

**Exploring teacher efficacy and job satisfaction beliefs: A mixed
methods study on language teachers at a college of technology in Oman**

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Abstract

The main purpose of this longitudinal mixed methods study is to investigate teachers' self-efficacy and job satisfaction beliefs in Oman, from the perspective of novice and experienced English language teachers in a college of technology. The study also investigates patterns of changes in teachers' self-efficacy (TSE) and satisfaction (JS). Using a short-term longitudinal study, five online diary surveys were filled by 84 teachers in the course of one semester. Data were collected quantitatively and qualitatively using validated measures of teacher self-efficacy and job satisfaction. This study revealed non-significant change in TSE and JS over time. Differences in TSE and JS beliefs were observed between teachers with 1 to 3 and teachers with more than 21 years of teaching experience, specifically in selecting what strategies to employ in their teaching. The qualitative findings showed that teachers with high self-efficacy had the ability to select the right instructional strategies, maintain control in the class, emphasize students' willingness to take responsibility for their learning; were highly engaged; and ensured teacher-student relationships existed and maintained. Additionally, teachers' satisfaction was mainly affected by their sense of achievement and workplace environment. Bandura's self-efficacy theory suggests that self-efficacy may be malleable early in learning and, therefore, this indicates that if teacher self-efficacy is well established early on in the teaching career, a strong long-term sense of efficacy can be developed. In-service training and staff development programs can be the solution to strengthen teachers' belief in their abilities, as the qualitative results suggested. A student engagement scale (ESS) was created in order to explore links with teachers' self-efficacy. Data were collected from students whose teachers participated in the online diaries (n=838). The ESS was found to be reliable ($\alpha = .87$). A non-significant relationship between students' perception of their engagement and their teachers' beliefs in engaging them was reported.

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Author's Declaration

I hereby declare that this thesis is a presentation of original work and I am the sole author. This work has been carried out according to the rules and regulations of the University of York and has not previously been presented for an award at this, or any other, University. All sources are acknowledged as References.

1 Introduction

This study investigated English language teachers' efficacy and job satisfaction beliefs in relation to career stage. The context was the English Language Centre (ELC) at the Higher College of Technology (HCT) in the Sultanate of Oman. This study's main objectives were to investigate changes (if any) in teachers' self-efficacy and satisfaction beliefs over the course of one semester (three-month semester) using the Teacher Sense of Efficacy Scale (TSES), a widely used international scale, in a new context (that is, Colleges of Technology, Oman); to explore differences between novice and experienced teachers' experiences in terms of their self-efficacy and job satisfaction beliefs; and to develop a student engagement scale and test its validity in the Omani context. Using a mixed methods approach, data were longitudinally collected from teachers at six timepoints and from students, once.

The quantitative findings of this study found no significant change in teacher self-efficacy (TSE) and job satisfaction (JS) over time. Experience seemed to have an insignificant effect on teachers' beliefs and differences in teacher self-efficacy and job satisfaction were not observed between novice teachers and experienced teachers in terms of their choice of instructional strategies to employ in their teaching, their ways of engaging students and their class management strategies. On the other hand the qualitative findings showed that teachers' self-efficacy was affected by several factors including teachers' belief in their capabilities when instructing, engaging and controlling students, teachers' sense of engagement, and relationships at the workplace. Furthermore, teachers' satisfaction was mainly affected by teachers' sense of accomplishment, recognition from management, teachers' passion for teaching, and workplace environment. Teacher self-efficacy and job satisfaction will be referred to as TSE and JS throughout this thesis.

This study contributes to the growing body of literature on teacher self-efficacy, job satisfaction and student engagement. It is hoping to contribute to the understanding of what

factors influence teachers' efficacy and job satisfaction at the higher education institutions in Oman, particularly at the Colleges of Technology. A review of literature revealed that no studies have investigated the relationship between teacher self-efficacy and job satisfaction in Oman and it, also, revealed that no longitudinal research has been done to investigate changes in teachers' self-efficacy and job satisfaction over time. Additionally, this study meets the recommendations of previous study researchers who recommended conducting research using a mixed methods approach for a deeper and richer understanding of self-efficacy beliefs. Finally, this study hopes to add to the limited Arabic-context studies on self-efficacy that are published in English (Aldhafri, 2016).

1.1 Setting the scene

The Sultanate of Oman is located in the extreme south-eastern corner of the Arabian Peninsula. Oman shares borders with the United Arab Emirates to the north, the Kingdom of Saudi Arabia to the west and the Republic of Yemen to the south-west. It has 3,165-kilometre coastline that runs northwards from the Arabian Sea and the entrance to the Indian Ocean in the far south-west to the Gulf of Oman where it overlooks the strategic Strait of Hormuz at the entrance to the Arabian Gulf (MoI, 2016).

Historically, Oman was known by different names at different historical points. It was called *Majan* due to its role in shipbuilding and copper smelting, taken from the Sumerian language. The Sumerians recorded the role of *Majan* as a strategic linking point in the Arabian Peninsula. It was also known as *Mazoon*, which means rich resources of flowing water or heavy clouds in Arabic language. This explains having a flourishing agricultural society compared to the neighbouring regions. As a result, many Arabian tribes settled near these resources and became part of the Omani civilization. Another historical name of Oman is *Uman*, which is known today as Oman. It is believed that Oman inherited this name either after *Uman*, the

grandson of prophet Abraham or after an Arabian tribe that came from Yemen looking for water and settled in this land (MoI, 2014/2015).

Due to Oman's unique geographical location, in the Arabian Peninsula, Omanis worked and made a living from different activities related to agriculture, shepherding, fishing, mining, trading, shipbuilding, and navigation. Today, some Omanis continue to work in these fields while others expand their choices to cover modern jobs to keep pace with the ongoing changes in their daily lives. When His Majesty Sultan Qaboos Bin Said announced that formal education was free to all in 1970, many Omanis have realized the importance of sending their children to schools rather than to earn a living. This is obvious from the growing number of public and private school enrolments between 1970 and 2016 as will be discussed in Section 1.1.2.

Omanis explored far off lands to sell and exchange products with people from these places and the result was a territory that stretched from Gwadar, currently part of The Islamic Republic of Pakistan, to East Africa, now the Republic of Tanzania. Oman's approach from the olden times up until now is not to interfere in other's internal affairs. This represents its overriding objective of maintaining peace as a central strategy with all (MoI, 2016).

As part of the Arab culture in general and the Arabian Gulf, Omani society is affected and driven by political, cultural, economic, and religious factors. Omanis are brought up and encouraged to maintain strong ties among themselves, which is why family ties, tribal relations and social life are strongly favoured. Arab culture is characterized as highly collectivist, a trait that is evident in the presence of close groups (Obeidat, Shannak, Masa'deh, & Al-Jarrah, 2012) which is also the case in the Omani society. Belief in tribal power and connection is important. Tribes, which are best described as "local autonomy", are led by a Sheikh, who descends from an elite family within the tribe and whose main duties are to intervene to solve disputes and lead his people to face and conquer outsiders (Al-Barwani & Albeely, 2007). Oman is the only Gulf country that had been and remained politically independent and under the same ruling family

for 250 years except for brief periods of occupation by the Persian and Portuguese around the 16th century (Al-Barwani & Albeely, 2007) when the Omani Alya'ariba tribe expelled them (MoI, 2016).

The Omani society has some characteristics that are based on Islam and in relation with their Arab heritage. Family, as a small community frame, is favoured in the Omani society regardless of its size (nuclear or extended). Members are related to one another through blood ties and/or marital relationships and have certain mutual expectations of each other whether they live together in the same residence or not ('Abd al 'Ati, 1997). They abide by a strict code of conduct and maintain social support. Omani teacher participants of this study come from typical Omani families. Consequently, they are expected to act according to certain expectations at the personal, social and work levels. These factors may influence their perceptions of their own capabilities as well as their expectations of students' performance and behaviour.

1.1.1 Education in Oman: past, present and future

Keeping education at the heart of reforming Oman, the educational scene has changed radically since 1970 when there were only three schools with 900 students compared to 477,797 students in 1995 in 953 schools (A. S. Al-Issa & Al-Bulushi, 2012). The initial education system in Oman or the "General Education System" was based on a 12-year of public schooling with three stages. The first stage is the elementary with six years of schooling, and then comes the preparatory and the secondary stages, which each lasts three years. The teaching techniques and activities were all teacher-centred and the evaluation system was based on formal tests and examinations. There were some signs that this education system has pitfalls such as the high rate of dropouts after the elementary and prep stages. Additionally, the outcomes of this system could not serve the labour market well and the need for urgent change resulted in the existence of the Basic Education System (BES) in 1998 (Al-Issa & Al-Bulushi, 2012).

Supported by the UNICEF, the Basic Education concept in Oman aims at (1) providing equal educational opportunity for all, (2) providing a learner-centred education with the appropriate life skills such as critical thinking, self-learning and scientific skills, (3) and developing aspects of learner's personality within the context of preserving the Islamic values and social traditions. It also aims at (4) enabling learners to actively and effectively participate in the development of the Omani society, (5) reducing dropout rates, (6) eradicating illiteracy, and (7) preparing school graduates for higher education and the labour market. Table 1.1 summarizes the structure of the old General Education system and the Basic Education system. Table 2.1 compares the number of English language teaching hours in both General and Basic Education and shows that the Basic Education System has increased the English language teaching to more than double the hours in the General Education System at schools (MoE, 2007).

As a result of the government's educational plans and policies, the literacy rate significantly increased among the population aged 15-24 years to 98.7%, which is 98.51% males and 98.98% females (UNESCO, 2017). UNICEF (2016) reported that gender equality in Oman is 'significant' in various fields including education and that the girls' admission in schools has surpassed boys', which confirms the UNESCO findings.

Table 1.1 Structure of BES & GES in Oman (MoE, 2007)

Grade Level	Stages	Grade Level	Stages
12	General Education (GES)	12	Post Basic Education
11		11	
10		10	
9		9	Basic education (Cycle Two)
8		8	
7		7	
6		6	
5		5	
4		4	
3		Basic education (Cycle One)	
2			2
1			1

Table 2.1 English language teacher hours in BES & GES

Subject	Number of teaching hours		Difference
	Basic Education (BES)	General Education (GES)	
English language	1200	541	659

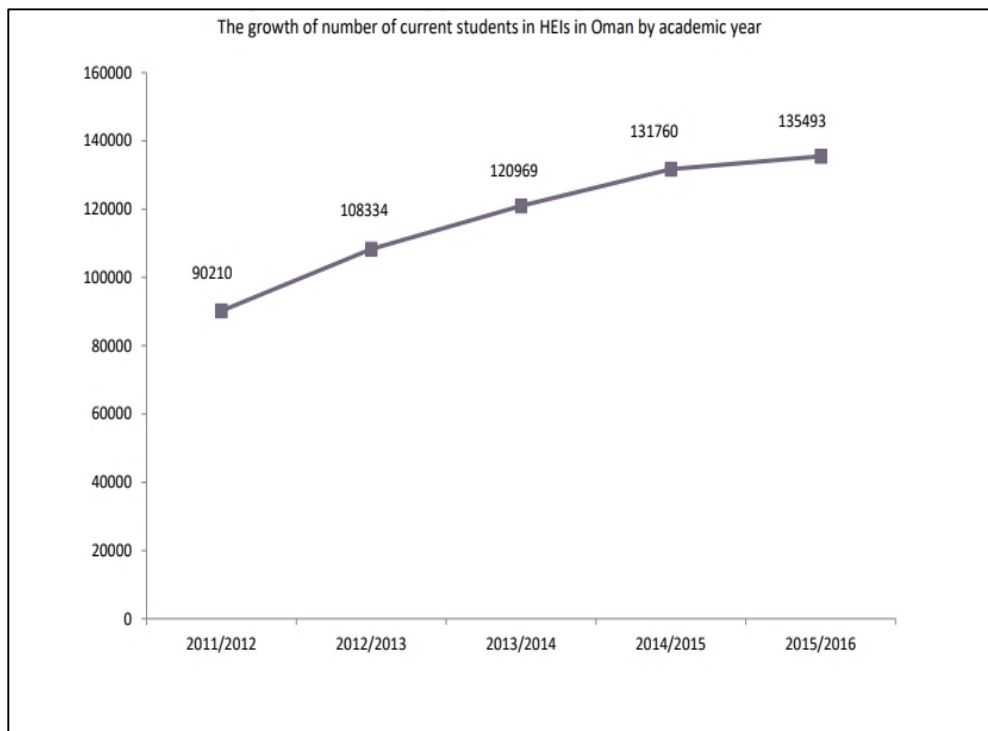
Note. Tables 1.1 & 2.1 are borrowed from (MoE, 2007)

1.1.2 Higher education in Oman

Although higher education is considered relatively young in the Sultanate of Oman, Omani government works hard to invest in its own people through enhancing their knowledge and skills (Al'Abri, 2016) as 1,651,000 (that is 35.6%) of the total population in Oman (total is 4,634,712) are aged 24 years and younger (UNESCO, 2017). Hence, the government strives to produce high quality graduates from the higher education institutes to prepare its citizens for the local and global labour markets (Al-Issa & Al-Bulushi, 2012). The first higher education institute was the Sultan Qaboos University, which was established in 1985 marking the beginning of higher education in Oman. Since then the Omani government has been working on finding solutions and ways to accommodate these growing numbers in both public and private higher education systems (Al-Lamki, 2006). In search for the right quality of national workforce, the government embarked on a radical plan to improve local work force through the "Vision Oman 2020". The core of this plan is to increase enrolment into higher education and technical colleges.

According to the Higher Education Admission Centre (2015/2016), the higher education institutions in Oman – both private and public- admitted 16,528 in public institutions and 16,124 in private institutions with a total of 32,652. The total number of students (new and current in this academic year) was 135,493. The seven Colleges of Technology, the context of the present study, admitted 8,431 students in the same academic year. Figure 1.1 shows the growth in the number of students in the Higher Education Institutions (HEI) in Oman from 2011 to 2016 (HEAC, 2015/2016). The increase in the number of students from 2011 to 2016 was 50.2%.

Figure 1.1 Growth of students in Higher Education Institutions in Oman (2011-2016)



Note. Figure borrowed from the Higher Education Admission Centre (HEAC, 2015/2016)

1.1.2.1 Higher Education and Colleges of Technology

The context of the present study is the Higher College of Technology (HCT), a public college that was established in 1985 to be the second largest higher education institution in Oman. Previously known as Oman's Technical Industrial College, the college was renamed, and upgraded through the Ministerial Decree (No.165\2001) in order to be up-to-date with the latest developments in the field of technical education. HCT is one of seven Colleges of Technology (CoT) distributed among the Sultanate's governorates: Musana, Shinas, Ibra, Nizwa, Ibri, and Salalah. These are dedicated to the delivery of the most updated training in technology, modern methods and techniques used to integrate technological programs. The regional CoTs were established in 1993 except the ones in Shinas and Ibri, which were established in 2005 and

2008, respectively. These colleges are all affiliated to the Ministry of Manpower and they deliver 35 different, work-relevant, English-taught programs in Engineering, Information Technology, Business, Applied Sciences, Pharmacy and Fashion Design specializations. All programs are designed in consultation with the industry market to ensure that students are equipped with the highest standard skills. The number of specializations increased from 13 in (2003-2004) to 25 programs. The number of specializations has continued to increase since then. Now, there are 38 specializations across the seven colleges.

HCT has grown enormously from a student population of about 200 to the current size of more than 7000 students. Its facilities have expanded from three initial buildings to a total built-up area of more than 49,700 square meters. The College has more than 600 faculty and staff members and an annual intake of about 1750 students into its General Foundation Program, besides transferred students from other CoT at the specialization level.

After successfully completing the General Foundation Program (GFP), students are enrolled in different specializations. Students have to study two academic years for the attainment of Diploma Certificate, three academic years for the attainment of the Higher Diploma Certificate and four academic years for the attainment of the Bachelor Degree. In HCT, students' progress from one level to another depends upon meeting a set of criteria at each level. In essence, this system affords students the flexibility to exit the system after completing any level with a qualification enabling them to enter the job market. Most graduates from CoT are diploma holders who will work as technicians in factories, companies, and government and private sectors. HCT offers a bachelor degree in all specializations except Photography, Fashion Design, Pharmacy and Cooling and Air conditioning. The rest of the colleges offer diplomas and advanced diplomas only.

1.1.2.2 General Foundation Program (GFP) in Higher Education Institutions.

Through the Ministerial Decision (No.72/2008), the Higher Education Council (No.13/2008) made it mandatory that all public and private higher education institutions adopt a General Foundation Program in the Sultanate of Oman, hereafter referred to as GFP. The council stated that GFPs have to meet certain standards in at least four areas: English, mathematics, computing and general study skills. Meeting these standards is officially recognized and assessed by Oman Academic Accreditation Authority (OAAA), previously known as Oman Accreditation Council (OAC). The purpose of these standards is to ensure that students are equipped with all the necessary skills and learning outcomes before embarking towards higher education (OAAA, 2016). The GFP is a compulsory entrance qualification for Omani degree programs. At the higher education level, English language is the medium of instruction at many higher education institutions in Oman. All Higher Education Institutions (HEIs) that deliver any programs in English offer GFPs. Higher Education Admission statistics show that vast majority of, in some institutions all, new students were enrolled on a GFP (GFPA, 2015). According to the Admission Statistical Report (HEAS, 2014/2015), the majority of the new students on GFPs are recipients of public funding.

At the CoT as in many other public education institutions, English language is not only the medium of instruction but also a criterion for admission to technical education. The GFP aims at elevating students' proficiency level in the English language, according to the HCT's online staff-guiding booklet (HCT, 2014/2015). This recognition of the importance of English language dates to early 1970s when the Omani government announced that education is one of the basic pillars for the development of Omani society.

1.1.2.3 General Foundation Program (GFP) in the Higher College of Technology (HCT).

Once accepted through the Central Admission Centre to join the CoT, school-graduates, whose ages range between 17-19 years old, are streamed into one of the levels based on an in-

house placement test scores. All registered students in the CoT are qualified to enter the GFP depending on their linguistic ability. These school graduates are allocated to the CoT based on (a) their permanent residential address and (b) their specialization choice as the colleges run slightly different programs. The HCT, being the firstborn and the biggest in terms of size and staff/student numbers, has more specializations and programs than the rest of the colleges. It is also the only college that offers a Bachelor Degree.

Freshmen are placed in one of four levels at the ELC. This means that some may progress through the Program much faster than others depending on the results of the placement test. Appendix A1 presents the GFP streaming of students based on the placement test results. Holders of International Accredited Exam valid records can be exempted from the placement test and admitted to the specialization programs, provided they produce evidence of TOEFL record (a minimum score of 400) or IELTS record of at least Band 4 (Appendix A1). They will be requested to sit for and pass the Level Four Exit Exam and meet the IT and mathematics GFP requirements. Appendix A2 shows this process of acceptance and exemption. The structure of the GFP in the CoT consists of four English language levels. At each level, students are enrolled in skills-based language subjects (Appendix B). The program is offered on a term basis and the academic calendar is divided into three terms. CoT annually receives two student intakes: in term one, which is in September, and in term two, that is in January.

1.1.2.4 Student and teachers of the GFP

In semester two (2015/2016), when data for this study were collected, the GFP at the HCT had 2321 new and current students. This number included 980 freshmen and 1341 students who were promoted from semester one (2015/2016). Thirty-five students joined with an IELTS certificate, which exempted them from sitting for the placement test and permitted them to sit for the GFP Exit Exam. The student participants of this study were a sample of this population.

Only one criterion was used for the inclusion of students, their teachers must have participated in the teacher online diary surveys.

Student participants had a formal education in public and private schools and were enrolled in the GFP at different levels based on their placement test results. Their schooling background might have affected the way they perceived their engagement in class. Students from public schools formed the majority. They befriend each other easily and form social groups of their own within and outside of class. Students from private schools tend to score higher in the in-house placement test and are challenged with another test called the Foundation Program Exist Exam. If they score 50% or more, they move to the specialization programs. If they do not, they remain in the GFP and are placed in level Four. It is with these students that some teachers may face lack of interest, de-motivation and/or disengagement, as they feel misallocated, as confided by teachers in our everyday conversations during data collection. The other prominent reason is the English proficiency level of public school graduates who “lack the ability to use language effectively and appropriately in all four skills throughout the range of social, personal, school and work situations” required for everyday life due to the level of English program in the public schools (Al-Issa & Al-Bulushi, 2012). Furthermore, literature reveals that Arab students, in general, have a problem with learning English. They are slow readers of English and suffer from comprehension-related deficiencies (Bell, 1999) which must have resulted from inadequate linguistic skills (Al-Mahrooqi, 2012). In the Omani context, reading was found to be the weakest English language skill among Omani college freshmen (Cobb, 1999). Al-Mahrooqi and Asante (2010) attributed these problems, which Omani students face at college level, to the absence of a reading culture. Based on this background, it is expected that teachers of the current study may shed light on the effect of the above findings on their current students.

Teacher participants come to the English Language Centre (ELC) with multi-cultural beliefs, practices and understanding to teach in a context where, although mostly Omani, students come from different regions of Oman. At the time of data collection for this study, the centre had 135 academic and support staff with 25 different nationalities. Omanis made up 35% compared to 65% non-Omanis. Due to this diversity, the ELC is a melting pot for different academic, religious and ethnical backgrounds that may cast its shade on the teaching and learning processes. It is important to highlight such diversity, in addition to the influence of other factors such as the teaching load, resources, level of students, work environment...etc., as they may affect teachers' efficacy beliefs and teaching capabilities in one way or another. Hence, their efficacy beliefs are created, modified or re-shaped.

Among the very first measures, that the ELC takes with new staff, is an induction program. The ELC's management team meets with them to introduce and discuss initial cultural and academic aspects of the ELC context. Teachers are introduced to some general guidelines related to student welfare (e.g. students' needs), cultural taboos, staff-student relations, expected discipline issues to name but a few. In a new teaching context, teachers, whether new to the place but experienced in the profession or completely novice to the teaching profession, go through a lot of learning themselves in terms of adapting to the new context atmosphere, building relations with colleagues and management, implementing and experimenting with the new teaching system, adapting to the policies and regulation including classroom observations, staff probationary period, and so on. In the current study's context, new teachers- novices and experienced- are observed within the first three months which is called the staff probationary period. Post-observation feedback is given based on the teacher's performance during that observed lesson in terms of instructing strategies, class management and ways to involve students. If the performance is not satisfactory, then another visit is scheduled within the probation period. New and current staff are assessed annually based on their performance during

the academic year and based on this assessment, the ministry renews or terminates staff every year.

The above-discussed background is expected to affect teachers' perceptions of their efficacy capabilities and provide an understanding of why they judge their capability beliefs the way they do and what implications do that have on their overall job satisfaction.

1.2 Underpinning Theories

Teaching is a complex (Chaaban & Du, 2017) and stressful profession (Kyriacou, 2001; Troman & Woods, 2000) just like other caring professions. On a daily basis, teachers face many challenges that could form the basis of their decision to stay or leave the profession at various career stages. Ingersoll and Strong (2011) reported that a high attrition rate among novice teachers in several countries had an impact on students' achievement and highlighted the importance of getting proper support and monitoring to prolong the teachers' career lifespan. In his theoretical model of the professional lives of teachers, Huberman (1989; 1993) hypothesizes that each career phase has some characteristics that distinguish it from the rest of the phases. Huberman strongly advocates that, although the phases of his model are harmoniously sequential, teachers do not necessarily move through them in the same depicted sequence due to all sorts of problems that teachers may face. Therefore, teachers sometimes "leap-frog" a stage or relapse to a previous phase. Huberman argues that a professional life cycle can terminate in "reassessment" which, in turn may lead to "bitter disengagement" from teaching. This is because teachers' satisfaction is generally built on and influenced by various factors including intrinsic rewards of teaching that are based on teacher and students achievement, and extrinsic factors that are related to teaching itself, management, and work climate (Dinham & Scott, 2000).

Due to the stressful and multi-tasking nature of the teaching profession, teachers need to develop an internal sense of motivation to push them further. According to Bandura's (1997) self-efficacy theory, the individuals' beliefs in their capabilities tremendously influence how they organize and perform their actions to achieve their goals. Taking a more in-depth view, these beliefs have the power to influence people's decisions to take actions, their persistence in the face of obstacles, their resilience during hard times, their coping strategies and the level of their achievements (Bandura, 1997). In other words, without self-efficacy, people do not devote enough effort because they perceive their efforts to be all in vain. A massive growing body of research has been proving that teachers' perception of their capabilities does affect their performance and is associated with many variables. Empirical studies revealed that teachers' beliefs of how capable they are influence students' motivation, achievement, engagement and self-efficacy beliefs (Ashton & Webb, 1986; Midgley, Feldlaufer, & Eccles, 1989; Ross, 1992; van Uden, Ritzen, & Pieters, 2014). These beliefs also affect the relation between teachers' behaviour in the classroom and their instructional change (Ashton & Webb, 1986). Research found a relationship between teachers' beliefs about their capabilities and job satisfaction (Caprara, Barbaranelli, Borgogni, & Steca, 2003; Chaaban & Du, 2017; Eithne, Katie, & Daniel, 2014; Gian Vittorio Caprara, Barbaranelli, Steca, & Malone, 2006; Gkolia, Belias, & Koustelios, 2014; Judge & Bono, 2001; Klassen & Chiu, 2010; Veldman, van Tartwijk, Brekelmans, & Wubbels, 2013). Considering the powerful impact of self-efficacy and how it could benefit the teaching profession, the present study attempts to evaluate the perceptions of the participating teachers' self-efficacy beliefs in the Omani context using a mixed method approach. Thus, the purpose of this mixed method study was to investigate the teachers' perceptions of their capabilities and the relation between these perceptions and their job satisfaction beliefs, and associate the teachers' perceptions of their capability to engage their students with their students' perceptions of their in-class level of engagement. Using a short-

term longitudinal approach, the current study was also designed to investigate changes in these beliefs over time during one academic semester.

Bandura's (1997, 1986) self-efficacy theory hypothesizes that there are four sources of teachers' sense of efficacy that underlie these beliefs: successful past experiences, vicarious experiences, verbal persuasion and physiological arousal, with mastery experiences as the most powerful one. He argues that self-efficacy beliefs are difficult to modify once they are established. However, Bandura proposes that to change solid beliefs, a kind of shock for the individual is required to reassess his beliefs. Since mastery experiences are the most potent, it is fair to suggest that building strong positive beliefs through successful experiences early in the teaching profession is better than having to change a perception that is already solidified. However, little research is there to support Bandura's sources and researchers are urging for a more in-depth practical measurement of these sources (Klassen, Tze, Betts, & Gordon, 2011; Usher & Pajares, 2008).

Research suggests that teachers' self-efficacy, which is based on a self-perception of competence rather than an actual level of competence, can be influenced by surrounding factors in addition to its intrinsic nature. This supports Bandura's cognitive theory, which proposes that when personal factors (that is self-efficacy beliefs) and behaviour interact with the environment, they influence each other. Researchers examined the relationship between teacher self-efficacy and contextual variables (.e.g. school and resources) and reported a need to understand the contextual factors that boost self-efficacy (e.g. Labone, 2004). The mixed method approach of the study allowed room for comparing the quantitative and qualitative findings to verify the results and explain the kind of factors that could increase or decrease teachers' sense of efficacy.

Teachers' job satisfaction is a related construct that was investigated in this study. Job satisfaction is an emotional reaction to one's profession (Locke, 1969). Research have reported that job satisfaction is directly related to teacher self-efficacy and can be triggered by it (e.g.

Duffy and Lent, 2009; Klassen & Chiu, 2010; Skaalvik and Skaalvik, 2007). The current study attempts to investigate changes in teachers' satisfaction over a three-month period and explore factors linked to such change, if any. Job satisfaction can be influenced by various elements including situational factors such as pay and professional development opportunities (Gerhart, 1987) or dispositional factors such as neuroticism and openness to experience (Judge, Heller, & Mount, 2002). Change in job satisfaction beliefs can be linked to career stage as well. A newcomer's satisfaction to a job after leaving a previous one may be attributed to aspects related to the new job compared to the old one. Boswell, Shipp, Payne and Culbertson (2009) found that changes in job satisfaction beliefs over time were formed in two patterns for newcomers across their first year of employment called honeymoon and hangover. A newcomer's satisfaction peaked during the first quarter of the year as he/she dealt with various aspects of the new job and decreased thereafter as he/she became more familiar with the upsetting aspects of the job, and compared it to the previous job as differences between the anticipated versus experienced emerged (Boswell et al., 2009). Age can also play a crucial role in changes in job satisfaction (Kalleberg & Loscocco, 1983) as older employees tend to express higher job satisfaction.

This study sheds some light on our understanding of factors influencing and causing any changes in teachers' self-efficacy and job satisfaction beliefs.

1.3 Significance of study

As a former teacher and member of the management team in the context of the present study, I have become aware of many issues that affected staff retention and satisfaction. Through friendly conversations, experience and observations made by the staff, I realized the need to investigate what lowered teachers' efficacy and dissatisfied them. Some leaving staff

chose to openly talk about the reasons behind their resignation and some decided to keep that to themselves. Among the reasons given were large size of the classes, mixed ability classes, demotivated students, irregular attendance and lack of opportunities for promotion and career progression. These reasons, in addition to others, were also highlighted in the Quality Assurance staff surveys.

Research indicates that there is a link between teachers' efficacy and job satisfaction. For instance, teachers' sense of efficacy can be maintained and boosted through providing proper means of satisfaction such as professional support in case of personal emergencies. Job satisfaction here reflects the effect of positive circumstances at work that leads to feeling satisfied. Promoting self-efficacy sources through certain practices in a teaching environment (e.g. proper informative feedback, peer observation, first-hand teaching experiences and ambient environment) might have an impact on teachers' job satisfaction. Therefore, exploring and understanding these interrelated constructs, and what factors underlie their existence or lack of it, will provide an insight into how to improve the teachers' levels of self-efficacy and satisfaction. It will also provide an understanding of what to consider when recruiting staff and what training should be included in the new staff induction program and in the staff development training for existing staff.

1.4 Definition of terms

The key terms in this thesis are defined here.

Longitudinal research

This study tracks patterns of change in teachers' self-efficacy and satisfaction beliefs across three-month semester using six time points to collect data. The six time points form this study's data. This study observes the teachers' beliefs over a protracted period of time (one semester, in this case). Longitudinal research implies a more "processual immersion" of change

(Saldana; 2003, p. 8). Therefore, it involves studying the processes rather than discrete events, according to Oxford online dictionary².

Change in beliefs

Saldana recommends that “we should be flexible and allow a definition of change to emerge as a study proceeds and its data are analysed ... we should permit ourselves to change our meaning of change as a study progresses” (2003, p. 10). In this study, change is investigated qualitatively and quantitatively to explore within- and cross-case patterns.

Teacher Self-efficacy (TSE)

Teacher self-efficacy is defined as “the teacher’s belief in his or her own capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context” (Tschannen-Moran, Woolfolk-Hoy and Hoy, 1998, p. 233). A similar definition that forms the basis of the current study is given by Tschannen-Moran and Woolfolk-Hoy that links teacher’s efficacy belief with students’ learning experience: “a judgment of his or her capabilities to bring about desired outcomes of student engagement and learning” (Tschannen-Moran and Woolfolk-Hoy, 2001, p. 783).

In this thesis, the term ‘confidence’ was adapted in the writing of the teacher self-efficacy items in the online diary surveys that were filled out five times by the participants. The rationale behind employing this word in place of “self-efficacy” was that it is the closest synonym to self-efficacy in colloquial plain language and is popularly understood. “Confidence’ is a personal characteristic that is not necessarily connected to a particular domain. Bandura describes the term confidence as a ‘nondescript’ term that “refers to the strength of belief ... [but not it is] certainty” (1997, p. 382). Self-efficacy, however, is a theoretical term that is more

² Oxford dictionary. Retrieved from: <https://en.oxforddictionaries.com/definition/processual> (25/10/16)

targeted but it is hard to understand. Since the word ‘confidence’ was used in relation to a specific domain (i.e. self-efficacy), it was adapted to avoid any confusion that using the term ‘self-efficacy’ could cause to the participants.

Job Satisfaction (JS)

Job satisfaction is “the pleasurable emotional state resulting from the appraisal of one’s job as achieving or facilitating the achievement of one’s job values” (Locke, 1969, p. 316).

Job dissatisfaction is defined as “the unpleasurable emotional state resulting from the appraisal of one’s job as frustrating or blocking the attainment of one’s job values or as entailing disvalues” (Locke, 1969, p. 316).

Student Engagement

No widely agreed upon definition is adapted in this study, rather student engagement in this thesis refers to the students’ emotional, cognitive and social involvement in their learning experience.

Novice Teachers

Full-time English language teachers in the English Language Centre at the Higher College of Technology, in Oman. They are those with three or less years of teaching experience as of January 2016.

Experienced Teachers

Full-time English language teachers at the English Language Centre at the Higher College of Technology in Oman. They have four or more years of teaching experience as of January 2016.

Due to the unequal number of novice and experienced teachers, I created three experience groups to use in the analysis of data: average experience group teachers with (4-20 years of experience), and the highest experience group teachers with (21 years or more). The criteria for selecting participants under these experience groups are discussed in sections 4.1 and 6.1.

1.5 Structure of the thesis

This thesis consists of eight chapters. Chapter One provides an overview of the Omani context, beginning with its unique geographical location and the establishment of modern Sultanate of Oman. This is followed by a brief history of its school education and higher education systems. The chapter sheds light on the education system at the Colleges of Technology as this study took place in one of these colleges, discussing briefly the history of technical education in modern Oman especially with regard to the specializations and programs that they provide in seven colleges across the Sultanate. Chapter One also outlines the research objectives and the significance of this study. Finally, it concludes by defining the terminology used in the study and a brief description of individual chapters in the thesis.

Chapter Two reviews the literature on the three main elements of the research topic: teacher self-efficacy, teacher job satisfaction and student engagement. In the background section, I discuss the debates in literature around how self-efficacy is related to the social cognitive theory in terms of people's judgements of their personal capabilities and what massive impact it could have on people as it allows them to exercise greater influence in how they behave, think, and conduct themselves. I argue that self-efficacy is not about assessing people's skills but it is about their perceptions of their capabilities in certain conditions. The chapter distinguishes self-efficacy construct from other self-referential concepts. Self-concept, for instance, is a past-oriented self-image compared to the future-oriented nature of self-efficacy that allows an individual to be resilient and persistent once it is established. In the foreground

section, I discuss two main strands of self-efficacy construct based on Albert Bandura's social cognitive theory and Rotter's self-efficacy theory. When discussing each of these self-efficacy theories, I refer to studies conducted based on them and how these studies contributed to measure teacher self-efficacy. This section concludes with the rationale for choosing Bandura's self-efficacy theory using Teacher Sense of Efficacy Scale (TSES) over many others to be employed in the present study. This discussion is followed by the presentation of job satisfaction as a construct related to teacher self-efficacy and student engagement as an outcome of teacher self-efficacy. Moreover, three of the research questions attempt to investigate teacher self-efficacy and job satisfaction based on the influence of years of teaching experience and how new and experienced teachers' beliefs in their capabilities are different. Thus, a discussion of Huberman's career cycle model is included. As this study compares responses of novice and experienced teachers, a framework that defines and distinguishes the different stages of a career is chosen. In each of the individual sections, I relate to the research questions and the rationale for choosing each framework or construct. I conclude the chapter with some conclusions from literature and the rationale for the present research.

Chapter Three presents the methodological choices that, in my point of view, are important to answer the research questions. The present study uses a short-term longitudinal approach. The chapter also discusses the mixed methods research design that is used to collect data and advantages and disadvantages of this design are taken into consideration. A brief summary of the pilot study is given. The chapter explains how quantitative and qualitative data were collected, coded and analysed using SPSS and NVivo packages. It addresses the ethical considerations and the mixed methods integration procedure.

Chapter Four presents the findings of the quantitative component of the study. The chapter starts with the preliminary analysis of quantitative data including descriptive statistics of the three measures used in this study, that of Teacher Sense of Efficacy Scale (TSES), Job

Satisfaction Scale and Engaged Student Scale (ESS). Using one-way repeated measures analysis of variance, a one-way between groups analysis of variance, Pearson's product-moment correlation coefficients and Cronbach alpha coefficient, the second section of the chapter answers the five quantitative research questions that are meant to investigate impact of time and relations between variables. The findings related to the first research question (1.A & 1.B) highlight the insignificant change in teachers' efficacy and satisfaction beliefs over time and the significant difference in beliefs between three experience groups of teachers. The findings of the second research question highlight the relationships between the two main independent variables (i.e. teacher self-efficacy and job satisfaction) and four demographics including gender, age, teaching level and years of teaching experience. The third research question investigates the effect of teachers' experience on the three teacher self-efficacy sub-factors: classroom management efficacy beliefs, in-class student engagement efficacy beliefs and instructional strategies efficacy beliefs. Findings of the fourth research question highlight the relationship between teachers' capability in engaging their students and their students' view of this engagement. Finally, the fifth research question investigates the validity of the Engaged Student Scale (ESS) in the Omani context.

Chapter Five is solely devoted to answer the first qualitative research question that investigates the factors affecting teacher self-efficacy and job satisfaction beliefs. This chapter is exploratory in nature and its findings are meant to explain the quantitative findings in the overarching discussion of the thesis. When investigating these factors, Huberman's model of career cycle is used to understand the findings. The first section of the chapter presents the factors affecting teachers' efficacy beliefs. I argue here that teachers' perception of their capabilities is driven by the three sub-factors of efficacy, which are teacher self-efficacy for student engagement, teacher self-efficacy for classroom management and teacher self-efficacy for instructional strategies (Tschannen-Moran and Woolfolk-Hoy, 2001). A distinction is drawn between novice and experienced teachers' beliefs in terms of the three sub-factors. Moreover,

participants discussed the impact of teacher engagement and the effectiveness of relationships at workplace in boosting their confidence in their capabilities. The second section of the chapter presents the factors influencing teacher job satisfaction and how it is attributed to two main issues: the teachers' sense of growth at work and the work environment. The chapter culminates with a summary of the findings.

Chapter Six presents the findings related to the second qualitative research question, "How do TSE and job satisfaction beliefs change over the course of one semester?" The purpose of this question is to explain the quantitative findings of whether change, if any, has occurred in the teachers' efficacy and satisfaction beliefs over time. Using the quantitative results of individual teachers' trajectories of change, five clusters are identified. Four clusters represent the increase and decrease in teachers' beliefs and one cluster represents the surprising trajectories. The second section of this chapter longitudinally discusses any cross-case changes. Five patterns of change through time are identified and discussed. Matrices of within-case and cross-case changes are found in the appendices.

Chapter Seven is divided into two main sections: quantitative findings discussion and qualitative findings discussion. The findings are discussed in the light of the context and academic literature.

In Chapter Eight, an overarching discussion of the quantitative and qualitative key findings is presented. The chapter provides some recommendations for future research, outlines the research implications and concludes with the limitations of the study in the context of Oman.

2 Literature Review

The purpose of this chapter is to provide a theoretical framework for the current study. I presented the literature reviewed on the self-efficacy and job satisfaction theories and the relevant frameworks. I looked for gaps in the literature including literature of the current study context to help me focus the project area and formulate the research questions. This chapter begins with a brief background of the social cognitive theory that underpins the formation of the self-efficacy theory and its relationship to teaching. Following that, I present a detailed historical background of the self-efficacy construct, its development and measurements. A review of studies on factors affecting self-efficacy is presented. Job satisfaction, a related construct, is discussed in relation to self-efficacy and its impact on it. Theoretical frameworks based on Bandura and Huberman are discussed. Finally, the chapter ends with a conclusion and a rationale for the current study.

2.1 The background - Social Cognitive Theory

An increasing body of research holds that teachers' beliefs about their capabilities to influence and be in charge of their job demands, their own commitment and their student learning (Tschannen-Moran & Woolfolk Hoy, 2001). These beliefs are believed to have a tremendous effect on what goals teachers set for themselves, which, in turn, increases the level of their cognitive and affective responses (Bandura, 1986). Relating this viewpoint to literature, the social cognitive theory argues that

People's beliefs ... influence the courses of action people choose to pursue, how much effort they put forth in given endeavours, how long they will persevere in the face of obstacles and failures, their resilience to adversity, whether their thought patterns are self-hindering or self-aiding, how much stress and depression they experience in coping with taxing environmental demands, and the level of

accomplishments they realize. (Bandura, 1997, p. 3)

The perceived self- efficacy, which is one of the main components of Albert Bandura's social cognitive theory, is a conceptual strand that refers to "judgements of personal capabilities" (Bandura, 1997, p. 11). Bandura (2012) explains that this theory "addresses the growing primacy of the symbolic environment and the expanded opportunities it affords people to exercise greater influence in how they communicate, educate themselves, carry out their work, relate to each other, and conduct their business and daily affairs" (2012, p. 12). Thus, the perceived self-efficacy notion of the theory refers to the individual's beliefs about their abilities to perform a particular task or skill. It is worth noting that perceived self-efficacy is not a measure of the individual's skills, rather it is the individual's beliefs of his capabilities and what the individual can do under certain conditions regardless of what skills the individual has, Bandura further suggests (1997). According to Bandura, "different people with similar skills, or the same person under different circumstances, may perform poorly, adequately, or extraordinarily, depending on fluctuations in their personal efficacy" (1997, p.37). Once formed, these beliefs contribute considerably to the level and quality of human functioning (Bandura, 1993). Therefore, I proceed with the notion that self-efficacy beliefs can influence human's - including teachers' - beliefs about their own capabilities and that such beliefs are what teachers need to cope in a demanding profession like teaching.

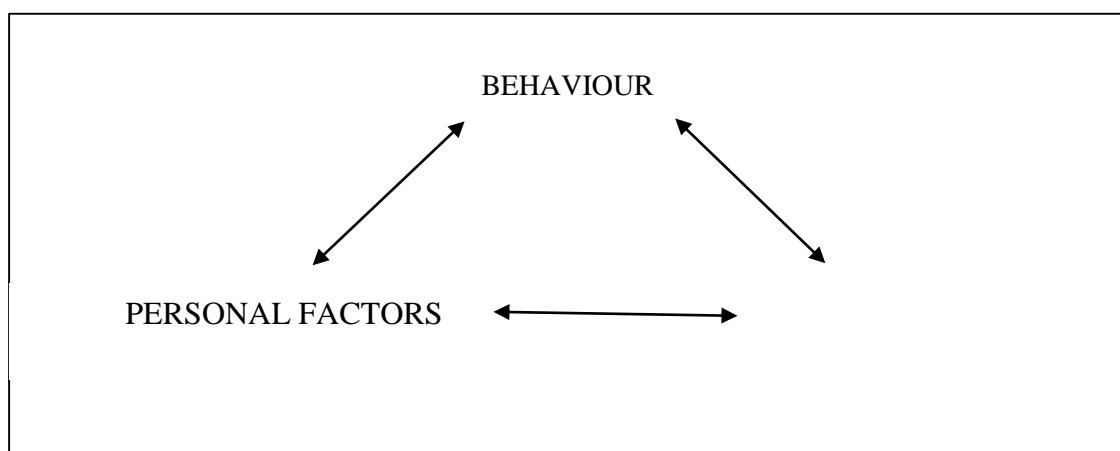
Bandura's social cognitive theory affirms that people function as contributors as well as determiners of what happens to them (1997, p. 3). Based on their understanding of what they are capable of doing, they take action. If they believe that they are powerless and unable to produce a certain result, they do not attempt it. This is because an individual's beliefs of his/her personal efficacy is a key characteristic of human agency that refers to the "acts done intentionally" whether or not the action that resulted in an outcome is unintended (1997, p. 3).

