with the exception of the PF, as the values, mission, vision and graduates' attributes statements are stated in the form of the smallest meaningful segments.

Although I have been one of the College's faculty members for the past five years, I analysed the College's strategic plan's text data from the perspective of the research questions. I printed copies of the College's strategic plan, read them thoroughly line by line, then I broke down the meaningful segments into codes. I placed all the related codes on an A3 sheet of paper, as mentioned in the methodology chapter. I drew connections among the similar codes, which were highlighted, to the same colours. Based on the codes commonalities, I constructed two overarching themes to reflect elements related to CT in the College's strategic plan. These themes are CT implicit elements in the College's strategic plan and CT explicit elements in the College's strategic plan. The following sections discuss in detail the CT implicit and explicit elements in the Colleges' strategic plan's components.

4.4.1 The College's strategic plan's CT implicit elements

4.4.1.1 The College's values

Mueller (2015) highlighted the importance of values in HE institutions. The scholar defined values as “foundational elements of strategic thinking that serve to drive the plan” (Mueller, 2015, p.41). Value statements explain the institutions' standpoints and how such institutions conduct their activities. In this context, Hinton (2012, p.10) defined the value statements from the institutions' viewpoints as “these are the characteristics we believe are important in how we do our work”. Hence, the College's values statements are set to ensure the effectiveness of its different programs such as the EFP. Hereunder are the College's values:

- Professionalism
- Integrity, honesty and fairness
- Flexibility
- Teamwork and tolerance
- Creativity and innovation
- Communication

The abovementioned College's values go beyond technical competence, and they reflect the 21st century's soft skills most required by labour markets. In his study, Robles (2012, p.453) defined the most important top ten soft skills demanded by these markets which are “integrity, communication, courtesy, responsibility, social skills, positive attitude, professionalism, flexibility, teamwork, and work ethic”. Robles (2012) highlighted the employers' increasing interest in the importance of soft skills or people skills, as such skills are viewed as investments in today's workplaces and labour markets. Referring to Robles' (2012) classification of the top ten soft skills, it is evident that the College's values reflect some of these important skills such as flexibility, teamwork, integrity, and communication.

In view of the aforesaid Colleges' values, some of these values, such as creativity, teamwork and tolerance reflect the impacts of CT teaching. A group of scholars, such as Gokhale (1995), Snyder and Snyder (2008) and Paul and Elder (2006), stated that problem-based learning and CT teaching help cultivate values such as creativity, self-direction and teamwork. Hence, CT teaching should be of significance as the impacts of such concept, reflected on the above stated values, would enable students to tackle social, scientific, and practical problems. Consequently, "researchers and educators generally agree about the importance of teaching critical thinking skills in higher education" (Behar-Horenstein & Niu, 2011, p.25).

4.4.1.2 The College's mission statement and vision statement

The College's mission statement and vision statement are similar to other HE institutions' missions' statements and visions' statements. Both of the College's mission and vision are succinct statements that state what the College would offer to its graduates in terms of high quality student-centred education. Through such type of education, the College's graduates, being empowered with personal and technical skills, are expected to contribute to the Omani national socio-economic development. Hence, the College's mission statement and vision statement reflect the institution's promise to its graduates (Wang, Gibson, Salinas, Solis & Slate, 2007).

In the same context, the College's mission statement and vision statement do not refer to CT teaching and practice explicitly. Despite that, both statements refer to the impact of CT teaching and practice in relation to graduates' professional competencies. For example, both statements reflect on the impact of the institution's high-quality education to empower Omani graduates to be confident professionals, who are well- prepared for the labour market. Hence, such statements elaborate on what matters to the College as a HE institution (Ireland and Hirc, 1992). Moreover, both statements reflect on how to achieve the College's graduates' "image of desirable future" (Mariasse, 1985, p.150) by providing high quality education. In view of this,

CT teaching and practice are among the characteristics of high-quality education (Gojkov, Stojanović & Rajić 2015).

To sum up, both of the College's mission statement and the College's vision statement urge the College's graduates to "critically question and assess the integrity of their deeply held assumptions about how they relate to the world around them" as has been stated by Mezirow and Taylor (2011, p.xi). The College's mission and the vision statements reflect the potential of HE in transformative learning (Garrison & Kanuka, 2004) to promote change and to challenge the institution's graduates to cope well with a life of contribution and success.

4.4.2 The College's strategic plan's CT explicit elements

4.4.2.1 The College's graduates' attributes

Barrie (2006) referred to HE institutions' graduates' attributes as a way through which such institutions articulate the outcomes of their education. Such attributes are not taught as part of the HE institutions' disciplinary knowledge. In contrast, graduates' attributes are transferable skills that students develop through their HE meaningful learning- teaching experience. For that reason, HE institutions' graduates' attributes reflect the beliefs of the institutions as well as their societies social and political climate (Barrie, 2006)

In view of this, the College's graduates' attributes are not connected to any academic discipline. Consequently, such attributes do not define the process of informational learning (Kegan, 2009). The majority of the College's ten graduates' attributes concur with the "positioning of education as one of the keys to the nation's prosperity in the new knowledge economy" (Barrie, 2006, p.216). Hence, the College's graduates' attributes touch on the graduates' performance as professionals, entrepreneurs and responsible citizens. In this context, the College's graduates' attributes explicitly reveal CT teaching multiple impacts on its graduates as an outcome of their learning-teaching experience. Some examples of CT teaching impacts articulated in the College's graduates' attributes are the graduates' abilities

to think critically and to act as problem-solvers. Furthermore, graduates are expected to process and apply knowledge to new situations showing high professional and entrepreneurial competencies in a changing global environment. Also, other CT teaching impacts on graduates are to develop themselves through life-long learning and to act as responsible citizens. Such citizens are expected to be aware of contemporary issues and to contribute to the national development. Hereunder are the College's graduates' attributes explicitly reflecting the impact of CT teaching.

Attribute 1: Are well disciplined and committed to hard work and a high standard of productivity.

Attribute 2: Are able to apply the knowledge and skills to a diverse and competitive work environment.

Attribute 3: Are able to think critically, analyse and solve problems.

Attribute 4: Have a high degree of competence in using information and communication technology.

Attribute 5: Are professionally competent and up-to-date in their field of specialization in a changing global environment.

Attribute 6: Can gather and process knowledge from a variety of sources.

Attribute 7: Can effectively demonstrate and apply good interpersonal skills in team work and leadership roles.

Attribute 8: Are committed to self-development through lifelong learning.

Attribute 9: Are socially responsible citizens aware of contemporary issues in contributing to national development.

Attribute 10: Are able to demonstrate and apply their entrepreneurial skills.

4.4.2.2 The College's pedagogical framework

PFs do not set classroom actions, as such frameworks define the intended outcomes of the learning, teaching and assessment processes in HE institutions. The College's PF is the blueprint to guide the professors in the teaching, learning and assessment processes. The College's PF sets the guidelines that improve the teaching quality in the various College's departments such as the EFP. Consequently, I investigated the College's PF in relation to CT teaching and practice, as the concept is one of the criteria that enhances the teaching quality.

In this context, I examined CT teaching and practice in the three processes in education which are learning, teaching and assessment. As for the learning and teaching processes, the PF refers to both processes as the two sides of the same coin and discusses them under one topic. The College's PF states that the aim of the learning and teaching processes is for professors to see the students' change from what they are into what they can be. Thus, the College's PF provides learning and teaching guiding principles to achieve such aim. One of the stated principles is the learners-centred approach, which is defined as a motivating guideline for learning. Such principle explicitly stresses the importance of developing skills such as CT and problem-solving as part of students' learning. The learner-centred approach is the only teaching guiding principle that explicitly refers to CT teaching.

In terms of the College's assessments, the PF stresses their importance but only as tools for assessing students' performance and progress. According to such framework, the College's assessments are based on the courses' learning outcomes and discrete items of knowledge. Hence, such assessments assess the students' informational learning (Kegan, 2009), where exam writers should be highly specific about what outcomes to assess. The College's assessments' procedures and contents are briefly discussed in one paragraph in the PF. Moreover, such framework did not implicitly or explicitly refer to CT as one of the components to be assessed.

In this context, I designed Figure 4.4 to illustrate the College' strategic plan's CT implicit and explicit elements. The College's values like professionalism, creativity, innovation and tolerance refer to CT implicitly as such elements are the impacts of CT teaching. Likewise, the College's mission statement and vision statement implicitly refer to elements that reflect the requirements of CT teaching such as offering high quality education to the students. Moreover, there are other elements in such statements that are related to the impacts of CT teaching such as the graduates' professional competencies and their attainment of personal skills and life-long learning. The graduates' attributes reveal the impacts of CT teaching explicitly, as they reveal elements such as expecting graduates to think critically, to be problem-solvers, to have professional competencies and to act as responsible citizens. In view of this, the PF refers to CT and problem-solving as one of the guidelines to be approached in the College's students-centred classes. Also, the PF referred to the role of prior knowledge in enhancing quality education at the College.

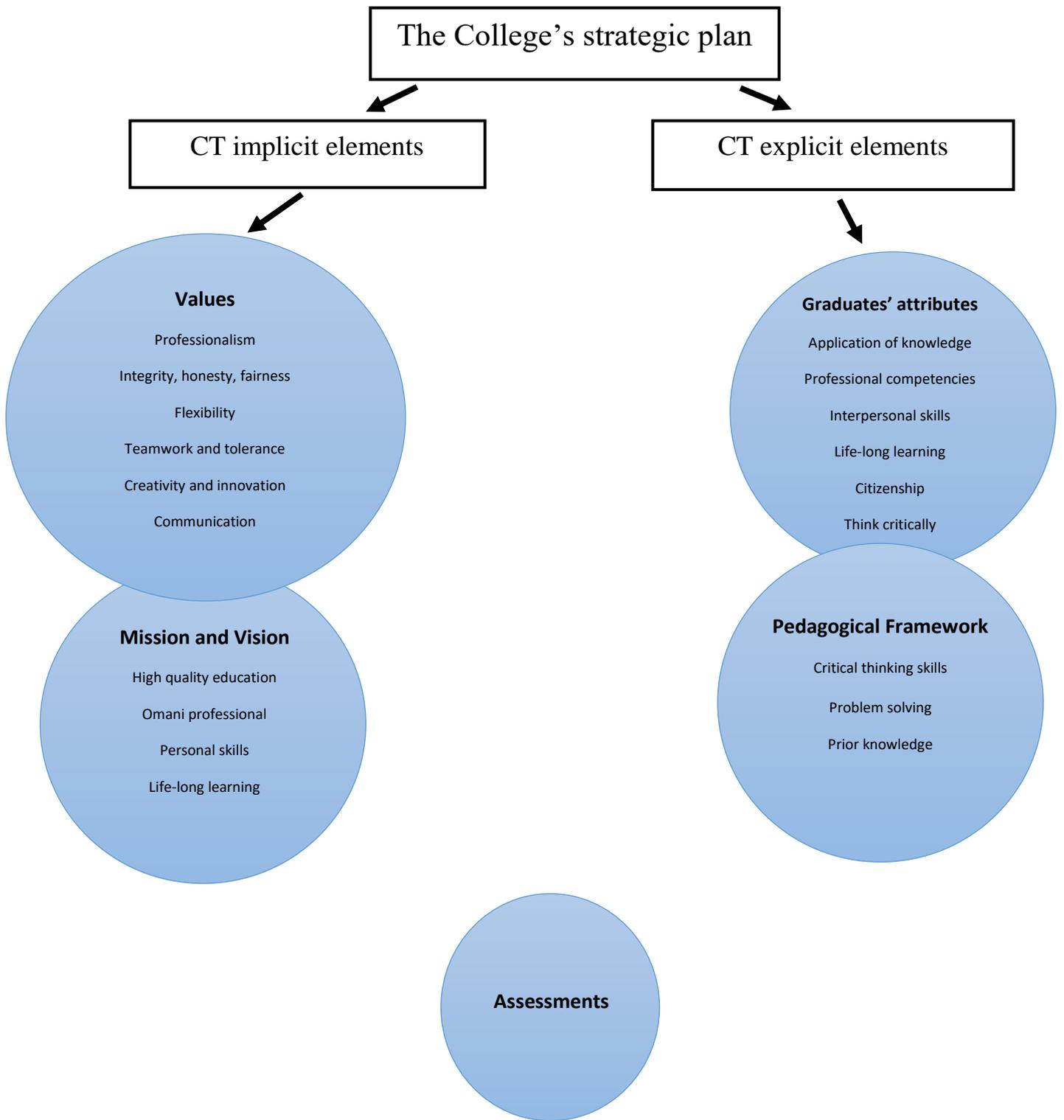


Figure 4.4 The College's strategic plan's CT elements

To conclude, the EFP textbooks and the College's strategic plan are important data sources that contributed to addressing two of the research questions and gave voice and meaning to the topic of this research (Bowen, 2009). Thus, the findings related to CT implicit and explicit elements in such two important components of the EFP learning-teaching process should foster CT teaching in the program. I elaborate on such point in the discussion chapter.

Furthermore, the other data sources, such as the EFP professors' interviews and the EFP students' interviews, were of equal importance to this study. Such interviews reflected on the life-world of the interviewees, in relation to the meaning of the described phenomena (Opdenakker, 2006). The following sections report on the analysis and the findings related to the EFP professors' perceptions of CT and the EFP students' perceptions of CT.

4.5 Findings related to the EFP professors' perceptions of CT

In terms of the EFP professors' transcribed interviews analysis, I broke such chunk of data into small meaningful segments. In such segments I looked for codes, in relation to the respondents' perceptions of CT. Hence, I relied on the often-repeated codes in such interviews as these codes are the most important ones on the respondents' minds (Ryan & Bernard, 2003). Then, I gathered such codes under related themes to reflect on the research questions. However, such themes did not "provide a rich thematic description" (Braun & Clarke, 2006, p.83) for the data. Hence, I had to rework on these themes, not because they were too broad or collapsed into each other, but because such themes did not reflect on the research questions (Braun & Clarke, 2006).

In view of this, I used a mind map to rearrange the long list's different codes under the related themes. I applied this thematic map to visualize the connections between the codes and the related themes as Braun and Clarke (2006) recommended. I reshaped the thematic map few times till I settled on naming themes that fell into a convincing narrative, through which I highlighted important issues in relation to CT teaching in the final report. As for naming such

themes, I adhered to Braun's and Clarke's (2006, p.92) advice, where both scholars affirmed that themes should identify "what is of interest about them and why". Hence, the themes' naming was not just a paraphrasing of the contents of the data extracts. Consequently, I named each theme not only to reflect its content, but also to use such theme to be part of the narrative as has been advised by Crowe, Inder and Porter (2015).

The EFP professors' sampling intentionally presented a variation in the professors' geographical and educational backgrounds, as well as in the years of their teaching experience. I expected that there would be a wide range of variations reflected in the professors' responses. On the contrary, such responses reflected similarities more than differences. However, such differences were evident in the EFP professors' responses regarding their first encounters and familiarity with CT.

The following sections report on the findings related to the themes constructed to address the research question related to the EFP professors' perceptions of CT. Such themes reflect on the professors' first encounters with CT, their connotations and denotations of the concept, their beliefs in CT attainability and their teaching of the concept in their classrooms.

4.5.1 The EFP professors' first encounters with CT

I advertently asked the EFP professors to flashback and recall the first time they came across the concept of CT. I preferred to start with a question that is related to their personal experience, rather than a one challenging their knowledge. The reason for that is to ensure the flow of the interviews and the EFP professors' responses. In view of this, more than half of the respondents spent some time recalling their first encounters with CT. Evidently, the EFP professors' geographical and educational backgrounds influenced their responses, in relation to their familiarity with CT. Respondents from eastern backgrounds, where their education and teaching experience were confined only to eastern countries and the Arab Gulf region, had difficulties remembering their first encounters with the concept. Such difficulties were

expressed in such EFP professors' hesitant responses. Hereunder are some examples of such responses.

P4: "ah ah (Pause)! Honestly, I cannot remember when was the first time I was introduced to CT, maybe a few years ago".

All of a sudden, after the second question, the interviewee recalled her first encounter with the CT.

P4: "now I remember I was attending a conference in the American University in Cairo, and there was a presentation about critical thinking and how important it is to English language learners".

Moreover, P4 elaborated on her further encounters with CT in presentations and informal conversations, but she did not refer to any formal training in relation to the concept. The interviewee reflected her encounter with CT in the following response.

P4: "In several occasions I read about critical thinking and listened to some colleagues' conversations and some other presentations in different conferences, the presentation was interesting, but I was not allowed in my classes to prepare materials to use critical thinking, I had to use materials prepared by the school where I was working".

Another example of the complete unfamiliarity with the CT is P5, who is a senior professor and has teaching experience of over 30 years, in Egypt, the KSA and Oman. P5 honestly expressed his unfamiliarity with CT altogether. Such unfamiliarity with the concept was reflected in the EFP professor's immediate response expressed as the following:

P5: "right now, from you, I heard about it, to be honest, from you. So practically I do not apply the concept in my teaching process here or

even before coming to Oman. I do not come across it frequently. It is limited to my own interpretations”.

In the same context, P9, who is a senior professor and has teaching experience of 25 years, expressed her recent encounter with CT. P9 stated that she had no previous encounters with the concept. P9 added that her encounter with CT has only started lately after the introduction of the new textbooks at the College. P9 expressed her first encounter with CT in the following response.

P9: “(Pause), for me the concept of critical thinking was like..... (mmmm) I mean not long, because it depends upon the type of students you are gaining and with the change of curriculum and change of time so we have started to work on this type of concept as the students need to have this idea of critical thinking because of the change of curriculum and the syllabus. So, to be precise from a year ago or two and mainly because of the new system and the new textbooks”.