Bandura's social cognitive theory stresses the significance of cognition's influence on people's capability to encode information, self-regulate and perform behaviour (Bandura, 1986). That is to say, a lot of the human behaviour and actions are a forethought based on 'cognized goals' or pre-determined thinking of one's capabilities (Bandura, 1989), hence labelling this theory as "cognitive". Bandura suggests that there are two main components of the social cognitive theory: the human agency and the triadic reciprocal causation. The human agency is exercised through three different modes: personal, proxy and collective (Bandura, 1997; 2000). The personal agency is exercised individually through direct control. Personal agency is different from the second agency, proxy, whereby an individual indirectly exerts an action through other individuals to reach a certain outcome. The personal agency, Pajares concluded, is "socially rooted and operates within sociocultural influences, individuals are viewed both as products and as producers of their own environments and of their social systems" (1996, p. 544). The third agency is the collective one, which as the name suggests, is the agency that acts through a group of individuals to produce desired results. These individuals realize that their power lies in working together (as a collective action) to attain their sought-after goals (Bandura, 2000). Bandura states that an efficacy belief is a major characteristic of human agency and, therefore, "[u]nless people believe they can produce desired effects by their actions, they have little incentive to act" (1997, p. 2-3).

The second key component of the social cognitive theory is the triadic reciprocal causation through which the human agency works. The underlying feature of this component is that it is multi-directional in which personal factors (cognitive, emotional, and physiological states), behaviour and environment interact to influence one another (Bandura, 1997; Henson, 2002, see Figure 2.2). The interaction and interplay of these three affects the individual's actions, thoughts and motivation (Bandura, 1989; Henson, 2002). The type of activities, the individuals and the circumstances play a massive role in affecting the amount of the influence (Bandura, 1997). The bi-directional interaction, between an individual and their environment,

suggests that the environmental changes and events are shaped by the individual's actions and that the individual's beliefs are influenced by the environment itself. Likewise, the mutual interaction between behaviour and personal factors has a reciprocal effect on both. When an individual's beliefs and goals contour how the individual behaves, these behaviours, in turn, outline the personal characteristics of this particular individual (Bandura, 1989).

Figure 2.2 Theoretical Model of Triadic Reciprocal Determinism. Adapted from Bandura (1997)



Two key concepts to Bandura's perceived self-efficacy are the individual's beliefs about their ability to select, to go through or avoid certain tasks or situations (for fear of failure) and the level of persistence in carrying out a task (coping). Bandura labels these two concepts as "efficacy expectation" and "outcome expectancy" (Bandura, 1977). Efficacy expectation is "the conviction that one can successfully execute the behaviour required to produce the outcomes" (Bandura, 1977, p. 193). Bandura argues that the perceived self-efficacy has a direct influence on the type of activities to choose as well as the expected level of success at the end through prolonging the coping efforts. Yet, efficacy expectation cannot stand alone if the individual's capabilities are missing.

The second concept of the social cognitive theory, outcome expectancy, is independent of the efficacy expectation. Bandura defines the outcome expectancy as "the person's estimate

that a given behaviour will lead to certain outcomes” (1977, p. 193). That is to say, it is an individual estimate of the ‘likely’ consequences of his/her performance (outcome expectancy) that is different from the individual’s assessment of his abilities to perform the task (efficacy expectation) (Bandura, 1977, Bandura, 1997, Tschannen-Moran et al., 1998). The efficacy expectations and outcome expectancy are independent of each other. Performance, in this context, is the accomplishment of a task, whereas, outcome is what follows it. The outcome expected from a certain performance makes “little or no independent contribution” to the predictive behaviour (Bandura 1997, p. 24). Bandura asserts that the individual’s beliefs about their capabilities have more impact on their actions than their actual capabilities. Tschannen-Moran and Hoy summarized these two concepts in two simple yet thoughtful questions: “the efficacy question is, Do I have the ability to organize and execute the actions necessary to accomplish a specific task at a desired level? The outcome question is, If I accomplish the task at that level, what are the likely consequences?” (1998, p. 210)

2.2 Self-efficacy Construct

Being the core of the social cognitive theory, self-efficacy has received a lot of attention and a growing body of literature in medicine, nursing, education, psychology and business has been produced. Four decades have passed since Bandura first introduced the notion of efficacy in his prominent publication “Self-efficacy: Toward a Unifying Theory of Behavioural Change” in 1977. Subsequently, Bandura published and discussed this notion with great elaboration and specification. This section presents the definition of self-efficacy and a distinction between self-efficacy and other self-constructs. This discussion is followed by a historical review of the development of self-efficacy measures.

In the light of the studies discussed in the upcoming section, I argue that fruitful outcomes are only born when people perceive themselves as capable to perform well and that failure becomes an outcome of their poor perception of their capabilities.

2.2.1 Perceived self-efficacy

Perceived self-efficacy is the foundation of human agency (Bandura, 1997). Self-efficacy is “the belief in one’s capabilities to organize and execute the course of actions required to manage prospective situations” (Bandura, 1986). Humans exercise control over their lives through their beliefs in what they are capable of doing. Efficacy beliefs affect people’s lives regardless if they are erratic or strategic, optimistic or pessimistic (Bandura, 2006). According to Bandura’s efficacy construct, these beliefs affect human functioning in numerous ways. It is theorized that these beliefs influence performance directly and indirectly, the level of goal challenges that people set for themselves, the amount of effort they put into it and the level of persistence in the face of difficulties (Zimmerman & Bandura, 1992; Bandura, 1997).

Self-efficacy beliefs do not look back at what has been accomplished; rather these beliefs are all about what can be attained in the future (Bandura, 1997; Goddard, Hoy & Woolfolk Hoy, 2004). Self-efficacy beliefs have a key role in shaping human cognitive competencies and contributing to individual’s performances (Bandura, 1997). Therefore, the resulting performances are affected by the self-efficacy beliefs, whereas, the beliefs themselves are formed and altered by the individual’s interpretation of the results of their performance (Pajares, 1996). This view supports Bandura’s “reciprocal determinism” concept which essentially recognizes a multi-directional relationship between the personal factors (cognition, affect and biological events), behaviour and environmental influences that interact to exercise control over the individual’s actions, thoughts, and motivation (Bandura, 1986).

2.2.2 Self-efficacy vs. other self-referential concepts

Bandura’s self-efficacy construct maintains that self-efficacy beliefs are cognitively processed to bring about desired results. An individual has the freedom of choice. In other words, one can make a decision considering a number of alternatives with the aid of reflective thinking. Therefore, one considers the choices, weighs the outcomes, and evaluates one’s

abilities to execute them (Bandura, 1997). Bandura (1977a) states that the cognitive processes are responsible for acquiring and retaining new behavioural patterns through taking part (experiencing it), observing others and modelling them and learning from action consequences (observe their own actions and decide what to do or avoid based on outcomes). The result of forming and accepting these beliefs contribute to one's success and level of functioning (Bandura, 1977b). Thus, it is important to distinguish and highlight the differences between different self- concepts that influence the human thinking and action.

“Self-concept” is an important self-referent process that is linked to self-efficacy. Self-efficacy is context-based and is measured in the context of specific behaviours in specific situations (Maddox, 1995), unlike self-concept which is based on a more global self-image concept (Bandura, 1997) and past attainments (Bong and Skaalvik, 2003). Bong and Skaalvik (2003) claimed that self-efficacy and self-concept have some characteristics in common but they are also different in a more pronounced way. Self-concept and self-efficacy predict the individual's thoughts, emotions and actions. However, self-concept is past-oriented and provides relative temporal stability compared to the future-oriented and resilient nature of the efficacy beliefs once established (Bandura, 1997). Self-concept requires comparing one's abilities with other's in the same situation. Bong and Skaalvik (2003) concluded that self-efficacy can provide a foundation for the development of self-concept and it is a better predictor of behaviour than self-concept (Bandura, 1997; Pajares & Miller, 1994).

Another construct, which is sometimes used interchangeably for self-efficacy, is “self-esteem”. Bandura indicates that these two constructs are different in terms of the judgements they depict (1997). Self-efficacy is concerned with the individual's judgements of personal capabilities, whereas, self-esteem judgements are concerned with self-worth. It is possible to have a capability that an individual is very efficacious about “but take[s] no pride of performing it well” (Bandura, 1997). An individual may view himself hopeless in a task (low efficacy)

without having to lose his image of self-esteem (high self-worth and self-value). For example, to perform well in a second language class (say French) requires more than high self-value to acquire the language and do well. In fact, an individual needs strong efficacy beliefs to sustain the efforts required to acquire the language, liking himself is not one of these beliefs. Hence, Bandura's strong opposition to link the two constructs (Bandura, 1997).

A third construct that is closely but mistakenly linked to self-efficacy is "locus of control" which was originally developed by Rotter in the 1960s. Bandura forcefully negates these two constructs being the same phenomena. In fact, there is little or no relationship even if they are measured at different levels of generality (Bandura, 1997). In other words, there is no fixed relationship between beliefs about one's capabilities and beliefs about whether actions affect outcomes. There is evidence that perceived self-efficacy is a good predictor of behaviour, which is lacking in locus of control, as Bandura (1997) asserts.

2.3 The Foreground - Teacher self-efficacy

Based on the above argument, self-efficacy is a simple yet powerful concept that can empower teachers. When examining literature, I found that research findings have linked teacher self-efficacy with many factors such as student outcomes (e.g. achievement, motivation, self-efficacy) and teacher outcomes like enthusiasm, persistence, instructional behaviour and commitment (Tschannen-Moran & Woolfolk Hoy, 2001). There is research evidence that creating a successful learning environment can be determined by teacher efficacy. Ross (1992), for example, found that student achievement was higher in classes with teachers who had high efficacy beliefs. Teacher self-efficacy is very well linked to student's positive attitude towards school, as Miskel, McDonald, and Bloom (1983) indicated. When a teacher rewards less achieving students with less attention and few rewards, the students' failure continues and their attitudes become increasingly negative. In a longitudinal study, Midgley et al. (1989) assessed 1,329 students who were moved from a high efficacy teacher's class to a low efficacy teacher's

before and after the transition. They reported that teacher efficacy is linked to student motivation. The movement negatively affected the students' perceived performance and lowered their expectancies in Maths. Teachers with greater personal teacher efficacy and general teaching efficacy seem to have more trust on their students, have more control over class and share responsibility for solving classroom problems with their students (Woolfolk Hoy, Rosoff, & Hoy, 1990).

Since the focus of this study is on teacher efficacy, it is essential to define it and discuss the measures relevant to the present study. Tschannen-Moran, Woolfolk Hoy, and Hoy (1998) define teacher efficacy as "the teacher's belief in his or her capability to organize and execute courses of action required to successfully accomplish a specific teaching task in a particular context" (p. 233). Teacher efficacy "has a powerful effect on the goals that teachers set for themselves and how they interpret the outcomes of their actions" (Ross, Cousins & Gadalla, 1996, p. 397). Ross and colleagues (1996) found that teachers with high efficacy beliefs accept responsibility for failing to meet targets and respond to that with renewed efforts. These teachers also set ambitious standards for themselves and their students which maps well with Bandura's hypothesis that self-efficacy subsidises one's success through setting goals to meet.

A considerable amount of debate has been brought forward by many scholars and researchers on the meaning and measurement of teacher efficacy (Goddard et al., 2004; Guskey & Passaro, 1994; Pajares, 1996; Pajares, 1996; Pajares, 1997; Tschannen-Moran, Woolfolk Hoy, & Hoy, 1998). The RAND organization was the first to produce an efficacy scale in 1966 and since then more and more teacher efficacy measures have been created and tested as the upcoming sections discuss.

2.3.1 Measurement of teacher efficacy based on Rotter's theory and RAND.

An independent research organization concerned about investigating the impact of education interventions, called RAND Cooperation, created a teacher efficacy measure, which

consisted of two efficacy items. The cooperation's measure was inspired by Rotter's (1966) work on locus of control and was credited as being the earliest in measuring teacher efficacy (Armor, Conry-Oseguera, Cox, King, McDonnell, Pascal, Pauly, & Zellman, 1976). The RAND defined teacher efficacy as "the extent to which the teacher believes he or she has the capacity to produce an effect on the learning of students" (Armor et al., 1976, p. 31). This definition indicates that highly efficacious teachers could affect student performance by assessing the environmental factors that affect students' achievement and evaluating their ability to overcome them.

The RAND conducted two studies to test the self-efficacy measure. The first study was on Black and Mexican students to examine the success of different reading programs (Armor et al, 1976). The second study was to investigate the effect of teacher efficacy on continuing to use project materials after the project has ended (Berman, 1977). Both studies used the two 5-point Likert scale items: Item 1 was "When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment." and Item 2 was "If I really try hard, I can get through to even the most difficult or unmotivated students." The first statement was designed to measure the teachers' level of agreement to considering the environmental factors (external factors such as conflict, violence, social and economic situations, race and gender, value of education, and personal factors) as overwhelming to teachers in school. The second statement was designed to measure the teachers' level of agreement to considering themselves confident enough to overcome any factor that could hinder students' learning by taking responsibility for it (internal factor). The sum of the scores of the two items was called teacher efficacy construct, which essentially consisted of general teaching efficacy (i.e. item 1) and personal teaching efficacy (i.e. item 2).

The RAND's studies paved the way for more interest in teacher efficacy with more items that were added to rectify the reliability problems encountered with the two items

(Tschannen-Moran et al., 1998). Guskey's (1981) 30-item Responsibility for Student Achievement (RSA) measure was created to measure whether the student's achievement was the teacher's immediate responsibility (internal) or due to some outside factors (external). One example item is "1. If a student does well in your class, would it probably be (a) because that student had the natural ability to do well, or (b) because of the encouragement you offered?" Participants were instructed to give a percentage to each option (a and b) that would add up to 100%. Guskey (1981) reported that the students' success (R+) or failure (R-) was attributed to four types of causes: specific teaching abilities, the effort put into teaching, the task difficulty, and luck. The scale consistency was moderately high and the R items (whole scale) correlations was $=.739$, the R+ items (student success) correlations was $=.718$ and the R- items (student failure) correlations was $=.784$, all statistically significant ($p=.001$).

Rose and Medway (1981) constructed the 28-item "Teacher Locus of Control" scale (TLC) that measures the teacher's inclination to attribute students' success or failure to internal or external factor, which is similar to what Guskey did. The forced-choice items required teachers to ascribe the internal or external options that have control over classroom events. Fourteen of the items described positive or success situations and the other 14 described negative or failure situations. Separate scores were provided for beliefs that were responsible for student success "I +" and failure "I-". One example of the TLC is "When the grades of your students improve, it is more likely (a) because you found ways to motivate the students, or (b) because the students were trying harder to do well". The researchers reported that the scale was internally consistent. The item-total correlations were significant ($p < .01$). Coefficients for the "I-" subscale ranged from .25 to .65 and the "I +" subscale coefficients ranged from .22 to .52. The subscales of the TLC appeared to have good internal consistency, "I-" = .81 and "I +" = .71 (Rose & Medway, 1981). The study was found to be predictive of the teacher and student behaviour in terms of verifying instructional and class management strategies.

The Webb efficacy scale was developed about the same time as the TLC and RSA and for the same reason, which was increasing the reliability of the RAND measure while maintaining a narrow conceptualizing of the efficacy construct (Tschannen-Moran et al., 1998). An example item is “(A) A teacher should not be expected to reach every child; some students are not going to make academic progress. (B) Every child is reachable; it is a teacher's obligation to see to it that every child makes academic progress”. Respondents were asked to determine if they agreed most strongly with the first or the second statement (Ashton, 1982). Ashton and Webb reported that those teachers who scored high in the Webb Scale experienced fewer negative interactions in their teaching style. They also reported that the reliability coefficient for the Webb Efficacy (N=21, college teachers) was $\alpha = .68$, $p < .004$ compared to RAND efficacy scale with the same sample $\alpha = .44$, $p < .07$. Ashton (1982) also suggested that the teacher's beliefs in their ability to affect student learning, at least among the experienced teachers, was distinct from their generalized belief in their sense of control over the reinforcements they received. The psychometric limitations (i.e. inadequate reliability) existed among different teacher sample (Ashton & Webb, 1986).

2.3.2 Measurement of teacher efficacy based on Bandura's theory

Bandura's efficacy construct is based on the social cognitive theory. It is not a global construct like that of self-concept, rather it is a cognitive mechanism for processing beliefs which makes it a dynamic multi-dimensional process that results in situation-specific efficacy expectation (Bandura, 1997).

In teaching, teachers are responsible for making many choices and constantly taking decisions. Bandura (1997) asserts that the strength of self-efficacy beliefs can determine the choices individuals make. The decisions teachers make about their teaching practices are directly influenced by their sense of efficacy for teaching. How teachers view their instructional efficacy partly determines the way they structure their in-class activities (Bandura, 2006).

Teachers with high efficacy beliefs “create” mastery experiences for their students (Bandura, 2006) and are less critical of students’ errors (Ashton & Webb, 1986) and, consequently, affect the way students view their intellectual capabilities and academic development (Woolfolk, Rosoff, & Hoy, 1990). Research has shown that self-efficacy does not only affect teachers’ performance but also that of students (Pajares, 1996). Students’ self-efficacy beliefs play a key role in their learning process, achievement (Ashton & Webb, 1986; Bandura, 1993; Zimmerman, 2000; Zimmerman, Bandura, & Martinez-Pons, 1992), and motivation (Midgley et al., 1989). Assessing students’ efficacy is an ample opportunity to raise teachers’ awareness of students’ needs as Pajares (1996) noted. However, the focus of this study is not on student self-efficacy. In fact, it is on teachers’ self-efficacy and its influence on student engagement, as will be discussed in section (2.4.1).

Bandura (1977, 1986) cautions researchers that self-efficacy is domain-, task- and situation- specific. Therefore, any results should be related and interpreted in terms of their relation to the teaching tasks used and the situation in which the study took place. When exploring teacher efficacy, the same caution should be considered. Researchers attempting to predict academic outcomes are cautioned to follow “theoretical guidelines regarding specificity of self-efficacy assessment and correspondence with criterial tasks” (Pajares, 1996, p. 547). Thus, the highest level of specificity and correspondence to the task should be considered when assessing self-efficacy to avoid any global attitudes or generalizations of the individuals’ capabilities in that specific task. Teacher efficacy has been studied in relation with other within-teacher factors, or incorporated within omnibus measures that are far from being particularized and is viewed as a generalized personality trait (Bandura, 1986; Klassen et al., 2011; Pajares, 1996).

Bearing these cautions and guidelines in mind, researchers started utilizing Bandura’s self-efficacy theory in creating and developing new measures. An early reference to Bandura’s

social cognitive theory was Ashton and Webb's (1986) in which they used Bandura's theory to expand RAND's instrument. They adopted his distinction between efficacy expectations (the individual's belief that he or she can execute an action in a given situation) and outcome expectations (the individual's estimation of the likely consequences of performing that particular task). They came up with two new dimensions labelled as "teaching efficacy" which reflects the perceptions of the consequences of teaching in general and "personal teaching efficacy" which, in particular, reflects the teachers' own perceptions of their personal capabilities to bring about the desired outcomes. They believed that the teaching efficacy dimension was assessed by the first RAND item and the personal efficacy dimension was assessed by the second RAND item.

Based on these dimensions, Gibson & Dembo developed the Teacher Efficacy Scale (1984) – a 30-item 6-point Likert scale ranging between "*strongly disagree*" and "*strongly agree*". Their research yielded two substantial factors. The personal teaching efficacy, that is the teachers' beliefs that they have the skills to influence students' learning, corresponded with Bandura's self-efficacy dimension. The teaching efficacy, that is the teachers' beliefs of the effect of some external factors such as students' families, background and the environment on their abilities to perform in in-class tasks, corresponded with Bandura's outcome expectancy. With 208 elementary teachers, the two-factor model accounted for 28.8% of the total variance. It presented an internal consistency reliability coefficient of $=.78$ for personal teaching efficacy, $=.75$ for the general teaching efficacy and $=.79$ for 16 items out of the original 30 items that yielded significant loading on one of the two factors. Thus, they recommended using a revised version of the scale with 16-20 items for further research to avoid concerns with the items that did not load under any of these two factors. The inconsistencies existed after shortening the scale even further to 10-item version by Hoy and Woolfolk (1993) with only five items under each factor. They found that reliability coefficients were $=.77$ for personal teaching efficacy and $=.72$ for general teaching efficacy. Although the Teacher Efficacy Scale was widely used,

inconsistencies in the results of studies using the scale persisted (Hoy & Woolfolk, 1993; Tschannen-Moran et al., 1998) which signalled the need to continue the search for a more stable and cross-culturally valid instrument.

Rotter's "Locus of Control" has been treated as an equivalent for Bandura's Self-efficacy Theory. Tschannen-Moran et al. (1998) concluded that these two conceptual strands of self-efficacy constructs are "separate but intertwined". Rotter's self-efficacy looks into an individual's beliefs of the effect of action on outcomes, whereas, Bandura's self-efficacy theory looks into the individual's beliefs if the individual can produce certain outcomes (Bandura, 1977). In fact, Bandura argues that Rotter's scheme is based on the causality notion that is concerned with the "action-outcome contingencies rather than with personal efficacy" (1977, p. 204). The individual perceives events as either internal (personally) or external oriented. Rotter's and Bandura's theories of self-efficacy have led to "a lack of clarity about the nature of teacher self-efficacy" in academic literature (Tschannen-Moran et al, 1998, p. 203).

Tschannen-Moran and Hoy (2001) realized the significance of specifying the tool's outcomes as well as focusing on teacher's capabilities as the core of efficacy measurement. To reach this level of understanding, they decided to develop an instrument based on Bandura's recommendations. Bandura (2001) recommends that "a scale must be tailored to activity domains and assess the multifaceted ways in which efficacy beliefs operate within the selected activity domain" (p. 310). Therefore, a scale should have a number of items as a single-item measure does not have the ability to capture the multifaceted dimensions of a construct like self-efficacy. Another recommendation is to construct the scale at various levels of task demands, so that it differentiates the ability differences of individuals. Bandura found the existing measures to be "too general" and lacked the specificity level required to measure efficacy beliefs. These recommendations formed the basis of Tschannen-Moran and Hoy's work for creating a teacher efficacy scale.

In a seminar on self-efficacy in teaching and learning at the College of Education, Ohio State University, Tschannen-Moran and Hoy along with eight graduate students commenced the work on a new instrument that represented frequent teaching activities. The team went through a long process of trial and error to develop the instrument based on Bandura's efficacy scale. They had to pool and test a number of items, which were either borrowed from other measures or created by themselves with the help of teachers and researchers. The selection and production of items was principally based on the cognitive analysis of the teaching task. After three pilot studies designed to assess and examine their scale, the researchers eventually brought forward the Ohio State Teacher Efficacy Scale (OSTES) measuring three main factors: efficacy for instructional strategies, classroom management and student engagement. In the first study, 224 participants (146 pre-service and 78 in-service) were asked to respond to 52-items on a 9-point Likert scale ranging from *1-nothing*, *3-very little*, *5-some influence*, *7-quite a bit*, and *9-a great deal*. Thirty-two items were selected as a result of principal-axis factoring with varimax rotation (Tschannen-Moran & Woolfolk Hoy, 2001).

The 32-item version was used at the second study with a different sample of 217 participants (70 preservice and 147 in-service teachers). Using the principal axis factor extraction again, the researchers decide to have an eigenvalue of greater than one and the result was an eight-factor solution. The instrument was shortened to 18 items from the 32 items used in the first study to remove redundant items and items that had low factor loadings. The researchers also examined the two or three factor solution that the scree test suggested and identified. As a result, three factors were chosen that represented the teaching task: management (3 items with reliability coefficient of .72), engagement (8 items with reliability coefficient of .82) and instruction (7 items with reliability coefficient of .81). Tschannen-Moran and Woolfolk Hoy (2001) concluded, "the findings of Study 2 were encouraging. The 18-item instrument had good validity and the factors were conceptually sound representations of the various tasks of teaching" (p. 798).

The classroom management sub-factor was criticized and challenged in academic literature. Roberts, Henson, Tharp, and Moreno (2001) empirically examined the psychometric integrity of the 18-item OSTES using the confirmatory factor analysis (CFA). The testing of the scale was different from the exploratory principal components analysis (EPCA) used by Tschannen-Moran and Woolfolk Hoy (2001) which resulted in three factors. Roberts and Henson (2001) found elements of ambiguity in the development of the scale, which raised concerns about its multi-dimensionality, correlation of the three factors, and the number of factors that actually existed considering the data at hand. With 183 in-service teachers in Texas and Washington, D.C teaching primary grades, the data was collected. The findings supported the validity of OSTES for the “efficacy of student engagement” and “efficacy for instructional strategies”. The researchers rejected the multi-dimensionality of the scale and recommended deleting the third sub-factor “efficacy for classroom management” because of its weakness.

Tschannen-Moran and Hoy argued that classroom management is a crucial element of the teaching task. They conducted a third study to refine the OTSES further (Tschannen-Moran & Woolfolk Hoy, 2001). With 410 teachers (103 pre-service, 255 in-service and rest no indication of teaching experience), a new instrument was created with two versions: a long form with 24 items and a short form with 12 items while keeping the classroom management sub-factor. Principal-axis factoring with varimax rotation revealed three strong factors for the in-service teachers and a single factor for the preservice teachers. On both 24- and 12-item scales, all items loaded on the single factor, with factor loadings ranging from 0.60 to 0.85, and accounted for 57% and 61% of the variance, respectively. The three sub-factors maintained high reliabilities in both versions of the scale (short version: with 0.86 for instructional strategies, 0.86 for management and 0.81 for engagement and long version: with 0.91 for instructional strategies, 0.90 for management and 0.87 for engagement). The intercorrelations between the two forms for the total scale and the three subscales were high, ranging from 0.95 to 0.98. The complete sets of the two forms of the scale can be found in Tschannen-Moran and Hoy (2001).

The researchers later changed the scale's name from the OSTES to the Teacher Sense of Efficacy Scale (TSES). In the current study, I refer to the Tschannen-Moran and Hoy's scale by its new name throughout the thesis, which is the Teacher Sense of Efficacy Scale (TSES). Table 3.2 shows examples of the three sub-factors' items:

Table 3.2 Examples of Tschannen-Moran & Hoy's Teacher Sense of Efficacy Scale (TSES)

Ohio State teacher efficacy scale (OSTES)	Item Sample
Factor 1: Efficacy for instructional strategies	➤ To what extent can you use a variety of assessment strategies?
Factor 2: Efficacy for classroom management	➤ How much can you do to control disruptive behaviour in the classroom?
Factor 3: Efficacy for student engagement	➤ How much can you do to get to believe they can do well in schoolwork?

Several studies have been conducted to validate the TSES. Fives and Buehl (2009) examined the factor structure of Teachers' Sense of Efficacy Scale (TSES) for both the long (24-item) and short (12-item) scales among practicing (n = 102) and preservice teachers (n = 270). The responses of both versions of the scale were compared in terms of teacher's experience and grade level. The 3-factor structure (efficacy for classroom management, instructional practices, and student engagement) was found to be appropriate for practicing teachers. The three factors together accounted for 57.09% of the variance in the long form scale with ($\alpha = .93$) and accounted for 64.99% variance in the short form ($\alpha = .86$). A single efficacy factor was found to be appropriate for preservice teachers and it was accounted for 47.98% of the variance in the long version and 52.88% of the variance in the data of the short version. The three factors had reliability coefficient of ($\alpha = .95$) and the one factor had ($\alpha = .92$). Fives and Buehl (2009) suggested that experience played a role in having distinguished efficacy beliefs.

Practicing teachers indicated “distinct efficacy beliefs with respect to classroom management, instructional practices, and student engagement” when using the three-factor measure. For preservice teachers, a one-factor measure was more suitable. When Five and Buehl tested a three-factor solution to the preservice teacher data, the result was multiple items had double loadings. Five and Buehl interpreted these findings in terms of having less experience in managing class, engaging and instructing students. Practicing teachers had the strongest efficacy beliefs for classroom management tasks and the lowest efficacy beliefs for student engagement tasks. This suggested that practicing teachers could benefit from efficacy-enhancing instruction (that is professional development) in the area of student engagement.

The TSES was used in the Arabic context but the studies failed to examine its validity beyond simple correlations with teacher-related variables and other ‘arbitrator judgement’ (Aldhafri, 2016). In the Omani context, the setting of the present study, the TSES was translated and was tested using explanatory and confirmatory analyses in two subsequent studies at the school level (Aldhafri and Abmusaid, 2012). In the first study, the EFA supported three-factor structure with some cross-loading items. Aldhafri and Abmusaid reported that TSES has convergent validity when examining the relationship between TSES and Rand 2 ($r = .33, p \leq .001$) and between TSES and Gibson and Dembo’s TES ($r = .52, p \leq .001$). Using both varimax and promax rotation methods, 44% of variance was explained by the three factors (Aldhafri & Ambusaidi, 2012). Using CFA to test the structure validity of TSES, Aldhafri and Abmusaid (2012) examined self-efficacy beliefs of 605 female teachers and found good fit indices for the three factors (NFI=0.983; IFI=0.940; TLI=0.933; CFI=0.939; RMSEA=0.044) which supported the findings of studies conducted in other cultural contexts (e.g. Klassen et al., 2009).

By far, TSES is considered one of the most “promising” instruments found as it meets Bandura’s recommendations (Kyle & Henson, 2001; Roberts et al., 2001). It went through a long process of validation by its founders using three studies in the production process and it

was validated in cross-cultural settings (Klassen et al, 2009; Aldhafri & Ambusaidi, 2012). Tschannen-Moran and Hoy (2001) concluded that the TSES “a step forward in capturing what has been an elusive construct. It is superior to previous measures of teacher efficacy in that it has a unified and stable factor structure and assesses a broad range of capabilities that teachers consider important to good teaching” (p. 801- 802).

Fairly recently, Aldhafri (2016) examined the TSES to find out any effect of cultural differences, based on responses of Omani participants to the long version of TSES and developed a short version of TSES. Following the same steps that Tschannen-Moran and Woolfolk Hoy (2001) used in creating the short version of the scale, Aldhafri used explanatory factor analyses and item total correlations as was done in the original study. He then gradually deleted the items “to reach the parsimonious version possible” (2016, p. 143). His short version was found to be different from the original short version as it included four items related to instruction and engagement sub-scales. Thus, further confirmatory factor analyses were carried out. The findings of both versions (the Arabic and English) had high fit indices and the researcher concluded, “both versions can be used by Omani researchers” (2016, p. 143). For details of these analyses, see Aldhafri (2016).

There is a research gap in terms of assessing teachers’ self-efficacy beliefs among college and university level teachers in the context of the current study as the studies conducted in the Omani setting were mainly done at the school teachers’ level. It is important not to ignore the post-school level teachers where there are several aspects that could add some interesting insights about teacher’s efficacy beliefs in higher education. This study, therefore, aimed at assessing teacher efficacy using the Teacher sense of Efficacy Scale (TSES) at the Higher College of Technology in Oman. I employed some items of the English TSES version created by Tschannen-Moran and Hoy (2001) due to its sufficient reliability and validity. In fact, it could be unfruitful to try to assess the personal efficacy beliefs, for instance, while

ignoring what often surrounds the teaching experience (e.g. resources, external challenges). Likewise, focusing on the effect of the external factors as the main determinant of outcomes cannot stand alone to assess teacher efficacy. Deciding on how to measure teachers' self-efficacy should involve covering the teachers perceived beliefs and their teaching tasks and responsibilities in any teaching context. These factors combined are important parts of assessing teacher efficacy. As a teacher of English language, I was always interested in tracking and contemplating on my perception of my own capabilities as a novice and then latter as an experienced teacher and how these beliefs changed or were modified depending on so many aspects surrounding me including personal, social, academic and professional ones. Hence. The interest in studying such beliefs.

The following section discusses the factors influencing sources of teacher efficacy beliefs, the development of these beliefs and whether they actually change once established.

2.3.2.1 Sources of efficacy information: development & change

Bandura argues that the individual's cognitive processing influences and shapes his or her efficacy beliefs which are obtained through four sources of information: mastery experiences (enactive), vicarious experiences, social persuasion, and affective states (emotional) sources (Bandura, 1977a, 1997). The cognitive processing has a crucial role in interpreting the efficacy beliefs that may be different in different individuals based on their independent interpretations (Goddard, 2001, Bandura, 1997). The four sources of Bandura's theory are discussed below:

2.3.2.1.1 Mastery experience source.

Mastery experience is the first and the most important source in developing efficacy beliefs (Bandura, 1997) and it is based on an authentic purposive performance. Interpreting the results of this performance creates and develops the sense of efficacy. Individuals learn by

observing their own success and learn from their own mistakes, which eventually makes the difficult times a source of power. Once a strong efficacy belief is developed –due to repeated success, occasional failure has little or no effect on individual’s beliefs. Success, therefore, raises self-efficacy appraisals, whereas, repeated failure lowers them. Bandura suggests that changes in perceived efficacy are a result of the cognitive processing of the performance -more than the performance itself. Thus, successful performance may raise or lower perceived efficacy depending on various personal and situational factors and how they are interpreted and weighed. In other words, people’s perception of their capabilities, the difficulty level of the task, the efforts they produce, and the external assistance received, the structuring of the past experience in the memory are all factors that influence the grand effect of enactive experiences (Bandura, 1997).

2.3.2.1.2 Vicarious experience source

Vicarious experience or modelling, based on observing others with similar goals or in similar situations, is yet another source of efficacy beliefs, which, compared to first-hand experience (i.e. mastery experience) promotes self-efficacy. Social modelling, which is a result of observing those similar to oneself to appraise efficacy beliefs, depends greatly on the talents of those observed. Knowledge and effective skills and strategies in managing environmental demands, for instance, can be acquired from observing competent models (Bandura, 1986). Even those with high self-efficacy can learn new things and raise their efficacy even further when observing models, which provide better ways of doing things (Bandura, 1997). Bandura suggests that modelling sometimes is more effective positively and negatively than mastery experience. For instance, when a less efficacious individual observes others fail, he or she quickly accepts their failure. However, visualizing others fail does not necessarily have a negative influence as it may weaken the impact of direct personal failure experiences and strengthen one’s efforts in the face of repeated failure (Bandura, 1997).

2.3.2.1.3 Social persuasion source

The third source of efficacy is social persuasion that refers to others' belief in one's capabilities. This source is developed because of positive messages that one receives from others. These messages are accumulative of the others' view of the individual's ability through the years. Pajares (1997) argues that this source of efficacy appraisal is weaker than mastery and vicarious experiences but people use it to inspire and 'empower' others. However, negative persuasions can be as effective in defeating and weakening self-beliefs. Bandura (1997) asserts that social persuasion can have a positive impact on efficacy if it remains within realistic bounds. Therefore, if persuasion is received from a trusted source, it can positively affect and change the efficacy beliefs for the better, by holding a stronger sense of efficacy. Persuaders need to have a good and real reading of their performers' ability and a full understanding of the task demands before engaging in the persuasion act as it may lower efficacy and result in discounting the persuader, if the performer fails (Bandura, 1997; Artino, 2012).

2.3.2.1.4 Physiological state source

The last source of efficacy information is the individual's own physiological and emotional state such as stress, anxiety, arousal, and mood swings. Like the mastery experience source, this source is cognitively processed and can positively and negatively influence efficacy beliefs depending on the level of arousal and the individual's evaluation of their cognitive state. According to Bandura (1997), people tend to judge their own abilities by the emotional state they are in during the performance. They expect success if they are not overwhelmed by a negative feeling and expect failure if they are stressed and tensed.

2.3.2.2 Information sources development.

Research indicates that teachers' efficacy can change and be developed (Ghaith & Yaghi 1997). Bandura (1986, 1997) hypothesizes four types of processes of change. The first is the acquisition which involves the development of knowledge, skills and self-beliefs that control

human thoughts and actions. The second process is the generality which has to do with how widely acquired capabilities are used. The third one is durability which is about how all changes are sustained over time and, finally, resilience which refers to the ability to recover from negative experiences. He postulates that mastery experiences, the most important source of information, accelerate the acquisition process and reduce its stressfulness while the resilience process maintains handling negative experiences during tough challenges through sustained effort (1997).

Efficacy beliefs are developed cognitively by processing various sources of information as discussed above. Just like any individual, teachers have their own way of integrating and weighing these sources in the process of producing their efficacy beliefs. The beliefs may be affected by their own past personal experiences, their counterparts in the same environment through modelling - that is achieved by peer observation- , social persuasion and their own physiological and emotional state. Bandura (1997) hypothesizes that when weighing and interpreting these sources, they are found to be additive (the more the sources of information available, the more they enhance efficacy beliefs), relative (one source is stronger and more dominant than others are), multiplicative (two sources result in interactive effect) or configurative (the strength of one source relying on the presence of others). However, people do not necessarily integrate them, as they tend to over-rely on certain ones and ignore the rest depending on personal and contextual factors.

Although Bandura's sources of efficacy beliefs have been criticized for being based on experimental studies, they are widely accepted and adopted by scholars. However, Klassen et al. (2011) conducted a literature review on teacher efficacy research between 1998 and 2009 and suggested that there is weak research support for these sources, which are generally accepted by teacher efficacy researchers. They identified only seven studies that explicitly studied teacher efficacy sources. Usher and Pajares (2008) did a great job in reviewing all the studies that

investigated the sources of efficacy assessment and measurement. They concluded that the greatest limitation of researching efficacy sources is the way these sources have been measured as (a) there is a lack of consistency in the items used, (b) the reliabilities of the vicarious experiences items due to the complexity of this source are low, and (c) correlations between the sources are very high, suggesting the need for a clearer distinction between them. Therefore, further investigations of the development of the efficacy sources is needed to broaden our understanding of Bandura's sources and be open for new findings in this area especially when handling these sources in an academic context. One example of the efforts made in the area of studying efficacy sources in the academic context is Minett's (2015) published doctoral thesis titled "A qualitative study investigating the sources of teacher efficacy beliefs" online. Klassen and colleague's (2011) review has asked many questions in need of further research in the area of teacher efficacy sources which Minett took on board to address using a grounded theory design to confirm and/or further develop the sources of efficacy beliefs initially posited by Bandura.

Based on the notion of efficacy beliefs development, one major research question was formulated to address it in the current study, Research Question. 1(A) "*How do self-efficacy beliefs change over the course of one semester?*" The participants' responses to this question were analysed quantitatively and qualitatively. In relation to this question, the current study also attempts at investigating the factors affecting teachers' efficacy beliefs. Bandura's sources of efficacy helped the formulation of the first qualitative research question in this study which is Research Question. 6 "*What factors influenced the teachers' self-efficacy and job satisfaction beliefs during the semester?*" The question is about the factors that lead to develop certain efficacy beliefs throughout the semester as efficacy sources develop differently for different individuals in different situations (Bandura, 1997). The following section discusses three main factors/constructs that are related to teacher self-efficacy in the current study: years of teaching experience, student engagement and job satisfaction in the academic setting.

2.4 Factors influencing self-efficacy

When examining literature, I found several variables that are linked to teacher self-efficacy. This section outlines the constructs and factors that have been explored in relation to perceived self-efficacy and are considered the focus of this study.

2.4.1 Student engagement

Bandura (1997) suggested that high level of teacher self-efficacy should contribute to improving students' learning experience. Dolezal, Welsh, Pressley, and Vincent (2003) associated having effective learning with high student engagement in classrooms where effective teachers motivate students to engage academically. Hoy and Spero (2005) argued that teacher's "judgments about their abilities to promote students' learning" affect teachers' behaviour in class as well as the learning environment (p. 343). The teachers' perceived ability to provide support for learning through motivating and engaging students, regardless of their level of competence, is a key element of the learning process (Tschannen-Moran & Woolfolk Hoy, 2001). Teachers are more likely, then, to feel important and that their classes are being taken interest in (perhaps through attendance and interaction) which diminishes their considering leaving career option (Pines, 2002). Hence, student engagement is an influential aspect that is directly related to teacher efficacy. It is one of the examined variables in the present study. The engagement types outlined next are based on the instrument employed in the current study and in line with its aims.

Typically, student engagement is taken for granted by many (parents and some teachers) as long as the student is present in class. Some believe that student presence may indicate that they are engaged. Student disengagement, however, is characterized by having irregular, disruptive students, or students who do not complete assignments or homework (Lamborn, Newmann, & Wehlage, 1992). Defining and measuring of students' engagement vary from one study to another (Fredricks, Blumenfeld, & Paris, 2004). As a psychological

process, Marks (2000) defined student engagement as “the attention, interest, investment, and effort [that] students expend in the work of learning” (p. 156). Lamborn, Newmann and Wehlage (1992) agreed that student engagement is “the student's psychological investment in and effort [which is] directed toward learning, understanding, or mastering the knowledge, skills, or crafts that academic work is intended to promote” (p.12). Engagement implies the affective and behavioural participations in the learning experience. Therefore, it is not simply a commitment towards completing a specific task as students may complete a task without being engaged or with a minimum level of concentration or even by copying others’ work. The effort and investment that students need to expend imply the level of concentration they put into the learning experience to master some knowledge, which is why it should be viewed as a continuum from less to more as it entails acquiring knowledge continually (Lamborn et al., 1992). Student engagement is also a reflection of students’ willingness to participate in routine school activities such as class attendance, schoolwork submission, and following class instructions (Chapman, 2003a, 2003b).

Literature has shown that there are various types of students’ engagement. Researchers have used various combinations of student engagement indicators that have resulted in a number of separated instruments and tools to assess engagement. The growing number of instruments in the student engagement domain reflects its multifaceted nature. Thus, there is no one instrument to assess student engagement, comprehensively (Chapman, 2003a). As a result, researchers tend to investigate student engagement either by type, such as social engagement, academic engagement and intellectual engagement, or by ways of understanding how students engage, such as behavioural engagement, emotional engagement, cognitive engagement (Fredricks et al., 2004; Linnenbrink & Pintrich, 2003; Willms, Friesen, & Milton, 2009). The current study seeks to explore the impact of teacher efficacy on student engagement and vice versa. Based on the idea of multifaceted nature of the student engagement concept, I identified three types of engagement (cognitive, social and emotional engagement) to be used in the current study.

Cognitive engagement and emotional engagement are very common in many studies that explored student engagement, as the learning experience requires cognitive processing and emotional involvement. I included the social engagement as an important type of engagement due to the context of the study where social relations are considered highly important whether personified or through the use of social networking.