On the other hand, P10 and P2, who are from western backgrounds and had work experience in different places besides the Arab Gulf states, easily recalled their first encounters with CT. Furthermore, both professors elaborated on their first encounters with CT and the impact of the concept on them: in their personal and educational realms. P10’s and P2’s responses are reflected in the coming responses respectively.

P10: “I like.... remember still hearing about that in 1995 when I was studying for my Master’s degree in the US (ahah). But I am saying about the notion(laughs) it doesn’t mean I did not apply critical thinking in my own life or in my teaching before. The only thing perhaps I wasn’t thinking about that as defining it. Without knowing that I was using critical thinking. Of course, yes”.

P2: “Oh, probably in my Master’s or even in my undergraduate. The words critical thinking probably. But, honestly the concept, at least in American school, from when you’re young, it’s always fostered. Like, you’ve got to think on your own, think outside the box”.

Although P6 is an EFP professor from an eastern background, still she showed a different stance when compared to the other Arab and Asian EFP professors. P6 is a young Omani EFP professor who had her undergraduate studies in Oman and her postgraduate in the United Kingdom. The EFP professor represents the younger Omani generation who is educated under the reformed system. P6 was the only Arab professor who easily recalled her first encounter with CT. She assertively expressed her response, in relation to her first encounter with CT in the coming response.

P6: “It was after high school. My professor started to teach us how to think critically. At that time, it was a little bit difficult because I needed some practice and time. At the beginning yes, it was purely academic, and I was trying hard to think critically but later on after a while I tried to apply this method in my real life, honestly I got benefits when I read or write critically so I decided to do it even in my real life”.

Obviously, there are variations among the professors’ responses in relation to their first encounters with CT. Such variations are because of the differences in the EFP professors’ cultural and educational backgrounds. For example, EFP professors who are from western backgrounds have encountered CT as an integral part of their earlier schooling and higher education. Such EFP professors’ encounters with CT are completely different when compared to EFP professors from eastern backgrounds. The latter group of EFP professors did not encounter CT as part of their education or training systems. Some of the EFP professors, from eastern backgrounds, encountered the concept by chance such as P4. Moreover, some of such

professors as, P5 and P9, have only encountered the concept recently at the College. Despite the diversities in the EFP professors' encounters with CT, such professors managed to construct their own interpretations of the concept. Consequently, the following section reports on the EFP professors' denotations and connotations of CT.

4.5.2 The EFP professors' denotations and connotations of critical thinking

The denotations and connotations of CT are one of the themes where the EFP professors' responses were not influenced by their educational or cultural backgrounds. In terms of denotations or the literal meanings of CT, the ten EFP professors, even the ones who had earlier encounters with the concept, did not have any formal definitions of CT. However, each professor defined the concept from a laymen's perspectives and constructed his/her own informal definition based on his/her own reflective understanding of the concept. Even P5, whose first encounter with CT was only at the time of the interview, constructed his own meaning of the concept depending on the term wording. P5's definition of CT was obviously based on interpreting the term itself.

P5: "ok (Pause) CT, it is brainstorming, could be some sort of activities that can go under CT. As far as I know. I guess it implies some sort of activating students' minds, so they come up with their own thoughts and ideas, stuff like that".

Even though P10 and P6 resumed their post-graduate studies in western universities, still both professors constructed their own definitions of CT, similar to P5. The EFP professors' approaches to construct their own definitions of CT are no exceptions, as Turner (2006) stated that the definition of the concept is influenced by our cultural knowledge. In the same context, some of the EFP professors such as P6 and P10 did not limit their definition of CT to the academia only. The hereunder brief responses reflect both professors' generalizability in terms of their perceptions of CT.

P6: “to think out of the box”.

P10: “digging deep”.

Like P6 and P10, the other professors had similar informal definitions of CT, yet their definitions lacked generalizability, as such professors limited the definitions of the concept to the academic context only.

For example, P1 and P9 had their own definitions of the concept, and still they kept the concept in the academic domain. The following responses reveal P1’s and P9’s definitions of CT, based on their own interpretations of the concept.

P1: “going beyond the text”.

P9: “Your own thinking, like what you know about a topic or about something in life, (Pause) what is your opinion, your idea or your experience about something. That is my idea, I feel it is the ideas that you get”.

In view of the above discussion, the EFP professors managed to construct their denotations of CT based on the literal meaning of the concept. However, such professors could not respond to the questions related to the connotations of CT and what kind of ideas or feelings the concept invokes in them. For example, P5, whose first encounter with CT was at the time of the interview, gave his response in relation to what CT invokes in him in the following succinct verbatim.

P5: “I don’t know”.

P5 could not express what CT invokes in him, like that way that he managed with the definition of the concept. It is not possible to construct such a response depending on the literal meaning of CT, as there must be familiarity and previous experience with CT.

In view of this, the other EFP professors, who had earlier encountered the concept in their workplaces or conferences, restricted the denotation of the concept to the academia, and slightly touched on it as a life-skill. Only few EFP professors, such as P4 perceived CT beyond the academic context. P4 revealed her response, in relation to the denotation of CT and its impacts in the coming responses.

P4: “It is about acquiring new skills in your job, learning new skills for your life, so if you think critically you can attain any skill you need for your future”.

However, the majority of the EFP professors are unlike P10, who had encountered CT in his HE. Even so, P10 could not clearly articulate what CT invokes in him or define the impacts of the concept on students. P10’s response is reflected in the following verbatim.

P10: “I do think so, well as I said umm again as I said a while ago I accepted that notion in my life, again it does not always make it easy, but I do not know (laughs) I have fun with that, (laughs) questioning, being sceptical about things sometimes I go overboard with that in my own career life”.

Evidently, the majority of the EFP professors linked CT more to the academic realms, while only few EFP professors slightly reflected on the concept as a life-skill. In other words, the majority of the EFP professors could not perceive CT multiple impacts on students’ personal and professional competencies. Hereunder, are some responses that reveal how the majority of the EFP professors limit CT to thinking inside the classrooms.

P3: “it is out of the box thinking”.

P9: “I think of student’s issues, like how to generate ideas from them”.

P4: “Critical thinking is beyond simple understanding of words, you need to think of connotations or words and evaluate information to have a kind of judgment, something like that”.

Despite the EFP professors’ differences in their geographical backgrounds, the majority of such professors related CT to thinking inside the classrooms. For that reason, the EFP professors believe in the possibility of CT attainability provided the availability of a knowledge-rich curriculum (Halpern, 2014), factual content and evidence- based arguments. Hence, the EFP professors disagreed to the idea that there is a cultural superiority in relation to attaining CT. Moreover, such professors believe in their responsibilities as educators to enhance CT teaching in the EFP learning- teaching process. In this context, the following section discusses the above stated points in relation to CT attainability.

4.5.3 The EFP professors’ perceptions in terms of CT attainability

CT attainability has been an on-going argument in literature (Lee et al., 2015). For example, Atkinson (1997) disagreed with the possibility of attaining the concept in other cultures apart from the Western ones. To second his stance, Atkinson (1997) defined CT as a latent social component that is confined to western cultures. In fact, in their responses, the EFP professors affirmed the role of cultures in attaining CT. Nevertheless, such professors perceived the matter from a different perspective. Like Egege and Kutieleh (2004), the EFP professors did not perceive one culture to be superior to the other cultures when it comes to attaining CT. However, the EFP professors believe that one culture can provide the right learning environment for CT teaching compared to the other ones. I quoted different professors from eastern and western backgrounds to assert their points of view. Despite the EFP professors’ different years of teaching experience, educational and geographical backgrounds, they agreed on the attainability of CT regardless of the learners’ cultural backgrounds.

P4: “I can say some cultures provide the right environment for critical thinking better than other cultures. It is not about genes or people, it is about the environment or educational system, so it is attainable”.

P2: “I think everybody is born with what can I say, a clean slate, tabula rasa, I don’t mean to get philosophical but you know, people (um) are not completely, but partially products of their environment, so critical thinking, like I said, gets cultivated in school or from your parents (um), from older people I would say or from another source and forces someone to grow those ideas, skills and analysis, ability to produce or to give their opinions, ability to (um), I don’t know. I’m trying to think of another word except for produce... ability to express”.

Despite the evident dichotomy in the literature regarding CT attainability, EFP professors affirmed that CT could be acquired through the right learning environment. Hereunder, the EFP professors’ responses referred to the educational environment as being responsible for attaining critical and creative thinking (Lee et al., 2015).

P6: “The methods that the teachers use will definitely help the students to think critically or not”.

P4: “Yes, it is possible if the materials we teach adopt the same approach or the teachers were interested in this or believe in the importance of critical thinking to students and if we have students who have simple thinking skills so then we can build on that”. On recapping on her responses, the interviewee added “and the right amount of teaching time”.

The EFP professors affirmed that the teacher’s role is essential in any learning-teaching environment to enhance CT teaching. In their responses, the EFP professors stressed the

importance of the teacher's role, individuality and methodology in the classrooms in helping students to attain CT. The EFP professors' responses showed that their beliefs have an influence on their work as educators (Cranton, 1996). Such professors strongly believe that it is their responsibility as educators to teach CT. The EFP professors defined themselves as facilitators in the College's PF. In the coming section, I share some of the EFP professors' responses, in relation to their responsibilities and obligations, as educators, to CT teaching in their classrooms.

P10: "maybe obliged is a strong word, but I do think it is our responsibility to do this as part of being a good teacher".

P2: "So some teachers just want to hear back what they got and other teachers want the students' own ideas or words from their projects or whatever. So, it totally depends on the teacher. I think we talked about it at the very beginning of the interview. That's where critical thinking comes into play. There are some conditions that have to be set up, and I think that some teachers are great at setting up those conditions and some just aren't. Some don't care".

P7: "I do not believe that this should be the responsibility of teachers only, so the writing materials, writing exams, teaching and the books we choose to use, everything should provide students with the right environment".

I discussed the abovementioned themes in a predetermined order. I employed such order so as not to dwell on the EFP professors' informal definitions of CT, as this is not a concern. In the same context, Turner (2006) stated that individuals construct their own definitions of CT, in relation to their knowledge. I relied on such themes to prove that the EFP professors' informal definitions of CT did not hinder their appreciation of, and beliefs in, the attainability of the

concept. In view of this, the coming section explores CT teaching in the EFP classrooms and the EFP professors' role in enhancing the teaching of such important concept.

4.5.4 CT teaching in the EFP's classrooms

In the previous section, the EFP professors referred to the CT attainability and to their responsibilities, as facilitators, to help students attain such challenging concept. However, such professors honestly expressed the rarity of implementing CT teaching in their classrooms. This misalignment between the EFP professors' espoused practices and enacted practices, in terms of CT teaching, is not unfamiliar. Polly and Hannafin (2011) stated that studies confirmed such discrepancy, when learner-centred approaches are implemented. For example, P1 and P8 voiced their justifications for not teaching CT in their classes.

P1: "The level of the students is a major constraint as they feel they cannot express themselves. I try to enforce it in the class, but students' cooperation is too weak. Their reasoning skills, learning skills and thinking out of the box are not yet mature enough to say that they are thinking critically. It depends on the student, if he fails to cover the simplest thing how can we go deeper? I like teaching the concept still the students' abilities determine that".

P8: "To a certain extent, not much. Now changing the curriculum, I think there is a lot of CT that has to be done by the students to which I don't think they are prepared and also the language which they need to know it is not up to the standard. There are a handful of students who can do that not the majority of them and it will take some time".

Only P10 had a different standpoint when compared to the other EFP professors, in relation to CT teaching. P10 is the only EFP professor who stated that CT teaching is not an easy task, still it is part of his teaching methodology.

P10: “I think I do it all the time, I think I do it pretty much all the time because I never let them get away with just the answer, so I always kind of try to make them think so why, why do you do that? They might hate me for that”.

The other EFP professors, with an exception of P10, had the same justifications such as P1 and P8 for not teaching CT in their classes. Such professors referred to students’ resistance as one of the most hindering barriers for them to teach CT. Students’ resistance is a common barrier to CT teaching in ESL classes as Aliakbari and Sadeghdaghighi (2013) referred to in their study, which was conducted in some Iranian schools and universities. In the same context, P6 and P3 referred to EFP students’ low language proficiency, and not having CT as part of the assessments, as their main justifications for not teaching the concept. The following responses reflect both of the EFP professors’ views in relation to not teaching CT.

P6: “For me the language itself is a vital constraint as students did not acquire the right expressions to think critically especially at level 1. I try hard to apply this concept, but few students could answer. Another thing is the assessment system in our college. It does not encourage to think out of the box”.

P3: “Critical thinking is not a big part of the class. It is usually a part of the lessons’ end, where the students looked at the lesson from a different angle. I focus more on Lessons A in the textbooks to cover the factual level of the unit. Because critical thinking is not part of the assessment, I assign Lessons B as homework”.

In view of the above, Figure 4.5 illustrates the EFP professors’ perceptions of CT through the abovementioned four constructed themes. Such sub-themes and aspects related to the main themes are placed in different legends of different colors. For example, the theme that is related to the EFP professors’ first encounters with CT is placed in an indigo legend, then two other

indigo legends are connected to it. One of the indigo legends refers to the EFP professors from eastern backgrounds and where they encountered CT for the first time. The other legend refers to the EFP professors from western backgrounds and the places of their first encounter with the concept.

Green legends reflect the theme linked to the EFP professors' connotations and denotations of CT. One of the green legends shows the EFP professors' denotations of CT, and two green legends follow this one to illustrate the professors' definitions of the concept. Both legends relate the EFP professors' denotations and connotations of CT to the academic realm. The EFP professors' connotations of the concept are not clear and they relate them to the academic contexts.

As for the theme related to CT teaching, such theme is illustrated in the red legend. Three red legends are connected to the main red legend to reflect the reasons for the lack of CT teaching. Such reasons are the teaching time constraints, CT is not part of the assessments, the students' resistance and their weak language proficiency.

The theme in relation to the belief in CT attainability is shown in the blue legends. The factors that enhance the theme, such as the professors' roles, cultural values and the right environmental factor for CT teaching, are illustrated in the same colour.

The majority of the EFP professors shared similar CT perceptions in terms of the concept's definitions, applications in the classrooms and attainability. However, such professors honestly expressed their reluctance to teaching CT in their classes for different reasons that will be elaborated on in the discussion chapter. One of such reasons for the EFP professors' reluctance to CT teaching is the students' resistance to the concept. Ironically, the EFP students' expectations of their EFP learning-teaching process concur with the impacts of CT teaching. In view of this, the following section reports on the EFP students' expectations of their College's learning- teaching process.

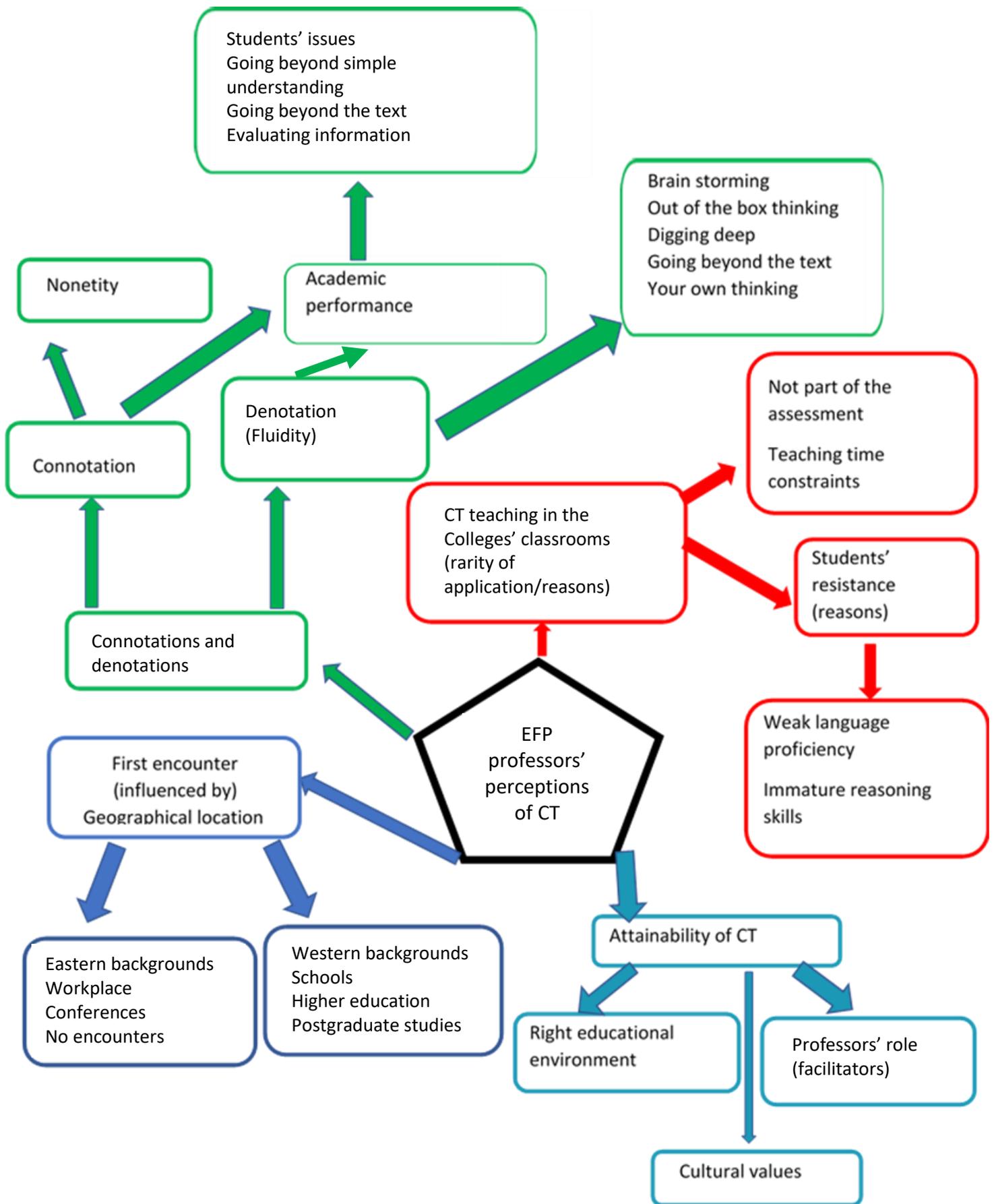


Figure 4.5 Thematic analysis of the EFP professors' interviews

4.6 The EFP students' focus- group interview thematic analysis and findings

This section focuses on the analysis of the EFP students' responses and the findings based on the analysis of such responses. In terms of the EFP students' responses' analysis, it was similar to the EFP professors' responses analysis. Hence, the chunk of the EFP students' responses was broken into meaningful segments, then into codes that were gathered under relevant themes. It was not possible to ask the EFP students direct questions in relation to CT for different reasons that will be explained in the discussion chapter. Thus, I had to ask the EFP students questions related to their expectations of their College's learning-teaching experience. Based on such expectations, I constructed overarching themes that concur with the multiple impacts of CT teaching.

Based on the EFP students' responses' analysis, I constructed three themes that reflected such students' expectations of their College's learning-teaching experience. I relied on the EFP students' expectations to construct such themes in relation to the impacts of CT teaching on such students' professional, academic and personal realms.

In view of this, it is expected that the EFP students would not have a precise definition of CT and its impacts, because the concept is "seldom clearly or comprehensively defined" (Petress, 2004, p.462) in literature. However, the EFP students' responses reflected reasonable awareness of their expectations of their College's learning-teaching process, especially from the part of the high achievers. For example, the high achievers stressed the acquisition of professional competencies as one of their goals to achieve throughout their College's learning-teaching process. In the same context, Maudsley and Strivens (2000) referred to CT teaching and problem-solving as highlighting conditions for professional acquisition. Furthermore, the EFP students expressed their other expectations of their College's learning-teaching process, which concur with the impacts of teaching CT skills. The following sections discuss in detail the constructed themes such as professional competencies, academic attainability, change and

social responsibilities to report on the EFP students' expectations in relation to the impact of CT teaching.

4.6.1 Professional competencies

In terms of the EFP students' responses, such responses varied in accordance with the students' academic performance levels. There were significant differences in the low achievers' and the average achievers' responses when compared to the high achievers' ones. For example, the low achievers and the average achievers had different incentives behind joining the College, in comparison to the high achievers. Apparently, such variations in the students' incentives were clearly reflected in their responses.

The brief responses of S2 and S9, who are average achievers, and S1, S14 and S15, who are low achievers, reflected their dissatisfactions with being students at the College. Such students did not elaborate on their responses to express any expectations of their learning- teaching experience. S1, S14 and S15, S2, and S9 expressed their incentives for joining the College in the following succinct responses that were uttered with an uninterested tone.

S1: "I am here because of the student's allowance, the ninety rials per month".

S15: "This was my second choice. I wanted to join Sultan Qaboos University and study education".

S2: "It was not a matter of choice, that was my only option. I wanted to get a scholarship and travel abroad".

S9: "That was my only option in Muscat".

S14: "mmm. I want to be in Muscat and the College is in Muscat".

In contrast, the high achievers, who are also good readers, had different incentives for joining the College. For instance, S3 and S4 confidently articulated their incentives for joining the College. Both students related their reasons for joining the College to the professional

competencies they expect to gain by the end of their learning- teaching process. In the following responses, the two high achievers perceived their College's learning-teaching experience as the venue through which they can equip themselves with the labour market's requirements.

S3: "It was my choice. The duration of studying is less than Sultan Qaboos university. The College is under the Ministry of Manpower and it is a public institution, so it is recognized by the labour market. You can find a job easily, so you can start your career quicker".

S4: "I joined The College for two reasons. Firstly, it is related to the industry. It has strong ties to the job market. Second, because it offers my specialization".

Evidently, the EFP students' academic performance variations' levels were reflected in their responses. Another reason for students' responses' variations was their reading habits. Most of the high achievers have good reading habits that were reflected in their thinking. As Beck (1989, p.677) asserted "there is no reading without reasoning'. The good readers' responses reflected that they are good thinkers as well. Consequently, the high achievers' participation level was more dominant than the low and the average achievers' participation levels. However, the high achievers and some of the average achievers clearly revealed their expectations of their learning-teaching process at HE. Such students' expectations concur with the impacts of CT teaching, even though these students are not aware of the concept and its impacts on individuals. However, the low achievers could not articulate their expectations or define them, in relation to their professional or personal growth.

In the same context, the EFP students' responses, in relation to their modules' preferences, varied according to their academic performance levels. The high achievers such as S4, S5 and S6 related their modules' preferences to their professional competencies, where they expect to gain "lifelong professional learning" (Maudsley & Strivens, 2000, p. 535). The EFP students extended their appreciation for the modules to their specialisations and to future professions.

In the following responses S4, S5 and S6 relate their modules' preferences to the impact that such modules would have on them.

S4: "We all have preferences. Some modules are not important to our specializations. But a good module has to be related to my specialization. There are some modules that are not important, they are not related to our specialisations. We need to learn how to write an essay before going to a higher level. The modules we learn in the EFP should be related to the specializations first, then the labour market".

S5: "In terms of modules, some of them are not related to the job market. For me the most important thing for the modules is to have a vision and to be related to the job market. Speaking is the most important skill to help us communicate, we need it for the job market. True, writing is important but they pay too much attention to grammar. Grammar is not important. Again because of the jobs we need speaking to communicate with the others. Speaking is very important, they should not focus on grammar".

S6: "I prefer modules that I can make use of them in my Masters or PhD. Also, a module has to be related to my job".

Hence, the EFP students' modules' preferences varied among the abovementioned high achievers. Some students related such preferences to their PFP specializations, while others related their modules' preferences to the labour market. Despite their different academic performance levels, the EFP students strongly related one of the reasons for their modules' preferences to the professors and their role implemented in classes. For example, S11 and S15, who are an average achiever and a low achiever respectively, could not relate their modules' preferences to further aspects such as their personal growth, academic achievements or

professionalism. However, S11 and S15 strongly affirmed the professors' role to enhance such modules' preferences' as they have expressed in the following responses.

S11: "My preference for a module depends on the professor. He plays an important role".

S15 "Seventy percent of the reasons for preferring a certain module is because of the professor. He makes things easy for you. He is the one who is able to make you like a module and excel".

In view of this, the variations in appreciating the impacts of modules are evident between the low achievers and high achievers even within the same level. The example is the Projects and Presentations module, which is only assigned to Level 4. Students at Level 4 are expected to research a certain topic, write a project and present such project in a ten-minute power point presentation to the class. The inconsistency in the responses between S13, a low achiever, and S3 and S4, who are high achievers, is very clear. Similar to the other low achievers, S13 could not perceive the impacts of the Projects and Presentations module and relate such module to his personal or professional growth. However, S3 and S4, perceived the importance of the Projects and Presentations module and identified its impacts on their professional competencies.

S13: "The Projects and Presentations module at the moment is a demanding module, if someone joined the engineering department it won't be of importance, it is so far from my specialisation. Maybe it will be of use when he gets a job, but it is not related to what we study"

S3: "I do not agree with my colleague, I think it is a very important module as it helps you in your job, if you have a meeting such module can build your confidence".

S4: “The Projects and Presentations module helps us in our graduation projects. It can help us in our post-graduate studies. Also, it could help us when it comes to the jobs”.

Obviously, the EFP high achievers have well-defined expectations of their College’s learning-teaching process. Such students expect, as graduates, to achieve professional competencies that prepare them for the labour market. Hence, to achieve the expected professional competencies, the EFP students need to be introduced to CT teaching. In their study, Ghazivakili et al. (2014) related CT teaching to enhancing professional competencies, a point that will be elaborated on in the discussion chapter.

Besides gaining professional competencies, the EFP students have other expectations of their College’s learning-teaching process. The following section reports on another EFP students’ expectation, in relation to their academic attainability at the College. This section focuses on the changes the EFP students experience in their academic context as students at the College.

4.6.2 Academic attainability at the College

The EFP students are appreciating their learning- teaching experience at the College, hereunder, S6’s response reflects such appreciation. The EFP students, with the exception of S2, agreed that their academic levels and learning styles have developed at the College in comparison to their schools. In Oman, pre-university education relies on memorization, where the application of developing problem-solving techniques and CT skills are at a minimum (Seyabi & Tuzlukova, 2014). S7’s and S8’s responses reflected Seyabi’s and Tuzlukova’s (2014) criticism of the learning- teaching process in Omani schools and identified the changes they are experiencing at the College. Moreover, the following S6’s, S7’s and S8’s responses reveal both students’ appreciation for their learning-teaching process at the College.

S6: “Definitely I have changed after I joined the College. here I have to prove myself. I have to depend on myself more, unlike the school. I select my own schedule, I am more organized, and I guide myself better. I changed.”

S7: “At school there was no focus on English. There is more focus on English here. Everything is taught in English and that is much better. My intellect and level of general knowledge developed here. The way we study here is better and easier than the school. At school we spent 12 years learning English but we didn’t learn much, at the College it has only been few months and we learnt a lot”.

S8: “I learnt more at the College. My intellect is much better here. The way we study enhances my intellect. Also, the topics are more interesting here, they are life-based”.

The EFP students made mature realizations by identifying the drawbacks of their previous schools’ systems (Hofer, 2008). For that reason, such students expect to work on their academic performance levels relying on different approaches such as a familiar life-based topics’ curriculum, where they can build on their own prior knowledge. S10 and S11 revealed their expectations of their learning-teaching process at the College. Both students defined such expectations to compensate for the schooling systems’ drawbacks. In the following responses, S10 and S11 reflected their expectations so they can improve their academic performance at the College.

S10: “the topics should be familiar to us. We need to have prior knowledge. If you do not have the facts you will not be able to answer the questions”.

S11: “Speaking is very important, we need to have more focus on speaking, at schools speaking was not very important. I think there should be more focus on speaking, rather than on grammar and writing”.

Similar to the other EFP students, S10's and S11's expectations, in relation to academic performance, are linked to the impacts of CT teaching. Karagöl and Bekmezci (2015) referred to CT teaching as one of the environmental factors that enhances academic achievements. In view of this, Ghazivakili's et al., (2014) study affirmed that learning styles and CT teaching can improve students' academic performance.

The previous two sections reported on findings related to the EFP students' expectations in relation to enhancing professional competencies and academic performance. Such expectations concur with the impacts of CT teaching. In the same context, the following section discusses the EFP students' expectations in relation to their social and personal growth. Similar to the other EFP students' expectations, personal growth and citizenry are impacts of CT teaching.

4.6.3 Personal growth and citizenry

CT is a comprehensive concept, as it has its impact on the individuals' personal and civic affairs (Beyer, 1995). Such CT impacts were reflected in some of the EFP students' responses, mainly the high achievers. For example, Level 4 high achievers related their personal growth to their College's learning- teaching process. Such students have been able to identify their personal changes because of the modules and the College's learning- teaching methodologies. The first example is related to the Projects and Presentations module, which is only assigned to Level 4. S4, a Level 4 high achiever, commended the role of such module for its academic and professional impacts on them. We can see the discrepancies in the responses between S13, a low achiever, and S3 and S4, who are high achievers.

S13: "If someone joined the engineering department it won't be of importance. It is so far from my specialisation. Maybe it will be of use when he gets a job, but it is not related to what we study".

S3: "I think it is a very important module as it helps you in your job, if you have a meeting such module can build your confidence".

S4 "The Projects and Presentations module helps us in our graduation projects. It can help us in our post-graduate studies. We have to learn to research for information from different sources. It has an ongoing effect".

Another example for change is through the writing module. S11 affirmed the impact of the writing module, which involves CT skills, on personal aspects. Here is the example in her responses.

S11: "For example writing cause and effect essays makes me think and it helps me to take the idea out of the classroom. It teaches us how to face a problem in life. We can apply it to our way of thinking".

However, some students could not relate their learning-teaching process to their personal experience. An example is S12, he could not relate to the reading module and he even criticized it for its limitations.

S12: "The reading module topics' are only related to facts, they do not relate to us. How will they affect you?"

Although several students, mainly the low achievers, could not relate their personal changes or have expectations related to their learning- teaching process, few had different points of view. S13's response was an immediate response to S12, where he reflected on the module differently.

S13: "I disagree with him; the reading module can affect us at the personal level. I can relate to the topics, I can think about them, when I know more and I can make my own decisions".

S11 and S13 related their personal development to the academic aspects of the College's learning- teaching process where they focused on the writing module and the reading module respectively. Both students limited their learning-teaching process' impacts to decision making and problem solving.

However, S4, S5 and S6, who are high achievers, elaborated more on their experience in accordance with Mezirow's theory of transformative learning. They perceived their learning-teaching experience at the College "as an outcome of adult development" (Dirkx, 1998, p.11). S5's and S6's responses reflect well on the transformative learning they have experienced at the College. Both students made meanings from their out-of- class experiences without following defined steps or stages (Dirkx, 1998). Moreover, the abovementioned students identified themselves with the Omani community through their College's learning-teaching process. S4, S5 and S6 summarized their out-of-class experiences in the following responses.

S4: "Honestly, after I have joined the Community Club I changed. This club influenced me I am more social now, I am more familiar with my surrounding environment I learnt a lot from this experience, it is good for your CV and also it is good for your social skills".

S5: "I changed a lot after I have joined the Community Club. I volunteered more than once, and I feel closer to the Omani community. I was part of the beach cleaning campaign. Also, I helped many people. I am more mature".

S6: "I am a member of the Drama Club. I met new people in other specialisations. I have an experience with the theatre. I participated in many competitions. Recently, we won in the Horizon Festival for Drama. The College influences us as individuals through the clubs".

Obviously, some of the EFP students are experiencing the impact of the College's learning-teaching process on their academic and personal levels. In light of their responses, such

students are realizing the changes they gain from their College's learning-teaching experience. Moreover, the EFP students are happy with such changes that they experience. Also, the EFP students have expectations of such learning-teaching process that will be extended to their professional life in the future. All in all, the EFP students' changes and expectations of their College's learning-teaching experience concur with the impacts of CT teaching. I elaborate on such point in the discussion section.

Hereunder, Figure 4.6 illustrates the EFP students' expectations of their College's learning-teaching process through three constructed themes. Such three themes concur with the impacts of CT teaching. The three themes are the students' professional competencies, their personal growth and social responsibilities and their academic attainability. Such themes, sub-themes and the aspects related to them are placed in different legends of different colors.

The first theme that is related to the EFP students' expectations, in terms of professional competencies, is placed in green legends. This theme was constructed by the EFP high achievers, and such students defined their learning orientations to, and expectations of, the College to enhance their professional competencies. The EFP average achievers and the EFP low achievers could not articulate their expectations of, or relate to, their College's learning-teaching process. The blue legend refers to the theme related to the personal change and social growth. Only the EFP high achievers could define the social growth they experience at the College because of their involvements in extra-curricular activities. The EFP average achievers and the EFP low achievers related their personal changes only to the impacts of some of the modules on them.

The third theme, in relation to academic attainability, is placed in red legend. The EFP students appreciated their College's learning-teaching process in relation to enhancing their academic attainability, such as their academic growth, in terms of improving language proficiency, developing intellect and acquiring life-based topics and prior knowledge.