The American National Research Council's definition of "social engagement" in the classroom encompasses students' sense of belonging at school, their feeling of connectedness and acceptance with peers, quality interaction with faculty and their overall acknowledgement of the concept of schooling (Council, 2004). Concisely, being socially engaged is when teachers and students become active parties in a relationship that involves being mindful and attentive to one another (Willms et al., 2009). Socially engaged students build friendships, social networks, sense of belonging, self-confidence, and enjoyment of school (Willms et al., 2009). On the other hand, disengaged students tend to be withdrawn from relations with peers and may exhibit unmanageable behaviour and stand against their teachers (Skinner & Belmont, 1993).

"Emotional engagement" refers to students' emotional reactions in class including showing interest, boredom, happiness, sadness and anxiety (Linnenbrink & Pintrich, 2003). Emotionally engaged students show positive and negative reactions to teachers, classmates, faculty and school and show evidence of willingness to do work (Fredricks et al., 2004).

"Cognitive engagement" involves a deeper, critical and creative understanding of the content/materials. It is a reflection on students' prior knowledge and their use of different strategies to get the most of the learning experience. Teachers maximize this kind of engagement through facilitating tasks that prove that this type of engagement exists. Such tasks include listening and watching the students' language when asking and answering, being mentally involved in group and class discussions among others (Linnenbrink & Pintrich, 2003). Students could enhance their cognitive engagement through asking, re-reading and mapping

what they have studied to each other. In other words, not only is a student engaged through “hands-on” involvement but also through adapting a “minds-on” technique, as Linnenbrink and Pintrich (2003) called it. Drawing on the notion of investment, cognitively engaged students are willing to exert the effort required to comprehend complex ideas and master difficult skills (Fredricks et al., 2004).

Given these definitions and types of engagement, the concept of student engagement is characterized as multidimensional, dynamic and multifaceted (Mehdinezhad, 2011; Ainley, 1993; Fredricks et al., 2004). This is just like the multidimensionality that students bring forth to their learning experience as they come to class with different personal goals, beliefs, aspirations and diverse learning styles and strategies. Students’ engagement influences their own performance (Skinner, Zimmer-Gembeck, Connell, Eccles, & Wellborn, 1998), their positive academic attitudes, values and satisfaction as well as their academic engagement especially when studying in an environment where caring and supportive interpersonal relationships existed within the school (Battistich, Solomon, Kim, Watson, & Schaps, 1995; Klem & Connell, 2004; Marks, 2000; Skinner & Belmont, 1993). Lamborn and colleagues (1992) suggested that passive learning does not involve any cognitive demands and, therefore, long-term knowledge cannot be mastered. They argued that engaging student is a salient pillar of formal education mastery as it helps to ensure a long-term retention and a realistic understanding of the purpose of education, which survives beyond the school tests.

When considering the relationship between students and teachers, the importance of student engagement becomes much clearer. To build confidence in one’s own learning abilities and continue to invest oneself in learning, support is much needed and must accompany the participation and involvement in academic tasks (Lamborn et al., 1992). Such personal support can be given from peers as well as teachers. It can be argued here that personal support does not

only affect directly the student's engagement in the task but also enhances students' bond with teachers and the organization which, in turn, indirectly fortifies students' engagement (Lamborn et al., 1992; Marks, 2000). Klem's (2004) study of students from elementary and secondary schools used students' self-reports and teachers' report-on-students on a four-point scale (1 - "*not at all true*" 2 - "*not very true*" 3 - "*sort of true*" and 4 - "*very true*"). This study yielded a significant relationship between teachers' and students' engagement. The results indicated that teachers' support was important for students' engagement, as it was reported by both students and teachers. High levels of engagement were associated with higher attendance and test scores. Interestingly, the teachers measured students' engagement mainly in relation with behaviours such as paying attention, staying focused, doing more than required. The teachers reported that the emotional and cognitive engagement was less related to academic performance.

Guo, Justice, Sawyer and Tompkins (2011) reported that high level of students' engagement was significantly associated with a higher level of teachers' self-efficacy especially when teachers worked in schools with high levels of teachers' collaboration. Rubie-Davies (2007) suggested that such a relationship might be facilitated through practicing teachers' expectations. In a study on 12 primary school teachers from eight schools, who were divided to form three groups called high-expectation, low-expectation and average-progress teachers, participating teachers were identified as having expectations for their students' learning that were either significantly above or below the pupils' achievement levels. The participants were observed twice in the academic year during half- an hour reading lessons. Two people observed each lesson, one completing a structured observation protocol and the other running a recorder. Teachers with high expectations gave far more feedback than the low expectation teachers and they spent more time giving instructional statements related to the lesson (e.g. providing link to previous lessons and student prior knowledge). The low expectation teachers gave far less instructional statements that suggested that their students received limited support for their learning.

Rubie-Davies (2010) found positive and statistically significant correlations between students' achievement and high-expectation teacher's perceptions of students' attributes ($p = .001$ for all variables). Students' attributes in this study included including perseverance, independence, reaction to new work, interest in schoolwork, cognitive engagement, participation in class, motivation, confidence, self-esteem, parent attitudes to school, home environment and small for classroom behaviour, relationships with peers, relationships with teachers, homework completion. That is to say, high-expectation teachers perceived their students' attributes positively and, thus, the more successful the students were, the more positively high-expectation teacher viewed their attributes. When teachers realized such attributes in their students, they became more inclined towards promoting positive student attitudes that may enhance students' motivation, engagement and success in school (Ryan & Patrick, 2001). On the other hand, the low-expectation teachers perceived that students' achievement was related to student engagement with the task itself.

In the current study, Research Question four "*To what extent do teachers' confidence in engaging their students relate to their students' view of this confidence?*" asks how students perceived their teacher's confidence in engaging them in class. The students' responses to an 11-item scale are compared to their teachers' responses of how they perceived their own capability in involving their students. Responses to the teacher efficacy scale and student engagement scale are used to answer this question to investigate the impact of student engagement on their teachers' efficacy beliefs.

2.4.2 Job satisfaction

Teacher job satisfaction is, yet, another important construct that could have an impact on teacher efficacy. Much attention was given to the relationship between teacher's sense of efficacy and job satisfaction over the past decades (Caprara et al., 2003; Gian Vittorio Caprara

et al., 2006; Klassen & Chiu, 2010; Tschannen-Moran & Woolfolk Hoy, 2007). As described previously, the focus of this study is how these two outcomes are related to each other and to teacher's length of experience. Thus, it is imperative to explore job satisfaction and its impact on teachers.

There is no one accepted definition of job satisfaction. Researchers and scholars have developed a number of definitions depending on the factors related to the job itself, in a particular context. The scholar's own perception, knowledge and experiences may also influence these definitions. This diversity results in a range of definitions, which are related to how deep the satisfaction concept is and how it is interpreted, with some being far away from definitions to a description of the satisfaction consequences or a list of its characteristics (Evans, 1998). With conceptual ambiguity around the job satisfaction concept, it is quite hard to cover the definitions that attempt to grasp its meaning.

There are some common definitions that have informed job satisfaction research. Hoppock defined satisfaction as "any combination of psychological, physiological and environmental circumstances that cause a person truthfully to say I am satisfied with my job" (Hoppock, 1953, p. 47, cited in Aziri, 2011). Based on this approach, job satisfaction is influenced by some external as well as internal factors that cause the individual to feel satisfied. Vroom's definition focused on the "affective orientation on the part of the individual towards work roles which they are presently occupying" (1995, p. 14). One of the most popular definitions is Locke's (1969), which links the achievements of job satisfaction with that of job values, "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating the achievement of one's job values" (Locke, 1969, p. 316). Evan's (1997, 2000) defines job satisfaction as a state of mind an individual's reaches when his/her job-related needs are being met. She distinguishes two main components of job satisfaction: job fulfilment that concerns how satisfactory something is and job comfort that concerns how satisfying something

is (2000). Spector's (1997) simple definition refers to people's feelings about their job and its different aspects with relation to what they like (satisfaction) or dislike (dissatisfaction) about it. In essence, these definitions agree that the individual's positive feelings about their job does not only signal their satisfaction about the job as a whole, but also signal their satisfaction about various aspects of it such as co-workers, pay, and managers/superiors.

2.4.2.1 *Teacher job satisfaction*

In the teaching profession, job satisfaction is an influential issue due to its relevance and influence not only on the teacher but also on many aspects related to it namely students. Although there no generally agreed upon definition of teachers' job satisfaction, the term refers to the teachers' affective relation to their teaching role and how they view the relationship between getting what they want from teaching and what it actually offers them (Zembylas & Papanastasiou, 2004, 2006). Teacher job satisfaction is also "an inside reaction against the concept of working conditions [and an] overall evaluation somebody receives from his/her working environment" (Gkolia et al., 2014).

Research studies have found that satisfied teachers are those who find themselves feeling successful and being effective. Bogler (2001) quantitatively examined the effects of school principal's leadership style, decision-making strategies and teachers' satisfaction among 930 teachers. She concluded that teachers were satisfied when they took part in the decision-making in the school, were given opportunity to develop and grow, and were given freedom in practicing their role (Bogler, 2001). Ostroff (1992) found a direct link between the teachers' sense of satisfaction and their pedagogic quality. The 'strongest' result was that organizations with satisfied teachers were more effective than those with less satisfied ones. Additionally, a positive relationship between teachers' satisfaction and indicators of students' behaviour and performance (in reading/math skills, discipline problems, and attendance rates) was found. Job satisfaction can drive the decision of staying in a profession or leaving (Chen, Chu, Wang, &

Lin, 2008; Mobley, 1977). The social nature of the teaching profession place a huge weight on the social context such as the relations with students and with each other (Zembylas & Papanastasiou, 2006). As a matter of fact, all the above-mentioned factors, and may be more, can also cause job dissatisfaction.

In the light of the above, it is clear where the importance and ambiguity around the job satisfaction definition comes from. Nonetheless, it is crucial to emphasize that I find Locke's (1976) and Zembylas and Papanastasiou's (2004) definitions to be the most relevant to the current study. Locke links how the individual's positive feeling and attitudes are a result of their perceptions of their job values. In a way, people are greatly satisfied when they perceive that their job is valuable and that they get from it as much as they put into it (Zembylas & Papanastasiou, 2004).

2.4.2.2 *Measurement of job satisfaction.*

In their comprehensive literature review of job satisfaction, Gkolia et al. (2014) listed the job satisfaction measures that have been developed based on Herzberg's theory that distinguishes two main categories of satisfaction: intrinsic and extrinsic. Among the listed measures of job satisfaction were three common ones: Job Descriptive Index (JDI) (Smith, Kendall, & Hulin, 1969), Minnesota Satisfaction Questionnaire (MSQ) (Weiss, Dawis, England, & Lofquist, 1967) and Employee Satisfaction Inventory (ESI) (Koustelios, 1991; Koustelios & Bagiatis, 1997). These factors were considered "the most trustworthy" by the reviewers for their validity and reliability and for being widely accepted in research on job satisfaction (Gkolia et al., 2014).

Job Descriptive Index (JDI) was developed by Smith, Kendall and Hulin in 1969. It includes 72 questions and 5 dimensions under the titles of work, payment, promotion, supervision and colleagues. The MSQ is a 100-item self-reported instrument with 20 sub-domains with five questions about each dimension measuring intrinsic, extrinsic and overall

satisfaction. With 24 questions, ESI instrument measures six dimensions of job satisfaction: working conditions, salary, promotion, job itself, supervisor, and organization as a whole. Caprara et al. (2003) used four items from JDI instrument that were initially selected and adapted by Borgogni in an unpublished doctoral dissertation (1999), as Caprara et al. reported (2003). The overall reliability of the instrument was .82. In Klassen and Chiu (2010), two items from Caprara and his colleagues' instrument were used and had a good reliability of (.84). In the current study, the Caprara et al.'s (2003) four-item instrument was adopted for it showed adequate reliability and validity as well as relation to self-efficacy in various studies (for example Caprara et al., 2003; Caprara et al., 2006; Klassen et al., 2009; Klassen and Chiu, 2010). The following are the four job satisfaction items as created by Caprara et al. (2003):

Table 4.2 Example of Caprara et al.'s Job Satisfaction Scale

Caprara and colleagues scale	Item Sample
Job Satisfaction Scale adopted in the current study	<ul style="list-style-type: none"> ➤ In general, I am satisfied with my job. ➤ I am happy with the way my colleagues and superiors treat me. ➤ I am satisfied with what I achieve at work. ➤ I feel good at work.

The current study uses Caprara et al.'s (2003) measure to investigate the teachers' job satisfaction beliefs. To build an understanding of how teachers rated their satisfaction beliefs, an open-ended question was added to complement the job satisfaction measure "*What experiences in the past two weeks have influenced your job satisfaction?*" Together the job satisfaction measure and the open-ended questions answered research questions **1(A)**, **1(B)**, **2**, and **3** (see section 2.7).

2.4.2.3 Factors influencing job satisfaction.

Academic job satisfaction is undoubtedly related to many factors that could cause, mediate or influence it, directly or indirectly. Literature on job satisfaction covers a huge

number of factors affecting it in many sorts of jobs and businesses. The following, however, highlights the factors that are directly relevant to the academic context.

There is evidence in literature that teachers' efficacy is a determinant of job satisfaction. Teachers with higher ability to manage their classes and instruct students well, reported higher job satisfaction levels (Klassen & Chiu, 2010). When validating Teacher's Sense of Efficacy Scale (TSES) in five countries (Canada, Cyprus, Korea, Singapore and USA), results showed a positive correlation between these variables across the five countries and confirmed that the relationship was similar across the diverse contexts (Klassen, Bong, Usher, Chong, Huan, Wong, & Georgiou, 2009). In recent years, studies have examined this relationship and investigated different aspects related to it at the workplace. Judge and Bono's (2001) meta-analytical findings indicated that generalized self-efficacy was positively related with job satisfaction to a correlation of $=.38$ across 18 studies. This was the highest correlation found by them, between job satisfaction and the four traits they studied (which were generalized self-efficacy, self-esteem, internal locus of control and emotional stability). In another study, Duffy and Lent (2009) tested an integrative model of work satisfaction in a sample of 366 teachers. They posited that work satisfaction was predicted by five variables: work conditions, goal progress, self-efficacy, goal and efficacy relevant support, and personality traits. The findings showed a good overall model-data fit and the model accounted for 75% of the variance in work satisfaction. The work conditions, self-efficacy and positive affect produced a 'unique' predictive variance to work satisfaction. The researchers concluded that the satisfied teachers who perceived their work environment as supportive, were confident in their abilities to complete work-related tasks and goals, and reported high levels of positive affect. Teachers' self-efficacy directly affects their job satisfaction through meeting their intrinsic needs of competence, and indirectly through motivating them to perform well and receive recognition and pride. If satisfied, these psychological needs promote health and well-being (physical effect)

and competence, autonomy and relatedness (psychological effect). If not, however, they lead to the opposite state (Ryan & Deci, 2000).

In a study of 2249 Norwegian teachers in elementary and middle schools, Skaalvik and Skaalvik (2007) tested a Norwegian scale measuring teachers' self-efficacy in relation to the school context, collective teacher efficacy, two teacher burnout dimensions (emotional exhaustion and depersonalization) and teacher job satisfaction. The study found that job satisfaction was positively related to teacher self-efficacy and negatively related to both dimensions of teacher burnout with emotional exhaustion as the strongest predictor. Teacher's autonomy, good interpersonal relations between teachers and parents and high time pressure were the most important factors that affected job satisfaction (Skaalvik & Skaalvik, 2007). Other studies have shown that teachers' self-efficacy beliefs influenced their commitment to the profession and their job satisfaction (Caprara et al., 2003; Coladarci, 1992). Teachers with high self-efficacy dedicate themselves to work and have the desire to remain in it for as long as possible (Coladarci, 1992).

The influence of self-efficacy and job satisfaction relation could extend to include other aspects of the teaching and learning experience. Gkolia et al. (2014) concluded from their study, that teacher efficacy has an influence on teacher's job satisfaction and that this association could have an impact on students' performance which they urged researchers to put to test in future research. Veldman et al. (2013) found a positive correlation between teacher's job satisfaction and teacher-student relationships in two case studies of eight teachers in the Netherlands. Using self-reported narrative-biographical method, the teachers' perceptions of their relationship with students were compared with their students. Veldman et al.'s results indicated teachers might have positive job satisfaction, even though their students reported a poor teacher-student relationship. Their study, therefore, suggested that relationships with students might not be an indicator of satisfaction.

Margolis (2008) investigated teachers of 4-6 years of teaching experience viewpoints of their future in the teaching profession. He concluded that teachers belong to one of the following types: (a) teachers who were looking for generative roles which could keep them learning and excited about teaching and (b) teachers who were looking regenerative roles which could widen their sphere of influence and share their talents with others in the profession (Margolis, 2008). The findings postulated that teachers' stress was taking place earlier than ever now that teachers were seeking out administrative posts to move forward professionally and financially. The study proposed applying certain procedures that were applied in other businesses to promote job satisfaction and retention in teaching such as personal recognition, flexible schedules and early promotions. One way to sustain teachers' job satisfaction is to maintain high level of self-efficacy among teachers through promoting interpersonal relationships with colleagues, which, in turn, positively affects their job satisfaction (Gian Vittorio Caprara et al., 2006).

Sousa-Poza and Sousa-Poza (2000) studied job satisfaction in 21 countries- including countries from Eastern and Western Europe, Japan and the USA- to compare job satisfaction levels and its determinants. They reported that there are two essential factors that influence job satisfaction: work-role input (e.g. exhausting job/effort, dangerous job, education, working time, physically demanding) and work-role output (e.g., high income, interesting job, working independently, job security, relationship with management/colleagues). The results showed no importance differences in terms of job satisfaction between genders. However, the analysis confirmed that these inputs and outputs have a significant influence on job satisfaction, in general. Some of them have more effect than others in specific settings. For instance, people of Eastern European countries find well-paying jobs are a source of satisfaction. The rationale behind this analysis is the assumption of the basic and universal needs of humans.

Furthermore, Huberman (1995) summarized the factors that could affect teachers' career satisfaction. The first factor was teachers who experimented more with class materials, student grouping, grading system ... etc. The second factor was teachers who stayed away from school-wide projects and activities were more satisfied with their jobs compared to those who were very involved in school-wide projects and were shocked with rejection (from the administrations). Consequently, they were more likely to feel dissatisfied and embittered in later years of their careers. There are also other factors that could predict job satisfaction later on in the career, according to Huberman: (1) shifting roles from teaching to doing administrative tasks every few years, (2) having "magical" years where teachers had highly vibrant classes with active students, (3) getting significant results after being able to motivate low-performing students to do well, for example. Thus, it can be concluded that experience plays a crucial role in giving a sense of satisfaction as work. The fact that one has digested the sort of tasks and had past experiences, positive or negative, and have learned to cope with its challenges and pitfalls, is in itself a reason for feeling satisfied or otherwise. The present study seeks to reveal the factors influencing job satisfaction that teachers experience in the Higher College of Technology in Oman. Therefore, the adoption of a career stages model to interpret the findings is vital. Research Question 2 addressed some of these factors such as age, gender, teaching level and years of experience (see section 2.7). The following section addresses the impact of experience through Huberman's (1989) career stages framework.

2.4.3 Effects of years of teaching experience on self-efficacy and job satisfaction

When Bandura (1977) introduced the concept of self-efficacy beliefs, he also proposed that these beliefs are very powerful as they influence the individual's motivation to take action; the amount of effort put forth in the endeavour; the level of persistence in the face of obstacles and failures; and the level of resilience to adversity (1997). In education, teachers make two types of judgments: they assess the teaching task requirements that include various factors such as students (their motivations, perceived abilities, and socioeconomic status), provision and

availability of resources and contextual factors (e.g. school leadership and collegial support). They also assess their own personal competence by evaluating their internal strengths and deficits (Tschannen-Moran & Woolfolk Hoy, 2007; Tschannen-Moran et al., 1998). In essence, it is the teachers' perceptions of their competence rather than their actual competence that influences the amount of effort they put in, the duration of persistence in hard times and the level of flexibility to deal with setbacks.

Bandura hypothesizes that once set, efficacy beliefs are relatively stable and might be hard to shake unless re-evaluated or reassessed by a shocking experience (1997). In a way, experience has an impact on teachers' efficacy. Hoy and Woolfolk Hoy (1990) reported that student teachers' efficacy increases during the preservice training period due to having a high sense of idealism. However, Ghaith and Yaghi (1997) concluded that self-efficacy tends to decline with more years of experience. This, on the other hand, suggests that a well-established teacher efficacy during the first stages of teaching career can be maintained for a long time (Hoy & Spero, 2005; Tschannen-Moran et al., 1998; Woolfolk Hoy, 2000).

Some studies, however, reported that teachers' self-efficacy increases or decreases depending on the stage of their career. Chester and Beaudin (1996) reported that the decline in self-efficacy among first year teachers is not a universal thing. They examined the efficacy beliefs of first and second career new teachers in urban schools and found that experienced teachers reported positive changes in efficacy beliefs (an increase) more than the novices did. Chester and Beaudin (1996) inferred that this change in efficacy beliefs of second career teachers (experienced) was due to the fact that they were "teachers by choice" and that they were confident of what commitments to make as they possessed a "sense of mission" (p. 251).

Some studies that examined the relations between experience and change in efficacy beliefs reported some factors that set the scene for change. Ross (2001) indicated that teacher efficacy was relatively stable over the course of in-service training programs but suggested that

change in teacher efficacy occurred rapidly in the early years of teaching and might not be strong enough to shake. Teacher efficacy, however, is not permanently fixed and resistant to change if faced with solid conditions to cause a dramatic shift such as unexpected change of curriculum or change of workplace to another school (Bandura, 1997; Ross, 1994). Hoy and Spero (2005) reported that first year teachers' efficacy dropped after support was withdrawn. Among the factors that influenced the efficacy beliefs, in Chester and Beaudin's study (1996), were the number of class observations, and the timing of the observation during the year. Teachers who were observed more frequently reported a significant change in efficacy beliefs compared to those who have not been observed at all or were observed late in their teaching year.

Along with the findings of these studies, Tschannen-Moran and Hoy (2007) reported that novice teachers mainly benefited from the availability of teaching resources and interpersonal support of colleagues. These findings were in line with Chester and Beaudin's (1996) recommendations to enhance change in efficacy beliefs in urban schools which included: (1) providing opportunities for collegial interaction, (2) more frequent class observations and focused feedback and (3) proper allocation of resources to support staff. Implementing these recommendations will result in avoiding the sense of devalued efforts and incorporating Bandura's view of the verbal persuasion source which should take the form of focused feedback (Bandura, 1997) from a credible, trustworthy and expert persuader to be effective (Bandura, 1986).

Mulholland and Wallace (2001), in their longitudinal case study, assessed the experiences of an elementary science teacher, Katie, using interviews and reflective journals in her journey from being a preservice to an in-service teacher. They reported a couple of sources that strengthened her efficacy beliefs: verbal persuasion and mastery experiences. Support in early years of teaching career from supervisors (verbal persuasion) was an effective way to

build her efficacy beliefs. Katie had received this source of self-efficacy (persuasion) from a trusted source, her supervisors, who had a good understanding of her skills and abilities and formulated their view based on observing her work in class. Soon, mastery experiences were the key aspect of increasing her efficacy, particularly when the experiences were difficult and turned out to be successful. Bandura (1997) posits that mastery experiences are the most influential source of information for new teachers, especially if success is gained on difficult tasks with little help or is achieved early on in the learning experience with few obstacles (Tschannen-Moran et al., 1998).

Research suggests that teachers' self-efficacy in themselves increases with experience (Wolters & Daugherty, 2007). For example, experienced teachers spend less time analysing a task that they are asked to perform particularly if they have performed it before and succeeded in it. On the other hand, novice teachers spend more time analysing the exact same task and tend to rely more on vicarious experiences, which is what would others do if they were in the same position, to form their own view of conducting it (Tschannen-Moran et al., 1998). Experience of performing the same task a number of times gives the experienced teachers the ability to perform it quicker. Klassen and Chiu (2010) suggested that teachers do gain confidence in their teaching skills early on and in their mid-career years peaking at about 23 years of experience. However, they also suggested that this belief might decline as they enter the later-stages of their teaching career. This low efficacy (low belief in abilities) leads to low investment of efforts which, in turn, has a negative impact on the outcomes resulting in lower self-efficacy (Maurer, 2001).

Using a longitudinal mixed methods approach, Klassen and Durksen (2014) examined the development of teachers' efficacy and work stress of preservice teachers. One hundred and fifty participants completed eight weekly electronic surveys during their two-month final teaching practicum. A key finding was that their self-efficacy increased and work stress

decreased during the course for most participants which were accompanied with much individual variations of self-efficacy and work stress patterns presented by the qualitative data. The qualitative data revealed that those participants who experienced an increase in efficacy reported positive efficacy for influencing decisions and management in the classroom. They also reported stress-related activities such as working late to plan lessons and complete assessment work. Although findings showed the dynamic nature of efficacy and work stress processes as participants were subject to change during the practicum, Klassen and Durksen reported that the self-efficacy and stress variables were 'independent' of each other.

A key element of Klassen and Durksen's (2014) study was the use of a mixed method approach to capture the patterns of teachers' efficacy and teachers' job satisfaction beliefs quantitatively and compare them to the teachers' comments that were collected qualitatively as a way to interpret the quantitative findings in more depth. More and more scholars urge teacher efficacy researchers to integrate different research paradigms to capture the essence of efficacy beliefs. Labone (2004) commends the work of quantitative-based researchers in succeeding at investigating teachers' efficacy beliefs but denigrates their efforts in understanding the development of efficacy beliefs by restricting themselves to only quantitative methods. This suggests the urgent need to incorporate qualitative research to provide a deeper understanding of how teacher efficacy beliefs are formed. Indeed, combining both approaches is a step forward to continue exploring the multidimensionality of efficacy beliefs and to observe the factors that contribute to building stronger and positive teacher self-efficacy in various domains (Schunk & Pajares, 2005).

Aldhafri (2016) elaborately reviewed a number of studies based in the Arabic-context, including the Omani context, which examined the relationship between TSE and years of experience. He reported that Omani teachers' efficacy and years of experience correlated

positively (for more details on these studies and other Arabic studies, Aldhafri's chapter is a good first step forward).

These aspects of relating experience to teacher efficacy using mixed method and longitudinal approaches instigated my interest in investigating teachers' views of their efficacy beliefs in relation to the career stage they are at. They directly guided the formulation of several research questions in this study. Research question *RQ.1 (B) "Is the change over time related to experience?"* focuses on the effect of years of teaching on the development of teachers' efficacy beliefs. Research question *RQ.2 "To what extent are teacher self-efficacy (TSE) and job satisfaction (JS) related to (1) teacher gender, (2) teacher age, (3) teaching Level at the foundation program, and (4) teaching experience?"* attempted to investigate the relationship between efficacy and satisfaction beliefs and some demographics. A more specific question that assesses teachers' efficacy sub-factors to their experience is *RQ.3 "How do novice and experienced teachers differ in terms of their TSE beliefs (including "classroom management efficacy", "in-class student engagement efficacy" and "instructional strategies efficacy")?"* This question aimed at finding any relationship between the career stage the teachers were at and the specific tasks of teaching.

2.5 Theoretical framework – Huberman's model of career cycle

In the current study, one of the focal points of research is investigating the differences between novice and experienced teachers and the impact of that on the teachers' self-efficacy and job satisfaction beliefs. Thus, different models of career stages are explored to find one suitable for the present study. For the purposes of this study, differences between novice and experienced teachers needed to be established within a framework as the coming sections show in light of relevant literature.

2.5.1 Novice vs. Experienced

Novice teachers are the ones with fewer years of experience. Berliner (2004) defines novice teachers as either student teachers or teachers in their first year of teaching. According to Huberman (1993), novices in their first three years are in what is called the discovery stage where a lot of exploration and learning take place. They are characterized to behave and react in certain ways. For instance, novice teachers are inflexible and are always afraid to be diverted away from the focus of their lesson (Berliner, 2001, 2004; Westerman, 1991). Thus, an “off-task” behaviour is always disruptive and unwelcome. They may also lack the ability to address classroom disorder (Veenman, 1984). If students come up with an interesting point or a spontaneous response that can be an essential learning point, they are most likely to be ignored (Fogarty, Wang, & Creek, 1983).

Novice teachers tend to start the lesson by directly relating to the topic in hand (Westerman, 1991). Novices’ professional development needs differ from those of the experienced teachers, as they are sometimes characterized by having no or little mastery experiences (Mahmoudi & Özkan, 2015). To improve their teaching, novices prefer to take part in courses/workshops, participate in networks of teachers formed particularly for the professional development of teachers, read professional literature, and engage in informal dialogue with their colleagues on ways to improve. They frequently adopt certain activities such as “exchanging teaching materials with colleagues, ensuring common standards in evaluations for assessing student progress, and discussing and deciding on the selection of instructional media”, as Mahmoudi and Ozkan (2015, p. 63) concluded.

Experienced teachers behave differently. For example, they rely heavily on student prior knowledge to bring up a new topic. They can also be distinguished for having a rich knowledge base, the ability to integrate different kinds of knowledge and make intuitive judgements based on past experiences (Mahmoudi & Özkan, 2015). Generally, they show a

deeper understanding of students' needs and abilities, an awareness of the necessary instructional objectives to support students' learning, an understanding of the use of language learning strategies. They tend to have greater flexibility, spontaneity in teaching, and efficiency and effectiveness in lesson planning (Richards & Farrell, 2005). Experienced teachers are also reported to be willing to engage in discussions and take part in material exchange and selecting media of instruction (Mahmoudi & Özkan, 2015).

Years of experience could highlight differences between novice and experienced teachers in terms of their cumulative abilities, knowledge, and skills development as well as their student's performance level (Kolodner, 1983; Pil and Leana, 2009; Rodríguez & McKay, 2010). Mahmoudi and Özkan (2015) argued that experienced teachers improve their teaching using various means such as through "mentoring and/or peer observation and coaching, reading professional literature, education conferences or seminars, and observation visits to other schools/institutes respectively" (p. 63).

These differences are helpful for understanding the impact of experience in establishing and developing teachers' efficacy and satisfaction beliefs. For this purpose, the elements that constitute the concepts of exploration, discovery, experimentation, stabilization and engagement/disengagement, which, together, they make Huberman's model of career stages, are defined next.

2.5.2 Huberman's Teacher Career Cycle Model

Literature shows that there are many career cycle models that have been created to build an understanding of teachers' behaviour at different career stages and the reasons they act in certain ways. It is established that teaching career is a career of challenges (McLaughlin, Pfeifer, Swanson-Owens, & Yee, 1986) because it is "filled with plateaus, discontinuities, regressions, spurts, and dead ends" (Huberman, 1995, p. 196). In the process of their professional growth, teachers experience many "shifts" due to personal and organizational

factors which make them swing back and forth between stages of “growth and frustration” (Fessler, 1995, p. 172). Therefore, a teacher armed with 30 years of teaching experience should have different preoccupations than one who has been teaching for only two years (Huberman, 1995). Theorists and researchers have identified a number of career cycle models based on various theories which were mostly criticized for describing the teaching career in the first few years until the teachers reach the maturity stage (e.g. models of Gregorc, 1973; Burden, 1982; Burke, 1984). Fessler (1995) discussed these models and concluded that they neglected what comes beyond maturity stage.

One highly respected model is Huberman’s career stages model. This model is based on the idea that teachers develop throughout their professional lifetime using different stages of career development processes in which teachers could leapfrog from one stage to another depending on various factors related to the teachers’ everyday life and personal issues (1989, 1995). The beauty of this model is that it has more differentiation in terms of the different stages and connection between them. Huberman stated that any career starts with an exploration stage and later moves on to stabilization stage. These two stages feature the early sequence of career development. Yet, this could not be generalized to cover every single individual nor it could be generalized to cover all sorts of careers or professions. There have been always exceptions. Between 1989 and 1995, Huberman investigated and studied teachers’ career cycle. In 1989, he theorized the career cycle model that consisted of five stages to show the ‘process’ of teachers’ life cycle with specific references to tasks and characteristics of each of these stages, as shown in Figure 3.2.

Figure 3.2 Huberman's (1993) Model sequence of teacher career cycle

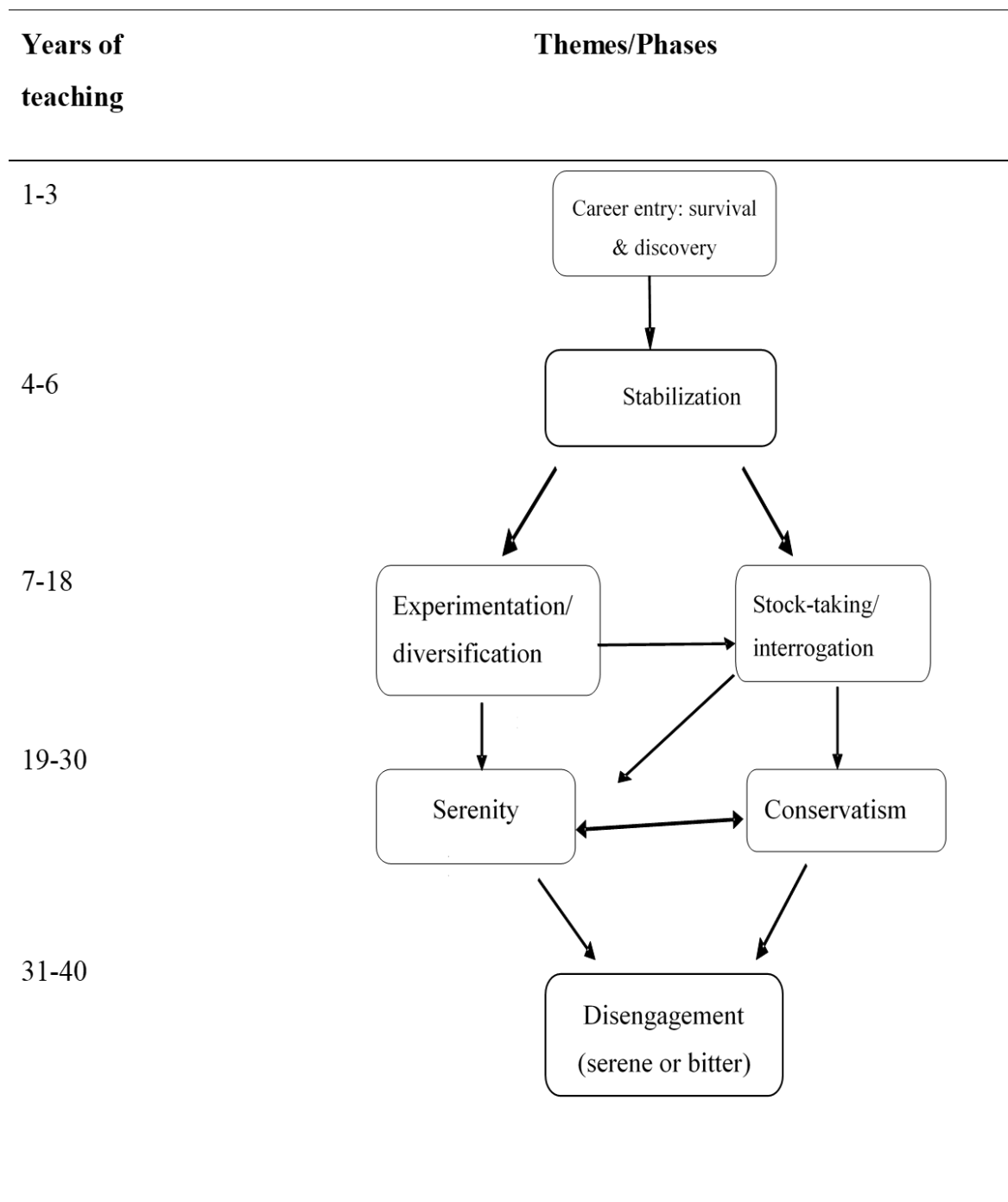


Figure 3.2 demonstrates that the career sequence does not have a straight stream from the first stage to the last. In fact, the sequence commences with a single stream from survival to

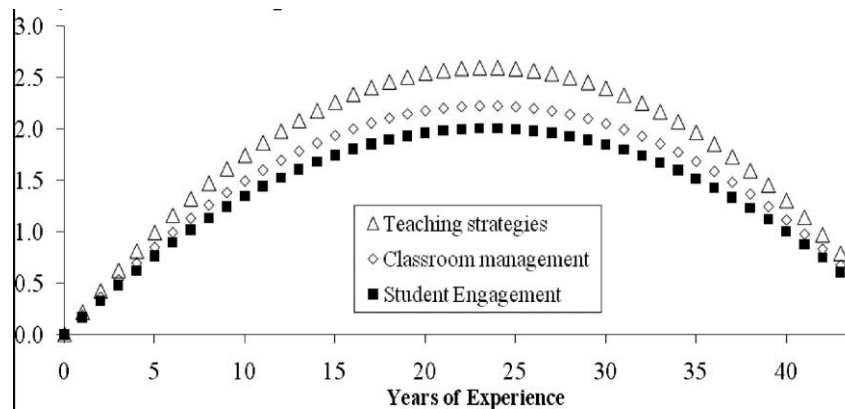
stabilization and then takes multiple forms from there on. The relational sequences are harmonious at points and problematic at others. Huberman, however, concludes that this model which represents the teaching profession doesn't necessarily represent the cycle of life which is more like "a staircase that we descend and ascend at different elevations" (1995, p. 203). The following is an account of Huberman's teacher career cycle model.

Teachers especially the ones without previous experience climb the career ladder with suspicious thoughts "Am I up to this challenge?" The theme of this stage is called survival, followed by the discovery stage that describes the excitement of being responsible for students, having colleagues and being part of the herd, experimenting materials...etc. Closely linked to this stage is the exploration phase that involves making career choices to consolidate one's position in the new profession. Having these feelings naturally means that the teacher has reached the next stage of stabilization. The most prominent characteristics of this stage are the sense of control and instructional mastery, relief from being supervised and watched, the sense of belonging and relatedness to the environment, the setting up of a fundamental repertoire with students, reaching the "spontaneity" phase and feeling committed. As a result, for reaching this 'secure' state of mind, the teacher becomes ready to experiment different materials, different student groupings and different combinations of lessons and activities. The teacher eagerly wants to see his/her impact on the students and, consequently, begins to sense any constraints imposed by the institution to limit this impact. Thus, he/she attempts to work out ways around them. He/she is fully ready to take up new responsibilities or challenges for diversification's sake and as a sign of commitment.

This leads to the stock-taking phase where the teacher moves towards freeing oneself from one's idealistic illusions and realizes that it might be time to move on to something new before it is too late. Female and male teachers are different at this stage with the men experiencing a stronger sense of "disenchantment". Interestingly, the teacher gets to a self-

accepting state of mind where there is no more self-beating for committing mistakes in class or for not being able to perfect one's work. That is why Huberman calls this stage the 'serenity' stage. The life cycle goes on and the teachers' views of the school environment age with its owner. The teachers become aware of the difference in school life compared to what they were used to. The students' behaviour, young colleagues' lack of commitment, the over lenient administration and the negative public image of educators all lead the old warriors to complain and resist the innovation. They become conservative. When teachers sense a growing disengagement from teaching, this signals the end of their teaching career, which has either a bitter or a serene touch. Addison's (2004) findings supported this as a sense of demotivation, which overwhelmed the older teachers, made them complain about the long teaching hours and workload. Klassen and Chiu's (2010) key conclusion also supported this as teachers' efficacy experienced an increase with experience for early and mid-career stage teachers and declined for teachers in the late career stages –representing a nonlinear relationship as shown in Figure 4.2. However, Huberman maintains that “a distinct phase of disengagement” has not been clearly established for teaching (1993, p. 109).

Figure 4.2 Relationship between experience and teacher efficacy factors (Klassen & Chiu, 2010)



2.6 Chapter Conclusion and Rationale for this research

The literature on self-efficacy and job satisfaction suggests that the contextualized nature of the learning environment is likely to influence the teacher self-efficacy beliefs, which in turn affect their job satisfaction and the level of their student engagement. Understanding factors that contribute to teacher self-efficacy and job satisfaction is vital to maintain higher levels of self-efficacy and satisfaction among teachers. From policymaking viewpoint, it is important to be aware of factors satisfying teachers to ensure that they get from their job what they need (Murthy & Varalakshmi, 2012). For teachers, the level of self-efficacy and job satisfaction beliefs may enhance or emasculate their performance (Bandura, 1997). Teachers with high self-efficacy engage themselves in practices associated with high achievement gains for their students as they have time to create activities, guide and praise their students (Gibson & Dembo, 1984).

Research in teacher self-efficacy can improve and enhance teachers' performance level and reduce signs of attrition. Understanding factors related to teachers' efficacy and satisfaction will not only benefit teachers but also program leaders and policy makers who strive to find

ways to nurture teachers' belief in themselves. Since self-efficacy beliefs are most likely to develop when individuals face some novel and challenging experiences or tasks (Usher & Pajares, 2008), exploring self-efficacy beliefs of novice and experienced teachers will contribute to this understanding.

The fact that there is an increasing amount of research in teacher efficacy and satisfaction does not mean that all aspects related to these areas have already been explored and all realities uncovered. Researchers are calling to vary the research methods and approaches used in investigating teacher efficacy. Data collected to address teachers' self-efficacy, in particular, has been mainly quantitative in nature. To give more depth to the findings, researchers recommend exploring the influences on teacher efficacy and satisfaction *qualitatively* (Labone, 2004; Zembylas & Papanastasiou, 2004, 2006), a method that has been long overlooked (Henson, 2002; Tschannen-Moran et al., 1998). In line with these calls to experiment using new research methods was the call to introduce longitudinal research to examine the malleable nature of efficacy beliefs (Henson, 2002; Klassen et al., 2011). Researchers are beginning to address these gaps using qualitative and mixed methods research (e.g. Klassen & Durksen, 2014; Mulholland & Wallace, 2001). However, less has been done in the current study's context, in terms of varying research designs. Therefore, the current study aims at investigating teachers' efficacy and satisfaction beliefs *longitudinally* to explore any development during the three-month semester using a mixed method design. It should be added that in the Omani context, no studies have used a *longitudinal* design to capture the impact of experience on novice and experienced teachers' self-efficacy and job satisfaction. No studies, which were conducted longitudinally at the higher education level in the Omani context, have come within the scope of the literature reviewed for the study.

Furthermore, much of the research into teachers' self-efficacy beliefs has focused on the western (meaning European and North American) contexts, generally. The research conducted

in Oman has focused on school level teachers and the teachers of Sultan Qaboos University - the first and the highest higher education institution in Oman. Some of these studies covered the teacher efficacy and job satisfaction, separately, but they were mainly conducted at the school level. Only two studies have been conducted about university level instructors' efficacy beliefs and published in Arabic journals (Almiali & Almusawi, 2011; Assaied, 2013) but are not available to people from other contexts. None of these was conducted at the Colleges of Technology, the context of the current study. The situation at these colleges may add to our understanding of teachers' efficacy at national as well as international levels. Additionally, the context of the Colleges of Technology may assist us in identifying features of the colleges' system that contributes towards the formation of these beliefs and the contextual factors that influence them. Aldhafri (2016) sent out an urgent call for conducting studies in the Arabic context in *English*, to contribute to the gap that exists in the efficacy beliefs literature, as there are only two widely cited Arabic studies in the English efficacy literature conducted by Ghaith and Shaaban (1999) and Ghaith and Yaghi (1997). Most of the Arabic-context studies are written and conducted in Arabic and published in Arabic journals. The Omani context is extremely young in terms of these kind of studies and there are massive opportunities to explore teachers' efficacy beliefs and its related variables in the context.

2.7 Purpose of the study and research questions

The purpose of the study is to explore English language teachers' perceptions of their efficacy and job satisfaction beliefs in relation to the number of years of teaching experience. The study also investigates changes in these beliefs (that is increasing or decreasing) during a short-term period of one semester. Factors that influence the formation of these beliefs are also explored.

The following research questions guided this study:

Overarching research question:

What self-efficacy and job satisfaction beliefs do novice and experienced teachers have at the Higher College of Technology, Oman?

Quantitative sub-research questions & hypotheses

RQ 1 (A). *How do teacher self-efficacy and job satisfaction beliefs change over the course of one semester?*

Based on previous research (e.g. Klassen & Chui, 2010; Caprara, Barbaranelli, Borgogni, & Steca, 2003; Caprara et al., 2006; Klassen & Durksen, 2014) I expected that self-efficacy would increase over time (*Hypothesis 1a*). I also predicted that job satisfaction would decline as teaching workload and classroom factors (e.g. student misbehaviour) increased towards the end of the semester causing dissatisfaction (Boyle, Borg, Falzon, & Baglioni, 1995) (*Hypothesis 1b*).

RQ 1 (B). *Is the change over time related to experience?*

Based on previous research (e.g. Hoy & Spero, 2005; Tschannen-Moran & Hoy, 2001; Caprara et al., 2003) teacher efficacy changes negatively or positively over time depending on the career stage. I predicted that experienced teachers would report higher levels of self-efficacy than novices as their efficacy increased with more years of teaching experience (Klassen & Chui, 2010; Aldhafri, 2016; *Hypothesis 1c*). I also predicted that novice teachers' self-efficacy started higher then decreased over time due to workload and other factors (*Hypothesis 1d*).

RQ 2. *To what extent are teacher self-efficacy (TSE) and job satisfaction (JS) related to (1) teacher gender, (2) teacher age, (3) teaching Level at the foundation program, and (4) teaching experience?*

I predicted that teachers' gender and age would be associated with high level of teacher efficacy and job satisfaction beliefs (*Hypothesis 2a*). I predicted that the teaching level would impact and be associated with teachers' efficacy in relation to their years of teaching experience as research showed that school level was found to be related to experienced teachers' self-efficacy and had no effect on novice teachers' SE (Tschannen-Moran & Hoy, 2007; *Hypothesis 2b*). I predicted that teacher self-efficacy was associated with job satisfaction as teaching efficacy would contribute to teacher job satisfaction (Caprara et al., 2006; Klassen & Chui, 2010; *Hypothesis 2c*).

RQ 3. *How do novice and experienced teachers differ in terms of their TSE beliefs (including “classroom management efficacy”, “in-class student engagement efficacy” and “instructional strategies efficacy”?)*

I predicted that experienced teachers would report higher efficacy than novices in selecting instructional strategies and classroom management techniques (Tschannen-Moran & Hoy, 2007; *Hypothesis 3a*).

RQ 4. *To what extent do teachers' confidence in engaging their students relate to their students' view of this confidence?*

I predicted that teachers with high efficacy beliefs would help increase their students' engagement level by varying their instructional strategies and techniques to motivate their students (Guo, Justice, Sawyer, & Tompkins, 2011; *Hypothesis 4a*).

RQ 5. *Is the Engaged Student Scale (ESS) valid in the Omani context?*

I predicted that the ESS would be valid in the Omani context. This prediction was based on the pilot study results (*Hypothesis 5a*).

Qualitative sub-research questions & hypotheses

RQ 6. *What factors influenced the teachers' self-efficacy and job satisfaction beliefs during the semester?*

RQ 7. *How do teacher self-efficacy and job satisfaction beliefs change over the course of one semester?"*

No hypotheses were assigned to the qualitative research questions, as the objective was to explain the quantitative results in the light of the qualitative data.

The next chapter discusses research methods used in this study, describing the research design, the sample population, the data collection procedures, and the data analysis procedures used.

3 Methodology

This chapter addresses the research design and rationale for this study. It also presents a detailed description of two main components: quantitative and qualitative approaches including a description of the research design, participants, and data collection procedure and data analyses.

This study employs a mixed methods approach, using quantitative method to investigate the teachers' self-efficacy beliefs in relation to instructional strategies, student engagement, classroom management and teacher job satisfaction. Furthermore, it also employs a qualitative method to explore sources of teachers' self-efficacy beliefs, the relationship between the TSE and student engagement, and teacher job satisfaction. Using these mixed methods, the study also compares the self-efficacy beliefs of experienced and novice teachers.

Although the main aim is to identify any measurable weekly changes in teachers' self-efficacy during a relatively short time (one teaching semester) in terms of classroom management, instructional strategies and student engagement, this study also looks at the relationship between teacher's self-efficacy and years of teaching experience. Additionally, the present study examines the teachers' self-efficacy in relation to student engagement, as teachers are believed to be able to motivate students' engagement (Dolezal et al., 2003). Teachers participating in this study were asked to give their students an online survey to investigate their students' engagement. This chapter gives a description of the research methods and the tools used to collect data in the study.

This study investigates the patterns associated with the changes of self-efficacy of experienced and novice teachers at the English Language Centre (ELC) at the Higher College of Technology (HCT) in Oman during a three-month semester using quantitative and qualitative

approaches. The quantitative approach employs an online diary survey in which the teachers are asked to answer a number of close ended questions to describe the status of their self-efficacy beliefs and job satisfaction at the end of every two weeks (five times/ semester). The qualitative approach measures these beliefs using two open-ended questions in the online diary surveys as well as an open-ended questionnaire at the end of the semester to explore and explain some of the main results or patterns reported in the quantitative method. At the time when teachers fill out the sixth survey (with the open-ended questions), their students were asked to evaluate their own engagement using a student engagement scale. Table 5.3 presents a summary of what this chapter covers.

Table 5.3 Summary of Methodology chapter components

Setting	English Language Centre at the Higher College of Technology- (HCT), Oman
Participants	English language teachers at the Foundation Program at the English Language centre
Research design	1. Quantitative data: Online diaries & student survey (longitudinal) 2. Qualitative data using open-ended questions(longitudinal)
Research Variables	Variables that adheres to Tschannen-Moran et al.'s TSE (2001), Caprara et al.'s job satisfaction (2003) and Engaged Student Scale

The purpose of this chapter is to describe the research design and rationale. To address the research questions and objectives, it specifically includes a parallel exploratory mixed methods design, which comprises of quantitative and qualitative approaches. As part of this chapter's sub-components, the choice of approaches and their definitions, sampling, data collection procedures, data coding and analysis procedures, instruments and mixed data analysis procedures are addressed.

3.1 Research Design & Rationale

The history of the mixed methods design dates back to the 1970s when certain writers called for combining quantitative and qualitative designs but it was practically attempted in the 1980s. Different attempts from different writers and researchers in the field of education and other fields such as sociology, nursing and management (see Creswell's 2011, p. 23-25 summary table on selected writers and their contribution to the development of the mixed methods research), paved the way for the birth of the systematic mixed methods design as we know it today. This design has witnessed growth and been criticized from early 2000 until recently. Before discussing the mixed methods research in details and relating it to the present research, the quantitative and qualitative approaches are separately discussed and their features are briefly highlighted.

The quantitative approach is characterized as objective, "time-free", "context-free" (Nagel, 1986), unbiased and "emotionally detached" from the objects being studied (Johnson & Onwuegbuzie, 2004). Part of the argument against this approach is that it is objective in nature. It is meant to measure and reach conclusions with as little interference of the subjects as possible. Johnson and Onwuegbuzie (2004) further argue that throughout the quantitative research process the research is affected by the researchers' subjective decisions such as deciding on the research problem, the measurement techniques, interpretation of the result and analysis. Thus, objectivity is not an untouchable characteristic of this method.

Qualitative research, according to Denzin and Lincoln (2005), is "a situated activity" where the researcher takes the job of making sense of what happens around him as it happens using all forms of data representations which may include some or all of these: field notes, interviews, photographs, recordings and his own memos. Participants are a substantial tool as the meanings and interpretations these participants give to the incidents are an important part of the qualitative data. Creswell (2007b) points out the constantly changing nature of the

qualitative inquiry that makes researchers from different fields rely on it. He (2007b) provides a comprehensive definition that includes a series of steps that a qualitative research goes through including process, procedures, and framework. The definition highlights the design of research and the use of different approaches for the purpose of investigation.

Qualitative research begins with assumptions, a worldview, the possible use of a theoretical lens, and the study of research problems inquiring into the meaning individuals and groups ascribe to a social or human problem. To study this problem, qualitative researchers use an emerging qualitative approach to inquiry, the collection of data takes place in a natural setting sensitive to the people and places under study, and the data analysis is inductive and establishes patterns and themes. The final written report or presentation includes voices of participants, the reflexivity of the researcher, and a complex description and interpretation of the problem and it extends the literature or signals a call for action (Creswell, 2007, p. 37).

This approach does not believe that the subjects of a study can be separated from the researcher and the research. The proponents of this approach argue in favour of constructing and interpreting data with time and context in mind. The writing of the analysis should always be in active voice with "rich", "thick" and informally written description (Johnson & Onwuegbuzie, 2004). The qualitative approach is still criticized for adopting "unqualified or strong relativism" (Guba, 1990). Thus, it proves to be refuted and invalidated due to the level of, what Johnson & Onwuegbuzie (2004) describe as, "soft" relativism which basically means respecting and considering the participants' views and beliefs. Another criticized issue regarding the qualitative method is that researchers might run under the risk of providing insufficient rationale for interpreting the data (Onwuegbuzie, 2000) which indicates that readers might blindly accept these interpretations.

Nevertheless, qualitative research has a number of strengths as it is based in the social reality and contains rich details. The strengths, however, are accompanied by challenges and

complexities of qualitative data analysis. Researchers are required to make careful decisions regarding methods of analysis as they will influence issues of researcher bias, and research validity and reliability.

3.1.1 Mixed Methods Research (MMR)

There has been a growing demand for combining these two methods, in what is called the mixed methods research (MMR) approach, in order to combine the benefits of the two methods. Johnson & Onwuegbuzie (2004) presented a list of the similarities that lay between the quantitative and the qualitative methods. The two approaches together attempt to examine and explain phenomena "us[ing] empirical observations to address research questions", analysing data and producing descriptions and arguments in order to defend them (Sechrest & Sidani, 1995 cited in Johnson & Onwuegbuzie, 2004). When and how these two ends of the continuum should be put together depends entirely on the research questions. The present research combines the quantitative and qualitative methods for the reasons discussed in this chapter. Before going any further in discussing the issue of how to make use of these approaches together in the present research, exploring the definition of the MMR is necessary. One of the earliest definitions of the MMR was Greene, Caracelli and Graham's (1989), which defined the MMR in the literal sense of the term, "we defined mixed-method designs as those that include at least one quantitative method (designed to collect numbers) and one qualitative method (de-signed to collect words), where neither type of method is inherently linked to any particular inquiry paradigm" (p. 256). (All as in original text)

Johnson & Onwuegbuzie (2004, p. 17) gave a more comprehensive definition of the MMR including the techniques, methods and approaches, "*the class of research where the researcher mixes or combines quantitative and qualitative research techniques, methods, approaches, concepts or language into a single study*" (italics in original). MMR is further described as the "third wave or third research movement" (Johnson & Onwuegbuzie, 2004, p.

17) and “the third methodological movement” (Creswell & Plano Clark, 2011, p. 1). In fact, it is “a movement that moves past the paradigm wars by offering a logical and practical alternative” (Johnson & Onwuegbuzie, 2004, p. 17).

Creswell & Plano Clark (2007a) adopted an even deeper definition of MMR that combined the methods and philosophy and later topped it with a research design orientation (2011). According to these scholars, MMR involves philosophical assumptions that guide the direction of the collection and analysis of data and the mixture of qualitative and quantitative approaches in many phases in the research process. As a method, it focuses on collecting, analysing, and mixing both quantitative and qualitative data in a single study or series of studies. Its central premise is that the use of quantitative and qualitative approaches in combination provides a better understanding of the research problems that either approaches cannot stand alone (Creswell, 2007a).

Johnson and Onwuegbuzie commented on the usefulness of combining the two research methods as this tactic may be used to "facilitate communication, to promote collaboration, and to provide superior research" (2004). The MMR is known to be “practical” (Creswell, 2011) as it practically allows the researcher to adopt or combine any feature of the two methods to answer the research questions or solve problems (2004). It also creates a balance that could be missing if a researcher fails to holistically paint a full meaningful picture out of the provided data from being misled or restricted by a single approach. The MMR is an "attempt to fit together the insights provided by qualitative and quantitative research into a workable solution ... [and this should]... offer the best opportunities for answering important research questions" (Johnson & Onwuegbuzie, 2004, p. 16).

An MMR design “provides a better understanding” as previously stated in Creswell and Plano Clark’s definition (2007). It has a combination of some unique characteristics. Bryman thinks that “bringing quantitative and qualitative findings together has the potential to offer

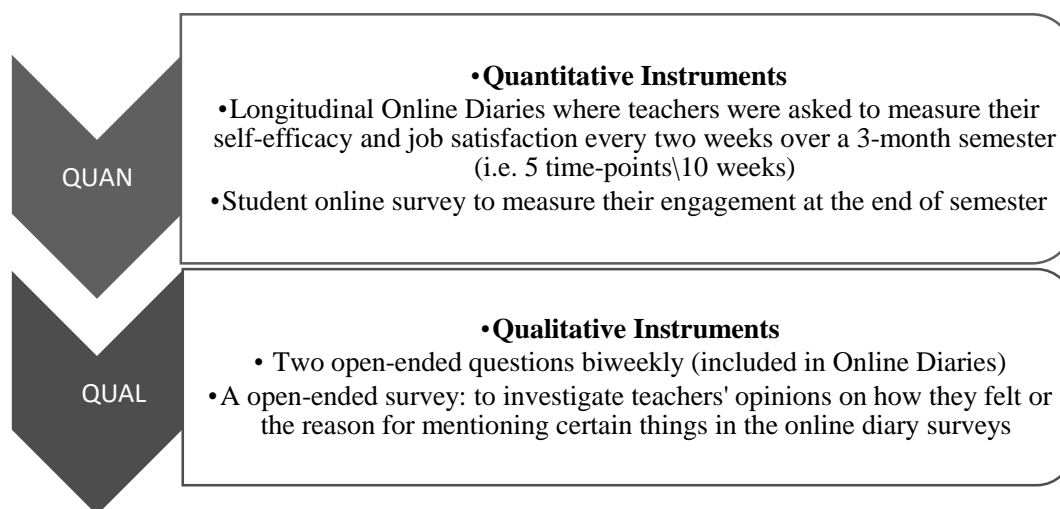
insights that could not otherwise be gleaned” (2007, p. 9). A mixed methods approach justifies the use of a multiple approaches to have a deeper and comprehensive understanding of the phenomenon and its research questions. “It is an expansive and creative form of research, not a limiting form of research. It is inclusive, pluralistic, and complementary” (Johnson & Onwuegbuzie, 2004, p. 17). In other words, the MMR approach attempts to fit in the different aspects of a phenomenon all in one frame without having to limit the study to one research method. In fact, when implementing the MMR approach, the findings of both methods demonstrate and strongly support the conclusion. If, however, the MMR results in conflicted findings, it is a great opportunity to enrich the research and its interpretations (Johnson & Onwuegbuzie, 2004).

Some scholars believe that a pre-requisite for using the MMR approach is to have good knowledge and expertise in dealing with both the quantitative and the qualitative approaches at all stages of the research (e.g. Creswell, 2011; Johnson, Teddlie, & Tashakkori, 2012). However, this is not necessarily the case in many studies. Bryman (2007) conducted a study to find out more about the fundamental issue of integrating the findings of these two methods in a single study. His study took a form of interviews with individual researchers who have read or worked on MMR. He argues that mixing the qualitative and quantitative methods does not necessarily lead to genuine integration. Sometimes the analysis of the findings show that both sets of data was analysed separately to support or answer a specific research question. When designing a mixed methods research, some researchers have the tendency of emphasizing the findings of one set of data over the other. In other words, they prefer and lean towards the method that they are most ‘confident’ with (Bryman, 2007). The idea of integration doesn’t always exist as many researchers treat the quantitative and qualitative methods separately by analysing them separately and, and in some cases having no intention or no specific plan to integrate them (Bryman, 2007). To rectify this issue, Bryman (2007) suggested that a key decision when designing an MMR is to sequence the data collection methods and give weight to

each of these. Therefore, the decision of which method is the main frame must be thought over during the planning stage to allow sufficient integration of both data sets.

As far as the present study is concerned, the dominant design was the online diary surveys (quantitative method) which was supported by qualitative method in the form of two open-ended questions at the end of each online survey in addition to an open-ended survey as shown in Figure 5.3. The quantitative method was conducted biweekly throughout the semester with two open-ended questions being ran parallel to it. At the end of the semester, participants were asked to fill in an open-ended questionnaire. This means that the statistical results were supported by qualitative data extracted from the survey (Creswell, 2009).

Figure 5.3 Summary of the Study Main Components



The main rationale for choosing the MMR and using it in this parallel manner was that the research attempted to statistically investigate the teachers' self-efficacy and job satisfaction beliefs in relation to the years of teaching experience. These data were complemented with teachers' own words (i.e. responses to open-ended questions) to highlight the important findings and/or contradict them which could lead to further investigation. The major purpose to

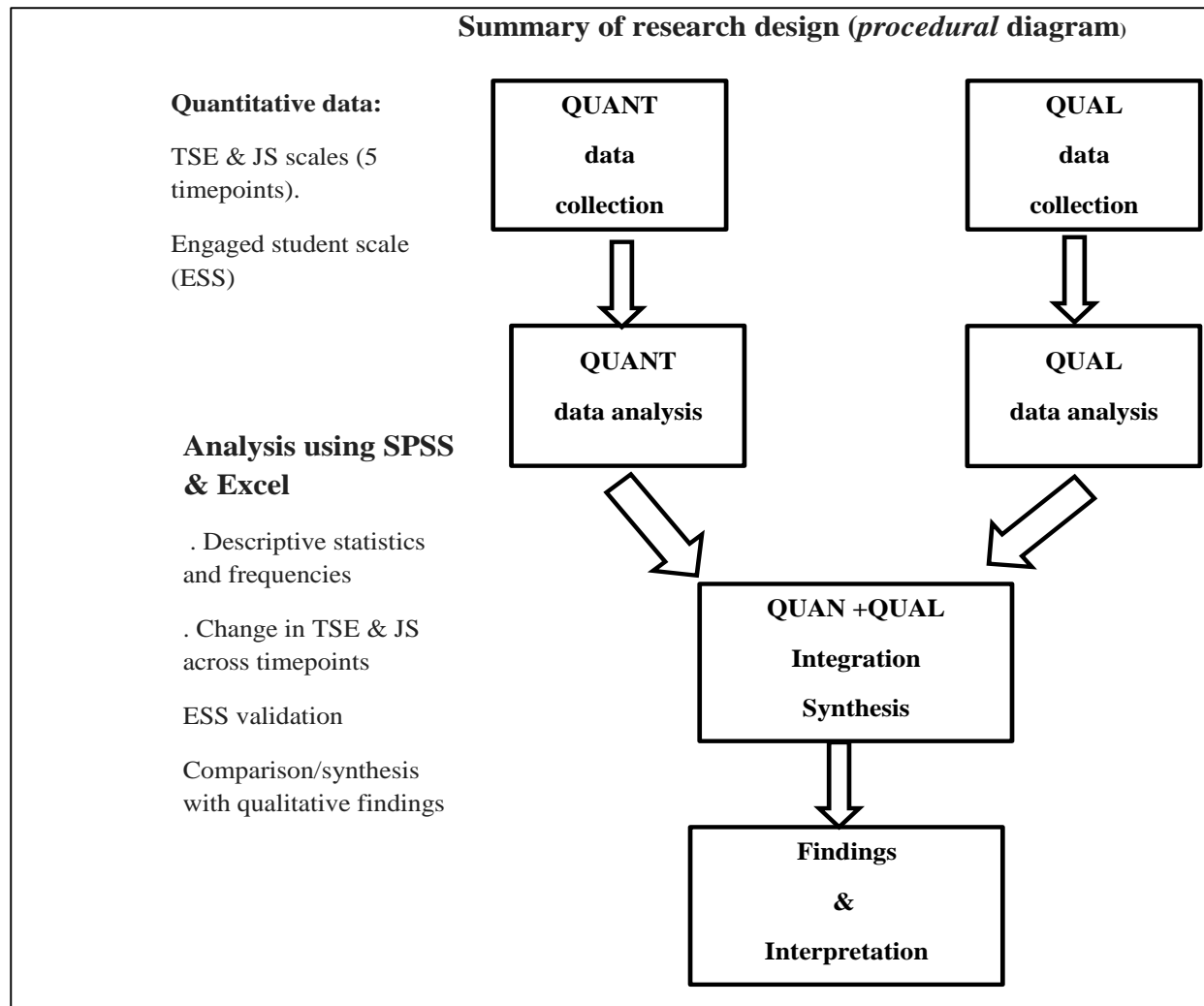
choose the open-ended survey as a complementary process is to seek elaboration of the patterns found in the quantitative data (changes, if any, in teachers' efficacy and satisfaction beliefs) and provide evidence of the key findings. Greene et al (1989) emphasized that this complementary nature of a mixed methods research allows for measuring "overlapping but also different facets of a phenomenon, yielding an enriched, elaborated understanding of that phenomenon", (p. 258).

In the current study, open-ended questions in the five timepoints and the open-ended survey (i.e. the sixth timepoint), as a complementing method of collecting data qualitatively, have the feature of focusing on a specific context with all its complexity and richness to bring forth the findings. The participants were asked to refer to their own personal "lived experiences" every two weeks to give weight and meaning to their responses (Miles & Huberman, 1994). In fact, the purpose of using the qualitative research approach in this study was to develop an understanding of the sense of efficacy and satisfaction for the English language teachers at the Higher College of Technology, Oman.

Another useful way to support the findings of these two methods was to conduct a short survey to be answered by students, quantitatively. For the survey purpose, an engaged student scale (ESS) was created. The ESS was originally called Engaged Teacher Scale (ETS) which was created by Klassen, Yerdlene and Durksen (2013) as shown in Appendix C.1. I translated the scale to Arabic language after getting a permission from the creator of the scale, Professor. Robert Klassen. The conversion and translation of the ETS into a student scale is the first of its kind from English to Arabic. Testing this translation in the Omani context will enrich the research body of student engagement and provide an opportunity to test its validity. The pilot study section 3.2 provides details on the production of the ESS. Figure 6.3 gives a detailed description of the present study's research design.

The following section discussed the theoretical paradigm that underlined this study and the reasons why and how it was implemented.

Figure 6.3 Research Design Diagram



3.1.2 Longitudinal Design

Longitudinal research is an evolving methodology that has been established in different social science disciplines such as criminology, education, psychology, social policy and sociology. Scholars has been using it not only to discover and understand changes that happens but also to find out why and how these changes happen (Holland et al., 2006). Change can be measured quantitatively and qualitatively depending on the need. Some scholars have identified some key features of longitudinal research. One advantage is its ability to understand life that evolves through time. From its name, longitudinal research runs through a length of time ranging from months to years. Saldana (2003) argued that defining this length can be a challenge as it is not easy to measure change (if any) by specifying a certain stretch of time for it to occur. All the studies that Saldana (2003) reported supported this as they ranged from 20 months to 15 years. Depending on the educational context of the present study, it can be argued that a longitudinal study can be limited to semester-wise length, or academic year length depending on what the study aims at. Thus, a short-term longitudinal study (that is one semester) was adopted for the purpose of examining changes in teachers' efficacy and satisfaction beliefs and most importantly for the sake of not losing the current study's sample somewhere during the data collection phase. Saldana's (2003) view of the necessary length of longitudinal research supported my decision as he stressed that longitudinal research doesn't have to be 'lonnnnnng' to achieve its purpose. Another key aspect of longitudinal research is its richness as it builds up from one wave or timepoint to another making it possible to tell a story that happened over time and draw on what was learned previously to understand any changes (McLeod & Thomson, 2009). This feature applies to quantitative and qualitative studies when time in both is a key factor in understanding developmental processes and change.

Because of the increasing interest in using technology in research – including longitudinal studies- some scholars advocate the use of data management software to handle the complex matrix

of data (Holland et al., 2006). The data collection method of the present study has increased the work load as data was collected qualitative and quantitatively in a longitudinal form (that's using a mixed method design). However, it is true that "The volume of data is at once the delight and the challenge of qualitative longitudinal analysis" (Lewis, 2007, p. 550). To avoid this complexity as much as possible, it was of premium necessity to use software packages to be able to organize and recall data. Thus, SPSS was adopted for analysing the quantitative data and NVivo was used to organize the qualitative data in order to perform analyses as the following sections reveal. Two main directions of qualitative longitudinal analysis were applied in the current study, the across time analysis cross-case and the across time within-case, as I hoped, to get the most of the wealthy longitudinal data that was collected. As far as the quantitative longitudinal analysis was concerned, individual change was examined using repeated measure (ANOVA) as will be discussed in the quantitative component section 3.3.6.

3.2 Pilot Study: Key Findings

This section includes a summary of the main findings in the pilot study.

Participants. Thirty English language teachers from the main study context, that is the Higher College of Technology, were contacted to take part in the pilot study. Twenty-four of them started the online diary survey and only 14 teachers answered the entire survey. Participants were 91.7% female and 8.3% males. Participants were between 25 and 60 years old with age Mean of 35.63 (SD=9.054), and years of experience ranging between one year and 38 years, with a Mean of 8.70 (SD= 8.49). Student participants were 13, with student engagement Mean of 5.12 (SD = .75). The teachers' self-efficacy Mean was 7.1 (SD= 1.6) for (N= 21) and teachers' job satisfaction Mean was 7.6 (SD= 1.6) for (N= 19).

Reliability of Teacher Self-efficacy & Job Satisfaction Scales. The Cronbach alpha coefficient reported for the teacher self-efficacy scale was $\alpha = .82$. The three self-efficacy factors reported $\alpha = .92$ for instructional strategies (3 items), $\alpha = .56$ for classroom management (3 items) and $\alpha = .71$ for student engagement (3 items). The Cronbach alpha coefficient reported for the job satisfaction scale was $\alpha = .92$. Job satisfaction appeared to have excellent internal consistency. All four items correlated with the total scale to a good degree.

Relationship between Teacher Self-efficacy & Job Satisfaction Scales. A Pearson correlation coefficient (r) was computed to assess the relationship between the two variables. There was a positive strong correlation between the two variables [$r = .583$, $p = .009$].

Engaged Student Scale. This scale items were adapted from the Engaged Teacher Scale (Klassen et al, 2013) after getting permission from the main researcher, Professor. Robert Klassen. The scale originally consisted of 16 items with four dimensions of social engagement with colleagues (SEC), social engagement with students (SES), emotional engagement (EE), and cognitive engagement (CE). For the purpose of investigating the teacher self-efficacy and its effect on their student engagement, I shortened the scale after consultation with Klassen to 11 items by excluding some of the items related to engagement with colleagues and students (since in the current study this scale will be filled in by students). Some of these excluded items were repeated in the original scale to investigate teachers' engagement with students. Appendix C1 shows the original scale. After excluding the repeated or irrelevant items, I made some changes in the wording to ensure that it relates more to students. Thus, "teaching" was changed to "learning" and "colleagues" was changed to "peers". The anchor of the scale remained the same with a 7-point scale ranging from 0 (Never) to 6 (Always).

Regarding the translation process, I adopted a back-translation process to translate the scale into Arabic. To enhance equivalence of the translated version, back-translation approach was used (Hilton & Skrutkowski, 2002). Having had some experience in translation as part of my first degree as well as being a language teacher, I translated the scale and forwarded the Arabic scale alone to two fluent bilingual speakers who worked as language teachers in the Higher College of Technology and were always assigned some documents to translate from Arabic to English and vice versa (by the centre's management). After checking the language of the Arabic scale, I sent them the English scale to compare my translation against it. This was to ensure that the scale was checked by people who are related to teaching field. Once I received the final version from them, I then compared their translations and came up with a version that, I believe, to be linguistically and semantically accurate. The second step was to send the original English scale to a professional translation office in Oman to translate it to Arabic language. When I received the Arabic version, I checked it, compared it to the Arabic version that I came up with (with the assistance of my colleagues) and I requested some amendments wherever- I thought- were needed. I then asked the office to give the document to another expert translator who back-translated their translation from Arabic to English. The advantage of this multiple-steps translation was to ensure that the translation was reliable enough. I then looked into the outcome myself, compared the original version to the English translation to ensure they semantically match. Based on this, I refined the Arabic version. I finally sent the original version and the English translation to the supervisor for final check. He approved the English translation but highlighted that the translation of "communicate well" in English does not hundred percent give the meaning of "connect well" (original wording). Having said that the Arabic language is a rich language and there are several terms or expressions for a single English term and sometimes there isn't any direct translation (Aldhfri & Ambusaidi, 2012). Yet, I eventually selected an Arabic term that carries the sense of 'connecting well'.

The overall alpha of the ESS was $\alpha=.74$. The three factors of the scale were found to be correlated with the highest correlation existing between emotional engagement and cognitive engagement ($r=.666^*$, $p=.013$).

Analysis of the two open-ended questions at the end of the teacher self-efficacy and job satisfaction scales as well as the sixth online diary (open-ended survey) showed three main themes that affected teachers' self-efficacy beliefs: teaching/pedagogical skills, internal factors and external factors and two main themes that affected their job satisfaction beliefs: internal factors and external factors as Appendix D shows.

3.3 Quantitative Component

3.3.1 Research design

The research design for this study involved using MMR approach whereby a single study employed both a quantitative method and a qualitative method. The quantitative component of this study contained five online diary surveys collected from teachers and students in the English language centre at the Higher College of Technology in Oman during a three-month semester. A repeated measure and correlational research design were used to address the research questions. This section provides an account of the descriptive statistics of Teacher Sense of Efficacy Scale (TSES), Job Satisfaction measure (JS) and Engaged Student Scale (ESS).

3.3.2 Participants

Teachers. The research site was the English Language Centre (ELC) at the Higher College of Technology (HCT). My research population was a group of foundation program teachers who only teach English skills and courses at the English Language Centre (ELC) at the HCT in semester two 2015/2016. The population included teachers from different parts of the world with a variation

of years of experience and age groups. Appendix E shows a distribution of all staff working in the centre at the time of data collection (including staff who did not take part in this study).

The foundation program is a 4-level general English course. Level One is an integrated course that is taught by one teacher, whereas, the other levels are skills-based and two teachers share teaching two groups. So, teacher X teaches writing and grammar for her group and teaches reading and listening to Y's group. Teacher Y teaches writing and grammar to her group and teaches reading and listening to X's group. Every semester, it is the ELC's policy to shuffle the teachers' level preference so the teachers get to try teaching different levels. At the time of the data collection, there were 135 staff members. This number included six non-academic (i.e. admin and support staff), and 129 academic staff of which 124 being full-time teachers and five being part-timers. This number included staff from the foundation program who taught freshmen and the post-foundation teachers who taught language courses to first year specialization students. In fact, this number varies slightly from one year to another based on the admission of students and staff recruitment. Table 5.3 presents the demographic characteristics mainly gender, age, level being taught, years of teaching experience, and background of the participants (N=84). It summarizes the frequencies and percentages of each variable across the five time points. The demographic results showed 1.2% missing in reporting the demographic information. Only one participant failed to report her age across all timepoints she participated in.

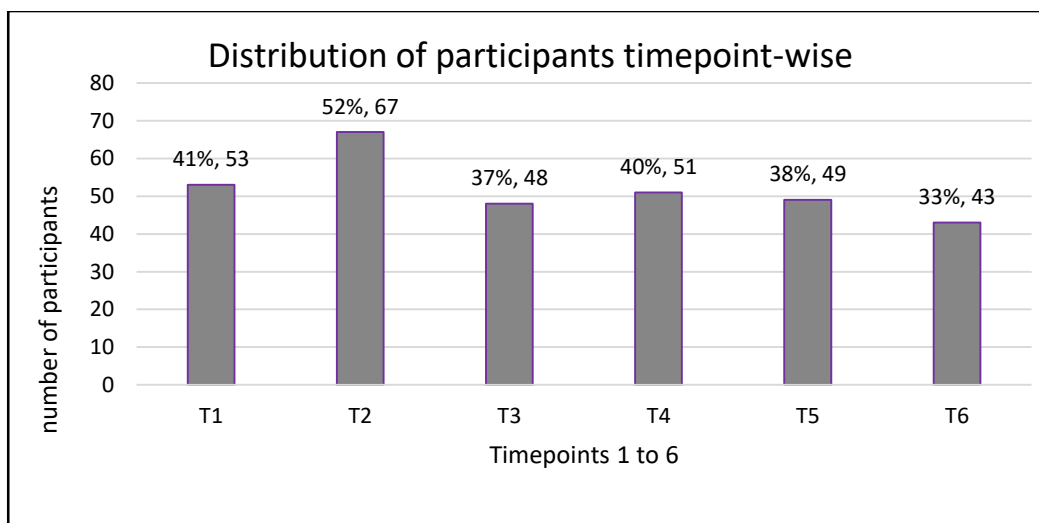
Table 6.3 Demographic Characteristics of Participants (N=84): Online Diary 5-timepoints

<i>Variable</i>		<i>F</i>	<i>%</i>
Gender	Male	27	32.1
	Female	57	67.9
Teaching level	level 1	12	14.3
	level 2	10	11.9
	level 3	19	22.6
	level 4	21	25.0
	PF	22	26.2
Age groups (Years)	age26-34	20	23.8
	age35-44	26	31.0
	age45-54	23	27.4
	age55-64	11	13.1
	age65+	3	3.6
	missing	1	1.2
Experience (Years)	exp1-3	6	7.1
	exp4-6	11	13.1
	exp7-18	27	32.1
	exp19-30	31	36.9
	exp31-40	9	10.7
Background	Omani	23	27.4
	Non-Omani	61	72.6
Arab/non-Arab	Arab	33	39.3
	Non-Arab	51	60.7
Continent-wise	Asian	69	82.1
	African	4	4.8
	European	7	8.3
	American(N/S)	4	4.8
Total		85	100%

The survey was sent to (129) Foundation Program English teachers of which 53 responded at timepoint 1, 67 at timepoint 2, 48 at timepoint 3, 51 at timepoint 4, 50 at timepoint 5 and 43 at timepoint 6. Figure 7.3 illustrates this distribution. Out of the 129 who received the survey, 84 participants took part in the five time points –whether in all of the timepoints or some of them.

In the first survey, the teachers were asked to report their gender, age, teaching level, years of teaching experience and background. Once entered, these demographics automatically appeared every time a participant logged in to fill out the diary. This was for the sake of saving the teacher's time throughout the semester and reducing dropouts. A reminder of this feature was conveyed to teachers from time to time to encourage those who decided to participate in any timepoint during the data collection period. To increase the participation and response rate, an incentive for contributing in the study was allocated. Specifically, four shopping vouchers were raffled to all those who took part in the study regardless of the number of timepoints they participated in. Although all possible effort was made to avoid dropout rate and nonresponse, it was inevitable to record the fluctuating participation on the online diary surveys.

Figure 7.3 Number of participants in each timepoint



Despite the continuous attempts to encourage teachers with varying teaching experience to take part in the study, the datasets at the five timepoints presented unequal numbers of participants in terms of the demographic characteristics. Due to the missing data in this study, I decided to reduce the number of time points used in the analysis as a measure of reducing *missingness*. In essence, I followed Saldana’s recommendation of not focusing on what’s missing, rather the focus was shifted to what is present (2003). The final sample, which was used in the analyses, consisted of 55 participants who responded in ≥ 3 times to the biweekly online diary surveys: 13 (18%) participated in 3 time points, 20 (28%) participated in 4 time points, and 22 (31%) participated in 5 time points. Table 7.3 presents the demographics of these (55) participants and it also shows that there is an unequal number of participants based on gender and years of teaching experience. In terms of age, the numbers are reasonably equal. The gender of teachers in this sample is inconsistent with the Higher Education Admission Centre (HEAC) data showing the percentage of male teachers (64.34%) and female teachers (35.66%) working in the public and private institutions. The background distribution (Omani/ Non-Omani), however, is almost consistent with the HEAC’s

data showing 27.71% Omanis and 72.29% Non-Omanis which is also represented in this study data of the teachers' background. Appendix F presents a comparison between this data's demographics and the HEAC's (2015/2016).

Although this study aims at exploring the differences between novice and experienced teachers' TSE and JS based on Huberman's career cycle theory in which he has five stages of career cycle (1989), the data showed unequal distribution of participants experience-wise. Due to this inequality in years of experience, a new variable of experience grouping was created in which only three experience groups were identified (novice experience = 1-3 years; average experience = 11-20 years; and the highest experience group = 21 years and above) equal numbers to answer some of the research questions that requested comparing teachers based on their experience. The purpose was to be able to compare participants' TSE and JS beliefs and the impact of the years of teaching experience on these beliefs.

Table 7.3 Demographic characteristics of participants ($n=55$, 3 timepoints or more)

Variable		f	%
Gender	Male	14	25.5
	Female	41	74.5
Teaching level	level 1	10	18.2
	level 2	8	14.5
	level 3	10	18.2
	level 4	14	25.5
	PF	13	23.6
Age groups	age26-34	14	25.5
	age35-44	15	27.3
	age45-54	14	25.5
	age55-64	9	16.4
	age65+	2	3.6
	Missing	1	1.8
Experience (Huberman's)	exp1-3	6	10.9
	exp4-6	8	14.5
	exp7-18	17	30.9
	exp19-30	16	29.1
	31+	8	14.5
	1-10exp	20	36.4
Experience (compare group)	11-20exp	14	25.5
	21+	21	38.2
Background	Omani	17	30.9
	Non-Omani	38	69.1
	Arab	25	45.5
	Non-Arab	30	54.5
Continent-wise	Asian	43	78.2
	African	4	7.3
	European	4	7.3
	American(N/S)	4	7.3
Total		55	100

Students. At the time of the study, the English Language Centre (ELC) had an enrolment of approximately 2284 students at the four levels of the foundation program. There were 3354 post-

foundation students taking English courses in both first and second semesters of their first year at the specialization, as shown in Table 8.3.

Table 8.3 Number of enrolled students at the English courses in ELC-semester 2 (2015/16)

<i>Foundation Program Courses</i>	<i># students per course</i>
Foundation Program Levels (FP)	2284
Post-foundation Level (PF)	3354

Note. FP = four foundation levels. This number included new in-take students (N=986) who joined the ELC in semester 2 (2015/16) plus old students who were already in the system from the previous in-take of September. PF included students taking English courses in their 1st or 2nd semester of their first specialization year.

Table 8.3 shows the number of students at the foundation program including the English courses that students sit for at the beginning of their first specialization year. In semester one of the Post-foundation year, students take Technical Communication and Technical Writing I. In semester two of the Post-foundation year, students take a Public Speaking course and Technical Writing II course. The Foundation Program Levels includes levels one through four. Students taking Technical Communication and Technical Writing I overlapped as students might be taking both courses in the same semester. The same can be said about Public Speaking and Technical Writing II courses.

One main requirement guided the identification of participants for the student data was that students had to have a teacher who took part in three or more online diary surveys. Out of the 84 participating teachers in all five timepoints, 56 of these (66.7%) had their students fill out the engaged student scale (ESSE). These 56 teachers did not necessarily participate in all five

timepoints. Therefore, only those groups whose teacher participated in three or more timepoints (45 teachers, 81.8%) were included in the analysis of the ESS. To increase the participation and response rate of students, a hard copy of the ESS was distributed to students who failed, for any reason, to do the web-based ESS survey. These copies were distributed to the entitled groups by four volunteers who were English teachers at the ELC due to the fact that I was off on a maternity leave at this point of the data collection. Eleven groups, that is, 221 students, did the hard copy survey. Of those eleven groups, two were entirely deleted as I failed to match the teacher unique ID that the students provided with any teacher ID listed in the participants' surveys.

Table 9.3 presents that out of the 85 teachers who took part in the entire study, 56 had their students do the ESS, whereas, the 28 of them did not. As stated earlier, only those teachers ($n = 55$) who did three or more online diary surveys were automatically included in the analysis of the study. Of those 55, 45 teachers had their groups do the ESS.

Table 9.3 Number of participants whose groups participated in student survey

<i>Groups taking part</i>		<i>F</i>	<i>%</i>
(N=84)	Yes	56	66.7
	No	28	33.3
	Total	84	100.0
(n=55)	Yes	45	81.8
	No	10	18.2
	Total	55	100.0

Note. Yes = participants whose groups took part in the student survey. No = participants whose groups DIDN'T take part in student survey. (N = 84) is total participants across 5 timepoints. (n=55)= is total number of participants who did 3 timepoints or more and, therefore, were included in the analysis of data.

Table 10.3 presents the percentage breakdown of participating groups with reference to level. This table could form the basis to answer fourth research question which relates the teacher's efficacy of engaging students to their student engagement level. The first half of Table 6 presents the number of groups in each level for all 84 participants. The second half presents the number of groups for the 55 participants who were included in the analysis.

Table 10.3 Level-wise number of groups participated in Engaged Student Scale (ESS)

<i>Level</i>	<i>no.</i>	<i>%</i>
One	12	14.3
Two	10	11.9
Three	19	22.6
Four	21	25.0
Post-foundation	22	26.2
Total	84	100.0
One	10	18.2
Two	8	14.5
Three	10	18.2
Four	14	25.5
Post-foundation	13	23.6
Total	55	100.0

3.3.3 Quantitative instruments

As the purpose of this study is primarily to describe changes in pattern and magnitude of relationships between variables, longitudinal research is the best way to employ to this study. In a longitudinal research, data is collected at one or more periods of time (could be seconds, minutes,

hours, weeks, or years) for a single or more variables (Menard, 1991). In this study, data was collected systematically for teacher's self-efficacy, job-satisfaction and student engagement in relation to the years of teaching experience that the participants had. The participants remained the same throughout the study. Since the study aimed at finding changes in patterns of self-efficacy, the analysis of the data involved comparing the data at different time periods. When examining such developmental changes over a period of one semester, the relationships between these variables were investigated. The following section outlines the instrument constructs used to collect data from teachers and students.