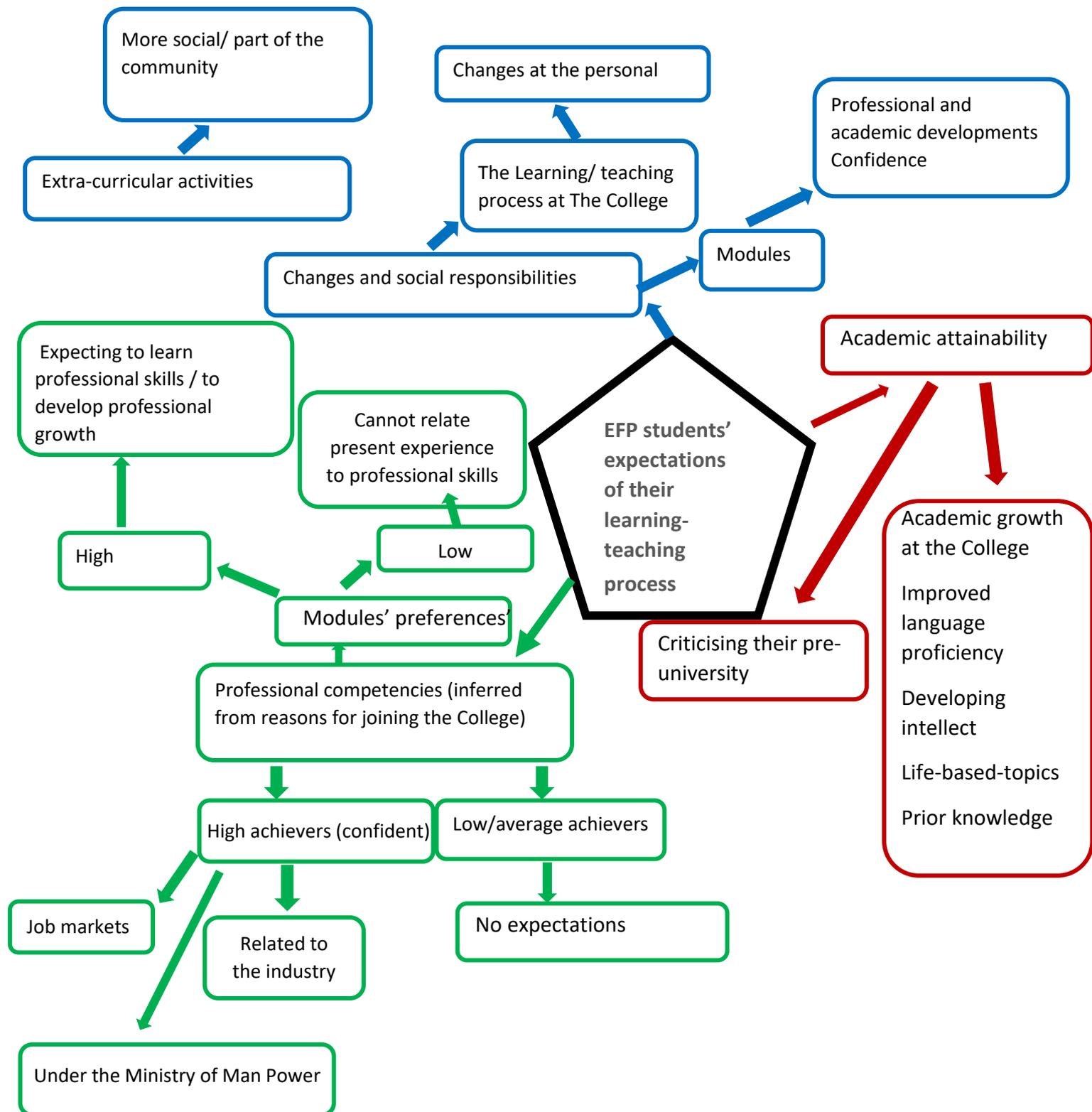


Figure 4.6 The thematic analysis of the EFP students' interviews

4.7 The EFP learning-teaching process' CT implicit and explicit themes

In conclusion, there are CT implicit and explicit themes in the EFP learning- teaching process reflected in the research's four data sources, which are the EFP textbooks, the College's strategic plan, the EFP professors' responses and the EFP students' responses. In terms of the EFP textbooks, CT implicit and explicit themes are constructed through the physical features' and the design's analysis of the materials (Littljohn, 2011), in addition to thematic analysis. Hence, such constructed themes should help in fostering CT in the EFP learning-teaching process, where the English language barrier is a challenge.

The College's strategic plan implicitly and explicitly refers to CT. For example, the College's values' statements, mission's statement and vision's statement implicitly reveal the impacts of CT teaching. However, the College's graduates' attributes explicitly refer to the impacts of CT teaching to achieve such attributes. Furthermore, the PF states that CT is one of the teaching strategies in the student-centred approach at the College.

In view of this, the constructed themes related to the EFP professors' interviews and the EFP students' interview reflected the perceptions of CT and the expectations of the abovementioned respondents respectively. As for the EFP professors, such overarching themes mirrored the professors' perceptions of CT in relation to the concept's connotations, denotations, attainability and teaching to the EFP students. On the other hand, the EFP students' responses referred to their expectations of their College's learning teaching-process and not to their perceptions of CT, because of such students' inability to conceptualize CT. However, the EFP students' expectations of their learning- teaching process at the College concur with the impacts of CT teaching.

Hereunder Figure 4.7 illustrates CT explicit and implicit elements under the EFP learning-teaching process. As for the EFP textbooks, the figure displays such textbooks' CT explicit elements reflected in the teaching materials units' sequencing and the explicit CT learning-

teaching activities. The CT implicit elements are revealed in the EFP textbooks' visual literacy, continuity and learning-teaching activities. The College's values' statements, the mission's statement and the vision's statement mirror implicitly the impacts of CT teaching. The College's graduates' attributes explicitly reflect the impacts of CT teaching. The PF refers implicitly, and explicitly, to elements of CT teaching. The EFP professors reflected their perceptions of CT in four constructed themes. Such themes are the EFP professors' first encounters with the concept, their connotations and denotations of CT, their beliefs in the attainability of CT and their practice and teaching of the concept in their classes. Also, the figure shows the EFP students' expectations of their learning-teaching process at the College. The EFP students' expectations in terms of their academic attainability, professional competencies, change and social growth concur with the impact of CT teaching.

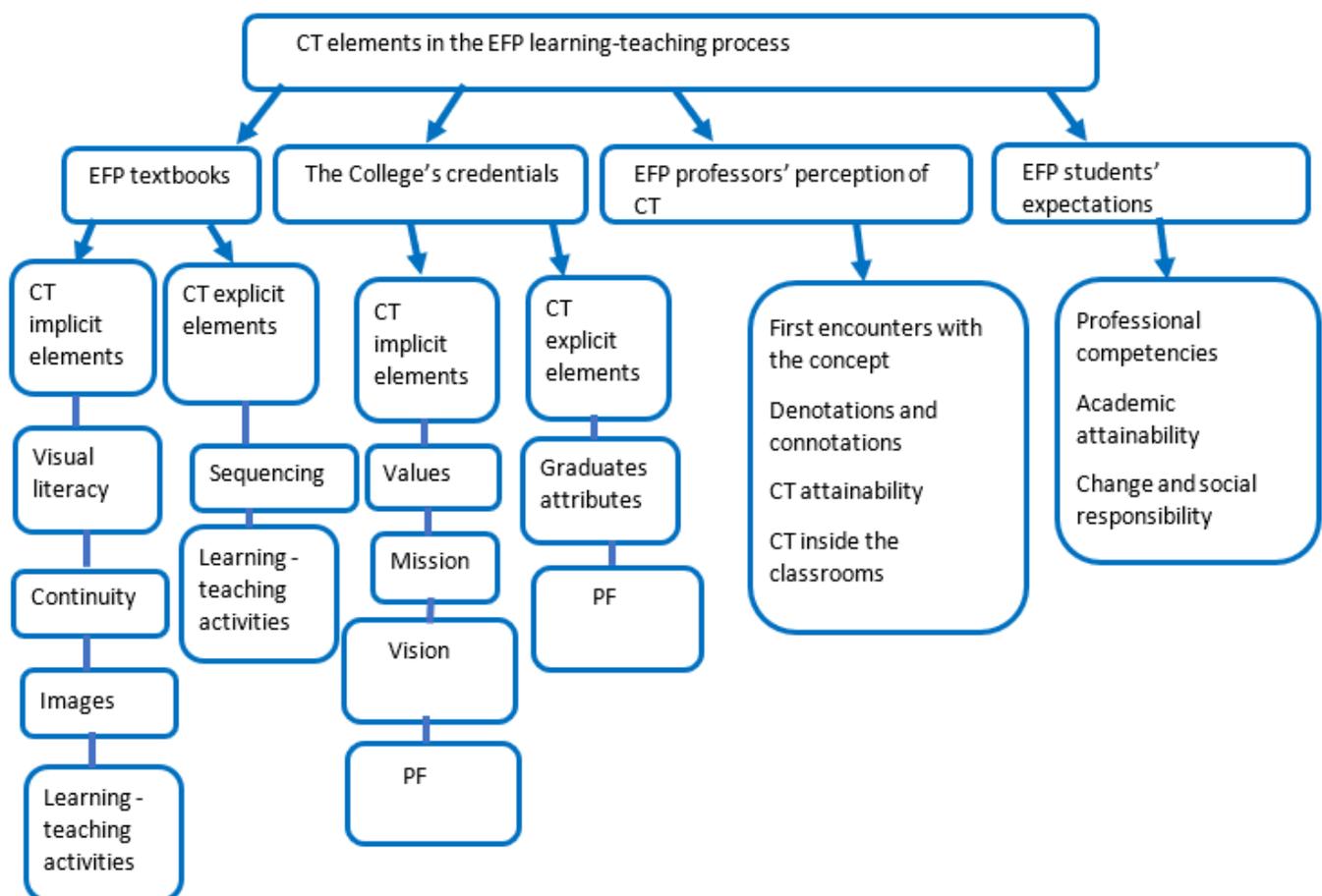


Figure 4.7 Thematic analysis of CT explicit and implicit elements in the EFP learning-teaching process at the College

4.8 Summary

This chapter reported on the findings from Littlejohn's general framework of analysing materials (Littlejohn, 2011) and thematic analysis (Braun & Clarke, 2006). Such findings are from four data sources, which are the EFP textbooks, the College's strategic plan, the EFP professors' responses and the EFP students' responses. In terms of the EFP textbooks and the College's strategic plan, both sources were investigated to examine CT implicit and explicit elements. However, the EFP professors' responses and the EFP students' responses were analysed to reflect on the respondents' perceptions of CT. The discussion chapter looks into such findings in relation to enhancing CT teaching in the EFP learning-teaching process. Also, it is important to note that the findings of this study should contribute to CT teaching in HE institutions in the Arab Gulf region, as enhancing teaching the concept is a concern for some educators and reformists in the region.

Chapter five

Discussion

5.1 Introduction

In this chapter I discuss the research's findings in relation to the literature in the area of fostering CT teaching. This study examines CT in four data sets in the EFP. These sets are the EFP textbooks, the College's strategic plan and the professors' responses and students' responses. I focus on such sets as they comprehensively reflect on CT teaching in the EFP learning- teaching process and, hence, they address the research questions.

As in similar social sciences research, I investigate CT elements within each set, through immersion and direct interaction (Labaree, 2009). I discuss the significance of the research's findings in terms of CT, in general, and CT teaching in the EFP, in particular. I employed such findings to address the research questions and explore how the EFP learning-teaching process fosters CT teaching within the abovementioned data sets.

Initially, I discuss the findings from the EFP textbooks' physical aspects and design that should explicitly and implicitly foster CT teaching in the EFP learning-teaching process (Littlejohn,2011). The EFP textbooks' analysis gave me insights to employ the materials to their full potential. For example, I found that the arrangements of the physical aspects and the design of the materials, per se, enhance CT teaching. I relied on these features to construct explicit and implicit themes that can foster CT teaching in the EFP classes. Hereunder, I present the EFP textbooks' CT explicit themes which are the materials' sequencing and the learning-teaching activities.

5.2 The EFP textbooks' CT explicit elements

5.2.1 The EFP textbooks' units' sequencing

The EFP Reading textbooks' units and the EFP Listening textbooks' units follow the same sequence (See Figures 4.1 and 4.2). Such units' sequencing reflects a consistent logical progression across the teaching materials. Each unit's sequencing raises the students' lower order of thinking skills to higher ones, following Blooms' Taxonomy (Forehand, 2010). This sequencing helps the learners to build up their language and learning-teaching activities, which depend on the previous activities and the learners' prior knowledge. Such sequencing's arrangement helps to maintain the EFP textbooks' physical and pedagogical coherence. Hence, the logical progression of the EFP textbooks sequencing is one of the techniques that can foster CT teaching in the EFP learning-teaching process.

Furthermore, the EFP textbooks' lessons' and activities' sequencing is akin to Numrich's sequence of CT tasks (Beaumont, 2010). Numrich's sequence, originated by Carol Numrich at Columbia University, is a framework to sequence CT tasks. Beaumont (2010) commended Numrich's sequence, because it fits well ESL classes as it sequences CT tasks to be practiced at any language proficiency level (Beaumont, 2010). Like Numrich's sequence, the EFP textbooks' activities can be grouped into three categories. The first category is pre- reading or pre- listening tasks such as the unit openers and new vocabularies in the EFP textbooks' Lessons A and Lessons B. The second category implies tasks focusing on the texts or the listening tracks such as the EFP textbooks' Lessons B. The third category relates to completing the main texts or listening tracks. Regardless of students' proficiency level, such categories foster their CT skills. Beaumont (2010, p.2) stated that one of the advantages of textbooks' sequencing is to "point students in directions they might not immediately see on their own".

Evidently, the EFP textbooks' sequencing motivates the students by gradually increasing the level of challenges linked to CT tasks. Students start at the factual levels and move upwards to

more creative ones. Such sequencing reflects Bloom's taxonomy's six levels within the cognitive domain, where each one is related to a different level of cognitive ability (Duron et al., 2006). For instance, this sequencing in the EFP textbooks' Lessons A reflects tasks that require learners to address the lower categories of the taxonomy, which are knowledge, comprehension and application. However, the sequencing in the EFP textbooks' Lessons B demands the learners to ascend, in stages, to the higher levels which are analysis, synthesis and evaluation (see Figure 4.1 and Figure 4.2). Duron et al., (2006) affirmed that at such advanced levels, that require more thinking, CT teaching takes place. Different scholars such as Duron et al., (2006) and Adams (2015) stressed the importance of these higher levels of the taxonomy to CT teaching.

For that reason, the EFP textbooks' units end in tasks that require explicit CT approaches. Van Gelder (2001) affirmed the importance of CT explicit instructions in teaching materials to enhance CT teaching. Samson (2016) referred to the results of Deal's and Pittman's study, where both scholars concluded that purposeful instructions, student-centred approaches and diverse learning activities enhanced students' CT skills.

5.2.2 The EFP textbooks' learning-teaching activities

Most of the EFP textbooks' learning- teaching activities are student- centred ones, that require students' collaboration. Each lesson, in the EFP textbooks, ends in explicit CT activities that require students' collaborative approaches. Nelson (1994) stated that such approaches can circumvent the complexity of CT teaching, in addition to the enthusiasm with which the students embrace their collaborative participations.

In both textbooks (See Figures 4.1 & 4.2) there are learning-teaching activities that explicitly require students to employ CT skills. Hence, students have to apply higher orders of thinking skills which are analysing, synthesising and evaluating. Evidently, such activities' goal of instructions is not to test the learners' factual knowledge, but rather to ensure that these learners

can elaborate, on and interpret, such knowledge. Moreover, relying on a gradual upward movement to the higher levels of Bloom's taxonomy can help the EFP students address such activities critically as has been affirmed by Adams (2015) and Forehand (2010).

In view of this, Brookfield (2013) underscored the necessity of explicitly teaching CT instructions to enhance teaching such threshold concept. The EFP textbooks' learning-teaching activities are based on authentic texts and they require open-ended conversations. Parrish (2006) referred to such aspects as criteria to enhance freedom of expression and acceptance of diversity. Such activities enhance one of the impacts of CT teaching in terms of civic education and democracy.

Evidently, the EFP textbooks' sequencing and the EFP textbooks' learning-teaching activities can explicitly enhance CT teaching. In addition to the abovementioned EFP textbooks' physical features, there are other aspects in such textbooks that implicitly foster CT teaching such as the EFP textbooks' continuity, visual literacy and learning-teaching activities.

5.3 The EFP textbooks CT implicit elements

5.3.1 The EFP textbooks' continuity

The continuity throughout the EFP textbooks' units enhances the students' prior learning and builds new learning simultaneously. Zwaagstra (2016) underlined the importance of knowledge and the exposure to different subjects as essential criteria in building CT skills. The EFP textbooks' sequencing maintains their continuity and exposes the students to various academic tracks such as business, psychology and sociology. Students can build on their knowledge, even with unfamiliar topics, relying on the coherent continuity across the units (See Table 4.1).

Maudsley and Strivens (2000) referred to the role of prior knowledge and lessons from contemporary education to explicitly foster CT skills. For example, the units listed in Table (4.1), under the findings section, fall within the scopes of psychology and sociology. Adhering

to the same academic tracks within ten units, over four semesters, maintains continuity in the teaching materials. Moreover, following the same academic tracks widens the students' scope and develops their familiarization with the area of knowledge. Such continuity within the EFP textbooks contributes to enriching the students' knowledge and, thus, fosters CT teaching (Zwaagstra, 2016). This knowledge that the students gain throughout the EFP textbooks' continuity presents a good base, to help such students approach the higher order categories of Bloom's taxonomy, which are analysis, synthesis and evaluation (Forehand, 2010). Developing such categories helps students enhance their CT skills. Garrison, Anderson and Archer (2001) mentioned that CT is based on abstract logical-thinking processes, such as deductive thinking and analysis of arguments.

5.3.2 The EFP textbook's visual literacy

Several studies confirmed the effect of visual literacy on enhancing CT and communication skills, such as Sarmiento Sierra's (2010) study in Columbia. This study showed that images helped the students to develop their CT skills, express themselves in Spanish and use English vocabulary. Another example of the effectiveness of visual literacy is in Housen's (2002) five-year study. Housen (2002) based his study on Visual Thinking Strategies (VTS) curriculum. The scholar proved that images produce growth in evidentiary reasoning. Housen (2002) added that images effortlessly trigger a discussion that can enhance CT. Hence, visual literacy enhances CT teaching, when there are limited verbal skills as in Sarmiento Sierra's (2010) study. Therefore, EFP professors can integrate visual literacy in their classes as it enhances CT, despite the EFP students' low language proficiency.

One of the examples of visual literacy in the EFP textbooks is unit openers. Each unit in the EFP textbooks starts with a unit opener, where there are visual introductions and open-ended questions (See Fig. 4.1 & 4.2). The authentic images and the related open-ended questions motivate students to participate, particularly in ESL classes (Wright, 1989). In addition to the

unit openers, the different authentic visual cues throughout the units are used to help EFP students predict the contents of the units and think critically. The images and the open-ended questions in each unit elevate the students to higher orders of thinking skills. Housen (2002, p.101) stated that such elevation across the units creates a “critical thinking studio”.

After closely observing the images, and with the help of the open-ended questions, students can evaluate, synthesize, justify and speculate the units’ contents. In the same context, Garcia Lazo, (2012) confirmed that images can help students develop their CT skills. Likewise, Emmison and Smith (2000) described images as crucial instruments to develop CT, because they represent ideas through multiple layers of meanings.