3.3.3.1 Online diary surveys: TSES, JSS & ESS.

Teacher self-efficacy scale (TSES). The Teachers' Sense of Efficacy Scale, which was used in this study, was first published in 2001 by Tschannen-Moran and Hoy and has been used and adapted widely since then (Tschannen-Moran & Hoy, 2001). The scale was designed in two measures: a 24-item scale and a 12-item scale. It is composed of three main factors which cater for the multi-dimensionality of sense of efficacy: efficacy for instructional strategies, efficacy for classroom management and efficacy for student engagement. These factors represent teacher's work which is why it perfectly fits the current research purpose and questions related to teacher efficacy. To lessen the response time for the participants, nine items of the 24-items scale were employed in his research. The present study adapted three items from each factor of the scale depending on the factor loading of each item and its relation to the research questions (see factor loading Table 11.3). The TSES has been known as "superior to previous measures of teacher efficacy" (Woolfolk Hoy & Spero, 2005, p. 354). The TSES scale is in line with the self-efficacy theory (Klassen & Chiu, 2010; Klassen & Durksen, 2014; Klassen et al., 2013) as it "has a unified and stable factor structure and assesses a broad range of capabilities that teachers consider important to good teaching" (Woolfolk Hoy & Spero, 2005, p. 354).

Table 11.3 Factor Loadings of Teacher Sense of Efficacy Scale (TSES)

Teacher's sense of efficacy			
Factor loadings of items		24 items	12 items
Factor 1: Efficacy for instructional strategies	1. To what extent can you use a variety of assessment strategies?	0.72	0.73
	2. To what extent can you provide an alternative explanation or example when students are confused?	0.70	0.75
	6. How much can you do to adjust your lessons to the proper level for individual students?	0.59	-
Factor 2: Efficacy for classroom management	9. How much can you do to control disruptive behaviour in the classroom?	0.78	0.83
	10. How much can you do to get children to follow classroom rules?	0.69	0.66
	13. How well can you keep a few problem students from ruining an entire lesson?	0.62	-
Factor 3: Efficacy for student engagement	17. How much can you do to get students to believe they can do well in schoolwork?	0.75	0.75
	18. How much can you do to help your students value learning?	0.70	0.69
	19. How much can you do to motivate students who show low interest in schoolwork?	0.66	0.64

Note. The numbers preceding each item represent the item order in the original scale. These items were numbered sequentially in the online diary survey of the present study from 1 to 9.

The first two parts of the online diary included items asking respondents to give specific information about themselves (a consent form, a unique identifier, gender, ethnic, age, educational

qualification, current teaching level). All demographic variables were repeated in every online diary to ensure that new participants could join the diary at any point of the semester. With regular respondents to the surveys, the demographics appeared automatically once the unique ID was entered. All parts of the online diary were in English since all participants were language teachers teaching English to freshmen in a foundation program.

Throughout this research, teacher self-efficacy (TSE) was generally defined as the one's judgement of their capabilities to perform a given task. As the foundation aspect of the TSE is the teacher's perception of their proficiency rather than their actual achievement (Klassen & Chiu, 2010; Frank Pajares, 1996), it was important to slightly re-word the nine teacher sense of efficacy scale (TSES) items. To measure teacher's self-efficacy at the point of filling out the diary, which showed the extent to which teachers believed themselves to be capable of engaging their students, managing their class well and using effective instructional strategies, the items were changed from "How much can you do to...?" and "To what extent can you ...?" to "At this point of the semester, how confident are you that you can...?". A screenshot of the TSES is shown in Figure 8.3.

Figure 8.3 Sample of Online Diary Questions

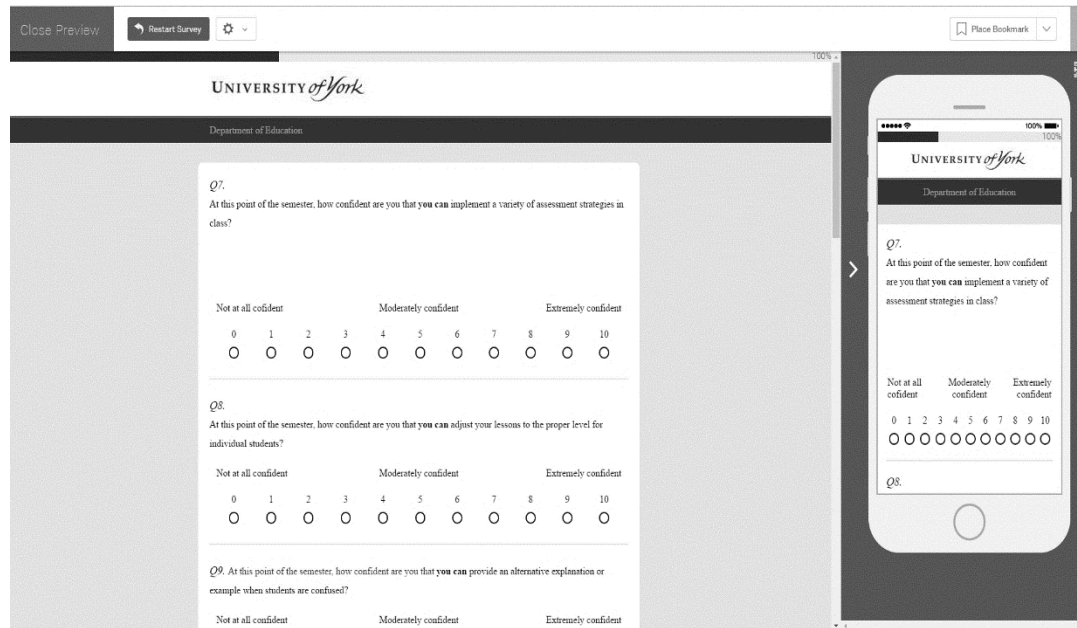


Figure 8.3 shows three items from the online diary that required participants to report their level of self-efficacy in using instructional strategies as in “Question 7. At this point of the semester, how confident are you that you can implement a variety of assessment strategies in class?” All items are self-reported on an eleven-point scale. Anchors corresponding to the eleven-scale points range between 0 = *Not at all confident*, 5 = *Moderately confident* and 10 = *Extremely confident*. Appendix G provides Timepoint 1 Online Diary Survey as an example.

Job satisfaction scale (JSS). Four job satisfaction items were employed as indicators of teacher satisfaction borrowed from Caprara et al.’s job satisfaction instrument (2003). This scale solicits responses from teachers to better understand their beliefs that underlie their job satisfaction. No changes or adaptations were made to any of the items which the participants responded to on an 11-points response scale, with anchors at 0 = *Strongly Disagree*, 5 = *Not Sure* and 10 = *Strongly Agree*. For full items see Appendix G.

Engaged student scale (ESS). The Engaged Student Scale (ESS) was adapted from the scale created by Klassen, Yerdelen and Durksen (2013) as an engaged teacher scale (ETS). Several steps were taken to transform it into a student engagement scale. To begin with, permission was taken from the main researcher of the ETS study, Professor. Robert Klassen. The first step was to select the items that were believed to be suitable for student engagement. Some items had to be reworded. The original scale had 16 items that went through a long process of validation (Klassen et al, 2013) but were shortened to include eleven items only. For instance, items related to teacher social engagement were deleted. Since the research context was going to be a college, some items were reworded to include the word 'college' instead of 'school' as in the original scale. The second step was translation where the researcher translated the scale into Arabic language. One important goal of testing this translation in the Omani context was to enrich the research body of the student engagement and provide an opportunity to test its validity.

The first section of the ESS was devoted to student demographics in which students were asked to report their teacher's unique identifier (ID), their gender, and their current level at the foundation program. A consent form in Arabic and English was provided to ensure that students understand the purpose of the survey. The second, and main, section was the eleven-item scale that consisted of statements used to investigate the level of engagement in class with a particular teacher. These statements fell under three subscales: the cognitive engagement (ESS-CE), the social engagement (ESS-SE) and the emotional engagement (ESS-EE). The survey closed with an invitation to ask, suggest or comment on anything related to the survey. To maximize students' response and comprehension rates, the entire survey was presented in both English and Arabic including the consent form, the demographics, the statements and comments question (see full scale in Appendix C2). Anchors corresponding to the seven-scale points range between 0 = *Never*, 3 =

Sometimes and 6 = Always. Table 12.3 shows two example items from the ESS, as appeared in the Online Survey.

Table 12.3 Engaged Students Scale: example items

	0 Never	1 Rarely	2 On occasions	3 Sometimes	4 Often	5 Frequently	6 Always
1. In this class, I connect well with my peers.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I am excited about learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3.3.3.2 Reliability and Validity of TSES & JSS.

The measurement of teacher efficacy has been discussed at length in the literature review chapter including the Tschannen-Moran and Hoy's (2001) 3-factor teacher's sense of efficacy scale (TSES) which has been validated and tested in different settings world-wide (Fives & Buehl, 2009). The results of Klassen's et al (2009) study showed significant findings in terms of universality, factor invariance and factor loadings in the five different settings. The TSES illustrated a "strong internal consistency" in all five countries. According to Tschannen-Moran and Hoy's (2001), the three sub-factors maintained high reliabilities in both versions of the scale. The short form (12 items) had 0.86 in instructional strategies ($M = 7.3, SD = 1.2$), 0.86 in management ($M = 6.7, SD = 1.2$) and 0.81 in engagement ($M = 7.2, SD = 1.2$). The long form (24 items) had 0.91 in instructional strategies ($M = 7.3, SD = 1.1$), 0.90 for management ($M = 6.7, SD = 1.1$) and 0.87 for engagement ($M = 7.3, SD = 1.1$).

The job satisfaction variable correlated with the TSE which proved the international validity of the TSE measure. Tschannen-Moran and Hoy (2001) and Caprara et al (2003) earlier

argued that this correlation is predicted due to the fact that teachers' belief of their capability to successfully perform certain teaching tasks is naturally related to their high sense of satisfaction at workplace (regardless of the cultural setting). Such correlations supported the international validity of the TSES. The study recommends that researchers interested in measuring teachers' motivation beliefs across different cultures could consider using the TSES as it has proved to be reasonable cross-settings invariance. Including the job satisfaction variable in the current study create an opportunity to further validate its correlation to the TSES as well as to validate the TSES itself in a new cultural setting (as recommended by Woolfolk Hoy & Burke Spero, 2005; Klassen et al, 2009).

The Job Descriptive Index (JDI) (Smith, Kendall, & Hulin, 1969) as adapted by Caprara et al. (2003) was the job satisfaction instrument used in the current study. Caprara and his colleagues used four items from the JDI instrument which were initially selected and adapted by Borgogni in an unpublished doctoral dissertation (1999), as Caprara et al. reported (2003). The overall reliability of the instrument was (.82). In the current study, I adopted the Caprara et al. (2003) four-item instrument for it showed adequate reliability and validity as well as a relationship with teacher self-efficacy in Caprara et al. (2003), Caprara et al. (2006), Klassen et al. (2009) and Klassen and Chiu (2010). In short, based on the above literature evidence, the TSE and job satisfaction are related. Thus, in the teacher online diary, two main sections are incorporated; one on teacher self-efficacy and the other section on job satisfaction.

3.3.3.3 *Reliability and validity of ESS*

As the Engaged Student Scale (ESS) was used for the first time with no previous study to test its validity, the results of this study will not be comparable to any study. The fifth research question checked the validity and reliability of the ESS in the Omani context, namely the Higher College of Technology (HCT).

3.3.4 Research ethics

Ethical approval was granted from the University of York Ethics Committee to embark on collecting data for the main study as well as the pilot study. For the sake of collecting data from the Higher College of Technology-Oman (HCT), the deanship was approached during summer 2015 and approval was granted (see Appendix H1). Appendix H2 shows the approval document provided by the college for this purpose. This study was also granted approval by the director of the English Language Centre who was requested to allow permission to teachers and students to participate in this longitudinal study.

As part of recognizing my responsibilities as a researcher and an investigator and while preparing for the study, I took many courses, all offered by the University of York, on copyrights, academic integrity and ethics, and data management among others. Further measures were taken to ensure that the intended data to be collected is culturally appropriate (Bazeley, 2013) since the study itself tackles the participants' views of their self-efficacy, own capabilities and job satisfaction. Thus, the wording of the items was examined carefully, especially of the open-ended items, and tested during the pilot study. The survey feedback forms included questions like 'was the scale used to answer the question adequate and appropriate?' and 'did you find the item offensive or inappropriate in any way?' A copy of the feedback form was provided for illustration purposes in Appendix I. In the informed consent forms, it was clearly stated that participation was voluntary

and withdrawal at any point and for any reason was the participant's right. My contact details were given in all three surveys should participants decide to practice this right. It was also made clear that confidentiality and anonymity would always be maintained and that data offered by participants would be only used for the purpose of my doctoral studies and publications.

3.3.5 Data collection procedures

The collection of quantitative data was done using a web-based service called Qualtrics survey. The three instruments, that were employed for data collection, that is the TSES scale, the job satisfaction scale in the form of online diary surveys, and the engaged student scale online survey, were uploaded online using this web service for several reasons. The following reasons justify the choice of this data collection method:

1. Online diary survey tool was easy to access from anywhere (college or at home) using PCs or mobiles. So its flexibility encouraged teachers to do it easily whenever they had time.
2. The University of York has a site license for Qualtrics survey tool, allowing all its staff and students to use it. Thus, it is a free tool provided by University of York IT services.
3. Qualtrics provides an online live support option to tackle any technical issues related to setting up, formatting, and distributing the surveys. Whenever I faced any technical difficulties in any of these areas, the live supporting team responded immediately to my emails during the survey creation stage and the data collection stage and even after that. Qualtrics support team provided detailed visual illustrations to help me sort out the technical challenges.

4. It saved participants' time as it is a matter of few mouse clicks and the timepoints data was always ready for download once the activation deadline was over. All that I needed to do once the data had been entered was to download it in the desired format (i.e. SPSS file, excel sheet, word or PDF documents).
5. The tool provided some data analysis options such as initial reports which were not used in reporting the results but were helpful to have.
6. Qualtrics provided a progress chart of completed surveys, in-progress surveys and incomplete ones. This chart made it easier for me to track the progress of the response. Accordingly, participants were contacted through the ELC management office to remind them of the deadline for completing the surveys. When downloading data, Qualtrics gave the option of downloading all the surveys including the incomplete ones for the sake of reporting any missing data.
7. This tool was in line with the confidentiality guaranteed to participants to maintain their privacy (Dorine et al., 2003). Hence, the request for creating a unique identifier by each participant to keep and use throughout the semester.
8. It was practical (Amar; Gaiser & Schreiner, 2009) in the sense that no papers had to be printed, distributed in person (to maintain confidentiality and anonymity), collected back or data entered for individual participants. In addition to cutting off the need for these tasks, it minimized the chances of transcribing errors (Gaiser & Schreiner, 2009).

3.3.5.1 *Online Teachers' Diary Surveys.*

The first contact with the Higher College of Technology (HCT) administration was in the summer of 2015 to obtain permission for data collection which was granted six months before the actual data collection process (see Appendix H1 & H2). After that the director of the English language Centre (ELC) was contacted to inform him of the permission obtainment. I emailed him a detailed description of the data collection process, its longitudinal nature and its stages. The director was also informed of when the data collection would commence in the ELC which was the beginning of semester two (2015/2016). Further details of the whole process of these contacts, the introduction of the project to the targeted participants, and the data collection dates are provided in Appendices J.

Data for this study were collected from the foundation program English teachers and post-foundation English teachers. All teachers were contacted through their management office to participate. A detailed email was circulated to introduce the project and the steps of the data collection to all foundation and post-foundation teachers. As part of the introduction process, I obtained the management permission to meet the teachers to explain the idea of my project. The meeting took place in week one at the beginning of the semester. Teachers were informed that they needed to fill out an online diary every other week, fill out an open-ended survey at the end of the semester, and have their groups fill out a student engagement scale only once at the end of semester. Therefore, students were approached through their teachers to fill out their online survey. I requested the teachers to create a unique identifier of their own and advised them to keep and use it every time they fill out an online diary survey. They were reminded to give their unique ID to their students as this is a significant step towards comparing teacher efficacy in engaging students to their students' engagement in class.

3.3.5.2 Online Student Survey.

At the beginning of the semester, the teachers were briefed about the kind of data they, and their students, were expected to provide in the online diary surveys. I restrained from using the term ‘engagement’ in order to avoid building any preconceptions which might affect their teaching during that particular semester as well as the response rate to the scale. The teachers were informed that a “student survey” link would be emailed to them and they in turn would have to pass it on to their students. Some teachers failed to pass on the link to their students and, thus, I had to run hard copies of the student survey to be given to those groups.

3.3.6 Data analysis procedures.

The quantitative data in the form of online diary surveys were analysed using SPSS (version 23). I downloaded the data from the Qualtrics Survey tool (a web based tool) into SPSS as separate data sets. In this case, there were six data sets: five online diary time points and one online open-ended survey. The five timepoints data sets contained the teacher’s sense of efficacy scale (3 items of each of these sub-factors: instructional strategies, classroom management and student engagement) and the job satisfaction scale (4 items). In order to meet the research objectives of comparing teachers’ self-efficacy and job satisfaction beliefs throughout the semester and comparing novice and experienced teachers, one mega file of all five timepoints was created to run the analysis. The five timepoints files were merged vertically by adding variables in SPSS. The data sets were linked together using the unique identifier that each participant created for themselves in the very first online diary they filled out. After this re-structuring, the file was ready to be cleaned.

I used descriptive statistics to report the responses for the teacher’s sense of efficacy scale (TSES) and job satisfaction measure (JS). The means, standard deviations and range were calculated. Since the main point of conducting a longitudinal research was to track any changes in

teachers' efficacy beliefs, repeated measures analysis of variance (ANOVA) was employed. A one-way between groups analysis of variance was conducted to further explore the impact of teaching experience on teacher's efficacy and satisfaction. In addition, the two main measures TSE and job satisfaction in relation to four factors (i.e. teacher gender, teacher age, teaching level and teaching experience) were assessed using Pearson's correlation coefficients. I also evaluated the relationship between teaching experience and three TSE beliefs (i.e. "classroom management efficacy", "in-class student engagement efficacy" and "instructional strategies efficacy") by creating three experience groups: (1) novice experience = 1-3 years; average experience = 11-20 years; and the highest experience group = 21 years and above and comparing them using a one way ANOVA to find out any statistical significant differences. The Turkey- HSD test was used to assess differences among the means.

An SPSS file of the student engagement scale data was downloaded from the Qualtrics tool. The file included those students who participated by filling out the ESS online. I manually entered the paper survey data for the eleven groups in SPSS. Initially, I had two student data sets: one with the student data that was manually entered and the second with the student data that was downloaded from the Qualtrics tool. Then, the two were merged in one SPSS file ready to be assessed for usability. Since each student survey asked for the teachers' unique identifier (ID), I managed to locate those teachers whose groups had done the student survey by comparing the teacher ID in the teachers' mega file to the teacher IDs in the student file. In the mega teacher's file of the five time points, a Yes/No column was inserted next to teachers' ID to specify if this teacher's group answered the survey.

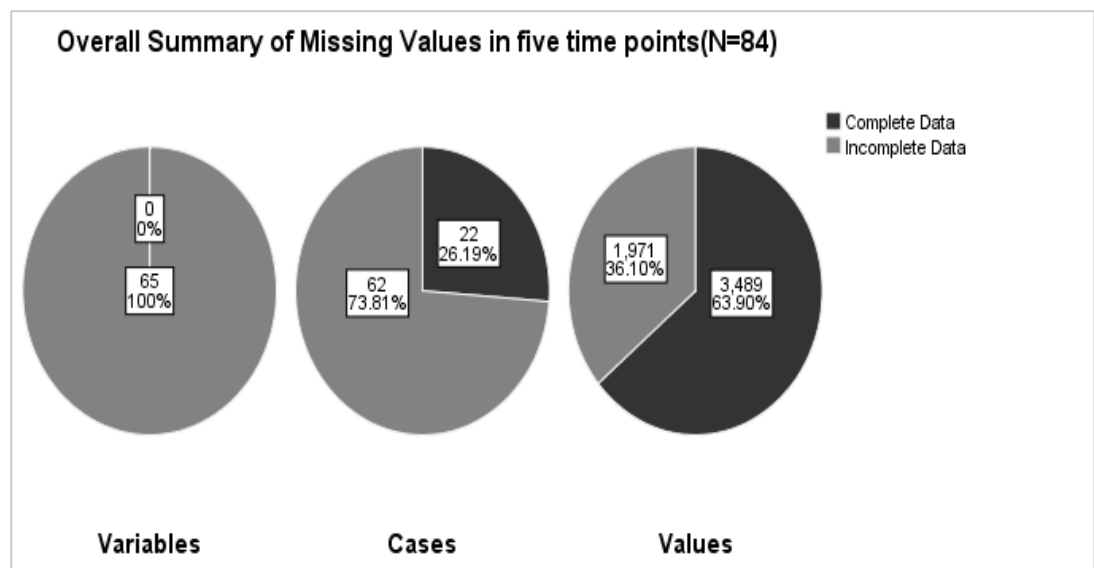
I used Pearson product-moment correlation coefficient to determine if there was a relationship between the teachers' perceptions of their ability to engage their students and the

students' view of this ability. This was conducted by comparing the teachers' responses to the teacher self-efficacy for student engagement factor to their students' response to the Engaged Student Scale (ESS). Reliability of the quantitative measures was checked using Cronbach's alpha.

3.3.6.1 Data screening & handling missing data.

Online diary (six timepoints). For an initial examination of the quantitative raw data sets (time points 1-5), Analysis patterns were performed. As a result, Figure 9.3 presents a clear picture of what missing values the five data sets had was obtained. The five data sets that resulted from the five online diary surveys (without the Timepoint 6) were checked for missing data.

Figure 9.3 Missing Values Analysis in 5 Timepoints (N=84)



With (5%) as the minimum percentage for missing variables to be displayed, the analyses identified (N=62) cases with missing data out of (N=84). Only N=22 (26.19%) had a full data. It also identified (36.10%) of values missing across all variables (see Figure 5). Table 7 presents a

summary of the missing data per variable across all five timepoints. Variable-wise, timepoint 3 had the highest percentage of missing data across all its items. It is worth mentioning perhaps here that when the third timepoint diary was sent out to teachers, it was the Mid-semester exam time. I attempted to maintain a consistent and close follow up with the participants by sending them What's App messages and reminder emails. The deactivation date of the online diary was extended for two full days in order to increase the response rate for this time point. Nonetheless, the response was low. Forty-eight responded as compared to (N=67) for timepoint two. Table 13.3 shows that the response rate to the job satisfaction section in timepoint 3 had the highest missing percentage (44.0%).

According to Tabachnick and Fidell, “there are as yet no firm guidelines for how much missing data can be tolerated for a sample of a given size” (2007, p. 63). Small percentage of missing values can be tolerated and simply corrected with mean substitution (Saunders, Morrow-Howell, Spitznagel, Doré, Proctor, & Pescarino, 2006). Larger amounts of missing values are problematic as literature doesn't give a consistent definition or percentage of missing values (Saunders et al, 2006). Deletion of cases with missing values or variables would have resulted in a massive loss of participants. To begin with, I ran a missing values analysis (MVA) to get a general look at the data sets before replacing the missing values and determining the type of *missingness* that the five data sets had. The MVA suggested that according to Little's MCAR test the data were missing completely at random (MCAR) with non-significance of ($=.923$). In other words, there is a very high likelihood that the data was missing completely at random (Little, 1988). Table 13.3 shows in percentage the amount of missingness that the five datasets bore for the (N=84) participants before any missing values were replaced or tackled.

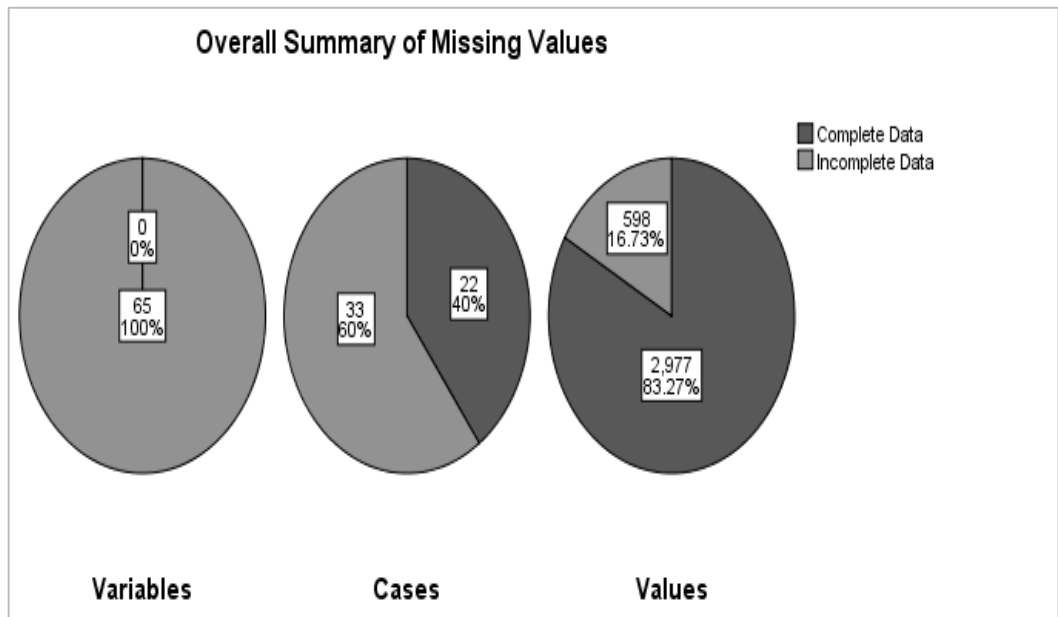
Table 13.3 Summary of Missing Variables & Values/Timepoint (N=84)

<i>Variables</i>	<i>no.</i>	<i>% of Missing</i>
Time3 Job Satisfaction 4-item	7	44.0%
Time3 TSE: Student Engagement 3-items	6	42.9%
Time3 TSE: Classroom Management 3-items	6	42.9%
Time3 TSE: Instructional Strategies 3-items	6	42.9%
Time5 Job Satisfaction 4-item	4	40.5%
Time5 TSE: Student Engagement 3-items	4	40.5%
Time5 TSE: Classroom Management 3-items	4	40.5%
Time5 TSE: Instructional Strategies 3-items	4	40.5%
Time4 Job Satisfaction 4-items	4	40.5%
Time4 TSE: Student Engagement 3-items	3	39.3%
Time4 TSE: Classroom Management 3-items	3	39.3%
Time4 TSE: Instructional Strategies 3-items	3	39.3%
Time1 Job Satisfaction 4-items	1	36.9%
Time1 TSE: Student Engagement 3-items	1	36.9%
Time1 TSE: Classroom Management 3-items	1	36.9%
Time1 TSE: Instructional Strategies 3-items	1	36.9%
Time2 Job Satisfaction 4-items	7	20.2%
Time2 TSE: Student Engagement 3-items	7	20.2%
Time2 TSE: Classroom Management 3-items	7	20.2%
Time2 TSE: Instructional Strategies 3-items	7	20.2%

Note. TSE= teacher's self-efficacy, Maximum number of variables shown: 65_a,
Minimum % of missing values for variable to be included: .0%_b

Missing data is predictable in any type of data for any reason let alone longitudinal research where the target population may drop out along the way for various reasons. It can weaken the validity of results (Peyre et al., 2011) if not handled with care. As an attempt to keep the results as much as possible grounded in the actual data and because the missing values were scattered across the five time point data sets and since participants missed full timepoints rather than a single or several variables here and there, I decided to include participants who did three or more timepoints to keep *missingness* at minimal. Thus, out of (N=84) only (n=55) were included. The percentage of the missing data identified, after reducing the time points to three out of five, was almost half of the missing data before the reduction (that's 16.73%, see Figure 10.3). I replaced the missing data with series means as the missing data percentage was (16.73%) for a small sample size $n = 55$. Mean substitution has the advantage of producing "internally consistent" sets of results ("true" correlation matrices)" (Statistica, 2017). Tabachnick and Fidell argue that "Part of the attraction of this procedure is that it is conservative; the mean for the distribution as a whole does not change and the researcher is not required to guess at missing values" (2007, 67).

Figure 10.3 Summary of Missing Value Analysis in 5 Timepoints (n=55)



Engaged Student Scale (ESS). Although it was made clear to teacher participants that those teachers, who volunteered to participate in filling the online diary, would have to ask their students to do the student survey, it was found during the student survey dataset screening there were two groups whose teachers did not take part in the study. I identified these two groups (totally 38 students) who wrote their teachers' names instead of their teacher's unique identifier as requested. The teachers were contacted two months after data collection to inform them that their groups have given their name in the teacher's unique ID cell and ask them if they themselves have done the teacher online diary surveys so that their data could be matched to their students' data. The answer was negative. Both teachers did not take part in any of the online surveys. Thus, their students' data was deleted from the data set that was meant to be analysed.

There were also a number of instances where data was there but had to be deleted for various reasons. For example, there was a case of a single student who answered the survey and his teacher's ID wasn't found in any timepoint. Another case was a student who wrote his level/group number instead of the teacher's ID. There were 14 students who wrote down their own student ID instead of the teacher's. There were 16 students who left the ID cell blank and finally there was a single student with a teacher's ID and full data but it was deleted because the teacher's ID didn't match with any teacher identifier in the six online diary surveys. For an easy-to-read summary of student data screening, refer to Appendix K.

There were a number of characteristics that the student dataset had which needed to be highlighted. The groups that participated were from different levels: from level one to post-foundation. It was noticed that the levels one to four groups had participants ranging between 2 to 28 students, whereas the post-foundation groups were large with participant numbers ranging between 25 and 43. This was most likely due to the fact that the ELC accepted different number of students in different levels. Level One, for instance, took maximum 18 students. Levels Two and Three took up to 28 students in each group, whereas, Level Four only took up to 23 students given that Level Fours students took information technology (IT) basic course that accepted only 23 students as only that number could fit in the IT labs. The post-foundation English courses took up to 40 students. This explains the varying numbers across levels. In addition to these reasons for having different numbers, which was beyond my control as a researcher, the students were told that their participation was voluntary which contributed to lessening the number of respondents from many groups.

Appendix K also presents the few cases with missing or incorrect teacher ID, even though the data might be complete, that were deleted as one main purpose of the engaged student scale

(ESS) was to compare student dataset with their teachers' sense of efficacy in terms of engaging students and not having the teacher ID simply means that these cases cannot be used in the analysis. Another important step was cleaning and making the student dataset ready for analysis by matching it to the teachers' unique IDs. Therefore, groups that had no match to teachers who did three or more surveys were not used in analysis process. The total number of groups that participated in the study and were matched to the teachers' IDs were 45. The remaining number of student participants which was ready to be used in the analyses was ($n=849$). However, this number was further reduced to ($n= 838$) as I decided to include in the analysis the groups that only had 10 or more students - as a cut-off number.

3.4 Qualitative Component

3.4.1 Research design

The analysis of the pilot study suggested that some of the participants had more to say than what they offered in the close-ended questions. To leave room for such needed elaboration, open-ended questions were added at the end of the efficacy and the satisfaction scales. Thus, the qualitative component of this study contains two open-ended questions in the five online diary surveys in addition to one open-ended online diary survey (timepoint 6) which was sent to participants at the end of the semester.

3.4.2 Participants and sampling

Qualitative sampling usually takes the form of a small sample of individuals closely examined in a specific context for a purpose (Miles & Huberman, 1994). The sample was a group of English language teachers who came from different cultural backgrounds. For the online diary timepoints, Fifty-five participants were included in the analysis of the quantitative data. There were

some who recorded no answers in one of the open-ended questions that followed the teacher self-efficacy and job satisfaction scales or both of them. Table 14.3 presents the number of participants who did not record any answer(s) in any of the two qualitative questions, or both, from timepoint 1 through 5. It clearly shows that the highest number of non-response were in timepoint 3 during which teachers had the invigilation, marking, and entering of the mid-semester exam and timepoint 5 during which the participants were busy getting their students ready for the finals. Timepoint 6, which was in the form of open-ended questions, was answered by 43 participants.

Table 14.3 Missing answers in open-ended question in timepoints 1 to 5 (n=55)

<i>Timepoint</i>	<i>N</i>	<i>TSE</i>	<i>JS</i>	<i>Missed TSE & JS</i>	<i>Total missing%</i>
Timepoint 1	53	1 (1.8%)	1 (1.8%)	10 (18.9%)	22.5%
Timepoint 2	67	6 (10.9%)	1 (1.8%)	4 (7.27%)	19.97
Timepoint 3	48	3 (5%)	1 (1.8%)	19 (34.5%)	41.3
Timepoint 4	51	4 (7%)	2 (3.6%)	13 (23.6%)	34.2
Timepoint 5	50	8 (14.5%)	1 (1.8%)	13 (23.6%)	39.9

Note. TSE = teacher's sense of efficacy open-ended question, JS = job satisfaction open-ended question.

3.4.3 Qualitative instrument development

3.4.3.1 Online diary surveys (timepoint one to five).

Following Woolfolk Hoy's (2004) recommendation of using qualitative approach when exploring factors that mediate development on the construction of efficacy beliefs (Shaughnessy, 2004), I attached two open-ended questions to the TSES and Job satisfaction scales to investigate the teachers' views of what factors have affected their self-efficacy and job satisfaction beliefs

throughout the semester. The open-ended question at the end of the TSES scale asked the participants “What experiences in the past two weeks have influenced your confidence in your ability to teach your class well?” and the one at the end of job satisfaction scale asked “What experiences in the past two weeks have influenced your job satisfaction?” The purpose behind using these two items was to provide explanations for any changes in efficacy and satisfaction beliefs throughout the semester. Similar to the quantitative analysis procedures, I included the responses of the 55 participants who participated on three or more online diary surveys and were analysed in the quantitative data.

3.4.3.2 *Online open-ended survey (timepoint six).*

The last online diary survey was timepoint six which was in the form of open-ended questions which were derived from the pilot study results. Some of the main themes that were found in the qualitative part in the pilot study were student motivation, internal and external factors affecting teacher’s self-efficacy beliefs, teaching skills, and job satisfaction (see appendix D). As a result, timepoint six was designed to give teachers a space to explain their answers to the first five online diary surveys, provide a recap of their teaching experience in that semester and express their views regarding their capabilities. The idea behind this survey was to give room to teachers to explain how they felt at certain times and why.

The first section of the survey thanked the teachers for continuing to take part in the project and asked for their consent to fill in the survey and if they have participated in any of the previous timepoints. The second section included the unique identifier (which participants used to fill out their online diaries) and the demographics (e.g. age, gender, teaching level and years of teaching experience) which popped up automatically if the unique ID was used in any of the previous surveys. The third section, which was the self-efficacy section, consisted of seven open-ended

questions asking them to reflect on their teaching experiences throughout the semester. This section included questions related to the themes that were found out in the pilot study such as “What external factors affect your level of motivation in the class?”, “What factors influence your students' motivation in class?”, “How do your colleagues influence your confidence to be a good teacher?” and “How is your confidence influenced by your students?”

Additionally, this section included three questions related to TSE sub-factors in which teachers were asked to explain their beliefs regarding their choice of their instructional strategies, their methods of classroom management and ways of keeping their students engaged. The fourth section included two questions investigating their job satisfaction and dissatisfaction sources during this semester. The open-ended survey is presented in Appendix L.

3.4.3.3 *Reliability and validity of qualitative data*

Some researchers consider a research reliable if it is repeatable, replicable, dependable, procedure conventionalized. In his *Qualitative Research Dictionary*, Schwandt (2007) gave a brief summary of “reliability” in qualitative research. He summarized that qualitative research is “judged to be reliable if it is capable of being replicated by another inquirer” (Schwandt, 2007, p. 262). Various procedures could assist in determining an instrument’s reliability and trustworthiness. In the present study, triangulation is used to ensure credibility of the findings. It involves using different methods when searching for a point to meet in using various forms of data sources (Shenton, 2004).

Creswell and Miller (2000) admit that it is a multi-level challenging task to write about the qualitative research validity. It is hard enough for expert researchers and further complicated for novice ones. Creswell and Miller define validity as “how accurately the account represents participants’ realities of the social phenomena and is credible to them” (2000, p.124). That is to say,

the inferences that a researcher could draw from them. Thus, deciding on a validity check procedure is undoubtedly vital. Triangulation, as noted before is a method of ensuring validity through the use of multiple data collection methods to reach replicated results from a number of data sources. For the purpose of this research, triangulation was adopted as a form of assuring validity in the qualitative results through confirming the findings of the other data sets, which is the quantitative data set (Miles, Huberman, & Saldaña, 2014; Miles & Huberman, 1994).

The richness of the qualitative data sets in the form of the two open-ended questions in the five timepoints, and the sixth online diary fostered the idea of replicating the findings of the quantitative data. I employed yet another ‘reality check’ measure which was keeping a personal debriefing in the form of memo writing to reflect upon changes, additions, omissions of codes throughout the coding process which latter helped in finalizing the coding list and generating themes (Saldana, 2009).

3.4.4 Data analysis and coding

Before describing the analysis and coding procedures, it might be useful to refer to the tool used to organize the qualitative data in this study. QSR NVivo software was selected as the data organizer for various reasons. In fact, QSR NVivo has many features that could assist researchers to code, index, organize, store and maintain codes. The tool has some more outstanding features, three of which are highlighted here:

1. It has the ability to code the same chunk or text a number of times under different codes making it easier to categorize and re-categorize the themes and codes. NVivo’s support in coding the texts from the open-ended survey was of a great assistance as participants tended to give very short answers to open-ended questions. To overcome such a limitation, Bazeley (2013) suggested that short answers should be coded in a semi-automated coding

procedure (i.e. through word searches) or categorized. He also suggested coding the responses to each question individually instead of the common method of coding the responses of all the questions for each case. This might have been a long process but it paid off since it made it possible to see an interrelation between the responses of different questions (Bazeley, 2013, p. 146).

2. It uses the same coded chunk to sub-code or nest another code of a smaller excerpt within the coded chunk.
3. Since QSR NVivo maintains any formatting applied to any exported data files, a different formatting (heading styles) was applied to data to represent different timepoints (Morse & Richards, 2002) which proved to be an effective way of tracking changes in teacher self-efficacy and satisfaction later on.

The coding technique can be so useful if planned well and executed accordingly. Schwandt (2007) explains coding as “a procedure that disaggregates the data, breaks it down into manageable segments, and identifies those segments. [It] is often classified as relatively descriptive or analytical/explanatory depending on the degree of interpretation involved. Coding requires constantly comparing and contrasting various successive segments of the data and subsequently categorizing them” (p. 32). Codes or labels are meant to help retain data not reduce it (Bazeley, 2013). For a proficient coding, a researcher needs to master four outstanding features “responsiveness to data, focus on purpose, learning through observations of and discussion with experienced others and practice” (Bazeley, 2013, p. 125). The process of coding and creating themes has various labels and names. It is called labelling and categorizing by some scholars (e.g. Bazeley & Jackson, 2013) and coding and *themeing* by others (e.g. Saldana, 2009).

Following the guidelines of Miles and Huberman (1994) and Saldana (2003), I examined the qualitative data to trace any references to change, sequence, process categories, themes, and trends through comparing and contrasting the different qualitative data forms (i.e. the open-ended questions from the 5 timepoints, and the timepoint 6 or, as I called it, the feedback survey). Initial coding, categories and themes were influenced by the previous research on teacher self-efficacy and job satisfaction (Klassen & Durksen, 2014; Klassen & Chui, 2011; Bong and Skaalvik, 2003; Bandura's SE sources, 1997; Bandura, 2006; among many others). The aim of this step of data coding was to code and categorize responses and chunks with no specific interest in changes or differences between cases. Additionally, a list of codes was developed during the data collection stage whereby I jotted down some words, phrases or labels that were highlighted by the participants as they filled in the open-ended questions throughout the semester. After the first reading of the answers to the two open-ended questions, an initial list of codes was built up by consulting and adding to the data collection stage list and saved aside. At a later stage, this was followed with more focus or interest in change and comparison and contrast between timepoints.

For this purpose, Klassen and Durksen's (2014) and Saldana (2009) coding techniques and advice in coding longitudinal qualitative data were followed in this study. For instance, an important measure that was maintained and followed up throughout the data coding process was the idea of keeping a table of definitions for all the codes. Saldana (2009, p. 35) called it "an internal reality check". Appendix M1 presents the final list of these definitions which although it did not include all the codes that were established during the journey of coding and labelling, it has the codes, themes and sub-themes that were part of the analysis. Because the coding process, the re-coding and further coding of the re-coded data was an ongoing process that formed the first stage of the coding process. It repeatedly gave way to more and more codes to be born and divided and subdivided in a 'cyclical' pattern (Saldana, 2009, p. 45). This in itself added richness to the qualitative

data and more possibilities to link the qualitative findings to the quantitative ones. To this end, I adopted the use of thematic analysis approach.

3.4.4.1 *Thematic analysis.*

Thematic analysis is a broadly recognized method for identifying and analysing patterns (i.e. themes) in qualitative data (Boyatzis, 1998; Clarke & Braun, 2013). Braun and Clarke (2006) stipulate a detailed process of finding themes across data sets rather than stepping aside and waiting for themes to ‘emerge’ as they naturally reside in the data. Therefore, as a researcher, it is essential that a researcher’s stance is taken based on the theoretical position to be able to make decisions about what the data set says. This, as a matter of fact, doesn’t oppose the fact that thematic analysis is accessible for those with little or no experience of analysing qualitative data.

Due to the complexity and richness of the qualitative dataset in this research (open-ended questions collected at six timepoints longitudinally), thematic analysis was found to be most suitable. This analysis allows flexibility and is useful in summarizing large body of data by offering a “thick description” of the data set. It “highlights similarities *and* differences” across the datasets as comparing novice and experienced teachers is one of the main objectives of this study. Furthermore, it is accessible for researchers new to analysing qualitative research (Braun & Clarke, 2006). Thus, I deemed thematic analysis to be the most appropriate.

Direct quotes, that are representative of the participants’ viewpoints in relation to their self-efficacy and satisfaction beliefs, were included with no manipulation from my side. When necessary, I inserted any alteration in brackets for cohesion purposes (e.g. adding a pronoun). The analysis procedure went through several steps of coding from descriptive coding to categorical and thematical coding to longitudinal coding to uncover the themes and categories (Miles et al., 2014; Miles & Huberman, 1994; Saldaña, 2003, 2009).

To generate and label the codes into themes, I first familiarized myself with the data by reading it thoroughly during the quantitative data analysis stage. The relevant information was identified through linking it with the quantitative data results (Bazeley & Jackson, 2013). At the initial stage of coding, I combined several coding methods from simple word coding triggered by words or terms present in the data set to descriptive coding where a basic topic of the passage was given (Saldana, 2009). I worked according to Saldana's recommendation for coding qualitative data (2009) whereby the research questions were reviewed and their characteristics were identified. It is crucial to highlight here that the themes were meant to capture something important in relation to the research question (Braun & Clarke, 2006; Saldana, 2009). Based on this, I identified the longitudinal coding method that was in consistent with the research questions that sought answers to the changes in teacher efficacy beliefs and sources of efficacy (Saldana, 2009). The codes then were assigned (based on the coding method) to represent the relevant information in the data. Bazeley & Jackson (2013) emphasize that when assigning a word or a phrase (a concept) to the data, it is important that documentation of the reason behind selecting the code takes place at the same time to avoid biasness. Another good reason for such documentation appeared during the writing up of the discussion chapter where this documentation assisted in linking the research questions with the findings and in recording my research thoughts. Thus, one way to ensure this when using NVivo was to use the memo link option to describe the code thoroughly and write any thoughts related to this particular code.