Evidently, visual literacy can extend students’ intellect to the achievement of higher orders of thinking skills, that are beyond lower order cognition. For example, Arneson and Offerdahl (2018) developed the Visualization Blooming Tool (VBT). It is an adaptation of Bloom’s taxonomy, where it focuses on visual representations. Such tool makes visual learning skills more explicit in instruction and it helps students to interpret images, create visual representations and develop a better understanding of the contents and skills needed.

In the same context, Tillmann (2012) stated that the incorporation of visual literacy into instructions aligns with Bloom’s Taxonomy to create meaningful learning experiences. Furthermore, such incorporation does not only focus on the lower cognitive levels of Bloom’s Taxonomy such as remembering and understanding. Tillmann (2012) added that such instructions can move beyond reading visuals, as they can analyse, interpret and assign new meanings to the images. Thus, visual literacy can address the “step up in Bloom’s Taxonomy of higher order thinking” (Tillmann, 2012, p. 15). To reinforce the role of visual literacy in enhancing CT skills, Tillmann (2012) referred to the role of design and technology classes in enhancing creativity. The scholar stated that such classes involve problem-solving skills, where students think critically beyond one method using multiple levels of Bloom’s taxonomy.

To sum up, physical aspects, like sequencing, the continuity of the materials and visual literacy contribute to CT teaching, especially when students' language proficiency is limited such as in the EFP classes. However, some scholars, such as Van Gelder (cited in Beaumont, 2010) stressed the importance of CT learning- teaching activities in enhancing the concept.

5.3.3 The EFP textbooks' learning-teaching activities

As the EFP textbooks' learning- teaching activities are student- centred ones, such activities require students to collaborate in pairs or groups. The advantage of collaborative learning in enhancing CT has been affirmed by different scholars. Gokhale (1995) stated that collaborative learning is emphasized in HE literature, not only for increasing interest among the students, but also for fostering CT. Gokhale (1995) referred to Johnson and Johnson to affirm that, based on evidence, collaborative learners perform better at higher levels of thoughts and retain information longer than those working individually. Johnson (1991), stressed previously the role of collaborative learning in enhancing professional competencies, citizenship and CT skills.

The design of the EFP textbooks' learning- teaching activities depends on collaborative learning. Such design helps the EFP students in scaffolding their CT skills. Working in pairs or groups is more convenient in ESL classes for different reasons as Hove (2011) stated. Firstly, group work can motivate the students to express themselves and overcome the language barrier. Additionally, students working in groups tend to focus on tasks, in a creative way, adopting aspects of CT skills to perform such tasks.

Upon analysing the EFP textbooks' learning- teaching activities, Littlejohn (2011) affirmed that there are other aspects to be considered. Such aspects are the learners' role, the mode of participation and the professors' role. Hereunder, I discuss these aspects in relation to enhancing CT teaching in the EFP classes.

5.3.3.1 Students' role in the EFP textbooks

As for the students, the EFP textbooks' sequencing of the activities elevates them gradually to the higher categories of Blooms' Taxonomy. In the Reading textbooks, the activities from Lessons A to the ones in Lessons B and C represent the transitional ascent from the lower order of thinking skills to the higher ones (See Figure 4.1) (Revised Blooms' Taxonomy, n.d). In Lessons A, the activities require the students to identify the meanings of ten words in the reading text and use them throughout the lesson. Also, there are other activities in the units that require students to recall, predict, infer and conclude information. In comparison with Bloom's Taxonomy, such activities in Lessons A fall in the lower categories of the taxonomy. In such categories, students are required to remember, understand and apply concrete knowledge (Revised Blooms' Taxonomy, n.d). Lessons B and C, in the Reading textbooks, explicitly require higher order of thinking skills. The EFP students are expected to apply abstract knowledge to such lessons. Such activities explicitly require higher order of thinking skills, such as analysing, synthesizing and critically evaluating ideas and information in the reading texts. Moreover, most of the EFP textbooks' learning-teaching activities instruct students to work collaboratively in small groups to achieve certain goals.

5.3.3.2 A collaborative mode in the EFP classes

The EFP textbooks' learning-teaching activities require students to show a collaborative mode of participation. EFP students are expected to work in pairs or in groups to approach activities that require lower and higher orders of thinking skills. Such students' collaboration helps them to enhance their CT skills by improving their abilities to evaluate, analyse, and synthesize information from a wide range of sources in the textbooks. Gokhale (1995) commended collaborative participation as it requires students to discuss the tasks, to direct their own learning, and thus become critical thinkers. Based on his study, Gokhale (1995, p.30)

concluded that “collaborative learning fosters the development of critical thinking through discussion, clarification of ideas, and evaluation of others’ ideas”. For the EFP students, to be able to approach such activities, they need their professors’ help. The following section focuses on the professors’ role as facilitators in the EFP classes.

5.3.3.3 Professors’ role as facilitators

Tigelaar et al., (2004) stated that the curriculum design determines the professor’s role in teaching. Consequently, the EFP textbooks’ student-centred approaches and the EFP students’ collaborative participation modes in the EFP textbooks model the professors’ role as facilitators.

As student-centred teaching approaches are gaining grounds in HE, such approaches require different teaching competencies. In this context, Tigelaar et al. (2004) stated that professors should have less authority in classes and give the lead to the students. In their capacity as facilitators, professors are expected to help their students, who work collaboratively, without interventions. In the College’s PF, the EFP professors are referred to as facilitators, rather than instructors. By being facilitators, the EFP professors’ role is to scaffold their EFP students to achieve the objectives of the EFP textbooks’ learning- teaching activities. Hmelo-Silver and Barrows (2006) agreed that collaborative learning- teaching activities require the professors to act as facilitators. For that reason, EFP professors are expected to guide their students and to enhance the construction of knowledge, rather than providing it (Tigelarr et al., 2004).

The EFP professors’ role as facilitators is stated in the PF in the College’s strategic plan. Such role is significant to CT teaching, as Topolovcan and Matijevic (2017) stated that teaching this concept cannot develop in teacher-centred classes. Hence the EFP professors should establish a constructivist learning environment, because Kwan and Wong (2015) affirmed that such environment has a direct effect on fostering CT teaching. In this context, the EFP professors should consider applying constructivism as a learning theory to facilitate teaching CT. Such

theory can fit well with CT teaching, because its principles focus on knowledge and the students' active role (Jones & Brader-Araje, 2002). Moreover, constructivism urges students to construct and reconstruct knowledge, because such approach fosters CT teaching as students act as active, social and creative learners since has been stated by Perkins (2006).

To sum up, the previous sections discussed the EFP textbooks' analysis, focusing on CT implicit and explicit elements. The following sections report on the College's strategic plan and discuss how each of such plan's components reflects on CT teaching and practice in the institution.

5.4 CT in the College's strategic plan

The College's strategic plan sets the institutional strategic directions to achieve the objectives of the institution. Consequently, the College's PF outlines the institution's strategic plan's components which are the mission, vision, values and graduates' attributes' roles in achieving such objectives. The strategic plan's components set the outcomes of the College's learning-teaching process. Hinton (2012) stated that contemporary strategic plans have different components, where each serves a specific purpose. Therefore, the following sections focus on each of the abovementioned strategic plan's components, to reflect a comprehensive understanding of CT teaching and practice.

5.4.1 The College's mission statement

In the College's mission statement, there are no explicitly stated CT elements. The College is no exception, as most of the HE institutions' mission statements do not explicitly reflect elements of CT. Meacham and Gaff (2006) surveyed the mission statements of 331 of the best HE institutions listed in Princeton Review. It was found that learning goals such as communication skills, integrative learning and CT, are in less than 15% of these institutions' mission statements (Meacham and Gaff, 2006).

Likewise, the College's mission statement does not explicitly reflect CT elements. However, the thematic wordings of the College's mission statement mirror implicit elements related to the concept. For example, high quality student- centred education, a criterion of CT, is stated as part of the College's mission statement (See Figure 4.4). This is followed by phrases that are linked to the College's graduates, such as being competitive graduates, having personal skills and being prepared for a life of contribution and success. Such statement's content reflects CT teaching impacts on professional competencies. This is expected as the College is under the MoM and it is directly related to the Omani industry. The College's mission statement is to equip Omani youth with skills and knowledge, thereby preparing them for the labour market. Such statement reflects "its main purpose, its *raison d'être*" (Camelia & Marius, 2013, p.655). Hence, the College's mission statement focuses on the glimpse of the final outcome of its graduating students (Wang et al., 2007).

CT is not explicitly stated in the College's mission statement. However, some scholars such as, Elder (2004b) believe that it is important to place CT at the centre of the colleges' missions. Elder thinks that an atmosphere of thinking needs to be created, at the focal point of the college's mission and goals to foster a climate for CT. Likewise, some researchers such as, Wang et al., (2007) emphasized the importance of the mission statements' wordings, because they reflect the purpose and uniqueness of institutions.

5.4.2 The College's vision statement

The College's vision statement concurs with the definition of vision statements provided by Özdem (2011). Like Özdem's (2011) definition, the College's vision statement refers to long-term objectives, where there is a look towards the future reflecting hopes. In such statement, the stakeholders articulate their expectations for the College, as to be one of the leading technological institutions and to contribute to the socio- economic development in Oman.

Hence, the College's vision statement mirrors the institution's aspirations expected from its graduates (Hinton,2012).

Like the College's mission statement, the vision statement does not reflect CT explicit elements (See Figure 4.4). Both of the College's mission and vision statements' wordings relate to the impacts of CT teaching. The vision statement's wordings, such as empowering the Omani professionals and contributing to national socio-economic development, address the country's needs (Hepworth & Duvigneau, 2012). Such wordings reflect the College's graduates' social responsibilities towards their own society, and imply the implicit impact of CT teaching on individuals as responsible citizens. Hepworth and Duvigneau (2012) studied the ethos of three universities in Africa and they found that the universities' ethos related their roles to their societies' needs. Hepworth and Duvigneau (2012, p.12) related this concept of social responsibility, in the universities' ethos, to the perception and understanding of "the value of information literacy, critical thinking and independent learning and its role in the development context".

5.4.3 The College's values

The College's values reflect the College's relationships with its stakeholders, and also the institution's expectations of such stakeholders. Immordino, Gigliotti, Ruben and Tromp (2016, p.39) stated that the institution's values focus on the "principles and perspectives that guide and influence daily work and the organizational culture". Likewise, some of the College's values, that direct its daily work, such as teamwork and tolerance and creativity and innovation, mirror the impacts of CT teaching.

Paul and Elder (2006, p. 48) stated that "students who think critically are able to identity ethical questions, issues, and situations and then reason well through them". Both scholars added that such students can distinguish ethics from religion, social conventions and the law. Hence, these

students come to know that doing ethical good involves many values such as kindness, open-mindedness and tolerance.

In terms of teamwork, Gokhale (1995) referred to the importance of such value within the workforce. The scholar added that for workers to be successful as part of teams, they need to think creatively, to make decisions and to act as problem-solvers. Gokhale (1995) stressed on collaborative learning as a means to develop and to enhance CT teaching, so as to achieve such attributes. Likewise, Chang's, Li's, Chen's and Chiu's (2015) study mentioned that students' creative thinking skills significantly improved after they acquired CT skills. Likewise, Eggers', Lovelace's and Kraft's (2017) study affirmed that there is a positive link between CT and stimulating creativity. So as to achieve the abovementioned Institution's values, CT teaching should be integrated in the College's learning-teaching process.

Evidently, the College's mission statement, the vision statement and the values do not reflect any CT elements explicitly. However, these statements closely touch on the impacts of CT teaching on the College's graduates' professional proficiencies and citizenries. In brief, such statements show the College's direction and its long-term objectives as Özdem has stated (2011). Furthermore, these statements explicitly reflect the College's graduates' responsibilities towards the Omani society and emphasize the College's unique characteristics. Thus, it is expected that the College's graduates would achieve transformational learning (Mezirow, 2012) reflected in the College's graduates' attributes.

5.4.4 The College's graduates' attributes

The College's graduates' attributes reflect Kerr's (1991) views in relation to HE institutions' role in their society. Kerr (1991) stated that such institutions should adapt to their own society's needs and act as instruments for change. Hence, the College's graduates' attributes reflect such expected change from its graduates. For example, graduates are expected to act as responsible Omani citizens, to be competent professionals in their specializations, and to demonstrate, and

apply, their entrepreneurial skills. The College's graduates' attributes reflect Barrie's (2012) definition of the graduates' attributes, which is a component that shows generic qualities and skills that such graduates acquire throughout their HE learning-teaching process.

Haigh and Clifford (2010) affirmed that HE graduates' role is more than being employees or employers. Both scholars stated that such graduates would be our future leaders or neighbours, so they would have an impact on our life. Thus, Albalooshi (2013) recognized graduates' attributes as an important component that affect graduates and their well-being. Therefore, educators and stakeholders give more attention to the establishing of graduates' attributes in HE institutions worldwide (Albalooshi, 2013). In the College's PF, one of the institution's objectives is to turn the students into graduates with specific skills, knowledge and attributes.

Nowadays, many HE institutions have made CT central to their graduates' attributes. Hill, Walkington and France (2016) stated that some of the common graduates' attributes that have gained popularity in universities are related to CT skills and personal attributes. As for the College's graduates' attributes, they reflect close similarities to the most popular attributes in universities worldwide.

The College's graduates' attributes, which are reported under the findings chapter, are classified under two categories; the first one is linked to the impact of CT teaching, while the second one is related to personal qualities. In terms of the attributes related to the impact of CT teaching, Attribute 3 explicitly states that the College's graduates are expected to think critically, analyse and solve- problems. Other attributes related to CT touched on the graduates' application of knowledge and interpersonal skills, their professional competencies and their responsibilities as citizens. On the other hand, graduates' attributes linked to personal qualities reflect the graduating students' commitment to hard work and productivity. Other personal attributes are related to the students' commitment to self- development, through lifelong

learning and effective communication in written and spoken English. Likewise, other graduates' attributes include their abilities to function in teamwork and have leadership roles.

The College's graduates' attributes mirror the four pillars of education that individuals achieve throughout life (Albalooshi, 2013). The scholar related the first pillar to broad knowledge with in-depth on specific subjects. Such pillar relates to Attributes 2, 6 and 10, where graduates are expected to have a diversity of knowledge and to apply it to new situations. The second pillar is linked to acquiring competencies to deal with different situations such as teamwork. Attributes 4,5 and 7 reflect the second pillar as there is a focus on graduates' professional competencies, their information technology literacy and their abilities to function in a team. The third pillar is associated with living with others, where individuals are expected to act as responsible citizens in their society. Attribute 9 urges the College's graduating students to show their social responsibilities and awareness of contemporary issues related to the national development of their society. The fourth pillar reflects on the individual's abilities to develop oneself and to have autonomy, judgement and personal responsibilities. Attribute 3 explicitly urges graduates to think critically, analyse and solve problems. Also, Attributes 1 and 8 relate to the graduates' commitment to hard work and continuous self- development.

To conclude, the above stated elements of the College' strategic plan which are the values, mission, vision and graduates' attributes, develop into the College's PF, which I discuss hereunder.

5.4.5 The College's pedagogical framework

The College's PF aims to direct the theoretical outline of the learning- teaching process of the institution. As stated in the PF, the aim of the College's learning- teaching process is to set the educational inputs for transformative learning (The E, 2010). Dirkx (1998, p.19) referred to Mezirow's theory giving an example, which is the "relationship among education and personal and social change". The PF refers to changes in the graduating students' attributes, because of

the College's quality teaching. As an impact of the College's learning- teaching process on graduates, such change is reflected on attaining skills, knowledge and attributes. One of the skills to be attained is CT, and to which the PF refers as an important learning skill that motivates students to learn.

In the PF, there is a stress on graduates to achieve the personal, academic and professional impacts of CT as emphasised in the graduates' attributes. In the previous section, I explained in detail how the College's graduates' attributes explicitly mirror the expected impacts of CT on its graduates. To sum up, CT is explicitly stated under Appendix 4 in the PF, as one of the College's teaching approaches. Evidently, the PF recognizes CT teaching as one of the integral strategies in the College's learning- teaching process.

Besides the PF's focus on the learning- teaching process, the framework defines the assessments as an essential element of the College's pedagogical philosophy. The PF refers to the synergistic relationship between the College's learning- teaching process and assessments. The PF stresses the importance of the assessments as they reflect the students' performance and progress. Such framework defines the College' assessments as potent tools for assessing the students' knowledge and skills that are related to their courses' learning outcomes. However, the framework does not define the types of skills to be assessed and how to be assessed. Despite the importance of CT, the PF does not refer explicitly to assessing the concept as part of the College's assessments. However, scholars such as Rotherham and Willingham (2010) highlighted the equal importance of teaching and assessing CT to ensure the attainability of the concept. In brief, the College's graduates' attributes and the PF, explicitly refer to CT. Both components relate CT to EFP students' academic, personal and professional realms.

5.5 The EFP professors' perceptions of CT

In the following sections, I discuss the EFP professors' perceptions of CT relying on aspects related to their educational backgrounds, their CT conceptualizations and their beliefs in the

attainability of the concept. It is important to explore the EFP professors' espoused beliefs, as educators. Choy and Cheah (2009) stated that the way professors perceive themselves affects their teaching practices. Hereunder, I discuss the EFP professors' responses to construct their perceptions of CT. Such responses reflect the EFP professors' first encounters with CT, their definitions of the concept, their beliefs in the attainability of CT and their roles in facilitating the teaching of the concept.

5.5.1 The EFP professors' first encounters with CT

The EFP professors' responses reflected that their cultural backgrounds influenced their familiarity with CT. Referring to the findings chapter, only P2 and P10, who are from western backgrounds, encountered the concept earlier in their education. The seven professors from eastern backgrounds, with the exception of P6, encountered CT either at their workplaces or by chance in conferences. The seven professors did not encounter CT in their education or educational training programs. Aliakbari and Allahmoradi (2012) confirmed the impact of the absence of CT from teachers' training courses on their teaching. Both scholars affirmed that, for professors to be able to teach CT, they need to have a breadth of knowledge on the concept. So, when professors from eastern backgrounds do not teach CT, it is not because of their culture, as Atkinson (1997) has claimed. Like Atkinson, Barnett (1997) and Moore (2013) view CT as a fundamental concept to western thinking. However, other scholars such as Ryan and Louie (2007) refuted this dichotomy of CT between eastern and western cultures. They affirmed that there are other aspects related to CT that are "often under-theorised or lack agreed meanings" (Ryan & Louie, 2007, p.404). Both scholars urged educationalists to initially realize the differences and complexities within cultures before making any judgements. Mason (2008) referred to this dichotomy, whether CT is a universal, or a culture-laden concept, as crucial to CT teaching.

5.5.2 The EFP Professors' definitions of CT

When it comes to the definition of CT, there is no agreement in literature on a single definition. In the literature on CT in HE, the concept is not commonly understood (Lloyd & Bahr, 2010). Likewise, each of the EFP professors has a different definition of CT. Such professors constructed their own definitions of CT, where they depended on the wordings and their understanding of the concept. They are not the only faculty to construct their own definitions of CT. Guleker (2015) cited a study by Paul, Elder and Bartell, where only 19% of the faculty could define CT.

Evidently, there is an agreement on not to have an agreed upon definition of CT. However, this agreement raises some arguments. Guleker (2015) stated that some scholars argue in the literature on how to teach CT, when it is not clearly defined. Burbach, Matkin and Fritz (2004) previously confirmed that educators' agreement on the value of CT is enough for the concept to be featured in courses. In the literature, there is more focus on CT teaching, because of its value and its multiple impacts on students, rather than on its own definition.

Turner (2006. p.3) described the definitions of CT as “unclear and emerge from cultural knowledge and traditions rather than universal measures of higher learning”. This is clear in the EFP professors' responses, with the exception of P2 and P10, whose responses were concise. P2's and P10's responses reflect informality and generality in terms of defining CT. The EFP professors, who are from eastern backgrounds, had different approaches of defining CT. They limited the definitions of the concept to the students' academic performance. Such professors perceive CT through their own cultural knowledge as Turner (2006) had stated. The EFP professors do not perceive CT out of the educational contexts. They confined the concept by connecting it only to the academic disciplines (Brookfield, 1997).

The EFP professors' responses to the definitions of CT relate the concept to students' performance in classrooms. They referred to the impact of CT outside classrooms as helping

students to be problem- solvers or life time learners. They overlooked other pragmatic characteristics of CT. For example, Faour (2011) referred to the importance of teaching CT to ensure the impact of the concept on better education, citizenry and peace. Such concept of citizenry is inevitable to the Arab region at the present time. Despite that, the EFP professors did not relate the impact of CT teaching to the concept of citizenry or civic affairs (Beyer, 1995). Such professors could not associate the concept with the acceptability of diversity and reasoning differences.

The EFP professors, coming from eastern backgrounds, showed a lack of familiarity with CT. This was not unexpected. Alazzi's (2008) study, in a Jordanian high school, proved that Arab teachers have little familiarity with CT. One of the reasons for that is the lack of research in the Arab world, in general, as Abu-Orabi (2013) reported. Besides, the focus on educational research in the region is marginalized (Abdelqader ,2016). Consequently, this would limit educators' knowledge in the areas of education, which impacts negatively on their classrooms' practice.

Furthermore, the dominance of 'banking education' (Freire, 1970), the exam-driven systems in HE institutions in the region and institutional regulations, discourage teachers from exploring CT. For example, P4 stated that even after she had started to appreciate the concept, especially for ESL students, she could not practice CT teaching at her previous workplace. P4 referred to her workplace's institutional regulations as the reason for not applying CT teaching at that time.

5.5.3 The EFP professors' role in CT teaching in the EFP learning-teaching process

Referring to the findings chapter, the EFP professors agreed on the attainability of CT and held themselves responsible for teaching it. Yet, nine out of the ten professors stated openly that they do not teach CT in their classrooms. Ironically, only P10 implements CT in his classroom. However, such misalignment between the EFP professors' espoused practices and enacted

practices is not uncommon in teaching practices. Polly and Hannafin (2011) referred to prior professional development studies to reflect on the discrepancies between what teachers report and what they demonstrate in their teaching. Furthermore, Ertmer, Ottenbreit-Leftwich, Sadik, Sendurur and Sendurur (2012) stated that such misalignment is because of some barriers such as lack of administration support, inadequate teachers' training and the focus on assessments.

In the same context, the EFP professors referred to the barriers they face as justifications for the mismatch between their espoused beliefs and espoused enactment, in terms of CT teaching. For example, the EFP professors stated that their students' low English language proficiency is the main barrier for not teaching CT. Evidently, low language proficiency hinders CT teaching and creates students' resistance in ESL classrooms. The professors in Choy's and Cheah's (2009) study and the EFP professors shared the same approach for not teaching CT. Like the EFP professors, Choy and Cheah (2009) found that several professors, in HE institutions, did not teach CT, because students lacked the language mastery and the confidence to demonstrate the concept.

Similar to Polly and Hannafin (2011), the EFP professors referred to the decline in students' motivation as another factor for this misalignment between their espoused practices and enacted practices in teaching CT. For instance, P1 referred to the students' lack of motivation and weak cooperation as main barriers for not teaching CT. Likewise, Aliakbari's and Sadeghdaghighi's (2013) study focused on students' resistances as barriers for hindering CT teaching in HE institutions. Both scholars stated that one of the reasons for impeding CT teaching is the students' focus on good grades, rather than on the process of thinking. Likewise, attaining good grades is a priority for the EFPs students in Oman, where the College is no exception. Mehta's and Al-Mahrooqi's (2015) study at SQU concluded that CT learning is not of concern to the EFP students. At this challenging stage of the EFP, students focus on content knowledge to achieve high grades in their assessments. The reason for students not focusing on CT learning is that the concept is not part of their assessments. Moreover, assessments'

grades in the EFP are of prime importance to the students, since such grades determine the specialization they can join in the PFPs.

Ertmer et al. (2012) and the EFP professors referred to assessment system a barrier to CT teaching. The EFP professors perceived the College's assessment system as an institutional barrier to CT teaching. Both P6 and P3 stated that one of their reasons for not teaching CT is that the concept is not part of the EFP assessments. P3 explained that her focus, in the EFP textbooks, is on Lessons A, where content delivery is required. Choy and Cheah (2009) affirmed the importance of content delivery for HE, yet it does not foster CT among students.

Likewise, Brookfield (2013) confirmed that attaining CT could not be viewed as a by-product of the learning process. The scholar asserted the important role of explicit instructions in teaching CT; a missing feature in the EFP classes. It is noteworthy that, P3 stated that she did not teach Lessons B, which focus on explicit instructions and activities related to CT teaching. P3 focused on Lessons A as they reflect the factual level of the unit which is related to the EFP assessments (See Figures 4.1&4.2). P3 added that Lessons B are not a big part of the class and they are assigned as homework because CT is not part of the assessments. Such P3's approach to CT teaching reflects the disparity between the professors' espoused practices and the enacted practices, a point that I expound in the coming chapter.

In view of the above discussion, the EFP professors' perceptions influence their enactment in classrooms. The EFP professors believe that CT is an attainable concept, and they define themselves as facilitators who are responsible to teach CT. Despite that, none of the EFP professors, with the exception of P10, teaches CT in their EFP classes. Hence, the EFP professors adhere theoretically to one of the College's objectives by defining themselves as facilitators. One of the reasons for limited CT teaching is that both of the EFP professors and the EFP students focus on exams. Several scholars such as Llyod and Bahr (2010) and Aliakbari and Sadeghdaghighi (2013) referred in their studies to the students' and professors'

pragmatic focus on exams and grades as constraints for CT teaching. Another reason for not teaching CT is that the concept is too challenging to teach. In his study at a HE institution, Ali (2012) found that professors focus on core disciplines, as such disciplines are less demanding to teach. This concurs with some of the EFP professors' approaches regarding the CT teaching. P2 commented on the EFP professors' attitudes, as far as CT teaching is concerned, stating that such attitudes vary from one professor to another. P2 explained that some professors focus on enhancing the students' CT skills, whereas some are indifferent towards teaching the concept. As well, Ngoc Du (2015) reported other factors that hinder CT teaching, such as the limited school democracy, low professors' autonomy and traditional pedagogy. Some of the EFP professors experience such factors at the College. For instance, P7 referred to the importance of professors' autonomy, reflected in the choice of the teaching materials, to enhance CT teaching. Likewise, P4 pointed out the institutions' democracy as another factor for enhancing CT. P4 noted the importance of the professors' beliefs and interest in the concept. Furthermore, P4 referred to the impacts of institutional regulations on CT teaching such as, the type of materials and the time given to the professors.

Cheah's and Choy's (2009) study highlighted some factors that foster CT teaching, such as the professors' in-depth knowledge and their willingness to incorporate the concept in their teaching. Also, both scholars affirmed the importance of professors' high expectations of their students to enhance their abilities, and to ensure CT teaching. The EFP professors had no expectations of their students to perform any kind of CT skills. Such professors assumed that the EFP students' low language proficiency would hinder CT teaching. Therefore, the EFP professors focus more on what to teach, rather than how to teach. Schafersman (1991) added that students do not develop CT skills because both students and professors focus all their energy on the first goal of education, which is transmitting knowledge, rather than acquiring it. In view of this, the following section presents the EFP students' expectations of their EFP learning-teaching process.

5.6 The EFP students' expectations of their College's learning-teaching process

Borghi, Mainardes and Silva (2016) stated that students' expectations are often under researched areas, despite their significance. Moreover, Borghi et al. (2016) affirmed that when HE institutions adjust their services to students' expectations, that would lead to students' greater satisfaction. Subsequently, the following section relates the EFP students' expectations to the impact of CT teaching to construct their perceptions of the concept.

In this study, it was important to investigate the EFP students' perceptions of CT, as there is rarity of research in this area, despite the importance of the concept (Saginak et al., n.d.). It was not possible to ask the EFP students direct questions, in terms of CT. The main reason is that the term wording of CT in Arabic is unfamiliar and confusing, even to professors (Alazzi, 2008), let alone to students. Murguia, Occhi, Ryan and Verbeek (2011) stated that the lack of a clear translation of CT could confuse students, when they are asked questions related to the concept. Both of the CT Arabic term wording and the unfamiliarity of the concept to the students made it difficult for them to figure out its meaning, unlike the English term wording of the concept.

Therefore, I could not rely on direct questions to investigate the EFP students' perceptions of CT. Consequently, I used questions to investigate the students' expectations of their College's learning- teaching process. Based on the findings of this study, the students' expectations of their College's learning- teaching process concur with CT teaching impacts on individuals' academic, professional and personal life.

In view of this, I refer to the EFP students' learning orientations as they embody the students' expectations of their College's learning-teaching process. Beaty, Gibbs and Morgan (1997, p.76) defined learning orientations as "all those attitudes and aims which express the student's individual relationship with a course of study and the university". Students join HE institutions having different learning orientations. Beaty et al. (1997) classified learning orientations as

vocational, academic, personal and social and, hence, such orientations are similar to the EFP students' expectations.

Students' expectations affect their approaches to their institutions' learning- teaching processes and, in light of this, the EFP students' responses reflected their different expectations for joining the College. Some students joined the College having defined professional, academic, personal and social expectations, while others did not. Hence, students' expectations can be perceived as their personal relationships with their institution. Khattab's (2015) study showed that students with higher expectations attain higher academic achievements; such expectations influence students' future education. Hereunder, I discuss the EFP students' different expectations of their College's learning-teaching process and relate such expectations to the impacts of CT teaching. Such expectations were influenced by the EFP students' academic attainment level and reading habits.

5.6.1 The EFP high achievers and professional competencies

For the EFP high achievers, who are good readers, one of their expectations of their College' learning-teaching process is related to vocational orientations. The high achievers' responses mirrored their expected goals, in terms of professional competencies, of their College's learning- teaching process, which is "to get a job after university" (Beaty et al., 1997, p.76). Such students joined the College knowing that the institution is under the MoM. Moreover, the high achiever students are aware of the College's close ties with the Omani industry. For example, the high achievers S4, S5 and S6 expected that their College's learning- teaching process and their modules' preferences would enrich their professional competencies.

Also, the EFP high achievers are aware of the challenges awaiting them in the labour market because of two reasons. The first one is that the youth unemployment rate in Oman is high, around 20.6% (Aftandilian, 2017). The second reason is that there is a low demand for Arab Gulf graduates on the part of the local labour market, despite the sufficient supply of such

graduates. Part of the unwritten protocol of the private sector in the Arab Gulf region, is that “employers still prefer to hire foreign workers” (Girgis, 2002, p.96). Both Aftandilian (2017) and Girgis (2002) stated that the reason for private sector companies’ preferences for foreign employees is their beliefs that Arab Gulf states’ universities’ graduates lack employability skills, such as communication, problem solving and CT skills. Subsequently, Aftandilian (2017, p.1) criticised the Arab Gulf state universities’ education system for being “heavily skewed toward memorization as opposed to critical thinking”.

To make up for the aforesaid drawbacks of schooling, the EFP high achievers expect their College’s experience would enhance their future jobs skills and professional competencies. Such students’ expectations are geared towards their future preparations, where the College is expected to provide “an educational service that benefits the students throughout their lives” (Borghi et al., 2016, p.174). Therefore, such students linked their modules’ preferences to the needs of the job markets. For example, S4 related the importance of a module to the specializations and to the labour market. Likewise, S5 affirmed the importance of the speaking module as it enhances the students’ communication skills in English. Like many students, S5 is aware of the importance of the English language as it is the only foreign official language in Oman. Evidently, high achievers’ vocational learning orientations such as S4, S5 and S6 reflect their expectations of a “lifelong professional learning” (Maudsley & Strivens, 2000, p. 535).

In contrast, the EFP average achievers and low achievers could not clearly articulate their vocational learning orientations. Hereunder, I discuss the EFP average achievers’ and low achievers’ lack of learning orientations, and hence expectations, from their learning- teaching process.

5.6.1.1 The EFP average achievers and EFP low achievers and their professional competencies

The EFP average achievers' and low achievers' approaches to their College did not reflect any vocational orientations. Such students' responses were succinct and void of any learning orientations or expectations. The EFP average achievers and the EFP low achievers, such as S1, S2, S9, S14 and S15 could hardly relate any expectations to their College's learning-teaching process. Students' expectations of such processes influence their HE experience. Sarwar, Bashir, Khan and Khan (2009, p. 204) stated that "If we are to do best we can, as a student, we need to understand what would we want out of studying and what learning means to us".

The negative effects for not having any type of learning orientations and expectations were mirrored in the low achievers' responses linked to modules' preferences. The low achievers could not relate the modules to any type of learning orientations such as vocational, personal or academic (Beaty et al., 1997). For example, S13, a Level 4 low achiever, viewed the Projects and Presentations module as demanding and not important. Although S13 added that the Projects and Presentations module could be of use in the future, he could not perceive the importance of studying such module to enhance his communication skills and professional competencies. In contrast, high achievers such as S3 and S4 realized the importance of the Projects and Presentations module for their academic performance and professional competencies.

5.6.2 The EFP students' academic expectations

The EFP high achievers revealed their clear academic learning orientations in their responses. Such students as S3 and S4 are "directly interested in the content of the course" (Beaty et al., 1997, p. 76). In contrast, the EFP average achievers and EFP low achievers had a different

stance. For example, S1's, S15's and S2's responses mirrored their academic learning orientations as "studying the course more as a means to an end" (Beaty et al., 1997, p. 76).

Despite the differences in the EFP students' academic learning orientations, these students appreciate their College' experience, when they compare it to their traditional schools' pedagogies. S6, S7 and S8 appreciate their academic development at the College. S7 is happy and aware of the importance of the English language proficiency and the level of general knowledge she is acquiring at the EFP. Likewise, S8 appreciates his College's experience for enhancing his intellect and being connected to the real world through life-based topics.

S10 and S11 were average achievers Level 4 students. Because of their average attainment level, both students were aware of their needs and clearly articulated their academic expectations. For example, S10 expected that the College's learning-teaching process would enhance his prior knowledge by working on the factual level of familiar topics that he studied. Also, S11 expect to enhance his communication skills should the College's learning-teaching process focus on speaking modules more than writing or grammar ones.

Such EFP students' expectations of their College's learning-teaching process reflect criteria that would enhance and facilitate CT teaching. For example, S7 and S8 enthusiastically referred to the general knowledge and the variety of the life-based topics they are learning. In view of this, Zwaagstra (2016) referred to the significance of knowledge and the wide exposure to a variety of subjects as essential criteria to foster CT teaching. Also, S10 articulated his expectations in terms of life-based topics and prior knowledge. Hence, prior knowledge and lessons from contemporary education explicitly enhance CT teaching (Maudsley & Strivens, 2000).

5.6.3. The EFP high achievers' personal growth and citizenry

The EFP high achievers appreciate their personal growth because of the impact of their College's learning-teaching process. Such students' responses reflected their expectations, in

terms of developing their soft skills such as their verbal and written communication skills and their thinking skills. For example, S3 and S4 defined the personal growth they expect to develop from the Projects and Presentations modules. S3 stressed the importance of such modules in developing his communication skills in his future career meetings and in enhancing his confidence and autonomy. Also, S4, referred to the impact of the module in developing his research skills for his coming graduating projects.