Initially, I took several steps when analysing the qualitative dataset to answer the qualitative research questions. Data were coded deductively and inductively (Miles and Huberman, 1994; Miles, Huberman & Saldana, 2014) by identifying any possible links to previous research on self-efficacy and looking for themes or categories that were data-driven (Braun & Clarke, 2006). First, the two open-ended questions across five timepoints of the qualitative data were coded based on

existing research findings and my own observations and notes during the data collection stage. Under factors affecting TSE and JS, specifically High TSE, Low TSE, High JS and Low JS, the responses were coded per timepoint. Matrices and tables were created using NVivo and Excel spreadsheets to achieve a visualized comparison between timepoints (similar to Table 15.3). In step two, all codes were sorted and categorized in which references to high/low self-efficacy and high/low job satisfaction sources were thematically and categorically pooled (Appendix M1).

Table 15.3 Sample matrix: finding evidence of high or low TSE & JS in qualitative data

<i>Evidence from open-ended questions</i>				
<i>Time point 1</i>	<i>High SE</i>	<i>Low SE</i>	<i>High JS</i>	<i>Low JS</i>
Participant 1				
Participant 2				
Participant 3				

From steps one and two emerged the answer to Research Question.6: “*What factors influenced teacher efficacy and satisfaction beliefs during the semester?*” The factors affecting teacher self-efficacy and job satisfaction were identified by the two open-ended questions from timepoint 1 to 5. The 55 participants’ responses to the questions were analysed. The main themes were further divided into sub-themes (i.e. factors). Evidence from the participants’ answers were included to support the presence of the sub-themes and codes and were further analysed with reference to experience to draw a comparison between novice and experience teachers in terms of what factors influence their beliefs.

The third step was to find evidence of change in teacher self-efficacy and satisfaction beliefs through time (Klassen & Durksen, 2014). To achieve this, a representative sample of the participants or ‘Cases’ was chosen by looking intentionally for contrasting cases (Miles & Huberman, 1994). Hence, the 55 participants, who were included in the quantitative data set, were closely examined, first through eyeballing then through comparing the three experience groups’ scores of TSE and job satisfaction. Cases with extreme changes or ‘surprises’ in reporting their TSE or job satisfaction beliefs or both were included. Cases with contrasting changes (increase/decrease) in TSE compared to their job satisfaction scores were also included (Miles & Huberman, 1994).

From step three, Research Question.7: “*How do teacher self-efficacy and job satisfaction beliefs change over the course of one semester?*” was answered by longitudinally tracking changes in teacher self-efficacy and job satisfaction beliefs. Klassen and Durksen’s (2014) case clustering was followed in which I selected 27 information rich participants out of (n=55) to analyse (Sandelowski, 1995). Thus, the analysis started by assigning the 27 participants under five expected and unexpected case clusters: (1) Case *SE/JS* referred to *increasing self-efficacy* and *increasing job satisfaction* for three participants, (2) Case *SE/js* referred to *increasing self-efficacy* and *decreasing job satisfaction*, (3) Case *se/ JS* which referred to a *decreased self-efficacy* and an *increased job satisfaction*, (4) Case *se/js* referred to *decreasing self-efficacy* and *decreasing job satisfaction* and, finally, (5) Case *Surprise* referred to participants with unexpected increase, decrease or consistency. The fifth Case clustering was driven by the unusual data of the current study. It is worth mentioning that the capital and small letters in the labelling of the Cases was determined by the increase or decrease of the TSE and job satisfaction score means in the quantitative data. These same Cases were used to track longitudinal changes within-case and cross-case and investigate the existence of any ‘epiphanies’, as recommended by Saldana (2003). The selection of quotes to be used in the

results chapters was based on their relation to the Cases and, therefore, each quote is representative of the increase or decrease of teachers' beliefs.

3.5 Mixed Data Analysis Procedures

A sequential mixed method analysis was undertaken to analyse the teachers' responses to the online diary surveys (Onwuegbuzie & Teddlie, 2003) by commencing the analysis with quantitative analyses followed by qualitative analyses. Both inductive and deductive reasoning were employed. Morgan (2007) labelled this integration of approaches as 'abductive', a combination of the inductive and deductive approaches. Abductive approach aimed at getting the most out of the quantitative and qualitative data sets by seeking "useful points" of connecting the two. The quantitative and qualitative analyses integration seemed to capture the richness of the two data sets and work out a middle-line between the subjectivity of the qualitative approach and the objectivity of the quantitative approach (Ercikan & Roth, 2006; Morgan, 2007). Morgan (2007) called this integration the intersubjective approach whereby a researcher is aware of the power of these two in parallel without leaning towards one more often than the other. For triangulation purposes, the data was collected quantitatively and qualitatively in parallel but the aim was not to test them against each other rather the quantitative and qualitative data were meant to be integrated to create a full picture of the whole situation.

4 Quantitative Results

A mixed-methods research design that combines both quantitative and qualitative approaches was employed in this study. The methodology chapter gave a detailed description of the procedures followed in using these two methods. The quantitative data was based on two Likert-scales from (*0 Not at all confident -10 Extremely confident* and *0 Not satisfied – 10 Extremely satisfied*) to investigate the teacher’s self-efficacy and satisfaction beliefs longitudinally using two measures. At the end of the semester, the teachers were asked to distribute an 11-item student engagement survey to their student groups to assess their level of engagement using a Likert-scale from (*0 Never – 6 Always*). The qualitative data was based on two open-ended questions at the end of the two quantitative scales and an open-ended survey. The aim of the qualitative data was to provide a “recap” feedback on the teachers’ teaching experience during semester two (2015-2016) when this data was collected. The following is an account of the quantitative findings.

4.1 Introduction to Quantitative Findings

For the quantitative portion of the research study, this chapter addresses the relationships between the research variables, the effect of experience on these variables and the change in teachers’ sense of efficacy and satisfaction over time. Throughout the semester, which was semester two in the academic year (2015/2016), the English language teachers of the foundation program at the Higher College of Technology in Oman received an online dairy every other week to fill out. The diary consisted of two main sections: the teacher sense of efficacy scale (TSES) and the job satisfaction scale and it was sent off to teachers at five timepoints. Eighty-four teachers participated but only 55 of them were included in the analyses, as some of them did not participate in all timepoints. I decided to include only those who participated on three or more online diary surveys. The teachers ranged between 26 and 71 years old and had between 2 to 40 years of teaching

experience. At the end of the semester – that is at timepoint five- the student participants (N = 1006) filled out an online student engagement survey at the end of the semester. The numbers of student participants in each group varied, as some groups had as few as three student participants while others had as many as 43 student participants. I, therefore, decided to discard the groups that had less than ten participants. The remaining number of student participants, which was used in these analyses, was ($n = 838$). The five online diary surveys and one student survey were used to answer the quantitative research questions as the following section shows.

Considering the fact that years of teaching experience was a key factor in this study, it was important to highlight here the inequality of the participants in terms of this factor. As the sample size was small ($n=55$) and unequal in terms of novice teachers (with 1 to 3 years of teaching experience, $n = 6$) and experienced teachers (with 4 and more years of experience, $n = 49$), it was hard to compare them as two strict groups as some of the research questions suggested. Thus, I decided to make a grouping where these two major groups of experience, that is novice and experienced, were divided further into three groups labelled as (1) novice group (with 1-3 years of experience, $n = 6$), (2) average experience group (with 4-20 years, $n = 6$), and (3) highest experience group (with 32+ years, $n = 6$). The three groups had exactly the same number of participants to maintain consistency and just above the recommended number of participants to form case clusters, which is in line with Creswell's recommendation (2007b). Additionally, they might be just the minimum number of cases needed to run a longitudinal analysis (Hedeker, Gibbons, & Waternaux, 1999). The first experience group included genuine novices with the least number of years of experience. The second group had a moderate level of experience in the data sample. Forty-one participants fell under this category with 4 to 20 years of experience but six average participants were included. There were eight participants, who belonged to the highest experience group with 32 to 40 years of experience, six of which were included in the analysis.

This chapter starts with a preliminary analysis section of the quantitative data and then answers the research questions. For the research questions that investigate the impact of teaching experience, the three experience groups are used. For the rest of the research questions, the entire sample size ($n=55$) is employed.

4.1.1 Preliminary analysis

4.1.1.1 Descriptive statistics for the study measures: TSE & JSS.

This study adopted two main measures to examine teachers' sense of efficacy 9-item scale by Tschannen-Moran and Woolfolk Hoy (2001) and 4-item job satisfaction scale by Caprara, Barbaranelli, Borgogni and Steca (2003). Table 16.4 presents descriptive statistics for the categorical and continuous variables in the online diary surveys for the 55 participants who participated in three or more surveys. The statistics presented in the first half of Table 16.4 were calculated before replacing the missing values using series means and the second half after replacing the data. It can be noted here that the means after substitution in all three TSE factors have minimally increased. For instance, the Teacher Efficacy of Instructional Strategies (TSEIS) increased from 8.27 to 8.30. Similarly, the job satisfaction means before and after mean substitution did not demonstrate a significant increase as it went up slightly from 8.71 to 8.77.

Table 16.4 Descriptive Statistics of TSES & JS scales: before & after means substitution

	VARIABLES	<i>n</i>	Range	Min	Max	<i>M</i>	<i>SD</i>
Original data before means substitution	Level	55	4	1	5	3.22	1.44
	Age	54	45	26	71	43.56	11.86
	Experience	55	38	2	40	17.15	11.19
	TSEIS	55	4.33	5.80	10	8.27	.96
	TSECM	55	4.40	5.60	10	8.61	.96
	TSESE	55	5.13	4.87	10	8.18	1.00
	JS	55	5.30	4.70	10	8.71	1.02
Data after mean substitution	TSEIS	55	4.20	5.80	10	8.30	.83
	TSECM	55	4.40	5.60	10	8.65	.86
	TSESE	55	5.13	4.87	10	8.17	.90
	JS	55	5.30	4.70	10	8.77	.88

Note. All values of TSE and JS are calculated scale-wise. Age = teachers' age at the time of data collection with one missing value, Level = level that teacher teaches; Experience = years of teaching experience; TSECM = teachers' sense of efficacy in classroom management; TSEIS = teachers' sense of efficacy in choosing instructional strategies; TSESE = teachers' sense of efficacy in engaging students; JS = Job Satisfaction.

4.1.1.2 Descriptive statistics for engaged student scale (ESS).

The ESS is used for the first time after transferring it from engaged teacher scale (ETS) to engaged student scale. For this reason, the scale is checked for normality and reliability (that is, the relationship between the items). Table 17.4 presents the ESS descriptive statistics (range, mean, standard deviation, skewness and kurtosis) for student engagement scale. The lowest mean in this scale (M=4.40, SD= 1.96) was in item eight of the social engagement factor, whereas, the highest (M=5.94, SD= 1.46) was in item three of the cognitive engagement.

Table 17.4 Descriptive Statistics of Engaged Student Scale (n=838)

ESS ITEM	N	M	SD	Skewness	Kurtosis
1. I connect well with my peers. (ESS1SE)	838	5.54	1.67	-.87	-.30
2. I am excited about learning. (ESS2EE)	838	5.46	1.69	-.95	.10
3. I try my hardest to perform well while learning. (ESS3CE)	838	5.94	1.46	-1.39	1.24
4. I feel happy while learning. (ESS4EE)	838	5.00	1.74	-.58	-.53
5. While learning, I really throw myself into my work. (ESS5CE)	838	5.03	1.68	-.54	-.54
6. At college, I value the relationships I build with my peers. (ESS6SE)	838	5.87	1.57	-1.42	1.28

7. I love learning. (ESS7EE)	838	5.43	1.73	-.96	.07
8. While learning, I pay a lot of attention to my work. (ESS8CE)	838	5.66	1.54	-1.10	.59
9. At college, I care about the problems of my peers. (ESS9SE)	838	4.40	1.96	-.27	- 1.08
10. I find learning fun. (ESS10EE)	838	5.15	1.75	-.70	-.39
11. While learning, I work with intensity. (ESS11CE)	838	5.59	1.50	-.95	.32

Note. The abbreviations attached to the items refer to the item number and the type of engagement: SE = Social engagement, EE = emotional engagement, CE= cognitive engagement

A normality test was computed to check the normality distribution of the scale. Table 18.4 shows that the *p*-value of the Shapiro-Wilk Test is less than 0.05 which concludes that the data significantly deviate from a normal distribution for the three engagement sub-factors (cognitive, emotional and social) which is “quite common in larger samples” as this one (N=838) (Pallant, 2013, p. 66).

Table 18.4 Test of Normality for the Engaged Student Scale (n=838)

	<i>Kolmogorov-Smirnov^a</i>			<i>Shapiro-Wilk</i>		
	Stat	df	Sig.	Stat	df	Sig.
ESS_SE	.113	838	.000	.951	838	.000
ESS_EE	.113	838	.000	.926	838	.000
ESS_CE	.120	838	.000	.918	838	.000

a. Lilliefors Significance Correction. Note. ESS = engaged student scale, the abbreviations attached to the ESS refer to the type of engagement: SE = social engagement; EE = emotional engagement; CE = cognitive engagement.

4.2 Research Question 1 (A)

1. How do TSE and job satisfaction beliefs change over the course of one semester?

To answer the first research question, “How does the TSE beliefs change over the course of one semester?”, the pattern of change was examined using a one-way repeated measure analysis of variance (ANOVA). The one-way repeated measures analysis of variance was conducted in order to determine the nature and significance of this change across the five timepoints. There was no significant effect for time, Wilks’ Lambda = .85, $F(4, 49) = 2.21$, $p = .08$, multivariate partial squared = .153. Thus, *Hypothesis 1a* (change of teachers’ self-efficacy over time) was disconfirmed. Although the results suggest that teacher’s sense of efficacy reported by the English language teachers did not increase significantly over time, the results approached significance, as the p -value is not very far from significance =0.05 which indicates that a general pattern of change may have existed. The means and standard deviations are presented in Table 19.4.

Table 19.4 Teacher self-efficacy (TSE) Means & SD across five timepoints (N=55)

Timepoints	M	SD	N
T1TSE	8.17	1.08	55
T2TSE	8.26	1.07	55
T3TSE	8.41	0.95	55
T4TSE	8.48	0.84	55
T5TSE	8.54	0.90	55

Note. T1TSE= teacher self-efficacy in timepoint 1, T2TSE = teacher self-efficacy in timepoint 2, T3TSE = teacher self-efficacy in timepoint 3, T4TSE = teacher self-efficacy in timepoint 4, T5TSE = teacher self-efficacy in timepoint 5.

A similar comparison was conducted to investigate change in teachers' job satisfaction across time. A one-way repeated measures analysis of variance was conducted. There was no significant effect for time, Wilks' Lambda = .93, $F(4, 51) = .93$, $p < .44$, multivariate partial squared = .070. The results suggest that the English language teachers' satisfaction did not change over time, which disconfirm *Hypothesis 1b*. The means and standard deviations are presented in Table 20.4.

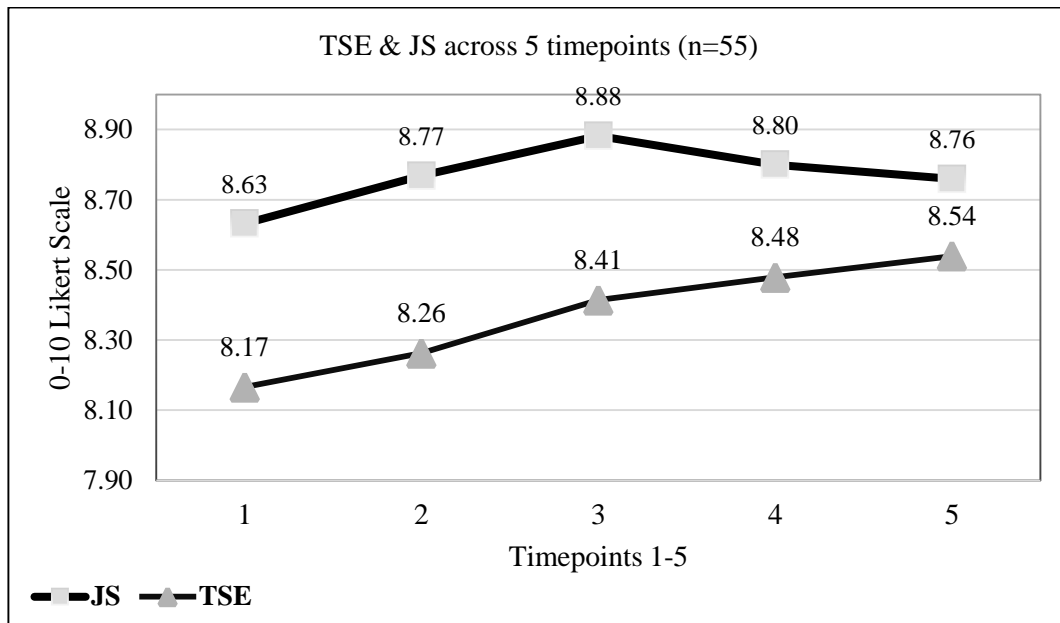
Table 20.4 Job Satisfaction Means across five timepoints (N= 55)

Timepoints	M	SD	N
T1JS	8.63	1.22	55
T2JS	8.77	1.14	55
T3JS	8.88	0.96	55
T4JS	8.80	0.96	55
T5JS	8.76	1.01	55

Note. T1JS= job satisfaction in timepoint 1, T2JS = job satisfaction in timepoint 2, T3JS = job satisfaction in timepoint 3, T4JS = job satisfaction in timepoint 4, T5JS = job satisfaction in timepoint 5.

Although the increase was not significant for TSE and JS, Figure 11.4 shows that both witnessed a slight change pattern over time. In terms of the teacher's satisfaction, the increase peaked at timepoint 3 (M=8.88), whereas, the teachers' self-efficacy continued to increase throughout the semester and peaked at timepoint 5 (M=8.54).

Figure 11.4 Teacher self-efficacy & job satisfaction across five timepoints

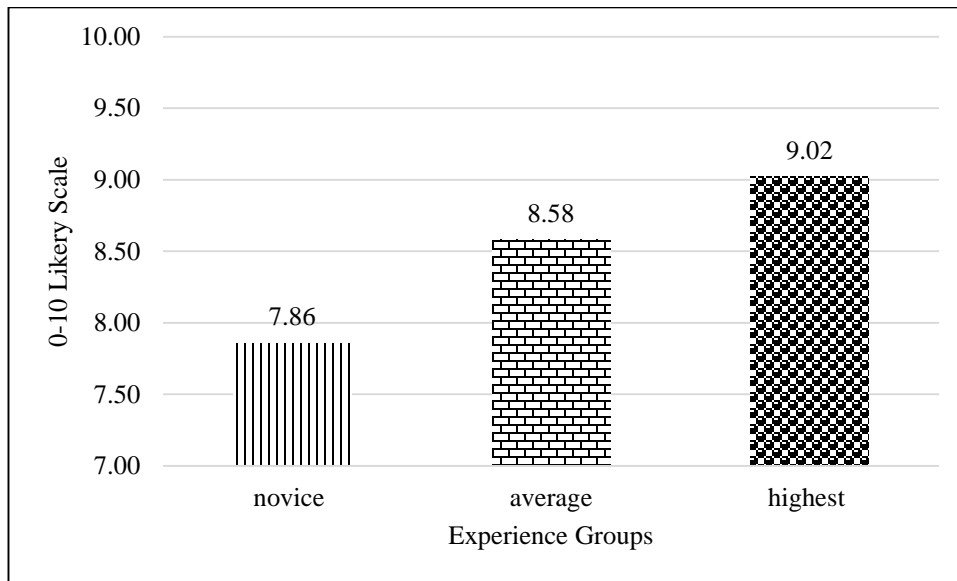


4.3 Research Question 1 (B)

1. Is the change over time related to experience?

To answer this question, a one-way between groups analysis of variance was conducted to explore the impact of teaching experience on teacher's self-efficacy and satisfaction. The three experience groups were used: (1) novice group (with 1-3 years of experience, $n = 6$), (2) average experience group (with 4-20 years, $n = 6$), and (3) highest experience group (with more than 21 years, $n = 6$). There was a statistically insignificant difference in teacher's self-efficacy for the three experience groups $F(2, 15) = 2.55, p < .11$. The effect size, calculated using eta squared, was .25. Figure 12.4, however, does not support this statistical insignificance when comparing the TSE means of the three experience groups as it shows that more experienced teachers had higher levels of self-efficacy, confirming *Hypothesis 1c*.

Figure 12.4 Different levels of teacher self-efficacy (TSE) among experience groups



Although the actual difference in mean scores between the groups was noticeable with ($M = 7.86$, $SD = 1.26$ for the novice group, $M = 8.58$, $SD = .20$ for the average group and $M = 9.02$, $SD = .89$ for the highest experience group), the Post-hoc comparisons using the Turkey HSD test indicated no statistically significant difference between any of the three groups. Table 21.4 does not supported this conclusion as it showed differences when comparing the means scores of the three experience groups across the five timepoints, especially between the novice and highest experience groups. The novice teachers' group started with ($M = 7.59$, $SD = 1.61$) at timepoint 1 and ended with ($M = 8.22$, $SD = 1.36$) at timepoint 5 which partially disconfirmed *Hypothesis 1d* (novice teachers' self-efficacy starts high but decreases with time). Table 21.4 showed a slight change for the other two experience groups across time. For a visual representation of the numbers in Table 21.4, Figure 13.4 illustrates the difference across time between the three experience groups. Appendix N shows three line graphs of each experience group by case. The changes in self-efficacy

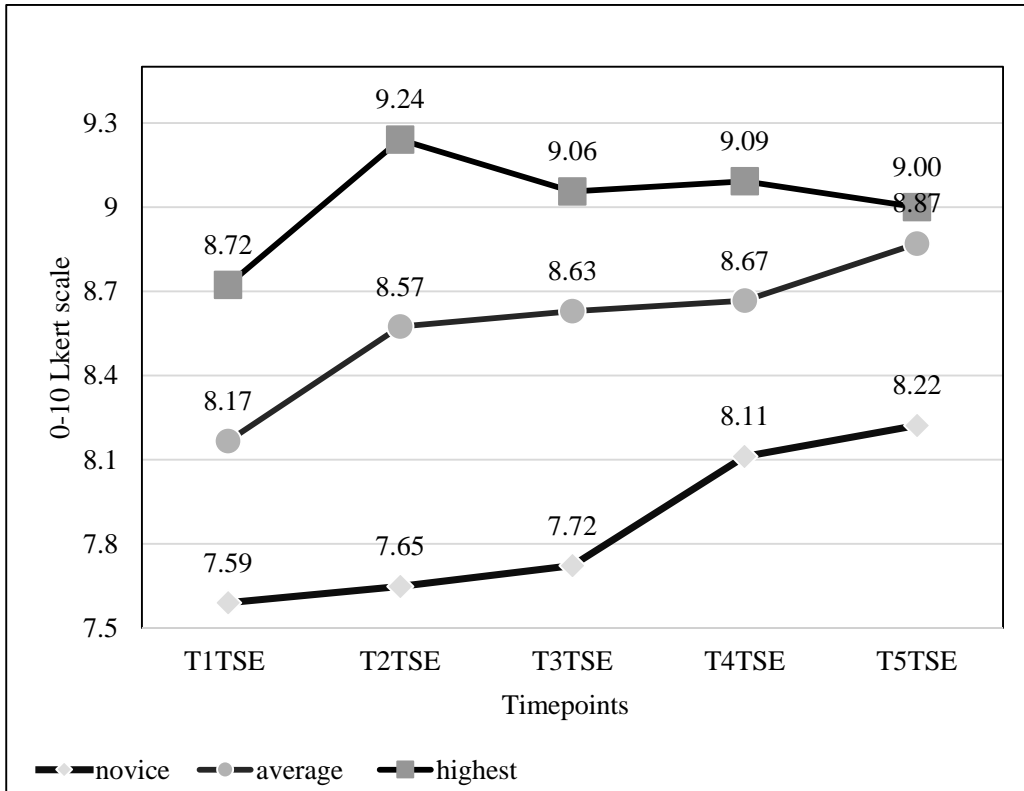
beliefs of all 55 participants will be used as a baseline for selecting participants to form within-case and cross-case clusters in the qualitative data analysis.

Table 21.4 Teacher self-efficacy Means for three experience groups across timepoints (N=18)

Timepoint	Experience Groups	N	M	SD
T1TSE	novice group	6	7.59	1.61
	average group	6	8.17	0.49
	highest group	6	8.72	0.89
	Total	18	8.16	1.13
T2TSE	novice group	6	7.65	1.25
	average group	6	8.57	0.59
	highest group	6	9.24	0.90
	Total	18	8.49	1.12
T3TSE	novice group	6	7.72	1.24
	average group	6	8.63	0.21
	highest group	6	9.06	1.04
	Total	18	8.47	1.05
T4TSE	novice group	6	8.11	1.45
	average group	6	8.67	0.25
	highest group	6	9.09	1.05
	Total	18	8.62	1.06
T5TSE	novice group	6	8.22	1.36
	average group	6	8.87	0.26
	highest group	6	9.00	0.92
	Total	18	8.70	0.97

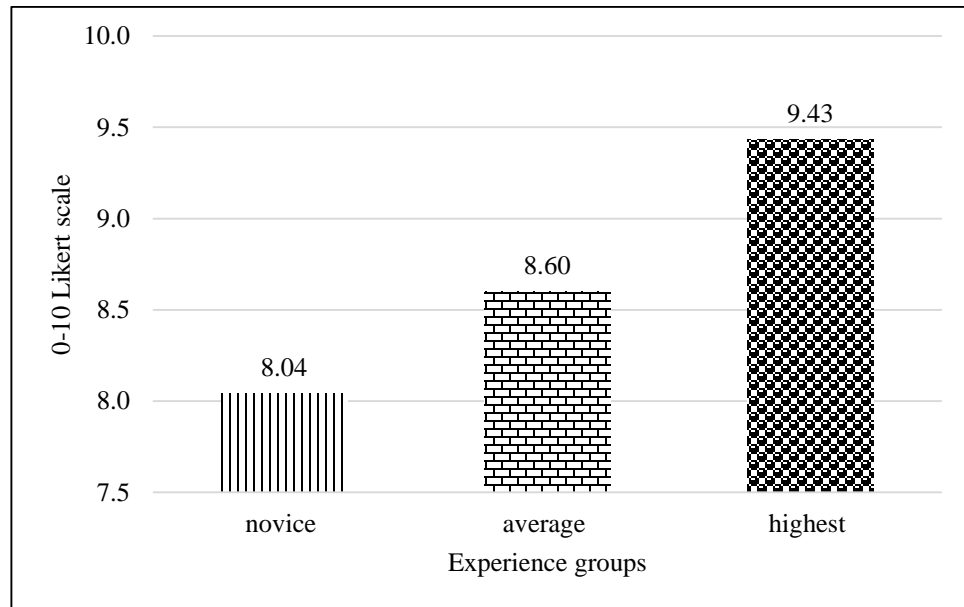
Note. The teacher self-efficacy across timepoints is referred to as T1TSE, for example, where T1 refers to timepoint 1 and TSE refers to teacher sense of efficacy.

Figure 13.4 Change in Teacher's efficacy across five timepoints based on experience (n=18)



Similarly, a one-way between groups analysis of variance was conducted to explore further the impact of teaching experience on teacher's satisfaction. Comparing the three experience groups across time to determine teachers' job satisfaction level resulted in no statistically significant difference for the three experience groups $F(2, 15) = 2.39, p = .12$. The effect size, calculated using eta squared, was $=0.24$. Post-hoc comparisons using the Turkey HSD test confirmed this non-significance. Despite reaching this statistical non-significance, there was a difference in mean scores between the three groups, mainly the novice group ($M= 8.04, SD= 1.71$) and the highest experience group ($M= 9.43, SD= 0.58$).

Figure 14.4 Different levels of Job satisfaction among experience groups



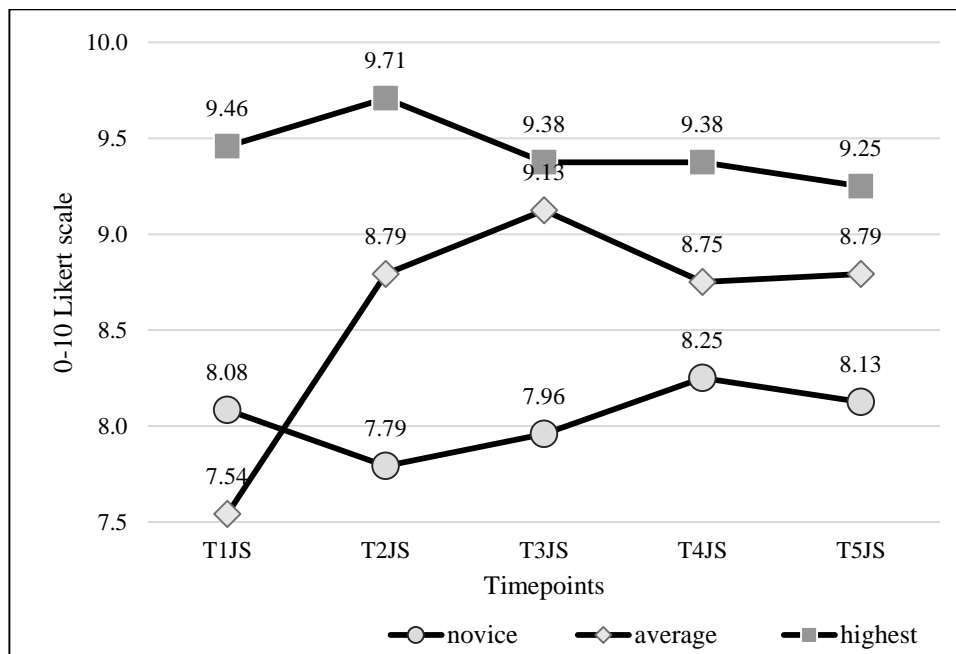
The job satisfaction level for the novice and the highest experience groups remained almost the same as it was at timepoints 1 and 5, indicating no change with time. The average group witnessed a slight increase from timepoint 1 to timepoint 5, indicating a change. The means and standard deviations of the groups across the five timepoints are presented in Table 23.4 and the difference between the three experience groups in job satisfaction is presented in Figure 15.4. Appendix N shows three line graphs of each experience group by case. The changes in job satisfaction beliefs of all 55 participants will be used as a baseline for selecting participants to form within-case and cross-case clusters in the qualitative data analysis.

Table 22.4 Job satisfaction: Means & SD for three experience groups (n=18)

Timepoint	Experience Groups	N	M	SD
T1JS	novice group	6	8.08	2.02
	average group	6	7.54	2.34
	highest group	6	9.46	0.49
	Total	18	8.36	1.89
T2JS	novice group	6	7.79	2.26
	average group	6	8.79	0.71
	highest group	6	9.71	0.46
	Total	18	8.76	1.54
T3JS	novice group	6	7.96	1.60
	average group	6	9.13	0.44
	highest group	6	9.38	0.74
	Total	18	8.82	1.17
T4JS	novice group	6	8.25	1.51
	average group	6	8.75	0.42
	highest group	6	9.38	0.74
	Total	18	8.79	1.05
T5JS	novice group	6	8.13	1.52
	average group	6	8.79	0.40
	highest group	6	9.25	0.76
	Total	18	8.72	1.06

Note. Job satisfaction is referred to as T1JS, for example, where T1 refers to timepoint 1 and JS refers to job satisfaction

Figure 15.4 Change in Job satisfaction across five timepoints based on experience (n=18)



4.4 Research Question 2

2. To what extent are teacher self-efficacy (TSE) and job satisfaction (JS) related to (1) teacher gender, (2) teacher age, (3) teaching Level at the foundation program, and (4) teaching experience?

Pearson's product-moment correlation coefficients were computed to determine the relationship between the independent variables using a two-tailed test of significance; teacher efficacy and job satisfaction. All 55 participants were included in the analyses of this research question. Table 23.4 shows a relationship that exists between the two main independent variables, confirming *Hypothesis 2c(TSE and JS are correlated)*. Teacher self-efficacy and job satisfaction have a strong positive correlation between them, $r = .775$, $n = 55$, $p = .000$, as the r is closer to +1 (Cohen, 1988a; Pallant, 2013). Figure 16.4 demonstrates this correlation as a straight line fitted with

the R^2 value of = 0.666 (close to 1) which implies a good linear relationship between the variables indicating teachers with high TSE are satisfied with their job.

Table 23.4 also presents the relationship between TSE and job satisfaction and each one of these variables using a two-tailed test of significance. It suggests that there is an insignificant negative correlation between TSE and the teachers' gender, $r = -.173$, $n = 55$, $p = .20$ and between job satisfaction and the teachers' gender, $r = -.191$, $n = 55$, $p < .16$. Thus, disconfirming *Hypothesis 2a* (association between gender and TSE and job satisfaction). As expected (*Hypothesis 2b*), the relationship between TSE and the level she/he is teaching in the foundation program is weak but significant, $r = .258$, $n = 55$, $p = .05$. The relationship between job satisfaction and the level she/he is teaching is positive and significant, $r = .287$, $n = 55$, $p < .03$. Table 24.4 and 25.4 compares the mean scores of each level showing the higher the teaching level is, the bigger the mean score. Table 23.4 shows that the results suggest that the relationship between teachers' gender and teaching level is insignificant as the p-value indicates, $r = -.116$, $n = 55$, $p = .40$. Age has a significant positive correlation with job satisfaction, $r = .320$, $n = 55$, $p = .01$. However, age has a weak, positive correlation with teacher's sense of efficacy, $r = .250$, $n = 55$, $p = .06$, as shown in Table 23.4. Thus, this result confirms *Hypothesis 2a* (relationship between job satisfaction and age).

The last demographic characteristics is experience which has a significant positive relation with the teachers' self-efficacy, $r = .375$, $n = 55$, $p = .005$ and similarly has a significant positive relationship with teachers' job satisfaction, $r = .351$, $n = 55$, $p < .009$ which is also supported in Figure 16.4. Another finding here is the relationship between experience and age. Table 23.4 suggests a strong and large correlation between these two variables (above .5), $r = .836$, $n = 55$, $p < .000$ (Cohen, 1988). Experience and gender have a significantly negative relationship, $r = -.323$, n

= 55, $p < .01$. It might be worth noting here that gender has a negative correlation with all demographic characteristics and the two main variables (TSE & JS).

Table 23.4 comparing TSE & JS mean scores across teaching levels (N=55)

Level	Self-efficacy		Job satisfaction	
	M	SD	M	SD
Level 1	8.02	.47	8.42	.49
Level 2	8.24	.90	8.50	.97
Level 3	8.23	1.14	8.67	1.45
Level 4	8.62	.74	8.97	.61
PF	8.56	.75	9.06	.70

Table 24.4 Comparing teaching levels in terms of self-efficacy factors (N=55)

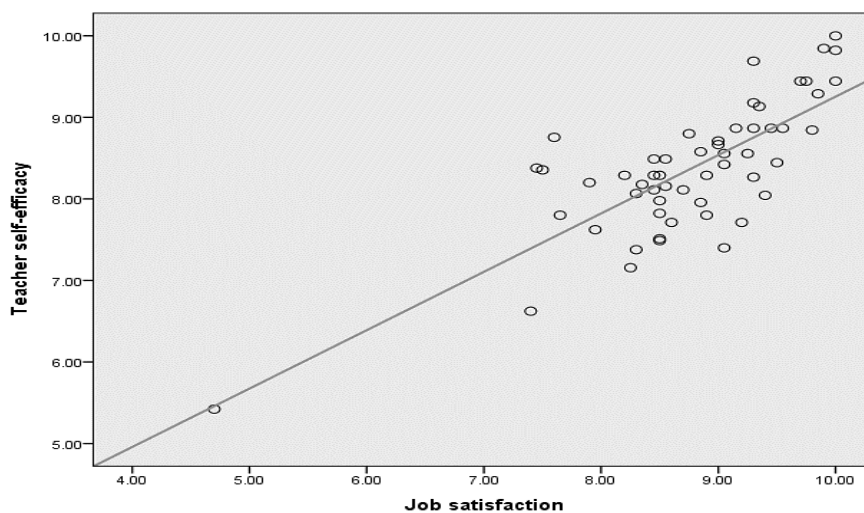
Level	N	TSEIS		TSECM		TSESE	
		M	SD	M	SD	M	SD
Level 1	10	7.85	.65	8.02	.70	7.76	.51
Level 2	8	7.97	1.23	8.71	.87	7.74	1.21
Level 3	10	8.35	1.11	8.47	1.31	8.07	1.30
Level 4	13	8.60	.92	8.82	.81	8.54	.84
PF	14	8.37	.85	8.88	.94	8.44	.95
TOTAL	55	8.27	.96	8.61	.96	8.18	1.00

Table 25.4 Correlation Coefficient between gender, level, age, experience, teacher sense of efficacy & job satisfaction (N=55)

Variables	1	2	3	4	5	6
1. Gender	-					
2. Level	-.116	-				
3. Age	-.328*	.232	-			
4. Experience	-.323*	.197	.836**	-		
5. TSE	-.173	.258	.250	.375**	-	
6. JS	-.191	.287*	.320*	.351**	.775**	-

Note. Gender = teacher’s gender, Level = the level that ELC teach at the foundation program, Experience = the number of years of teaching experience, TSE = teacher sense of efficacy and JS = job satisfaction. Statistical *p*-value: **p* < .05(2-tailed); ***p* < .01(2-tailed).

Figure 16.4 Relationship between teacher's self-efficacy & job satisfaction (n=55)



4.5 Research Question 3

3. How do novice and experienced teachers differ in terms of their TSE beliefs (including “classroom management efficacy”, “in-class student engagement efficacy” and “instructional strategies efficacy”)?

To answer the third quantitative research question, the effect of experience on TSE three sub-factors were investigated, that is classroom management efficacy beliefs, in-class student engagement efficacy beliefs and instructional strategies efficacy beliefs. The three main experience groups, labelled as (1) novice group (with 1-3 years of experience, $n = 6$), (2) average experience group (with 13-20 years, $n = 6$), and (3) highest experience group (with 21+ years, $n = 6$), were used to examine the impact of experience on TSE beliefs.

A one way ANOVA was computed to find out any statistical significance between the experience groups and teacher’s efficacy sub-factors. Table 26.4 shows that there was a statistically no significant difference in using instructional strategies (TSEIS) for the three experience groups, $F(2,15) = 3.42, p = .06$. However, it can be argued here that the p -value is not far from significance ($=.05$). Similarly, there was no significant effect of experience on teachers’ efficacy in managing their classes (TSECM) for the three experience groups, $F(2, 15) = 1.48, p = .26$ and in engaging their students (TSESE) for the three experience groups, $F(2, 15) = .265, p = .10$.

Table 26.4 One way ANOVA: three self-efficacy factors (N=18)

TSE factors		Sum of Squares	df	Mean Square	F	Sig.
TSEIS	Between Groups	4.650	2	2.33	3.42	.06
	Within Groups	10.187	15	.68		
	Total	14.838	17			
TSECM	Between Groups	2.988	2	1.49	1.48	.26
	Within Groups	15.127	15	1.01		
	Total	18.116	17			
TSESE	Between Groups	4.996	2	2.50	2.65	.10
	Within Groups	14.153	15	.94		
	Total	19.149	17			

Note. TSEIS = Teacher sense of efficacy in selecting instructional strategies, TSECM = Teacher sense of efficacy in managing classes, TSESE = Teacher sense of efficacy in engaging their students.

Table 27.4 indicated a difference in the mean score between the novice group (M = 7.86, SD = 1.09) and the highest experience group (M = 9.07, SD = .86) in choosing their instructional strategies. The post-hoc comparisons using the Turkey HSD test supported this result and indicated that there was a significant difference at the $p = .05$. The novice group teachers (M = 7.57, SD = 1.35) were not significantly different from the highest experience group in terms of engaging their students (M = 8.39, SD = 1.18) at the $p = .10$. No significant difference between the three groups was found in terms of the three groups' strategies in managing their classes. Thus, these results partially disconfirmed *Hypothesis 3a* as they showed that no difference was found between experienced and novice teachers in managing their class due to experience. However, they

confirmed the second half of *Hypothesis 3a* as they showed that a difference was found between experienced and novice teachers in terms of the use of instructional strategies.

Table 27.4 Comparison of experience groups: TSE's factors (n=18)

TSE Factors	Experience Group	N	Mean	SD	Min	Max
TSEIS	Novice group	6	7.86	1.09	5.80	9.07
	Average group	6	8.71	.32	8.20	9.07
	Highest group	6	9.07	.86	7.33	9.80
	Total	18	8.54	.93	5.80	9.80
TSECM	Novice group	6	8.16	1.38	5.60	9.80
	Average group	6	8.77	.38	8.27	9.20
	Highest group	6	9.14	.99	7.33	10.00
	Total	18	8.60	1.02	5.60	10.00
TSESE	Novice group	6	7.57	1.35	4.87	8.53
	Average group	6	8.27	.48	7.40	8.73
	Highest group	6	8.86	.89	7.60	9.87
	Total	18	8.23	1.06	4.87	9.87

Note. TSECM = teacher self-efficacy in classroom management; TSEIS = teacher efficacy in using of instructional strategies; TSESE = teacher's efficacy in engaging students. Statistical significance: $p = 0.05$

Table 28.4 illustrates that the correlation between years of experience and the three TSE factors for all 55 participants. The table shows a positive coefficient for the variable experience with the TSE factors in general. There was a significant positive relationship between experience and teachers' choice of instructional strategies, $r = .405$, $n = 55$, $p = .002$ (Miller et al, 2002), a significant positive relationship between experience and the teacher's capabilities in managing their class, $r = .285$, $n = 55$, $p = .035$, and a significant positive relationship between experience and teachers' abilities to engage their students, $r = .368$, $n = 55$, $p = .006$.

Table 28.4 also suggests that the strongest relationships existed between the three teacher efficacy factors themselves. The teachers' choice of the instructional strategies (TSEIS) has the strongest positive relationship with teachers' abilities to engage their students (TSESE), $r = .868$, $n = 55$, $p = .000$. The teachers' choice of the instructional strategies (TSEIS) has a strong positive relationship with teachers' classroom management (TSECM) skills, $r = .798$, $n = 55$, $p = .000$. The teachers' classroom management skills (TSECM) has a strong positive correlation with their abilities to engage their students well (TSESE), $r = .814$, $n = 55$, $p = .000$.

Although this research question does not enquire about the relationship between the three TSE factors and job satisfaction, it is worth highlighting here that the three factors have a highly significant ($p < 0.001$) positive correlation, $r = .706$ for TSEIS, $r = .709$ for TSECM and $r = .770$ for TSESE with job satisfaction.