The EFP high achievers are more interested in the broadening effect of education. For such students, their institution is “a place where new ideas and challenges can be used for self-improvement and to improve the ability to cope with life” (Beatty, et al., 1997, p. 81). Evidently, the EFP high achievers’ expectations, in terms of their personal development, concur with the impact of CT teaching.

Such students appreciate their community work experiences and they relate them to being students at the College. Students such as S4, S5 and S6 are aware of such process’ transformative impacts on them. The responses of S5 and S6 touched on Terenzini’s, Springer’s, Pascarella’s and Nora’s study (1995) where the scholars referred to the impact of academic and non-academic experiences on students’ gain of CT. S5 extended the impact of his out-of-class community activities on his role as an Omani citizen. Ten Dam and Volman (2004) affirmed that, to achieve citizenship competencies, education has to further critical competence.

5.6.3.1 The EFP average achievers’ and low achievers’ personal growth and citizenry

The EFP average achievers and low achievers could not articulate their expectations of their College’ learning-teaching process, in terms of enhancing their personal growth. For such students, their College’s learning-teaching process did not have any personal significance and they could not relate to the modules. For example, S13, a low achiever, stated that the Projects and Presentations module is a demanding one, that he would not need in his studies at the

present time. However, S13 added that the Projects and Presentations module could be of use to some students in their professions. In spite of such module's importance for enhancing professional competencies, this was not an incentive for S13 to have expectations of the Projects and Presentations module.

The EFP average achievers and low achievers, such as S1, S15, S2, S9 and S14 have approached their College's learning-teaching process having no learning orientations. Beaty et al. (1997) confirmed that students' academic, personal, social or vocational learning orientations influence students' learning experience and, thus, their expectations of such experience. Beaty et al. (1997) added that many students join HE institutions only because of outside pressures. In this context, teaching CT skills to EFP average achievers and low achievers could help them develop their reasoning skills and, thus, appreciate and define their learning orientations and expectations of their College's learning- teaching process.

Beaty et al. (1997) stated that social orientations affect students' decisions about how they spend their time at their institutions. The EFP average achievers and low achievers do not have any out-of-class experience, although the College has different clubs as part of its teaching-learning process. Such clubs offer different extra-curricular activities like photography, art and community services. These clubs are in touch with the Omani community through exhibitions and competitions with other colleges. With such varieties of clubs, the EFP average achievers and low achievers can find their interest in any of them, and they can be closer to the Omani community, in a way similar to the EFP high achievers.

In view of this, one of the impacts of CT teaching is enhancing individuals' personal and civic affairs (Beyer, 1995). Hence, teaching CT to EFP average achievers and low achievers can develop their academic, personal and civic growth. Such developments can help these students articulate their learning orientations and expectations, in a more mature way. I elaborate on such points as part of the research implications for the institution in the following chapter.

5.7 Summary

This chapter discussed the findings derived from thematic analysis of the EFP textbooks, the College's strategic plan and the EFP professors' interviews and the EFP students' focus-interview. Each of the aforesaid aspects of the EFP learning-teaching process reflects CT elements in its own capacity. For example, the EFP textbooks' sequencing, continuity, visual literacy and learning-teaching activities foster CT teaching in the EFP classes. The College's strategic plan's components mirror the impacts of CT teaching. The EFP professors' responses reflected their perceptions of CT, which affect their teaching of the concept. The EFP students' responses revealed their expectations of their College's learning-teaching process, which concur with the impact of CT teaching. The final chapter of this thesis presents the conclusion and research implications in a context to address the research questions. It discusses the implications the findings may have for enhancing CT teaching in the EFP learning-teaching process. Also, the chapter sheds light on the pedagogical and institutional implications of this research relevant to the EFP and other EFPs in HE institutions in the Arab Gulf region.

Chapter six

Conclusion and recommendations

6.1 Introduction

This case study investigated the EFP learning-teaching process, in terms of fostering CT teaching. In view of this, the main research question is how the EFP learning-teaching process fosters CT teaching. So, this case study examined four data sets in the EFP that comprehensively reflect on such process. These sets are the EFP textbooks, the College's strategic plan, the EFP professors' perceptions of CT and the EFP students' perceptions of CT. This chapter addresses the research questions in relation to the literature reviewed and the findings of this study. Also, it suggests the institutional and pedagogical implications, and the implications for practice of this research. The final sections of this chapter present this study's limitations, the recommendations for future research in the area of CT teaching and my own reflections on this doctoral journey.

6.2 Summary of the research's findings

The coming sections report on this research's findings in relation to CT explicit and implicit elements in each of the abovementioned four data sets. Such sections discuss the four research questions separately. Each of such posed questions reflects on one of the above stated EFP's data sets to explore CT elements in terms of teaching and practice.

The first question: What are the elements of CT in the EFP textbooks?

This question is the most significant one in relation to addressing the main research question because textbooks play a vital role in providing high quality education as has been stated by Meyers and Nulty (2009). Also, the EFP textbooks are the only teaching component in the EFP learning-teaching process. As these textbooks shape the EFP learning-teaching process, the

findings in relation to them constitute valuable contributions to the practice of CT teaching in such process.

In terms of CT teaching, Van Gelder (2001) and Brookfield (2013) affirmed the importance of CT explicit instructions to enhance teaching the concept. Likewise, Bangert-Drowns' and Bankert's (1990) study affirmed that CT teaching as a subject matter yields better results than when the concept is addressed generally. However, Tapper (2004) confirmed that CT is not directly taught to most of the students. Although the EFP textbooks' units end in extensive CT explicit teaching-learning activities, such activities are perceived as challenging tasks in the EFP classes and are often marginalized by the EFP professors. Likewise, Polly and Hannafin (2011) affirmed that there is a mismatch between professors' espoused practices and enacted practices in teaching learner-centred approaches.

In view of this, the research's findings in relation to the EFP textbooks' CT implicit elements should contribute to enhancing CT teaching in the low English language proficiency classes. Different studies have confirmed that EFP textbooks' CT implicit elements such as continuity, visual literacy and collaborative modes ought to foster CT teaching in such classes.

In other words, such EFP textbooks' implicit elements and explicit elements and the learning-teaching activities' arrangements help students to cover all of Bloom's Taxonomy cognitive levels, which are knowledge, comprehension, application, analysis, synthesis, and evaluation. Thus, such arrangements help the EFP students to build up from the lower levels of cognitive skills to higher ones. Hence, such students are involved in higher skills such as analysing and evaluating. In view of this, several scholars such as Athanassiou, McNett and Harvey (2003) and Huitt (1998) affirmed the importance of the Bloom's taxonomy's higher order thinking skills as essential categories for CT teaching. To reinforce such importance, Adams (2015, p. 152) stated that when students move to the higher levels of Bloom's taxonomy, "here is where the skills that we commonly think of as critical thinking enter".

The second question: What are the elements of CT in the College's strategic plan?

This research question investigated CT explicit and implicit elements in the College's strategic plan's components. The College's values statements, mission statement and vision statement do not explicitly mirror any CT elements. However, such statements reflect the impacts of CT teaching in terms of the College's graduates' soft skills, professional proficiencies and citizenries respectively.

Most of the College's graduates' attributes explicitly refer to CT and its teaching impacts as outcomes of the Institution's learning-teaching process. Such graduates' attributes state that graduates should think critically and act as problem-solvers. The PF refers to applying CT to the student-centred classes, as such approach improves the teaching quality in the EFP learning-teaching process. Hence, to achieve the objectives of the College's strategic plan's components, CT teaching should be implemented in the EFP learning-teaching process.

The third question: What are the EFP professors' perceptions of CT?

The findings related to the third research question have valuable contributions to CT teaching in the EFP learning-teaching process. It was important to investigate the EFP professors' perceptions of CT, as such professors' core beliefs influence their teaching in classes (Choy & Cheah, 2009). These findings can contribute to CT teaching in other HE institutions, as there is a lack of research in the area of exploring professors' perceptions of CT, despite its significance (Saginak, n.d.).

The findings derived from this study revealed the EFP professors' first encounters with CT, their denotations and connotations of the concept, their beliefs in the attainability of CT and their teaching of the concept in their EFP classes. One of the major findings is that it was found that the majority of the EFP professors stated openly that they do not focus on CT teaching in their classes giving different justifications. However, Brookfield (2013) referred to the importance of explicitly applying CT instructions to enhance teaching such threshold concept.

The fourth question: What are the EFP students' perceptions of CT?

Investigating students' perceptions of CT is under-researched as has been affirmed by Saginak et al. (n.d). So, such findings ought to contribute to adding knowledge to this important area.

Also, another valuable contribution of this study is shedding light on students' learning orientations. Beaty et al. (1997) referred to the importance of identifying such orientations.

Hence, to address the fourth question, I aimed to ask the EFP students questions related to their expectations of their College's learning-teaching process as, at this stage, they cannot conceptualize the concept of CT. Also, I focused on the EFP students' learning orientations to the College as such orientations reflect their expectations of their learning-teaching process. Such expectations varied in accordance with the EFP students' academic levels of performance.

The EFP high achievers have clear learning orientations to, and expectations of, their institution. Throughout their learning-teaching process, such students expect to gain professional competencies, academic development and personal and social growth. The EFP average achievers and low achievers did not have clear expectations of their learning-teaching process in terms of professional competencies and social growth, however they appreciate such process and have expectations, in relation to their academic performance and attainment. All in all, the EFP students' expectations of their College's learning- teaching process concur with the impacts of CT teaching.

The main research question: How does the learning- teaching process in the English Foundation Program at the College foster critical thinking teaching?

In view of the above, the College's strategic plan's components explicitly and implicitly refer to CT teaching and to the impacts of teaching the concept as objectives to be attained throughout the learning-teaching process of the institution. Evidently, the College's strategic plan sets one of its directions and aspirations towards fostering CT teaching and its impacts on its graduates.

In the same context, the EFP textbooks are designed to focus on CT teaching relying on explicit as well as implicit, elements that foster teaching the concept, especially in ESL classes. Also, the EFP high achievers and some of the EFP average achievers and some of the EFP low achievers have expectations of their EFP learning-teaching process that concur with the impacts of CT teaching.

Despite the dominance of CT elements, related to teaching the concept, in the College's strategic plan, in the EFP textbooks and in the EFP students' expectations, the EFP professors stated that CT teaching does not take place in their classes. Similar to the findings of Polly's and Hannafin's (2011) study, there are disparities between the EFP professors' espoused beliefs and their enacted practices, in relation to CT teaching. These disparities between theory and practice in education are common, and for that reason it is of concern to educators such as Flessner (2014). The scholar pointed to the gap between university-based teacher education programs and classrooms realities as one of the reasons for such disparities. Likewise, Ketter and Stoffel (2008, p. 129) referred to the Levine report, where the majority of teachers in such report stated that "schools of education do not prepare their graduates to cope with the realities of today's classrooms".

Hence, to bridge the gap between the espoused practices and the enacted practices in this research, some of the stated findings should have pedagogical and institutional implications for CT teaching in HE institutions in Oman and other neighbouring GCC countries. Moreover, these research findings ought to add to the implications of practice in terms of teaching CT in the EFP learning-teaching process and other educational processes.

6.3 Pedagogical implications

As this study was conducted in a HE institution in Muscat, it can give insights to similar institutions in Oman and in other GCC states. In view of this, this research's pedagogical implications can bridge the gap between research and practice in the College's EFP and in other

HE institutions EFPs. Thus, such implications would help in developing new ideas and improving education as has been advised by Hatasa (2012).

The findings derived from the EFP textbooks' analysis would have significance to the EFP professors and other EFPs professors, as such textbooks are assigned to the other six public HE institutions that are under the MoM in Oman. The findings reported on the EFP textbooks present such textbooks only as a pedagogic device that enhance the learning of a foreign language (Littlejohn, 2011). Such findings would help the EFP professors, and other EFPs professors, to direct their classes in accordance with their EFP students' language proficiency levels.

The EFP professors stated that they do not focus on the EFP textbooks' CT explicit learning-teaching activities because of the EFP students' low English language proficiency. Such low language proficiency is a common challenge for professors, as well as students, in EFPs. Referring to this study's findings, the EFP textbooks' CT implicit themes such as continuity, visual literacy and learning-teaching activities (Littlejohn, 2011) would enhance CT teaching, despite the students' low language proficiency. Such findings would help EFP professors and other EFPs professors, employ the above stated EFP textbooks' CT implicit themes to foster the teaching of the concept in a constructivist learning environment, as has been advised in this research.

For instance, the EFP textbooks' continuity is maintained throughout their units' sequencing, adhering to the same academic tracks and depending on prior knowledge. Thus, such aspects of maintaining continuity by relying on prior knowledge and contemporary education topics implicitly foster CT teaching, as has been advised by Maudsley and Strivens (2000).

Likewise, the EFP textbooks' visual literacy would cultivate CT teaching in the EFP classes, where the language barrier could hinder such process. The EFP textbooks extensively rely on unit-openers, authentic images and award-winning videos. Such visuals and audio-visuals

develop students' CT skills. Sarmiento Sierra's (2010) and Housen's (2002) studies proved that images produce growth in evidentiary reasoning, as they can enhance discussions and collaborations when verbal skills are limited.

In the same context, the EFP textbooks' learning-teaching activities are student-centred activities, that require students to collaborate in pairs or groups. Collaboration modes in the EFP classes implicitly foster CT teaching, as Gokhale (1995) affirmed that such modes retain higher levels of thoughts. Likewise, Johnson (1991) referred to collaborative learning as an approach that would enhance professional competencies, citizenships and CT skills in classes.

In view of the EFP textbooks' learning-teaching activities, constructivist principles are applied to the EFP learning-teaching process to handle and practice such activities. Consequently, such constructivist approach in EFP classes would implicitly foster CT teaching, as Topolovčan and Matijević (2017) stated that the concept is the most significant feature of constructivist learning.

6.4 Institutional implications

I conducted this research as a scholarly practitioner and for that reason, this research's contributions are valuable. Such contributions touch on both the academia and the practice of the institutions (Hebert, 2010). Therefore, this research's findings can address some of the College's academic issues. For example, in terms of the EFP professors' reluctances to CT teaching, the study's findings imply that such reluctances should be addressed. One of the reasons of such reluctances is the EFP professors' unfamiliarity with the concept and its impacts. Larrivee (2000) stated that professors' perceptions and knowledge base of CT influence their teaching of the concept in their classes. Hence, the EFP professors need to have in-depth knowledge of CT, so as to appreciate the concept and, consequently, to apply it to their learning-teaching processes.

In view of this, the study's implications for this institution are to highlight the importance, and the multiple impacts, of CT teaching. Thus, the professional development programs can utilize the study's literature reviewed and findings, in relation to the definition and the impacts of CT teaching, and hold presentations and workshops for the EFP professors to develop their knowledge of the concept and its practical applications to the EFP classes. Consequently, these kinds of professional development programs would improve the EFP professors' conceptualizations of CT and, hence, their teaching and applications of the concept.

In terms of the EFP students, the study's findings reflected on such students' learning orientations and their expectations. Beaty et al. (1997) confirmed that many professors are not aware of their students' different learning orientations, thus they tend to blame such students' low academic performance for their lack of motivation. These scholars (1997, p. 86) defined the importance of learning orientations as "a useful construct for understanding a student's personal context for study. It encapsulates the complex nature of a student's aims, attitudes, purposes for studying".

In view of this, one of this study's institutional implications is to help the EFP students', especially the low achievers, articulate their learning orientations, so as to improve their academic performance and define their expectations, in and outside, the College. Beaty et al. (1997) referred to the term 'study contract' as an implication to define the relationship between the students' orientations and the way they approach their studying. Beaty et al. (1997) added that these contracts are negotiated by the students within themselves, then such contracts become visible in interviews, where students' ambitions and knowledge of themselves make these contracts. In these interviews, students make links between their aims and their studying, hence such students can have a better understanding of the outcomes of their university studies (Beaty et al., 1997).

Furthermore, introducing the concept of study contracts to the EFP students is one of this research's implications. Study contracts can help the EFP students, especially the average achievers and the low achievers, to articulate their learning orientations to, and expectations of, their College's learning-teaching process. Hence, such contracts ought to improve the EFP average achievers' and the EFP low achievers' academic levels of performance and help them comprehend the outcomes of their HE experience.

This approach could be implemented through the College's students' academic advisors or the College's students' affairs office. In these contracts, the EFP average achievers and the low achievers can reflect on the outcomes of their HE studies in relation to what they expect to gain from such studies. Also, such contracts show these students that, to achieve their courses' outcomes "there is a payment in terms of effort, and that some students may not have to 'pay' as much as others" (Beatty et al., 1997, p. 86). Another important reason for referring to study contracts as one of this research's institutional implications, is that such contracts stress the importance of the students' awareness of the impacts of their present decisions on their future (Beatty et al, 1997). Hence, such contracts help EFP average achievers and EFP low achievers to comprehend the practical impacts of the courses they study and the consequences of their choices on their studies and careers.

6.5 Implications for practice

Ching (2014) referred to the importance of applying theories and principles, in a way, to show their relevance to classrooms' practices. I have approached this research as a scholarly practitioner, and this approach helped me to have a comprehensive understanding of the EFP textbooks and, thus, such understanding contributes significantly to my practice.

As a scholarly practitioner, the study provided me with the EFP textbooks' conceptual framework, where there is a focus on these textbooks' aspects, which are their physical features

and design. The findings of this study strengthened my in-depth knowledge of the EFP textbooks' aspects, in relation to employing such aspects to foster CT teaching in ESL classes.

In view of this, I have started to give more attention to employing the EFP textbooks' CT implicit elements, such as the visual literacy, the continuity among the units and the collaborative modes of participation so as to address the learning-teaching activities, in a way to foster CT teaching in my classes. I utilised the abovementioned elements to foster the process of CT teaching, rather than to focus on the level of the language accuracy.