Table 28.4 Correlation coefficient: years of experience, teacher efficacy & job satisfaction (n=55)

Variables	1	2	3	4	5
1. Experience	-				
2. TSEIS	.405**	-			
3. TSECM	.285*	.798**	-		
4. TSESE	.368**	.868**	.814**	-	
5. JS	.351**	.706**	.709**	.770**	-
M	17.15	8.30	8.65	8.17	8.77
SD	11.20	.84	.86	.90	.88

Note. Experience = the years of teaching experience, TSEIS = teacher sense of efficacy in selecting instructional strategies, TSECM = teacher's sense of efficacy in managing their classes, TSESE = teacher sense of efficacy in engaging their students, JS = overall job satisfaction. Statistical *p*-value: **p* < .05(2-tailed); ***p* < .01(2-tailed).

Table 29.4 illustrates that the correlation between years of experience and the three TSE factors for the participants who were included in the experience grouping. The table shows a positive coefficient for the variable experience with the TSE factors in general. There was a significant positive relationship between experience and teachers' choice of instructional strategies, $r = .545$, $n = 18$, $p = .019$ and a significant positive relationship between experience and teachers' abilities to engage students, $r = .510$, $n = 18$, $p = .031$. Although a relationship existed between experience and teachers' capability to control their classes, it was not significant, $r = .402$, $n = 18$, $p = .098$.

Similar to Table 28.4, Table 29.4 suggested that the strongest relationships existed between the three teacher efficacy factors themselves. The teachers' choice of the instructional strategies (TSEIS) has the strongest positive relationship with teachers' abilities to engage their students

(TSESE), $r = .913$, $n = 18$, $p = .000$. The teachers' choice of the instructional strategies (TSEIS) has a strong positive relationship with teachers' classroom management (TSECM) skills, $r = .930$, $n = 18$, $p = .000$. The teachers' classroom management skills (TSECM) has a strong positive correlation with their abilities to engage their students well (TSESE), $r = .895$, $n = 18$, $p = .000$. The three TSE factors have a highly significant ($p = 0.000$) positive correlation, $r = .860$ for TSEIS, $r = .872$ for TSECM and $r = .843$ for TSESE with job satisfaction.

Table 29.4 Correlation coefficient: years of experience, teacher efficacy & job satisfaction ($n=18$)

Variables	1	2	3	4	5
1. Three experience groups	-				
2. TSEIS	.545*	-			
3. TSECM	.402	.930**	-		
4. TSESE	.510*	.913**	.895**	-	
5. JS	.489*	.860**	.872**	.843**	-
M	2.00	8.54	8.69	8.23	8.69
SD	.84	.93	1.03	1.06	1.19

Three experience groups= novice group, average group & highest experience group.
 Statistical p -value: * $p < .05$ (2-tailed); ** $p < .01$ (2-tailed).

4.6 Research Question 4

4. To what extent do teachers' confidence in engaging their students relate to their students' view of this confidence?

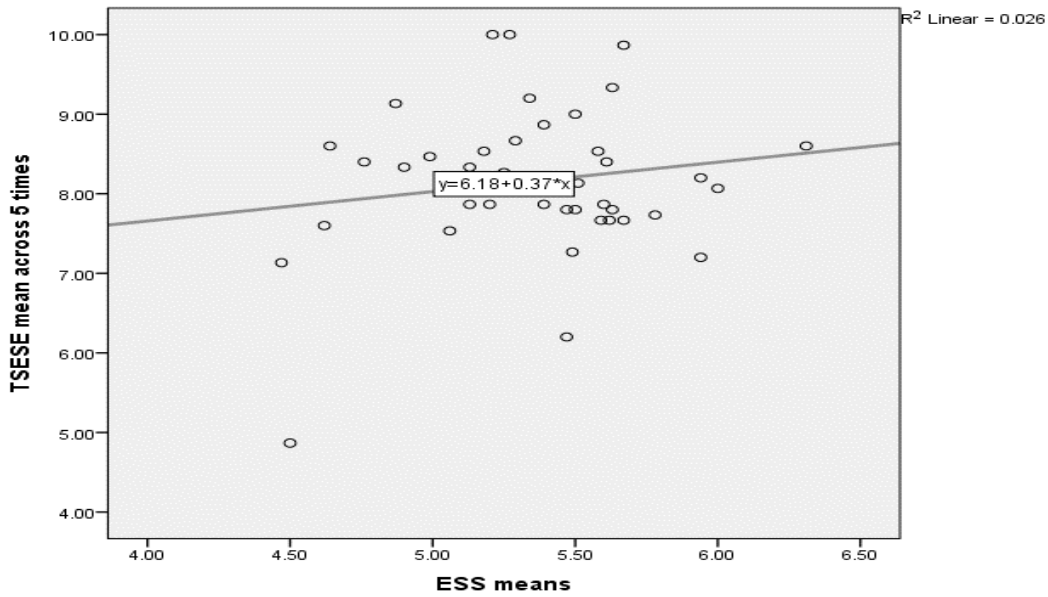
The relationship between teacher's capability belief in engaging their students (TSESE) and their students' view of this engagement (ESS) was investigated using Pearson product-moment correlation coefficient. Table 29.4 shows that the relationship between TSESE and ESS was relatively low and statistically insignificant, $r = .161$, $n = 41$, $p = .313$. Thus, disconfirming *Hypothesis 4a* (teachers with high efficacy beliefs had the ability to increase their student engagement level). Figure 17.4 illustrates that there can be a linear relationship existing between the teacher's sense of efficacy in engaging their students and their students' view of this engagement.

Table 30.4 Correlation coefficient: Teacher's efficacy in engaging students & their group's view of this capability (n= 41 groups)

Variables	1	2
1. TSESE	-	
2. ESS	.161	-
M	8.16	5.40
SD	.94	.41

Note. TSESE = teacher sense of efficacy in engaging their students, ESS = teacher's group evaluation of its teacher's capability in engaging them.

Figure 17.4 Relationship between Teacher's efficacy in engaging students sub-scale & engaged student scale



4.7 Research Question 5

5. Is the Engaged Student Scale (ESS) valid and reliable in the Omani context?

There were initially a total of N=1044 participating students. However, the final number of participants included in this analyses was n=838, 474 males and 364 females, due to various reasons including the exclusion of: (1) participants with no matching teachers to compare with, (2) the groups with less than 10 students, and (3) the participants with wrong teacher unique identifier. All participants were first year students at different foundation program levels in the English Language Centre (ELC) whose teachers took part in three or more online teacher diary surveys.

The engaged student scale (ESS) initial pool of 11 items was created to develop an instrument that assesses student's engagement level by asking students to rate their level of

involvement with particular teachers. These 11 items were generated from a pre-existing validated Engaged Teacher Scale (ETS) by Klassen, Yerdelen and Durksen (2013). The 16-item original teacher scale reported cognitive engagement $\alpha = .85$, emotional engagement = .89, social engagement with students = .84 and social engagement with colleagues = .85. All 11 ESS items used in the present study were answered on a Likert-type scale ranging from 0 (“Never”) to 6 (“Always”). Table 30.4 provide the means and standard deviation of the 11 items.

I created the ESS to evaluate the student engagement level using the Engaged Teacher Scale (ETS) after certain modifications, as previously discussed in the methodology chapter. Additionally, it was used for the first time as a student scale. The initial step was to check the reliability of the scale using Cronbach’s Alpha during the pilot study phase which showed that it had good internal consistency with Cronbach’s alpha coefficient reported $\alpha = .74$. The engaged student scale in the main study had good internal consistency, $\alpha = .865$ which is higher than $\alpha = .7$, an acceptable alpha score (DeVellis, 2003; DeVon, Block, Moyle-Wright, Ernst, Hayden, Lazzara, Savoy, & Kostas-Polston, 2007; Field, 2006; Field, 2009). The ESS had Cronbach alpha coefficients of $\alpha = .85$ for the emotional engagement (EE), $\alpha = .54$ for the social engagement (SE) and $\alpha = .79$ for the cognitive engagement (CE), respectively. Thus, these findings confirmed *Hypothesis 5a* (ESS would be valid and reliable in the Omani context).

All items appeared to be worthy of retention as all values in the Alpha ‘If Item is Deleted’ column were around the overall value (Field, 2006). The overall alpha was $\alpha = .87$ and all values in this column were around this value. The worst was the social engagement item 9 (*At college, I care about the problems of my peers.*) and deleting it would increase the alpha from $\alpha = .865$ to $\alpha = .870$. However, removal of this item wouldn’t increase alpha dramatically. Thus, keeping it doesn’t put the scale at risk. The Corrected Item-Total Correlation ranged between $.320$ and $.708$. As a matter

of fact, the “corrected item-total correlation” and “Cronbach’s alpha if item deleted” columns suggested that deleting the social engagement (SE) items (ESS item.1, ESS item.6 & ESS item.9) could raise the reliability even further. To test this, the three social engagement items were tentatively deleted and the engaged student scale was found to be highly reliable (8 items; $\alpha = .90$). However, all items were retained in this study as the scale proved to be reliable ($\alpha = .87$).

The student data set was examined to investigate correlations between the items and the three engagement sub-factors using Pearson’s product-moment correlation coefficient. With a large sample size (200+) as the case in this study ($n=838$), the parametric procedures can be used in a non-normally distributed data (Asghar & Saleh, 2012) as it should not cause major problems (Pallant, 2013). Table 30.4 presents the correlation for the ESS eleven items which shows a significant and positive correlations between most of the items. The highest correlations were among the emotional engagement (EE) items.

Table 31.4 Engaged Student Scale Correlations between 11-items (n=838)

Scale items	1	2	3	4	5	6	7	8	9	10
1.ESS1SE	-									
2.ESS2EE	.274**	-								
3.ESS3CE	.186**	.513**	-							
4.ESS4EE	.240**	.602**	.453**	-						
5.ESS5CE	.210**	.423**	.364**	.536**	-					
6.ESS6SE	.299**	.227**	.281**	.210**	.252**	-				
7.ESS7EE	.169**	.588**	.480**	.549**	.445**	.313**	-			
8.ESS8CE	.235**	.447**	.545**	.475**	.420**	.332**	.606**	-		
9.ESS9SE	.250**	.176**	.140**	.208**	.170**	.303**	.205**	.244**	-	
10.ESS10EE	.178**	.530**	.428**	.576**	.381**	.241**	.682**	.537**	.278**	-
11.ESS11CE	.212**	.487**	.473**	.531**	.465**	.313**	.578**	.635**	.216**	.598**

** . Correlation is significant at the 0.01 level (2-tailed), *p-value*= 0.00.

Table 31.4 showed the correlations between the three engagement sub-factors using Pearson's product-moment correlation coefficient. It presented a strong correlations between the three factors; 3-item social engagement factor (SE), 4-item cognitive engagement factor (CM), and 4-item emotional engagement factor (EE). Table 32.4 suggested that the social engagement factor had a significant positive correlation with the cognitive engagement factor, $r = .405$, $n = 838$, $p = .000$, and with the emotional engagement factor, $r = .375$, $n = 838$, $p = .000$. The strongest positive correlation existed between cognitive engagement and emotional engagement, $r = .760$, $n = 838$, $p = .000$. Table 32.4 also presents the scale means and standard deviations.

Table 32.4 Correlation coefficient: Engaged Students Scale factors (n = 838)

ESS Factors	1	2	3
1. ESSSE	-		
2. ESSCE	.405**	-	
3. ESSEE	.375**	.760**	-
M	5.27	5.56	5.26
SD	1.26	1.21	1.43

Note. ESSSE = social engagement factor in the engaged student scale, ESSCM = cognitive engagement factor in the engaged student scale, ESSEE = emotional engagement factor in the engaged student scale. **Statistical p . value = 0.01 (2-tailed).

4.8 Summary of Chapter

This chapter reported the statistical analyses of the five online teacher diaries and the student engagement scale. It was designed to report these analyses based on five research questions.

From the teacher online diary surveys, it was indicated that a period of three months was not sufficient to observe a significant change in teachers' efficacy and satisfaction beliefs. The data, however, showed a slight increase in both that peaked at timepoint 3 in terms job satisfaction and that continued to develop in terms of self-efficacy beliefs, which peaked at the end of the three-month period. Experience seemed to have an insignificant effect on teachers' beliefs and no difference was found between the three experience group teachers in terms of teacher self-efficacy beliefs in engaging and managing students. However, experience had an impact on teachers' beliefs in terms of selecting strategies to instruct students.

Relationships between this study's variables were also investigated in this chapter. Teachers' self-efficacy and job satisfaction correlated significantly with a good linear relationship indicating that teachers with high self-efficacy were satisfied with their job. Neither teacher efficacy nor satisfaction beliefs correlated with teacher gender. In fact, teachers' gender had a negative correlation with all demographic characteristics. Age, however, was found to be significantly related to the teachers' satisfaction level but less related to their efficacy level. Teaching experience correlated highly with teacher self-efficacy and satisfaction.

In terms of the validity of the engaged student scale, it was found that it had a good internal consistency ($\alpha=.87$) and that all items had a significant correlation between them. The three sub-factors correlated positively with each other with the strongest correlation existing between the emotional and cognitive sub-factors. The next chapter presents the qualitative data results.

5 Qualitative Results

This chapter features a qualitative investigation. It addresses research question.6 “*What factors influenced teachers’ self-efficacy and job satisfaction beliefs during the semester?*” This question investigates the factors affecting the English language teachers’ self-efficacy and job satisfaction during the second semester (2015/2016) at the Higher College of Technology in Oman. Data were obtained from 55 participants, who took part in the quantitative component of the study, by asking them two open-ended questions at five timepoints and a few other open-ended questions at a sixth timepoint at the end of the semester. Each participant used a unique identifier to identify themselves throughout the six timepoints such as (IM17). For the purpose of anonymity, these identifiers are maintained for uniformity throughout the thesis (i.e. in the quantitative and qualitative analyses). In this chapter, the unique identifiers are followed by a number that indicates the years of teaching experience in order to distinguish the novice and experienced participants such as IM17 (2 years of experience).

The two open-ended questions were placed at the end of the teacher’s efficacy scale and the job satisfaction scale. The questions were, “*What experiences in the past two weeks have influenced your confidence in your ability to teach your class well?*” and “*What experiences in the past two weeks have influenced your job satisfaction?*” The richness of the obtained data allowed for an intensive, in-depth look at the factors affecting teachers’ efficacy and satisfaction. Keeping the qualitative research questions in mind throughout the process of coding, recoding, categorizing, assigning themes and finally writing up, was “the best defence against overload” (Miles & Huberman, 1994). This process aided in drawing a much clearer picture of the themes related to research question 6. Furthermore, the coding process took inductive and deductive forms as recommended by Miles and Huberman (1994) and Miles et al. (2014). I always consulted the list of codes/themes that were created during the data collection phase (that is after the participants had

entered their responses for every single timepoint). These codes were formed by taking notes of what was frequently highlighted in the participants' responses. The findings of the quantitative component of this study and the findings of other research studies were also used to give power to the analysis (Miles and Huberman, 1994).

This chapter is divided into two sections: (1) factors influencing teachers' self-efficacy (TSE) and (2) factors influencing job satisfaction (JS). Each section includes a number of themes that are highlighted in bold. Finally, the chapter concludes with a summary of the key findings. Appendix M1 and M2 present these themes and their frequencies in the data.

5.1 Research question 6

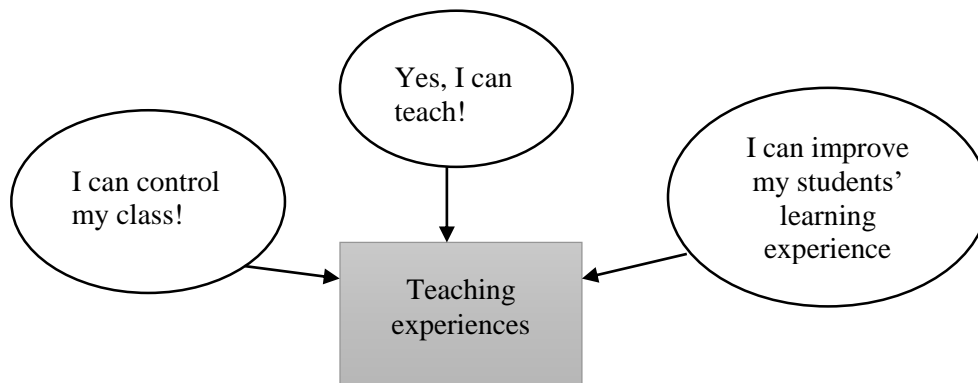
What factors influenced teachers' self-efficacy and job satisfaction beliefs during the semester?

5.2 Factors influencing teacher self-efficacy

5.2.1 Theme 1: The influence of teaching experiences on teachers' self-efficacy beliefs

This theme is very prominent among teachers as expected, as almost all teachers talked about what they do to make their class successful and worthwhile. They said that they manage, they instruct, and they engage their students. Thus, the theme is further divided into three sub-themes which are the three factors that represent the teaching tasks (Tschannen-Moran & Woolfolk Hoy, 2001) as shown in Figure 18.5.

Figure 18.5 Theme 1: Teaching experience



I can control my class. Novice teachers hardly talked about class control or management. One novice teacher, IM17 (2 years of experience), explicitly stated that she can manage her class well but she only expressed that at the very end of the semester, that is at timepoint 5, after spending 10 weeks with the class and getting to know students well. She said, “I understand each and every student’s level and what they need. In terms of behaviour and classroom management I can manage the class much easier”.

Teachers with more than three years of experience referred specifically to the kind of management problems and challenges they faced. AS16BR (4 years of experience) implicitly talked about having issues with students’ attendance and arrival time for class. She admitted that a change of strategy and showing a kind of strictness was the remedy, “I used to give them 5 minutes before I take the attendance. Now, on the clock and they understand they must be on time”. AR18 (16 years of experience) followed a slightly similar approach. She decided that criticizing students’ behaviour in a *constructive* way might help sort things out, “The effect of constructive criticism on the students' level of motivation worked like a miracle”. Later, she admitted using another constructive method of solving discipline problems which was the power of knowledge, “The more knowledge they [i.e. students] acquire, the easier it is to teach them, and control their discipline”. In a way, she

resolved to straightening behaviour problems in class by keeping students busy trying to learn and acquire knowledge. PA (20 years of experience) echoed AR18's class control strategy. She believed that busy learners are more manageable, "students were very cooperative... [and] participated in class discussions..., all classes are easy to manage in [terms] of behaviour". She hoped that this classroom environment, "which is very conducive in teaching and learning process will be maintained".

Being strict was not considered the only option. Experience has taught teachers that it is sometimes necessary to maintain a relaxed atmosphere in class to feel at ease, for both teacher's and students' sake. HI17 (10 years of experience) realized that, "Having a little sense of humour and short time games in between classes [is required] to create a good atmosphere". Her comment indicates that students do enjoy having an accommodating teacher who entertains during learning.

Sometimes teachers need this kind of mood lightening tricks to keep the class going even when discipline problems do not exist. NE14's (14 years of experience) comment suggests that there does not have to be badly behaved students in the class to experience a problem, sometimes teachers find it hard to teach when students have a low level of enthusiasm. She stated: "Class management isn't much of a problem. Motivating them to complete the writing tasks is a bit challenging. But [she was] able to make them sit through it". Thus, it can be inferred here that a teacher, with high efficacy beliefs, does not only make sure that students are motivated to exert the required effort, but also ensures it happens through rules and regulations. As one participant said, "I encouraged the students to do their work in the class. My students always follow the rules and behave well. No chance is given to them to misbehave in the class" (CE05, 34 years of experience). This statement suggests setting the scene with students right from the very beginning by introducing in-class rules and policies to follow is the key. Many experienced teachers' comments reflected this. AV05 (35 years of experience) asserted that "Compliance to the rules set in the beginning" was

helpful. MO017 (26 years of experience) maintained that: “I gave the regulations from the first day. What they should do and should not do. I follow the college policy which is clear for all”. ANCH’s comment that her “students are following the set rules thoroughly” indicates that being clear with students from the beginning is essential to get the desired outcomes. This behaviour on part of the teacher results in “trust and care” (ANCH, 21 years of experience) and the ability to address “the problematic cases that came up with the least efforts and ... less time” (BA06, 21 years of experience).

One essential component of the class management was to give students some kind of control over the class. LA17 (17 years of experience) perceived that a well behaved and easy to manage class was the one that was controlled by students. She exemplified, “Running a democratic class, e.g. we vote on how much homework is to be done, peer-tutors for absentees, and working on students' needs, e.g. timetable, or boy-girl discomfort”.

Based on the above evidence, it can be said that high self-efficacy teachers know what class control strategies to use and when to use them. Experienced teachers had a higher level of self-efficacy than novices did, as the discussion above showed.

Yes, I can teach! From the data emerged the importance of the different kinds of instructional strategies employed by teachers in raising or lowering teacher efficacy beliefs. Each teacher had their own unique approach of using effective instructional strategies to enhance students’ learning. Novice teachers, for example, relied more on teaching through modern technology. MU21 (3 years of experience) linked her students’ enthusiasm in class with using technology, mainly mobile phones. Although it is not approved to use mobile phones in the classrooms as a college policy, MU21 was ready to experiment with any techniques that would maximize her students’ learning, as she said “I keep trying to use technology in class. Students love their phones so in the past weeks I used a website called kahoot. It helped teaching students through

their mistakes and errors. By the end of the game the number of mistakes were reduced to zero!”

The comment signals how enthusiastic she was herself about using technology but at the same time she justified herself by saying that she found it useful for students to learn from their own mistakes and through technology. For AH17 (2 years of experience), some students find writing essays intimidating and teaching them to write essays using a new concept, such as the life cycle of Tornadoes which is new to the Omani setting, can make it even harder. So, he taught it through showing an educational video clip of the natural phenomenon. The effect was, he narrated, “Students watched the video with interest and in fact, it supplemented them to follow the text and complete the tasks with much ease”.

These comments suggest that the good selection and use of tools can maintain students’ attention provided proper planning took place to ensure its suitability to students’ level and needs. CH30 (18 years of experience) explained how considering her students’ needs ensured success of the activities. She said she needed to make sure that the activities were connected to real life situations and brought forward a socially desired human value, that is responsibility,

Paying attention to individual's strengths and weaknesses and encouraging them to participate in the classroom activities found to be helpful. In addition, emphasizing on the relations between the teaching subjects and real life situations, as well as encouraging the sense of responsibility towards individuals' actions and their outcomes (CH30).

Using technology-friendly instructional methods seemed to work for all-levels of students, but not for all teachers. Teachers with more than 30 years of experience preferred the traditional ways of teaching and found them still working. Among this group of teachers was CO08 (40 years of experience) who talked about his teaching methods. He did not believe in technology, thus, he announced, “I have relied on 40 years’ teaching experience, plus constantly reminding them that at this level students do fail and that it’s their duty to themselves and their families to make sure that

they do not fail”. He concluded “[Students] appear to be enjoying it... Students keep listening”. CO08’s comment indicates that he valued his mastery experience more than anything else which he relied on, completely. According to him, his approach proved to be still working as his students continued to show interest and interacted in the class. This suggests that teacher’s mastery experience has an impact on how teachers’ perceived their competence. In this data, experienced teachers with more than seven years of teaching experience perceived their competence depending on their previous experience in teaching the subject, the academic level, or the training they had. ANCH (21 years of experience) believed that her competence came from the fact that she had a good training, which had prepared her to teach. In fact, ANCH’s statement summarized all the mastery sources covered by teachers in this study. She listed them, “Teaching students using TESOL methods, making use of previous experiences of teaching and learning from students, clear idea about the subject matter and teaching [and a] well planned lesson plan”.

Some teachers also argued that teaching the same level of students is important. The mastery of knowledge that teachers gained because of teaching the same level gives them a sense of efficacy that is solidified by repeated experience. SI29 (2 years of experience) described how her, “previous experience in teaching level one last semester and the positive influence of the teaching materials on students' progress in language learning” boasted her efficacy beliefs in her capabilities. Her statement pointed out two essential factors that affected her efficacy: teaching the same level that she previously taught as well as the suitability of the teaching materials. Although she only had a total of two years of teaching experience, she relied on her past experiences of teaching this level which strengthened her belief in her abilities. JU23 (10 years of experience) agreed that teaching at the same level positively affected her, which was empowered by an increase in her students’ abilities. She stated, “I like teaching Level One ... you can see an increase in ability over a semester in a more pronounced way than other levels”. With SI29 having two years of experience and JU23 having 10 years of experience, it can be inferred that gaining a strong belief through teaching the

same level a number of times, positively influences teachers regardless of their experience in teaching.

Most experienced teachers gave specific details of their instructing methods and linked that to students' response. IM24 (4 years of experience) elaborated, "Because of my teaching techniques such as usage of technology, scaffolding methods, group work and pair works ... etc., I was able to enjoy total concentration of my students in the learning process resulting in students attending to the homework which implies that students are following well what has been taught in the class". Therefore, students' response can give an indication of the effectiveness of the teaching methods. Students' response also helps ascertain the need to adapt a new approach or stick to the current one. VA04 (15 years of experience), for instance, reported, "Initially, some students were not participating in class-room activities, but all students started participating in the activities. I too changed my style and tone".

Many teachers talked about the importance of having a well-planned lesson or delivery plan. One novice teacher, AH17 (2 years of experience), expressed his satisfaction with the well-laid delivery plan that helped him teach and gave him confidence in his capabilities. He believed that it increased the students' participation level and cleared away the confusion that students had over some early-taught points. As he said, "The first and foremost element is the well laid down delivery plan. This helped me in revising what has been learnt in the previous course which led the students to participate well and at the same time helped some slow learners to get clarified their doubts". Perhaps due to the teacher's limited experience, a well-laid delivery was crucial in benefiting students' learning and came as a priority to support his confidence in the class. TU12 (16 years of experience) explicitly announced this, less frequently talked about, aim, "Different activities and methods involved were the main target for [my] self-confidence". JO712 (10 years of experience) agreed, "Group activities, interactive games, think, pair and share activities have been

very successful ... Students are motivated and excited to take part. [This] usually boosts my ability to do something more interesting and make teaching a fruitful experience". These comments indicate that students' response demonstrates the success or otherwise of the teaching strategies and it can be considered a way to move forward or correct mistakes,

There was a positive response from my students due to my teaching strategies. For example, while teaching reports I explain the question by breaking it into different logical parts. This helped them understand what exactly goes into each section of the essay (IM24, 4 years of experience).

Additionally, it can be noted here that getting a positive response from students, as previously discussed, was effective in terms of boosting teachers' self-efficacy, which encouraged teachers to put in extra efforts. KH03 (3 years of experience) mentioned that he was ready to put more effort for his students' sake, "Students appreciating what I do for them ... [for they were] learning and benefiting from me". Teaching is a stressful job as it is and receiving a word of appreciation is very much desired and appreciated by teachers. GA29 (28 years of experience) reported with enthusiasm that she was very popular among her old students who encouraged their friends to register in her course this semester. As she stated,

I got a news from my old students that most of my students in my classes now are their referrals. This has been an experience also for the past semesters. If they referred this teacher to their friends and classmates, they must have been happy or feel they have learned from this teacher. Or so, I guess.

Clearly her statement indicates the impact of being pointed to as an influential teacher who made a difference in her students' lives and she enjoyed that feeling for quite some time and it kept her going.

I can improve my students' learning experience. One of the teachers' main worries is to keep the class active. Student engagement does not necessarily mean keeping students busy doing work. Sometimes students look physically involved writing or doing a collective task but their minds are wandering outside the class. The teachers, in the current study, reported and commented on the level of student engagement in their classes and provided strategies to ensure students are actually learning and evidence of their learning.

Novice teachers believed that using a method that relates to students' way of thinking (e.g. technology) has proved to work. AH17 (2 years of experience) reported that, "Using of technology in the classrooms and enhanced levels of concentration of the students due to the Mid Semester Examinations being round the corner". This comment indicates that students were ready to exert more effort knowing that exams were approaching and to maximize that sense of concentration, the teacher used technology.

Experienced teachers suggested that encouraging students by reminding them of what they are actually there for could sometimes be effective. NE14 (14 years of experience) realized that student have their own objectives that might or might not agree with hers'. Students sometimes attend and work in class to pass tests or avoid absence warnings, which are reported to parents by the Student Affairs office as college policy. NE14 described her students' goals,

At this stage, the students are almost comfortable with the system that we follow. In my opinion, the students' objective is attendance and need to pass the exam. So they are kind of relaxed with this objective. To me, I have identified the weak students. I am able to hold my confidence to teach and handle the class well.

As students are clear in their minds of what they want from being in class, ANCH's comment suggests that students' understanding of their goals was the key element that involved students in class. She explained, "They understand their goals and how to achieve them. Students' Quiz & MSE marks and their attendance for both Quizzes and MSE made me realize that they are moving towards their goals".

Experienced teachers reported their observations of what could involve students more and how to increase their engagement. IM24 (4 years of experience) understood that her students worked harder when they were at the centre of the whole process. She explained, "Making the class more student-centred, by making them work in groups and pairs, makes them well involved in the lesson". Three weeks later, she reported, "There has been a steady increase in the number of active participants in class". One important aspect of involving students reported by CH30 (18 years of experience) was that students knew what was expected of them, "providing student-oriented learning activities, making sure that students understand the instructions and what they are expected to do or produce". Therefore, creating activities that are targeted to enhance students' independent learning accompanied by well-laid instructions of the teacher's expectation, make meeting the desired outcomes possible.

Having engaged students or working towards involving students could result in outstanding effects on both teachers and students. Novice teachers highlighted the tangible results which were in the form of actual in-class achievements. For MU21, the "students are showing good understanding of the subject. They played a game that tests their grammar and they scored high". She also assessed the students and "the result showed a good improvement in the performance of many weak students". Generally speaking, novice teachers' comments of their students' involvement were all about the students' results in the quizzes and tests. For example, SI29 (2 years of experience)

shared: “Students' are able to understand the instructions of classroom activities for themselves and their obvious progress in reading and writing [and] good scores in mid semester exam”.

Experienced teachers observed a higher level of the effect of involving their students. They reported that their students have demonstrated a sense of responsibility for their learning and a growth in their personalities. LA17 (17 years of experience) commented that her students “are learning to think for themselves. They are comfortable to make requests, even if it is just two out of the entire class”. The impact of following his instructions made even the low performing students show willingness to learn, as SA20 (23 years of experience) narrated, “My less abled learners are showing interest in the classroom procedure. In spite of errors, they try to complete their essay within the stipulated time”- a situation that led the teacher to believe that he “was successful” in teaching them.

EN121 (15 years of experience) observed that the students were really growing, in terms of knowledge and attitude. Students showed efforts in their “written work in and outside their classroom, classroom assessments [and an] improvement in their knowledge and their confidence level”. Two weeks later, EN121 reported that she witnessed a further positive change in the “students’ motivation level and growing self-confidence”. These comments indicate that not only students attain knowledge but also believe highly in their learning abilities (i.e. self-efficacy).

One experienced teacher with more than 30 years of experience highlighted that when students become responsible for their learning, the teacher’s effort lessens in one aspect, which is motivating students to continue to be responsible and not lose interest. ME21 (36 years of experience) believed that she did not have to motivate students once their sense of responsibility was established and her teaching experience became rather *smooth*: “Now I do not have to motivate them on their responsibilities, which has resulted in smooth teaching/learning”. AR33 (10 years of experience) reflected that he “was [positively] influenced by the active responses of students in the

class”. MM07 reflected that by allowing a more relaxed atmosphere in the class, the students’ interaction increased and students became creative in making their own class activities. He elaborated, “participation of students in most activities. Students are asking for more class activities. They added more activities of their own and competitions as well”. This indicates that the more relaxed and confident the teacher is in his abilities, the more engaged and confident students become.

At the same level of importance, students’ engagement influenced teachers in this context. Only experienced teachers expressed this effect. In terms of how they felt when teaching, their comments were extremely positive. IM18 (31 years of experience), for example, attributed the students’ on-going engagement, that was illustrated through their assignments, to his hard work and efforts. He explained, “Most students seem to be on-track with their assignments, so this is a reflection of the “good job” I am doing with them”. This is also reflected in CE05’s statement who felt “happy and confident enough to teach in any situation” and GI (28 years of experience) who felt “lucky and blessed” because of her students’ interest in learning. It can be noted here that the encouraging attitude of teachers can actually retain students in the class. These comments suggested that a high level of student engagement was significantly associated with a higher level of teacher self-efficacy.

Although students were perceived as a positive factor that boosted the teachers’ self-efficacy as discussed above, they also contributed to affecting teachers’ efficacy beliefs negatively. Experienced teachers, chiefly with 19 years of experience or more, demonstrated a kind of low self-efficacy because of students. The main source of low efficacy came from the low abilities and learning habits. Teachers complained that their students’ level of comprehension was low, like AN26 (23 years of experience) who complained that “students’ level of understanding [is low which is] due to lack of [prior] knowledge about the topic [they] discussed [in the lesson]”. WN26

(23 years of experience) was frustrated about “[the] weakness of some students though many points are repeated again and again”. AN26 and WN26 attributed the students’ weakness to lack of knowledge and low abilities. However, the fact that these students were language learners who were there to acquire a new language should explain why they were weak. It can be also said that these teachers have reached a point of discontent with their job-related aspects which were typical of their job (i.e. teaching weak learners). One evidence that led to this conclusion was WN26’s repeated complaints, throughout the semester, about students’ learning habits, “Having to repeat some points without getting students’ focus or attention, so they ask about what I was talking about again and again”. She reported no efforts from her side to rectify this issue. IM18 (31 years of experience) elaborately narrated an under-performing student’s situation and how this student had not learned a thing in the writing classes despite the fact that he attended all the classes. IM18 concluded “Even though his was the only case in class, I still consider it my personal failure to recognize and address in time a serious problem with this particular student”. IM18’s perception of his failure to push this particular student to succeed reflects his understanding of job requirements and that he was there to give but failed to make an impact.

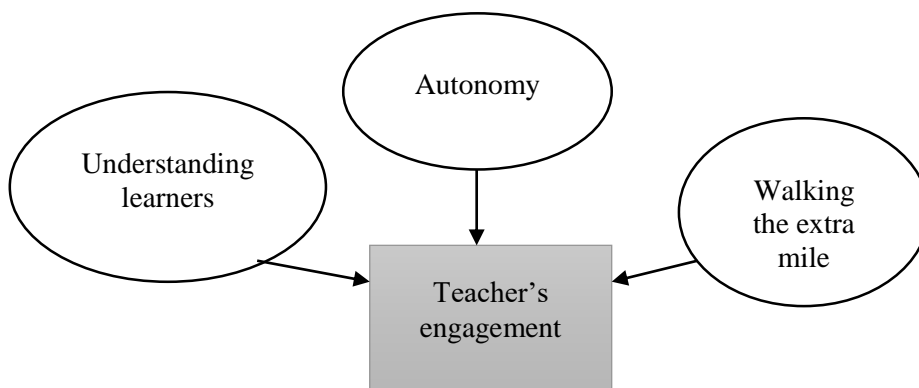
The above comment indicates the massive negative effect of having under-performing students on the teachers’ perception of their own capabilities. Teachers, like IM18 who felt incapable and WN26 who showed signs of frustration when students behaved indifferently and exhibited disinterest, are some examples of such an impact. These teachers lost enthusiasm for their profession and all they could see was the negative aspects of their job. When WN26 had nothing to say about the low level of her students, she turned to criticising their behaviour, “only having some noisy students”. Lack of students’ motivation was also highlighted, but only by one experienced teacher. IB14 (38 years of experience) described his students, “Students’ results in exams were not satisfactory. They became less motivated... Students come late to classes. And sometimes they

don't pay attention to what's being discussed". IB14's statements throughout the semester were negative and mainly related to students' unpunctuality or absence and lack of motivation.

5.2.2 Theme 2: The impact of teachers' engagement on their self-efficacy beliefs.

Teachers' responses communicated some interesting views about their beliefs in themselves and the impact of that on them. These beliefs were predominantly positive and were expressed through teachers' effort in understanding students, being autonomous and striving to walk the extra mile with learners. When encompassed together, they reveal that teachers' efficacy beliefs affect their engagement level (see Figure 19.5).

Figure 19.5 Theme 2: Impact of teacher engagement on teacher efficacy



Understanding learners (needs) Teachers try to understand their learners through finding out their needs and working on how to fulfil those needs. The data demonstrated this equally among all teachers regardless of the length of their teaching experience. IM17 (2 years of experience), a novice teacher, reported four times that she was getting to know the level of her students and in timepoint four, she reflected, “I understand my student more. I know now the level of each and every student with their weaknesses”, which suggested that this is a continuous process that developed throughout the whole semester. KHUL (6 years of experience), an experienced teacher, commented that she assessed her “students’ level of language by asking them some questions” and,

consequently, managed to build up a good understanding of her students' way of learning. She said, "I don't have to explain more than once. They get me because I know the best explanation that suits their level". MA21 (4 years of experience) echoed KHUL's comments. She realized that the more she knew her students, the better she dealt with them especially those who needed more attention. She said, "Discovering more about my students' levels, individual needs and attitudes helped me to get a clearer picture of how to deal with different situations in my classroom". Towards the end of the semester, she also reflected, "By this time, I almost know everything about individual differences in the classroom which really helped me to pay more attention to those whose level is lower than the others".

ANCH's (21 years of experience) statement suggested that sometimes knowing the students' needs could simply mean to put yourself in their shoes. First she tried to understand their "level and exposure" then she had to adjust according to their level, "Finding myself as a student of second language and getting into their basic levels helped a lot". Experienced teachers also reflected that knowing students' needs could start by knowing your own strengths first. The beginning of the semester is a golden opportunity to do this. GA29 (28 years of experience) elaborated:

In the first two weeks of the semester I can feel "sizing up" of me and my ability as a teacher. After the two weeks, I can feel their being comfortable and more relaxed countenance while learning-they openly display their need for help in the writing exercise.

As evident from her comment, knowing students is not enough to be able to address their needs. In fact, teachers believe in assessing their own capabilities to know if they are capable of meeting their learners' needs. Teachers with high efficacy beliefs perceived themselves as capable of carrying out this task. SA28 (26years of experience) expressed this, "I feel my students have understood me better than the first two weeks and vice versa. So, as a teacher I am able to distinguish the abilities of the students individually. I understand now what they like and which method is successful". The

comment indicates that teachers who find themselves engaged in finding and meeting students' needs perceive themselves as capable, too.

Autonomy There was evidence in this study that high self-efficacy teachers were autonomous. NA31 (2years of experience) reported, "being head of delivery plan [...] allows me good time to be more creative in the classroom". Thus, creativity was linked to being given a new responsibility at work. A new task at workplace renewed the way she viewed things and enhanced her level of creativity in the class, especially when the new responsibility was some sort of a promotion. Sometimes, the class itself drives the teachers to be creative as TU12 (16years of experience) reported. She dealt with four sections, which were entirely different in terms of "the level of students in mastering the language". Due to the individuality of each section, she adjusted her teaching methods and plans. She commented:

In every type of classroom, I have to adjust to different methods so that the lesson could be more effective. So far, the influence has been [on] the mixed-ability classes, where you teach the same program with different approaches [and this] involves a variety of assignments and strategies as well as [an] individual approach to [individual] students.

Additionally, the individuality of the classes called for creativity and improvisation regardless of the challenge of having a mixed abilities class. As ME21 expressed,

Dealing with mixed ability is the challenge this term. This particular group has quite a few repeaters and a very few high achievers. The rest are just average, and dealing with this is what motivates to be more creative and I am forced to bring about improvised plans to the class.

Walking the extra mile Along with creativity and autonomy, teachers of this study realized that sometimes they had no options but to walk the extra mile with students because in-class

teaching was not always sufficient. None of the novice teachers reported any evidence of this and, thus, it can be confirmed that this case was only observed by experienced teachers. Their comments suggested that teaching and learning have no boundaries. They take place everywhere anytime. The teaching does not have to be a tip on how to remember a word spelling or its pronunciation, but it can be a piece of advice or a word of encouragement. KHUL (6years of experience) admitted that quizzes assisted her in knowing the level of students and helped indicate who needed further assistance in the form of an advice. She elaborated:

The pop quizzes helped me to know who is studying and who is not. Thus, I encouraged those who are not studying to revise everything given in the classroom. And I keep reminding them that the exam is next week.

KHUL's comment reveals that it was her job to keep pushing students not just by giving advice but also by constantly reminding them of what is coming- exams- as some students' main goal was to pass the exams, as shown earlier. Teachers with high self-efficacy realized that if motivating students could make a difference, then perhaps taking further steps could make an even bigger difference. Thus, some were committed to out-of-class motivating techniques, such as counselling. For instance, LA17, described her efforts with students through counselling with individual students, "Having a one-to-one sessions with students during Academic Advising Hour [was] almost every day". The comment suggests that the one-to-one talks take place daily which indicates that they are more than counselling sessions and teachers make the best use of them. They are golden opportunities to identify the needs to be met. SA28 (26years of experience) believed that some of her students were slow and that some were lacking some class etiquettes and these areas needed to be addressed, "I've spoken to the students (who seem to be slow learners) individually and have encouraged them. Every day before I begin I keep talking about classroom etiquette and discipline. I am meeting the irregular students to discuss their absence problems". Her comment

suggests the substantial effect that counselling could have on students and that is why it could cover so many aspects like discipline, etiquette, absence, and student performance.

This discussion links back to the concept of teachers with high self-efficacy. It is established, in self-efficacy research, that reaching out for students is a characteristic of high efficacy teachers who feel responsible for their students' learning not only inside the class but also at the personal level. It can also be argued that the counselling strategies performed by teachers here are a source of self-efficacy. Teachers use the social persuasion source (i.e. counselling) in motivating students, solving their problems (e.g. absence) and guiding them to be good students and citizens (e.g. etiquette and discipline advice).

5.2.3 Theme 3: The impact of relationships on teacher's self-efficacy beliefs

Relations among teachers The theme of relations emerged through the data signalling the crucial impact of dealing and interacting with other members of the learning process. Very little evidence of the relations between teachers was found among participants, across different career stages. Only one novice teacher referred to her relations with other teachers. SI29 (2 years of experience) believed that the "good relationship with the administration and the colleagues" motivated her at the workplace. No elaboration was given of the sort of motivation that interaction among members of staff had on her.

Only one experienced teacher thought that building relations with colleagues was beneficial, personally and professionally. GA29 (28 years of experience) elaborated:

My colleagues are warm and caring aside from the fact that they are very professional in dealing with me. From both men and women colleagues, I have struck a very friendly relationship with them which makes life and work and teaching much fun and easier. The fact that my colleagues and coordinators approach me for anything and ask my

opinion makes me feel confident that I am doing okay with them and with my work and with my students.

Relations with students Having said that, it is evident from the data that teacher-student relationship was highly crucial especially among experienced teachers. The same novice teacher who mentioned the teacher-teacher relation, also reported that a good relationship with students, “[enabled her] to understand their needs and weaknesses, and thus helping me to make much effort on their difficulties and to fulfil their needs”.