Furthermore, one of this research's findings is the necessity of introducing CT explicit instructions so as to enhance teaching the concept, as has been affirmed by different scholars such as Brookfield (2013) and Van Galder (2001). Such finding contributes to my practice, as I have started to give more attention to such instructions in my classes. I have started to assign more time and guidance to give the students more chances to address the challenging CT explicit learnings-teaching activities. Also, I have encouraged the students to approach such activities and to relate them to their experience, while resorting to Arabic if, and when, required for further clarifications.

In the same context, it is important to enhance CT teaching as an implication for practice in the EFP classes. Pica (2000) affirmed that for students to be proficient in a foreign language, they should learn to think creatively and critically when using the target language.

That's why another implication to support change in the EFP practice is to apply Bloom's taxonomy when teaching the textbooks to ensure the "hierarchical nature of learning" (Seung-Youn Chyung & Stepich, 2003). Such implications using Bloom's taxonomy can help the EFP professors at the College, as well as educators in similar HE institutions in the Arab Gulf region, address higher order of thinking skills to enhance CT teaching. Ivanovska (2017) affirmed the necessity of CT teaching, where professors lead students from the simplest order thinking skills to the most complex form of cognitive skills. In this view, I have started to advance gradually,

and with more proficiency, across the cognitive domain's six levels of Bloom's taxonomy as an implication for practice. Such approach helps me to enhance higher order thinking skills in the students, building up from lower-level cognitive skills. Hence, as an implication for practice I have started to use Bloom's taxonomy as a road-map to help the EFP students to expand critically their thinking and overcome the challenges of a foreign language.

Also, as an implication for practice, I rely on the first levels of the taxonomy, such as knowledge and comprehension, to help the EFP students, especially the average and below average ones, proceed to higher levels. I have started to design the class and the EFP textbooks' learning-teaching activities to help such students hone the first two levels of this taxonomy. Seung-Youn Chyung and Stepich (2003) stated that for students to develop complex cognitive skills such as synthesizing information, they have to develop simpler ones. Therefore, I utilize resources such as flashcards for vocabulary activities, multiple choice worksheets and reading comprehension questions to help students recall and explain information. Such activities, based on simple cognitive skills, such as remembering and understanding, would help the students at higher levels. At these levels, students can apply such acquired knowledge and concepts to new situations.

In the same context, I rely on different activities to address higher levels of Bloom's taxonomy such as application and analysis. Examples for these activities are role-playing and analytical writing tasks such as compare and contrast essays. Also, in-class presentations, sequencing stories and breaking down information into components are other examples of these activities. Such activities are in Lessons B in the EFP textbooks, where they are often assigned as homework as one of the EFP professors stated interviews. As an implication for practice, I have started to assign more time and effort to such activities, where the focus is on the students' critical approach to such tasks as well as the level of language accuracy.

In terms of the highest levels of the taxonomy, which are synthesis and evaluation, students are expected to gather information to form new ideas to address such levels. To achieve these levels, I depend on activities such as writing tasks, presentations and discussions to create solutions to common problems, to debate ideas and to evaluate new situations. As such levels reflect creative thinking, I focus on the content and the critical approach in the writing tasks such as problem and solutions essays, persuasive essays and the report required at Level 4 Projects and Presentations module.

In the same context, I have started to approach the speaking classes differently, requesting the EFP students to move beyond the factual level focusing on their own views. For instance, I have started to provide the EFP students with short stories, where they are required to find alternative endings to such stories to enhance the evaluation level of Bloom's taxonomy. Such tasks are good venues to work on these two complex levels of the taxonomy, which are synthesising and evaluation. However, as in all ESL classes these tasks are challenging for the EFP students because of their limited language proficiency. Therefore, I often base the higher-level thinking skill tasks on the lower level ones. Hence, the EFP students use the vocabulary they recalled and the ideas they understood at the knowledge and comprehension levels to apply them and to address higher levels of Bloom's taxonomy. Moreover, I consider the time factor when addressing the synthesis and the evaluation levels of such taxonomy. With these challenging levels, I ensure that I work with the students at such levels at a slower pace.

6.6 The research's limitations

The EFP professors stated that they do not teach CT for different reasons. One of these reasons is that the concept is not part of the EFP learning-teaching process' assessments. Assessments have been issues of concern to educators in the Arab Gulf region. For example, Al-Issa and Al-Bulushi (2012) criticised the assessments systems, in the field of English language teaching in

Oman, for training students to only focus on contents and to achieve high grades in such assessments.

In view of this, one of the limitations of this study is that it did not investigate the EFP learning-teaching process' assessments, in relation to CT. Because of the time constraints of this study, it was not possible to analyse the EFP assessments. In each semester in the EFP there are a mid-semester exam and a final exam for the four levels. Also, for each level there are four exams to cover the four skills of the English language. Hence, to analyse such numerous assessments, there should be an attempt for an independent study, in this respect, in the future.

The other limitation in this research was a methodological one. In this study, I relied on a focus-group interview to create a sense of belonging within the group (Onwuegbuzie et al., 2009). This sense of belonging creates cohesiveness, and an environment of open discussion. However, such sense of belonging was only among the high achievers. Although the focus-group interview was conducted in Arabic, the EFP average achievers' and the EFP low achievers' participations' levels were low, even some of such students had participated only, once uttering few phrases.

6.7 Future research

Abu-Orabi (2013) and Abdelqader (2016) referred to the modesty of research and educational research respectively in the Arab world. Chouari (2016) expressed his concerns for the rarity of literature on CT, in the Arab states. Hence, there is paucity of research in the area of education, in general, and CT, in particular, in the Arab world and the Arab Gulf region. In this context, more research in the area of education is needed in both.

Because of the discouraging status of HE and the paucity of research, in the Arab world and Arab Gulf region, there should be more studies in the area of educational research in the region, where CT teaching is no exception. Phoenix (1998) stressed the importance of educational

research, in terms of contributing to knowledge development, practical improvement and providing new perspectives and foci.

In view of the impacts of educational research, there are two important areas that need to be investigated to contribute to the enhancement of CT teaching in the EFP and other HE institutions in the GCC states. The first area is to research the reasons for the gap between the espoused practices and the enacted practice, in terms of CT teaching. Although CT is implicitly and explicitly an integral concept in the College's strategic plan, one of this study's main findings revealed the rarity of CT teaching in the EFP classes.

The second area to be researched is the reasons for the EFP low achievers' poor academic performance. However, educators and reformists need to have a comprehensive approach, when investigating such area. They need to examine the EFP students' low performance from the perspectives of the drawbacks of their per-university education and their learning orientations to HE, so as to break such students' resistances to the learning of CT.

6.8 Reflections on my doctoral journey

I have to say that this literally, and figuratively, long journey preparing for a doctorate degree from the University of Liverpool has been a challenging one. Yet, I am so grateful to this journey because it has added a lot to me at the personal, academic and professional levels. Thus, in many aspects, such journey is somehow a kind of a transformational experience. Throughout such journey I have gained aspects of transformative learning, as I have been thinking critically and questioning assumptions to achieve deeper meanings and newer perspectives (Mezirow, 2012).

In the same context, Beaty et al. (1997) defined the outcomes of learning as a change in the perceptions of some concepts, issues, and aspects of the world. So, if it were not for the EdD program, my perceptions of CT and the multiple impacts of teaching such concept would have been very limited and related only to the academic realm. It is in this program that I have started

to develop a profound understanding of the implications of CT teaching and the concept's multiple impacts on enhancing students' academic performance, professional competencies and social responsibilities.

Thanks to this doctoral journey, I have gained in-depth insights into some key factors in education such as HE transformative potentials. The extensive literature I have reviewed gave me perspectives to view HE beyond the academia. I have started to look into HE in terms of practical implications. At the present time, I have started to believe that HE should be a priority to educators as it is an integral part of global economy and knowledge economy. Also, I trust that HE ought to address some of the Arab world's and Arab Gulf region's most serious issues in terms of ethnic, religious and political diversities.

With view of the importance of the findings concluded in this research, one of the most appreciated impacts of this doctoral journey is that it intrigued me to explore the publication culture (Hartley, 2008). As I have mentioned earlier, the professional, intellectual and personal growth that I have acquired throughout this challenging journey made me think of the necessity of publishing and disseminating my work. As the concept of CT teaching, and its positive impacts at the personal, academic, professional and most importantly civic and moral levels on individual is in its infancy in the region, I believe I should introduce such an important concept at this critical stage in the region. Consequently, I am planning to publish aspects of my work related to CT teaching and its effective impacts on individuals. I am thinking of using different venues for publishing and disseminating my work such as prestigious journals in the field and academic educational conferences in the region. For example, I can publish my work in regional journals such as the Arab World English Journal and Teaching English to Speakers of Other Languages (TESOL) Arabia. As well, the College's monthly newsletter and the other colleges' periodicals are good venues to disseminate aspects related to the teaching of CT and its vital impacts. In addition, annual conferences such as the English Language Teaching

conference organized by the ELC at SQU in Muscat and TESOL Arabia in the UAE would be good venues to circulate my work.

Finally, before I started writing this thesis, some of my colleagues had advised me to choose a different topic, rather than CT, because of the fluidity of the concept (Moore,2013; Petress, 2004; Davies, 2015). However, I have been very pleased with CT as the topic of my dissertation for different reasons. Firstly, researching such important concept, that is still in its infancy in the Arab Gulf region, adds valuable contributions to the theory and practice of CT teaching in HE institutions in Oman and the region. Secondly, the importance and the vitality of CT have been highlighted in literature since the concept has been defined as one of the seven survival skills of the 21st century (Saavedra & Opfer, 2012).

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Dear Maha Abasaid		
I am pleased to inform you that the EdD. Virtual Programme Research Ethics Committee (VPREC) has approved your application for ethical approval for your study. Details and conditions of the approval can be found below.		
Sub-Committee:	EdD. Virtual Programme Research Ethics Committee (VPREC)	
Review type:	Expedited	
PI:		
School:	Lifelong Learning	
Title:	Critical Thinking Skills: A Case Study of the English Foundation Program at the Higher College of Technology in Muscat	
First Reviewer:	Dr. Lucilla Crosta	
Second Reviewer:	Dr. Ewan Dow	
Other members of the Committee	Dr. Anthony Edwards, Dr. Martin Gough, Dr. Michael Watts, Dr. Marco Ferreira, Dr. Janis McIntyre, Dr. Janet Hanson	
Date of Approval:	18th December 2015	
The application was APPROVED subject to the following conditions:		
Conditions		
1	Mandatory	M: All serious adverse events must be reported to the VPREC within 24 hours of their occurrence, via the EdD Thesis Primary Supervisor.



This approval applies for the duration of the research. If it is proposed to extend the duration of the study as specified in the application form, the Sub-Committee should be notified. If it is proposed to make an amendment to the research, you should notify the Sub-Committee by following the Notice of Amendment procedure outlined at <http://www.liv.ac.uk/media/livacuk/researchethics/notice%20of%20amendment.doc>.

Where your research includes elements that are not conducted in the UK, approval to proceed is further conditional upon a thorough risk assessment of the site and local permission to carry out the research, including, where such a body exists, local research ethics committee approval. No documentation of local permission is required (a) if the researcher will simply be asking organizations to distribute research invitations on the researcher's behalf, or (b) if the researcher is using only public means to identify/contact participants. When medical, educational, or business records are analysed or used to identify potential research participants, the site needs to explicitly approve access to data for research purposes (even if the researcher normally has access to that data to perform his or her job).

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Please note that the approval to proceed depends also on research proposal approval.

Kind regards,

Lucilla Crosta

Chair, EdD. VPREC

Appendix II: The EFP students' focus group interview

Date of the interview:

Location:

Number of Students:

Background information:

- 1) When you joined the College was it a matter of choice and why? Would you have preferred to join another college in Oman or even outside Oman? Why?
- 2) Is reading one of your hobbies? How often do you read and what kind of books do you read?
- 3) So, being a student at the College does that have any kind of effect on you academically and personally?
- 4) Are you a member of any of the clubs offered at the College? Does that experience have any kind of impact on you as a student and as a member of the Omani society?

Students' views regarding the College and the teaching material:

- 1) What do you think are the strong points of the College and what are its challenging aspects regarding its teaching material, methods of teachings and activities?
- 2) Do you think a certain language skill is more engaging than the other? What makes a skill more engaging than the other, is it the teacher or the content of the materials?
- 3) Are the contents of the teaching materials related to each other and do they provide you with information that you can implement in your daily life?

- 4) Does the content of the four skills help you to develop skills related to problem solving and understanding new situations?
- 5) Does the content of the teaching material have an impact on you outside the College? Have you ever recalled any aspect of the teaching materials in any situation?
- 6) For level 4 students how do you view the Projects and Presentations module? Does it have an effect on your social, verbal and communication skills?
- 7) Does participating in clubs have impacts on you?

Students' views regarding the assessments at the College:

- 1) What makes you classify an exam as a good one?
- 2) Do you care more for a high grade or a good understanding for the module?
- 3) How would you rate an exam that is not based on the factual level of the module and requires a different approach like applying new techniques or thinking skills?
- 4) What is the main idea behind exams and continuous assessments?

Appendix III: The EFP professors' semi-structured interviews

Interview Code No:
Location :
Date :
Duration of the interview:

First encounters and perceptions:

- 1) I am writing my thesis and it is related to CT at our workplace. When was the first time you got to know about CT and what kind of denotation and connotation does it have for you?
- 2) Recalling your academic and teaching experiences, how often do you come across the concept?
- 3) What are the CT impacts academically? What does the concept invoke in you? Does it have an impact on students outside the classroom contexts?
- 4) Is CT a culture related concept? Can it be acquired?

The theoretical and practical aspects of CT teaching:

- 5) CT is one the first attributes of the college, are we obliged to teach CT to the students?
- 6) Do you think that the teaching material of the Foundation Program and the learning-teaching process reflect CT elements?
- 7) As you know that most students struggle with the Foundation Program. Could CT be taught at this stage?
- 8) In the Foundation program does on skill reflect elements of CT more than another skill?

9) Are there any major differences among the program's levels in attaining CT skills?

10) What about the role of the teaching materials in enhancing CT teaching?

11) Do the program's assessments require CT skills?

Teacher's role in enhancing CT elements:

12) As a teacher do you think that the teacher's role helps in developing elements of CT?

13) Do you teach CT explicitly to your students?

Appendix IV: Screenshot coding process

P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	Mission	Vision	Values	GAs	Pf
workshop going beyond the test digging deep reading between the lines only high achievers can do it academic impact think better culture related materials teachers role students levels time attainable teachers role materials exams CONST- rains CT not applicable ESL constraints factual level no CT teaching	USA HE CT/life questioning digging deep use it all the time CT related to teaching Some students can impact out of side culturally related accepted CT is acquired role PFP no CT teaching lessons of HW facilitator long barrier time to go to the PFP Schools and CT ask the why of materials assessment factual	out of the box work conference walkshops no training teaching material not much (CT) Students level teaching material impacts academic right environment culturally culture facilitator teachers role exams very hard to teach not related to sexes CT teachers material	can't remember AUC teaching material as beyond words attainable enough time better learners jobs skills role of culture materials teaching time right environment not sure exams not sure teacher's role exams not sure reading reflects CT no CT teaching students level teachers role	brain storming (not sure) now freedom of thinking liberating your mind not familiar limited understanding gain knowledge be active thinker maybe transform impact academic culture role not sure students level more activities teacher's role exams not sure learning CT assessment to promote CT surface learning language teaching role not much	HE methodology class complex better students go deeper not sure of impact culture role acceptance culture right environment helps in future attain time teachers responsibility not much exams no CT teaching materials facilitator Low lang. barrier schools influence facilitator factual level language teaching role not much	different questioning experience before students can think critically masters high school academic impact impacts out of the class cultural impacts values environment lang. barrier students knowledge difficult Students linguistic level right environment Colleges constraints teachers responsibility memorization assessments language CT impact factual level	your thinking experience before students can think critically masters high school academic impact impacts out of the class cultural impacts values environment lang. barrier students knowledge difficult Students linguistic level right environment Colleges constraints teachers responsibility memorization assessments language CT impact factual level	USA 1995 before students can think critically masters high school academic impact impacts out of the class cultural impacts values environment lang. barrier students knowledge difficult Students linguistic level right environment Colleges constraints teachers responsibility memorization assessments language CT impact factual level	high quality ed professionalism social- economic development student- centered labour market confidence communication skill	high quality ed. professionalism future impact socio-economic development	Professionalism Integrity Honesty fairness flexibility team work tolerance creativity innovation Communication	hard work apply knowledge think critically analyze/evaluate teamwork self development life-long learning responsible citizens applied entrepreneurial skills	learning teaching assessments learners- centered approach	
											EFP Textbooks			
											Writing, Reading & CT textbooks		Listening, Speaking & CT textbooks	
											Lessons A, B, C unit openers visuals authentic materials 10 Units academic tracks teaching activities collaborative evaluate synthesize analyze create		Lesson A, B, C unit openers charts/maps/figures visuals authentic materials no Units different academic tracks teaching activities collaborative teacher's role evaluate synthesize analyze create	
											EFP students' Interview			
											High achievers		low & average achievers	
											jobs mgmt industry focus related to PFP modules + the industry vision for the job market modules + confidence communication skills projects teachers role academic transformation language proficiency general knowledge clubs community clubs volunteer work closer to the community Drama club		no choices go abroad no impacts of the modules within the college surface learning - PFP teacher's role academic transformation language proficiency general knowledge no extra-curricular activities	

Appendix V: The four data sets constructed themes