Experienced teachers believed that building good relationship with students facilitates learning and teaching experiences. They also believed that this could result in making students active and attentive members of the classroom and, consequently, having a highly engaged class as CE05’s (34 years of experience) comment suggested:

I built a friendly but strong foundation between the students and the teacher in the class and then I started teaching. It worked well and all the students were attentive and focused in doing their class work.

TU12 (16 years of experience) reported that dealing with the same group for a while enhanced teacher’s efficacy, “Perhaps the main factor still remains the length of the teaching process. The longer you deal with the same group the more confident you become”. Teachers with high self-efficacy felt comfortable in their relations with students. EN121 (15 years of experience) asserted more than once that having “positive personal relationship between teacher and students ... created comfort and boosted [their] bonding [and resulted in] students shared their learning difficulties”. The comment indicates that when a good relationship is maintained with students, “trust and care” is created. Discussing and sharing needs became natural.

Experienced teachers, with a high sense of their abilities, praised their own ability to have a good relationship with students. SA20 (23 years of experience) mentioned, “I could establish a good rapport with them [which made them] ... cooperate well and help the less abled students”. LA17 (17 years of experience) described, in detail, how she developed and maintained a good relationship with students and made sure that the same kind of relationship existed among the students.

We communicate openly. Students are not afraid to suggest things and are honest. The problem on my side is I have to be more consistent in consequences. A student might not follow up on writing exits. She/ he doesn't work on the problem. It can be something important as punctuation or a persistent spelling mistake. I let go because the student is imbibing a lot.

Her statement suggested that an open-door policy with students gave the students a comfortable feeling and encouraged them to express their needs. For her, as long as the students were ‘imbibing’ the right knowledge, miniature things like ‘persistent spelling mistake’ should not matter. She managed to create a small community within the class to enhance the students’ learning experience. At the end of the semester, she concluded that this strategy succeeded and students were learning, progressing, and sharing,

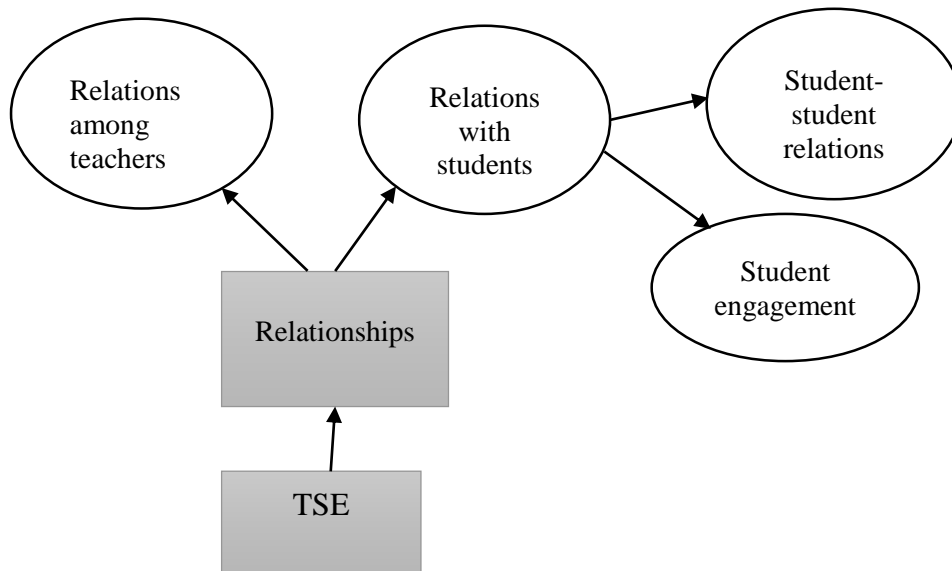
Communication open. I don't sugar- coat. They tell me as is. They are learning to think for themselves. They are comfortable to make requests, even if it is just two out of the entire class. Within themselves, they are a community. Their embarrassment felt by students who did more time to process. Perhaps they don't tell me this as openly as they tell their peers, but the level of trust is there. (LA17, 17 years of experience)

This comment suggested that a teacher with high self-efficacy leads students to practice their citizenship even in class. LA17 was proud of being the leader of her small community that was built

based on 'trust' and good relations with the students. In order to reach this result, she believed in reaching out for learners and developing a bond with them by forming a community within the class.

A rather opposite feeling was conveyed by SH05 (17 years of experience) who experienced a low level of self-efficacy due to the internal policies of de-staffing and the external factors of immigration. This was reflected in her inability to get the 'shy students' out of their shell. Always referring to the problems that were present at work and at the personal level, she let go of tremendous opportunities of lifting the students' efficacy and interest in learning. Nowhere throughout the five timepoints of data collection, did she mention any efforts in encouraging 'shy students' to speak and communicate their worries. In fact, all the comments she provided were loaded with worries that students had nothing to do with but had to suffer the consequences of having a teacher whose mind was pre-occupied with out-of-class issues. Although she continued to work for the same employer, which was evident by being there till the end of the semester and by continuing to take part in the data of this study till the very end, she did not stop complaining about the termination "threats" and the students' shy attitude. Being overwhelmed by negative feeling (e.g. stress), she attributed the hard times, which she was going through, to her profession. Figure 20.5 illustrates these relationships and their impact on teachers'.

Figure 20.5 Theme 3: impact of relations on teacher's efficacy



5.2.4 Summary of teacher efficacy factors

In this section of the qualitative chapter results, the factors that were found to be influencing teachers' self-efficacy were presented. For the teachers, their self-efficacy beliefs were influenced by their teaching experience, their own perception of their engagement level and their perception of the effectiveness of their relationships with students and among themselves.

Instead of shying away from discussing and admitting having class management issues, experienced teachers looked at the bright side of the problem by sharing his/her own strategies for sorting out the problems. Their understanding of what caused the problems has led them to incorporate solutions such as cracking jokes to change the mood of the class, creating in-class rules and following them, making sure students were pre-occupied with work and stay interested. Teachers with high self-efficacy lend themselves to improving students' learning experience by being positive in their attitude towards problematic students. Thus, they adapted constructive methods of dealing with problems rather than just pinpointing and criticizing. Those teachers seemed to understand the importance of encouraging independent learning. The vast majority of

teachers, regardless of how experienced they were, talked about or referred to students taking responsibility for their learning and celebrated that. They enjoyed fostering a student-centred learning experience where students were in charge of their learning experience.

Another important theme emerging from the data was the impact that teachers' engagement could have on students and vice versa. Teachers, who were committed to and involved in their work, found themselves putting more effort into understanding their students' needs and working even harder to fulfil them. They were always found assessing their own abilities to teach and to make an impact, creating lesson plans and using teaching styles that would meet the students' needs and finally, walking the extra mile through advising, encouraging, and counselling.

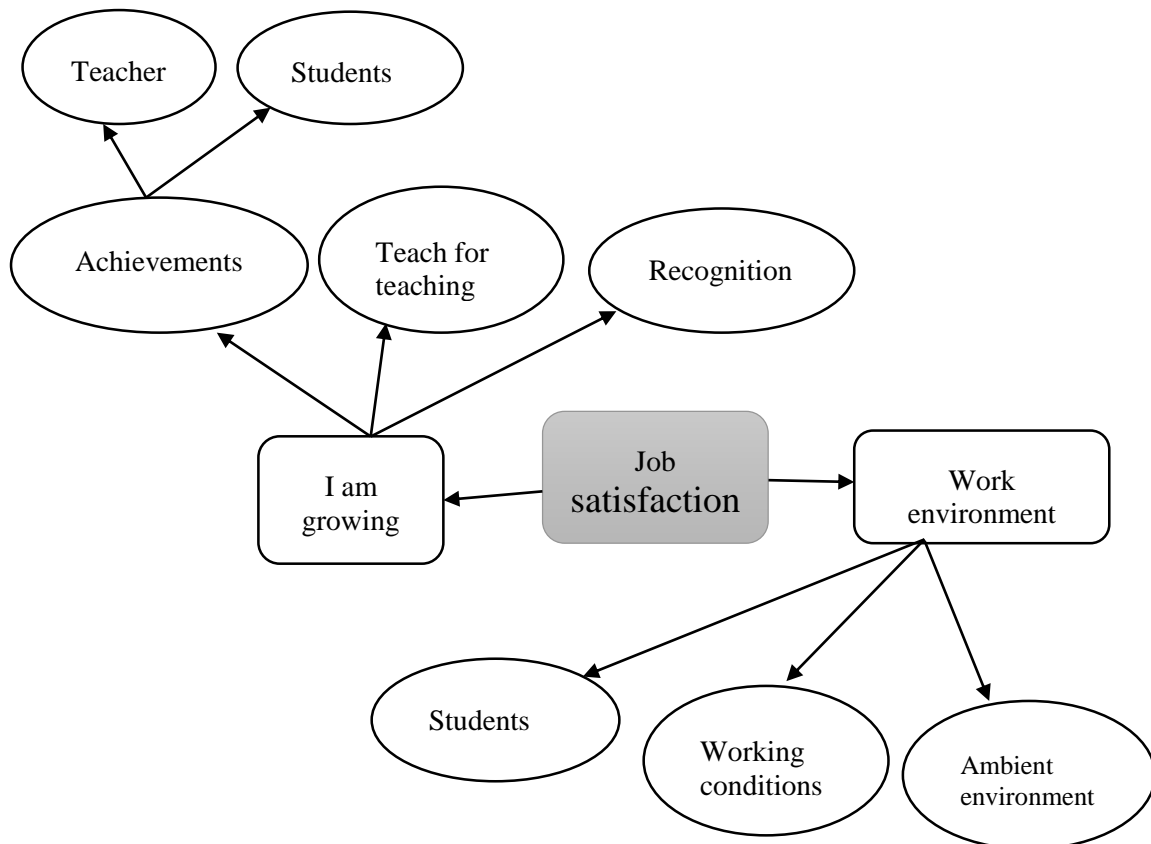
For novice teachers, building job-relations either with students or colleagues did not seem to be a priority. Instead, the focus was more on students' achievements and improvement. Obviously, time and lack of experience did not permit them of such a luxury, as building good relationships. For the experienced teachers, however, building a relationship with students was a priority. They strove to maintain a good bond with students, lend a listening ear through one-to-one counselling sessions, and develop a community within the class. The next section discusses the factors influencing teachers' job satisfaction.

5.3 Factors influencing teacher job satisfaction

Inquiring what affects teachers' job satisfaction, resulted in a number of factors, which are sorted here in two main themes labelled as: *I am growing* and *Work environment*. Figure 21.5 presents the two themes leading to job satisfaction. Each of these has been further categorized for evidence across the five career stages of Huberman's model. It is worth noting that some of the teachers whose comments are discussed, in the factors influencing satisfaction, might also appear in

the factors influencing job dissatisfaction section. This overlapping should not affect the analysis as teachers who exhibited satisfaction with certain factors might have experienced dissatisfaction with others, throughout the semester.

Figure 21.5 Factors influencing job satisfaction



5.3.1 Theme 1: I am growing

Throughout the qualitative data, there was evidence that teachers could feel and see themselves growing personally and professionally and aspiring high standards, through most of what they did in their everyday life as teachers. **I am growing** was a prevalent theme that stood out time and time again, as teachers filled in the open-ended question of what experiences in the past two weeks have influenced their belief in their own ability to teach their classes well. The teachers

referred to their own achievements and that of their students'. Teachers talked about the need to be recognized, the inner sense of fulfilment and how all of these together made them thrive in a job which is mainly characterized as being stressful and demanding.

Teacher achievements AV05 (35 years of experience) consistently expressed her excitement for being able to meet her job's demands through meeting "all deadlines" and completing "all duties assigned". PA (20 years of experience) had more time "to finish some paperwork intended for the week" without pressure. ME21 (36 years of experience) expressed that "I was able to complete my lessons and review" which she set as a "target". She further said, "My target of achieving the[se] goals has been the factor for [my] job satisfaction". It was these little things about working as a teacher, that made a difference to some participants and gave them a sense of achievement. Throughout the five timepoints, AN26 (28 years of experience) stated that she actually *achieved* covering the delivery plan, "I am on the right track with my delivery plan". She tied this achievement, which she referred to in every single timepoint, with other important factors that contributed to her satisfaction. She said, "and I haven't encountered any grudges/troubles with my colleagues", "and I was never late nor absent from my classes in two weeks", "and submitted on time the MSE exam grades of the students". In timepoint five, she concluded: "Delivery plan is achieved. Quiz 2 marking is done and students are satisfied with their marks the fact that there were NO complaints or arguments from them". Finally, she reached a conclusion that gave her peace of mind, "This means that my marking skill is fair enough for the students". There were several aspects of teaching profession that made teachers realize their potentials. Being able to work in accordance with a set plan, as the case with JU23 (10 years of experience) and NE14 (14 years of experience). The teacher's ability to manage teaching two different levels in the foundation program with all their different requirements (in planning, and preparing) in addition to having the responsibility of writing tests, made YH05 (13 years of experience) realize how capable he was.

Only one experienced teacher reported the outstanding achievement of taking part in the decision-making. Although taking part in the decision-making was not expressed extensively in the data as one of the major factors of job satisfaction, it was important enough to discuss. HI17 (10 years of experience) expressed the excitement of voicing opinions and getting a reaction from the management's side and the impact of "Giving our opinions and suggestions to our leaders and approving them made me more satisfied with my job". The second reference to decision-making factor was expressed negatively by LA17 (17 years of experience). She stated,

Generally, [I] am satisfied with the heads. In the last two weeks, I felt the head wasn't listening to what most of us were voicing [regarding] a particular exam. The matter hasn't ended for the teachers and we are trying to approach the head again ... so I don't think I would let the (heads) lower this time around.

The above two comments depict how teachers view their responsibility towards their workplace by not limiting it to teaching only.

Student achievement For many teachers, the sense of attainment stepped beyond just achievements at the personal and professional levels. They talked about being effective and putting extra efforts in their teaching to improve the level of their students. Although there was evidence of this throughout the data, teachers mainly with 1-3 years of experience had the highest number of references to ***student achievement*** (see Appendix O for code frequencies). They saw students' achievement and improvement as indicators of their efforts. This group of teachers' main focus was not on what they had accomplished during the semester, rather it was on what their students were able to do, show and achieve. They highlighted things like "students' results in the MSE exam" (NA31, 2 years of experience), and "Students' progress in learning" (SI29, 2 years of experience). KH03 (3 years of experience) expressed that "noticing that my students are learning and enjoying the learning process ... [gave me that] feeling that I'm doing well". In every timepoint, KH03

reported that, “I keep noticing my students’ language level improvement” and that he was always finding out that they were “learning from ... [him]”.

Teachers with 4-6 years of experience highlighted the importance of students’ achievement. MA21 (4 years of experience) noted this twice and highlighted its effect on her overall feeling, “Seeing some improvement in my students’ levels” and “Seeing progress in my students’ level and their positive attitudes towards learning boosted my satisfaction”. For RU28 (6 years of experience), who reported twice that “watching the improvement in [her] students level ... [was] the only thing”, it lifted her spirit and satisfied her.

Teach for teaching Teachers also look for satisfaction beyond their professional achievements. Some teachers teach because they have a passion for it, they teach because they find themselves in it, they teach because they are born to be teachers and they teach because they hear it in the voice within them that loudly says ‘it’s your duty’. Any comment related to these examples were placed under the sub-theme ***teach for teaching***. The following gives a close-up account of how teachers from different career stages articulating and giving meaning to this moto. All career stages highlighted this moto in some way except teachers with 1-3 years of teaching experience who provided no mention of it. CE05 (34 years of experience) felt responsible for her students’ present level as well as their future, “I did what I should do as a teacher keeping in mind the students’ future. This gives me the satisfaction of having done good to the students”. WN26 (23 years of experience), for instance, valued her job, having worked in this English Language Centre for a long time. She articulated this, “My satisfaction is based on working here for a long time, so I have gained respect and friendship of many people at work”. Sometimes being passionate about something drives the person to give more and put more effort into it for nothing but the love of it. “I spent extra hours in my office and I take up new responsibilities”, SA20 (23 years of experience) reported without giving a reason. Volunteering to do more work and take a new responsibility is a

big step that requires more than having extra half an hour in your schedule to volunteer. It requires being passionate about it and ready to give up your free time –in the middle of a busy day at a job like teaching.

Teachers with more than 20 years of teaching experience represent a more emotional side of their moto. BA06's (21 years of experience) comment blasts with the significance of enjoying whatever she does, "I feel I am doing something that I enjoy. Pleasing myself has always been a major driving factor in doing what am doing". For ANCH (21 years of experience) teaching is not just a job, because she believes that teaching should come from deep within. So for her, she is "Teaching from [her] heart". MO017 (26 years of experience) expresses a similar view as she is teaching for a genuine purpose, "Motivation to help those who are in need" and that is why she concluded, "I like my job... I am satisfied with all what I have been doing". YH05 enjoys having a sense of fulfilment in working at a job where people see him 'important', as he proudly expressed, "I really feel important". MU23's (12 years of experience) usual 'happy' feeling made her "ready to work and will work hard".

Teachers with 4-6 years of experience also expressed that they teach for the love of teaching and more. SH01 (4 years of experience) announced that, "I just love my job [and] in general, most of the things [about teaching] are making me feel very satisfied". AS16BR (4 years of experience) goes even further to see teaching as a glorified profession where her mission is "Striving to promote my students and centre academic level". Supported with 32 years of teaching experience and a positive view of her abilities, ZA17's (32 years of experience) self-efficacy and sense of persistence has not changed or been affected by the work stress like having weak learners. As she said, "There are very weak students in my class and my confidence has never changed though. I am able to cope with all". Her comment suggested that although her students were

underperforming, she expected success as she was not feeling overwhelmed by a negative feeling (.e.g. stress).

Recognition was not discussed widely in the data. However, it was critical for teachers with 19-30 years of experience and 31-40 years of experience. Teachers of these two career stages reported that it was essential for them to be recognized at work, somehow. Recognition could take various forms. AV05 (35 years of experience) discussed two forms. He repeatedly highlighted that one way of feeling appreciated is to receive “[positive] response from students, colleagues and supervisors” and “feedback from superiors and colleagues”. The other form of recognition was by being “given new responsibilities”. LI16’s (4 years of experience) efforts are also recognized by “designing the course outline and being appraised by the head”. Recognition here is a kind of promotion which is based on working hard. The same forms of recognition are reported by two teachers who belonged to the 19-30 years of experience group. At two different timepoints, ANCH (21years of experience) referred to students, colleagues and superiors “positive feedback”, “appreciation”, “motivation” and “positive response [that] encouraged [her]”. This is echoed by PA (20 years of experience) who reported, “Appreciation from seniors have greatly influenced my level of job satisfaction”.

5.3.2 Theme 2: Work environment

In their responses, some teachers marked the work environment as one of the top needs to be met in the teaching profession. This theme includes three main sub-themes related to students’ willingness to learn, the workplace ambience and the working conditions.

For their willingness, I do it Many of the teachers across all career stages commented on the impact of their students’ willingness to learn on *them*. With the least reference to this sub-theme, 1-3 years of experience teachers pointed out that students’ willingness is translated in a change in their attitude. SI29 (2 years of experience) stated that, “The change in students' attitudes towards

learning English and little progress in their writing” have had an impact on her as they continued to be active and willing to take part. She concluded that, “My students' writing has progressed and they are not reluctant to ask questions as before”. Obviously, students have walked up the ladder from being only willing to learn to taking an initiative, a form of cognitive engagement which is characterized by being involved in “minds-on” activities (Fredricks et al., 2004).

Generally, experienced teachers highlighted the effect of having students who display willingness and eagerness to learn. The terminology used by teachers is loaded with signals of willingness and engagement such as “the students’ participation in classroom activities” (KHUL, 6 years of experience), “Students’ interaction in classroom activities” (KHUL), “students [being] eager to learn” (MA21, 4 years of experience), “students’ interest level” (EN121, 15 years of experience), “students’ enthusiasm to learn” (MM07, 40 years of experience), to name but a few. MA21 reported that the impact of this was not only on her students’ academic level who “appeared more responsible and serious and their language had really improved [but also on her as it] makes [her] more confident and satisfied”. From a behavioural point of view, the students’ willingness affected their “level and discipline”, too.

Teachers with 7-19 years of experience gave more details, to display the importance of their students’ willingness to learn. CH30 pointed out that “students' participation ... and students' response to implementation of the lessons” as well as “students' understanding of the relation between the amount of the work they have done and their achievements” reflects the magnitude of the impact of students’ willingness to be part of the learning process on their understanding of their own role as learners. A key factor for JU23 (10 years of experience) was students’ motivation level. She stated, “Student motivation I think plays a big part in the teaching experience. At Level One, I find student motivation high in the first few weeks at least, especially compared to other levels”.

When learners have a motive for learning, they do not only take on board what their teacher wants to grasp but also make sure that they themselves are an active contributor to it. VA04 (14 years of experience) shared this experience, “A few students volunteered to perform a role-play based on a listening unit. It was really good. It showed that my style of teaching was really effective and boosted my level of confidence. It gave me a sense of great satisfaction”. TU12 (16 years of experience) realized this and concluded that her “job satisfaction increased perhaps because of the students' enthusiasm and motivation for learning. These two factors are mutually important if a teacher wants to gain job satisfaction”. These comments indicate that teachers' satisfaction can be linked to fostering students' willingness. In other words, teachers could motivate students to take interest in their learning by enhancing their motivation level, which - when attained - can raise the teachers' satisfaction of their work environment.

The connection between the students' willingness to learn and their teachers' satisfaction level was intensively present among teachers who have 19-30 years of experience but much less among the ones who have more than 30 years of experience. In expressing this link, teachers used terms such as “cooperation”, “willingness to cooperate”, “being cooperative”, “participative” and “trying and working hard”. “Some students really try and work hard, so I feel most of them will do better in the exit exam”, reported KA28 (20 years of experience). Teachers reflected that teachers' satisfaction could also stem from their students' behaviour in and outside the class. Khjanuary17 (24 years of experience) stated teachers get job satisfaction “especially ... when we see the difference in student's behaviour, discipline and performance. If it's still not up to the mark then you keep improvising your ways”. Nonetheless, he had a sense of satisfaction because of the “class control... attendance and the behaviour of most of the students as they listen to me and are trying to learn”. SA28 reached a stage where she could identify her students' willingness in numerous ways, “students are involved better now. They turn in their homework. They give positive feedback by

saying they don't want to miss my classes. I get to know them better and I have identified the students who have real absence problem”.

The fact that students' willingness was translated into certain actions such as “understand the deadlines given by me for their home assignments / projects/ presentations”, regular attendance, good class participation, homework submission, influenced the teachers' aims. SA28, for example, talked about a more crucial aim: “My only aim at work is to make my students happy ... [I] get the satisfaction when the students are happy with my teaching, approach and the treatment. Students understand and follow the instructions and seem to enjoy my classes. This is enough for me”.

Having said that, a few teachers reflected upon being discontent with students that they believed to cause dissatisfaction in this particular context. *Discontentment with student* was only represented in the comments of experienced teachers who had between seven to thirty years of experience. Teachers were disappointed that students lack a sense of motivation and interest in learning. Having disengaged and uninterested students could disappoint and “exasperate” teachers (GA29, 28 years of experience) no matter how hard working teachers were. GA29 reported that “[students] are lacking diligence and do not like to work hard or to think. Even after a lot of explanation and examples, they still stare at you like you have not said anything”. She found it “rather disappointing ... [when] you try your best to help but they seem not to value it or even care about what you tell them” and the same common errors that she pointed out in their writing exercises were “still prevalent in their papers”. In essence, when student showed a careless behaviour towards learning, the teacher became distressed. Sometimes an uninterested student could cause further issues in the class like behaviour problems. JU23's comment signals an inclination to giving-up as nothing seemed to work, “some students continue to be disruptive and unmotivated no matter what I do in class which makes me feel less satisfied”.

Other teachers reported that this disappointment mainly came from their students' failure, poor performance and inability to cope with the learning responsibilities. CH30 (18 years of experience) explained, "I think that students' language skills, their abilities to comprehend the reading material as well as learning habits are some of the reasons for not being fully satisfied". Dissatisfaction was intensified by the students' learning habits and low abilities as they willingly chose to ignore any feedback corrections given on their work and repeated the exact same errors (GA29).

Working conditions sub-theme includes a number of aspects which are part of job satisfaction for many teachers. In fact, teachers, regardless of how many years of teaching experience they have, referred to the working conditions and the impact of that on them. One of the most frequently mentioned condition was the *professional support* that teachers got from the management of the centre and their colleagues. Teachers with 1-3 years of experience were satisfied with the support provided by their superiors. AH17 (2 years of experience) explained, "superiors are always ready to provide guidance at times of necessity... [and] in academic affairs". This kind of guidance, which was also described as "valuable" (AH17) and "proper" (SA20, 23 years of experience), assisted teachers to get him through "unexpected" hard times (GI, 28 years of experience). The academic support made the teachers' life easier and encouraged them to focus when they were overwhelmed with "a lot of deadlines to meet. Some units and tests were impossible to complete within the given time. They were cut off to help teachers focus on the subjects at hand. It shows that the management is aware of the arising challenges and ready to make changes" (MU21, 3 years of experience).

The professional support took various forms like (1) reducing the teachers' load to half or adjusting the timetable based on personal conditions and needs (AS16BR, 4 years of experience & MM07, 40 years of experience), (2) following "clear cut policy matters and rules... objectively [and

being] always ready to clarify any queries” (IM24, 4 years of experience), and (3) providing “positive support” (EN121, 4 years of experience) “and clear instruction from the management side [that] lifted up the confidence level [of teachers]” (AR33, 10 years of experience). (4) Making sure that their staff were not trapped in personal anxieties which, in turn, might negatively affect their level of performance and their students’ learning as IB14 (38 years of experience) demonstrated, “I asked for an emergency leave and got all the possible help from my bosses and colleagues”, and finally, (5) practicing an open door policy and listening to teachers voicing their concerns, as the following teachers stated:

In the last week, our level had trouble with mid-semester exam. It was good to sound out things. And now I have a better idea how to communicate with the coordinators. Also, one of the coordinators was open to my comments (a phone chat) and our (Level 2 teachers) input has been sought. (LA17, 17 years of experience, all brackets in original)

My management is very supportive and understanding. They are very good at what they are doing. Things have been not easy, as we have had many changes but I am lucky to have them. They are very professional but they are also very good understanding human being. (GI, 28 years of experience)

The flexibility of my superiors... I voiced out my disagreement with my superiors over certain decisions and they were very attentive and understanding listening to my view. (BA06, 21 years of experience)

GA29 (28 years of experience) pointed out that the “supportive” nature of the management people was accompanied with being “sincere with their desire to help... [They were also] quiet and professional”.

Colleagues, too, were considered part of the professional support that teachers received at work. Teachers with 1-6 years of experience hardly mentioned the support they received from colleagues with only one exception, FD (5 years of experience). She referred to the “professional support by colleagues in teaching”. Rest of the teachers with seven and more years of experience pointed out the support from colleagues by using phrases and terms like “cooperation from my colleagues” (EN121, 15 years of experience), “the support and cooperation of my colleagues” (WN26, 23 years of experience), “good cooperation from my colleagues” (SA20, 23 years of experience), “support of other teachers” (Khjanuary17, 24 years of experience). Generally, there was no further explanation or elaboration that accompanied these comments. However, DE02 (26 years of experience) was the only participant who further explained the sort of assistance and support she received from colleagues, “I can see that most of my colleagues are very supportive and helpful in terms of sharing ideas about any issues related to teaching”. It can be concluded that all these comments and much more indicated the powerful effect management and colleagues’ professional support had on teachers’ job satisfaction.

Furthermore, teachers with more than seven years of experience referred, in a number of instances, to the level of independence they have developed at work. EN121 (15 years of experience) reported how having the freedom to execute her job requirements by the authorities boosted her sense of autonomy at work. As she explained, “Freedom into classroom and at work place”. As a matter of fact, she noted that the management’s belief in her lifted up her confidence in her own abilities. She highlighted “their confidence in me that I can do my job well despite my drawbacks” meant a lot to her, obviously. Not being dictated, on what teaching techniques to use led, ME21 (36 years of experience) to “trying out different techniques in class which have turned out to be successful, and probably that is what has influenced my satisfaction”. This level of freedom and independence at work was also highlighted by ANCH (21 years of experience) who said it inspired her to do more than just teaching, “Total involvement of preparing lessons according

to the students' level, teaching according to their needs, giving them life based skills through English language, helping them to achieve their goals, and giving them counselling if needed". ANCH's comment suggested that she was completely engaged in her work at the personal, professional and academic levels.

Providing resources at the workplace was considered important by all teachers. To those with 1-3 years of experience, resources were not only what helped them teach in the classroom but also what made them communicate more easily with others and get access to things. AH17 (2 years of experience) listed all the things that kept her satisfied throughout the semester:

I was allotted an office in a very short time. Provided with the car access card to enter the college in a very short time. I was provided with an e-mail id to access the college web site ... the permission being provided to work in the office during holidays ... I was also provided by the necessary technical inputs for effective discharging of my duties.

IM24 (4 years of experience) explained that getting the resources was a life and time saver for her, "providing of car access cards for entrance was in fact a very good experience for me, else every day I used to wait for the security [to access the building] ... providing of e-mail ID is a great help to get updates about all official work schedules and circulars". Little things, as they might seem, lack of resources can cause distress and dissatisfaction. That is why, for example, well planned schedules and provision of ready alternatives, scheduling plans could make things easier at work, as NE14 (14 years of experience) and DE02 (26 years of experience) noted.

Only one experienced teacher, RU28 (6years of experience), acknowledged that professional development opportunities are important. She shared, "We had a symposium which we gained a lot from. We met experienced teachers and attended useful workshops". The verb "gained"

summarizes what taking part in or simply attending workshops had in store for teachers and the importance of it.

Some aspects of the *Working conditions* were considered dissatisfying by few teachers. They commented on some of the centre's policies such as the class size and the students' movement from one group to another at the beginning of the semester- due to several personal reasons related to the students (IB14, 38 years of experience & NA31, 2 years of experience). Dissatisfaction of the participants with the *English Language Centre's (ELC) policies* was also related to Quality Assurance Committee's new rules and regulations (SH05, 17 years of experience). Although it was out of control, SH05 raised a point that had an unlimited impact on her "threats and hooks of reduction in staff nag us continuously which affect our mental satisfaction and performance both as we need peace of mind to be good at work". The staff reduction policy affected SH05 emotionally. She related it to some external factors, outside the job, "the outside job situation and immigration restrictions keep us stressed and restless".

Part of the ELC's policies is to stick to the common delivery plan to ensure that all students are tested (using the standardized test) on the same materials. Experienced teachers praised the 'well' designed delivery plan. However, one novice teacher did not agree as she was convinced that she knew her students' needs better than anyone else. MU21 (3 years of experience) announced:

I was committed to my students needs and so, have finished the curriculum before the planned timing. I started covering extra topics and coming up with different lessons but the management thinks it's an error and I should have followed the plan strictly.

MU21's analysis of the situation might have been built on a sound basis, that is her knowledge of students' needs. However, the fact that she did not have enough experience to judge

and estimate reasonable timing to cover the delivery plan and meet the learning outcomes could work against her comment as some experienced teachers criticized the workload.

Some teachers raised the issue of being *over-loaded with work* which was not in the interest of the job or students, like VA31 (20 years of experience) who was unhappy with the “insane amount of material to cover in a semester”. She explained the reason, “A heavily loaded curriculum and delivery plan which is tailored to testing more than learning”. KHUL (6 years of experience) echoed that “too much work to do and I can't do extra practice for my students” which resulted in dissatisfaction. She elaborated:

I'm not very satisfied with my job because there are many distractors. I am a member of that testing unit and teaching two levels. I don't have enough time to prepare well for my class. Though my students are doing well, I believe I would have done better.

For SH05 (17 years of experience), dissatisfaction was driven from a combination of different aspects, “The time constrain and tight schedule pressure sometimes make me unhappy [because] I feel that my students need more practice or time for certain topics”.

The *standardized testing system* let some teachers down. The practice in the ELC is that Testing Unit creates a test that is used by all groups of a certain level at the same time and date. JU23 (10 years of experience) was disappointed with the standardized test but it was not the only cause of dissatisfaction as her students did not seem to be ready to exert the required efforts. JU23 anxiously explained, “The exam has made me feel less satisfied with my job temporarily as I had my entire class tell me how difficult the exam was and nothing was related to the book! Obviously that is not true but it made me feel as though no one studies so what's the point!” She temporarily lost hope in her students, as they exhibited an indifferent attitude towards learning.

Ambient environment In line with the working conditions sub-theme of factors affecting teacher self-efficacy, teachers expressed the significance of having a relaxed ambient environment at workplace to enhance teacher job satisfaction. In general, teachers viewed workplace ambience as principally salient contributor to their satisfaction. After all, the teaching profession is all about working, dealing, serving and living with people. Therefore, a good work environment does matter. The following comments reflect the value of ambient environment for teachers' satisfaction. Novice teachers enjoyed having good work environment. NA31 (2 years of experience) celebrated the teachers' day by having a time out with colleagues and considered it satisfying. AH17 (2 years of experience) reported how, "the cordial atmosphere at the work place" added to her satisfaction in addition to other factors like management's guidance and availability of resources. For MU21 (3 years of experience), she could feel peace at work where everyone was helpful and cooperative, "I don't feel pressure as everyone are helpful. I needed a cover for one of my classes and everyone helped". The cordial relations do not have to be with colleagues only, they can also be held with the authorities and students as IM24 pointed out time and time again in each and every timepoint, "very encouraging and cordial relations with the superiors" and "cordial relations with colleagues; increased rapport with the students".

SH01 (4 years of experience) explained, "the environment of the centre [and] in general, most of the things are making me feel very satisfied." TU12 (16 years of experience) asserted that "job satisfaction comes from a positive and peaceful working environment. I also get satisfaction from my job when I achieve the goals put forward". Some teachers linked the effect of the environment to the culture of the people they are working with. As TU12 said, "job satisfaction requires serenity of mind and concentration of ideas. This is what I get here".

MU23 (12 years of experience) highlighted the effect of this on her emotions, "Nice atmosphere, helpful staff and colleagues ... [left her] Feeling happy... [and] ready to work". For

EN121 the “teacher-teacher interaction and comfort level [gave a chance for] personal discussions on various job-related techniques”. That is to say, these interactions have affected the teaching techniques she employed in her teaching. BA06’s (21 years of experience) comment, that his “colleagues are more open to discuss with me their achievements and the difficulties they face”, lifted up the level of significance of work relationships to a higher level. Teachers sometimes get their satisfaction when they share their achievements and pitfalls with people from the same work background. This adds to their experience and gives them a sense of relief as they are not alone in this. DE02 attributed her satisfaction to “my relationship with my co-staff as well as my students. I always try to maintain a good climate with the people I work with. As a result, the working atmosphere is positive and I get what I expect from my students and colleagues”.

For GA29 (28 years of experience) work was not only about getting teaching done as noted in the previous sub-theme. It was about having a second home, where good feelings were shared. As she said, “Colleagues are warm, friendly and never forget to engage in how-are-you talks even if time is not so much of a luxury”. It was about sharing and receiving respect “Colleagues and students show respect, one that has been earned after some time”.

Teachers with 31-40 years of experience also described the atmosphere at the work place and shared the effect of it. Complemented with respect, and cooperation, “easy flow” and “smooth flow” of the teaching process were typical results of the comfortable work environment (MM07, 40 years of experience). This in turn led to “improved communication with students (which leads to better results/marks)”, as IM18 (31 years of experience) summarized.

5.3.3 Summary of job satisfaction factors

In this section, I discussed the factors that had an impact on the teacher job satisfaction. Generally, the evidence to support theme 1 *I am growing* runs throughout the data. Teachers highlighted their little everyday achievements, their students’ achievements, their motives to teach

and the effect of being recognized on themselves. Teachers except those with 1-3 years of teaching experience celebrated their achievements prominently, which might be due to various reasons. Novice teachers' sense of satisfaction had not developed yet, in a more pronounced way, like teachers at other career stages (4-6 years, 7-18 years, 19-30 years and more than 31 years). They were more concerned about their students' achievements. Being busy trying to keep up with all the job demands might have adversely affected them. Perhaps they could still not see the scope of what they were doing because they were struggling with it. Perhaps they were too busy that they could not enjoy what they were doing and, therefore, they overlooked why they had chosen to be teachers. Additionally, novices did not mention students as a source of dissatisfaction as the experienced teachers did.

The second outstanding theme, *Work environment*, included references to the influence of students as the main element of the teaching profession, the workplace ambience and the working conditions. These factors were discussed at length depending on their impact on the teachers' satisfaction.

5.4 Summary of Chapter

In this chapter, I presented the factors influencing teacher self-efficacy and job satisfaction. Represented in the first theme of TSE, *the impact of teacher efficacy on teaching experience*, the teachers' beliefs of their abilities to manage, teach and instruct their learners was the most important drive in feeling efficacious. Novice teachers scarcely gave details of their management techniques in class, while experienced teachers elaborated on discussing problems they faced and strategies they used, to tackle them. The novice teachers expressed their willingness to experiment with technology in teaching by using mobile-friendly activities, websites, games and video clips and valued their students' achievements more than anything else. Experienced teachers, on the other hand, resolved more to traditional ways of teaching, varied their in-class techniques (pairs, groups,

scaffolding), focused on value-related teaching, well-planned activities and relied on their mastery experiences in teaching the same level or subject. Experienced teachers encouraged students to be responsible for their learning and utilized tasks that were student-centred and that focused on achieving students' goals.

The second theme highlighted *the impact of the teacher efficacy beliefs on teacher's engagement*. I mainly focused on teachers' efforts to meet student needs, autonomy and exerting extra efforts to enhance students' learning. Although, generally, all teachers exhibited the capability to understand their students' needs, this theme was chiefly dominated in experienced teachers' comments.

The last theme, *the impact of relations within workplace*, illustrated that teacher-teacher relationships are not crucial which was evident as there was not enough support for it. However, teacher-student relationship was highlighted by both novice and experienced teachers, with more emphasis among the experienced teachers who highlighted that such relations were essential in facilitating the leaning process.

With regard to the factors influencing teachers' job satisfaction, two themes emerged from the data. The *I am growing* theme was more conspicuous among the experienced teachers. They pictured themselves capable of meeting their job demands, achieving set goals, making effective decisions while enjoying their students' progress. Their satisfaction was enhanced by their passion for teaching, pleasing themselves by doing something they enjoyed and by finding themselves reaching out for those who needed their assistance. They maintained this satisfaction by a word of appreciation, positive feedback from their students, colleagues and management and a professional promotion (i.e. new responsibility). The second theme, *work environment*, demonstrated that job satisfaction increased when certain aspects were available. These aspects included having eager learners who were ready to interact, respond, volunteer ...etc.; having an understanding

management, that cared for its staff; having sufficient resources and enjoying an ambient atmosphere with students and co-staff. The next chapter discusses changes, if any, in the teachers' efficacy and job satisfaction beliefs and how they take place.

6 Qualitative Results.. Continued

This chapter is a continuation of the qualitative portion analysis that was started in chapter five. It qualitatively addresses the first research question in the present study: “How do teacher self-efficacy and job satisfaction beliefs change over the course of one semester?” which was answered quantitatively. This chapter re-examines changes (if any) in teachers’ beliefs using evidence from the qualitative data.

6.1 Research Question 7

“How do teacher self-efficacy and job satisfaction beliefs change over the course of one semester?”

This research question was answered quantitatively using TSE and job satisfaction measures where all 55 participants were used to track changes in their efficacy and satisfaction (see chapter 4). To answer this question qualitatively, I used a multi-wave (i.e. six timepoints) multiple case analysis to closely examine the factors affecting teachers' self-efficacy and job satisfaction and provide contextual explanations for any change or development in the participants’ self-efficacy and job satisfaction beliefs. When tracking increase or decrease in self-efficacy and satisfaction, all 55 participants were used in the quantitative analyses. To answer this question qualitatively, I purposefully selected information rich cases (Sandelowski, 1995) to track teachers' personal experiences of change and provide an explanation for the quantitative results, whenever possible.

In order to maximize the richness of the findings, a set of criteria was used to select the participants as not all 55 were useable for the qualitative analyses: (a) The qualitative data were collected from participants who answered the two biweekly open-ended questions from timepoint one through timepoint five: *What experiences in the past two weeks have influenced your confidence in your ability to teach your class well?* and *What experiences in the past two weeks*

have influenced your job satisfaction? Participants were asked to respond to one question after completing the online quantitative measures. (b) Participants who provided qualitative data for three timepoints or more are included. (c) Participants who provided a meaningful amount of data at two or more timepoints (e.g. more than one sentence) are included. Thus, those who provided zero data (no response registered) or provided a sentence in more than two timepoints were excluded. (d) Selection of participants to include in the qualitative analyses commenced with carefully examining the trajectories of the 55 quantitative participants in order to identify real consistent increase or decrease in self-efficacy and satisfaction scores over time. Six participants witnessed discrete changes in scores creating two distinct cases (increasing self-efficacy/increasing job satisfaction and increasing self-efficacy/decreasing job satisfaction). The eyeballing of all 55 participants resulted in categorizing the participants into cases depending on their efficacy and job satisfaction scores at timepoint 1 and timepoint 5. Following Shank's recommendation of focusing on unique clusters of cases and Klassen and Durksen's (2014) clustering patterns of "unexpected" and "expected" cases, five cases were found.

Within the sample of 55 participants, 18 were labeled under the increasing self-efficacy and increasing job satisfaction (**Case SE/JS**); 9 decreasing self-efficacy/decreasing satisfaction (**Case se/js**); 8 increasing self-efficacy/decreasing satisfaction (**Case SE/js**); 3 decreasing self-efficacy/increasing satisfaction (**Case se/JS**) and 18 participants with surprisingly unexpected scores (**Case Surprise**). Case '**Surprise**' (Miles & Huberman, 1994) included some participants with a row of identical scores across 5 timepoints (i.e. consistent scores in one area such as TSE) and a change of scores in the other (e.g. job satisfaction) and some other participants who experienced settlement in both TSE and JS. For instance, if a participant reported an increase in TSE at timepoint 5 compared to the score reported at timepoint 1 and reported no change in job satisfaction as the same scores were reported throughout timepoint 1 to timepoint 5, then it is

labelled as a '**Surprise**'. The lower and upper case in the titles of the cases (e.g. **SE/JS** or **SE/js**) indicates the increase or decrease as explained next to each case title.

Therefore, (e) the last criterion used was to follow Creswell's (2013) recommendation for the number of multiple bounded cases (i.e. between four and five cases). Since the number of participants of the five cases was massively unequal, six participants under each case cluster were included, to maintain consistency with the quantitative analyses, except **Case se/JS** which only included 2 participants falling under it. The number of participants under all five case clusters was 27 (aged 26 to 70, with 2 to 40 years of experience). Additionally, the 55 participants have already been used in chapter 5 qualitative results which may result in redundancy of information. Thus, their responses were only used to make a point and avoid unnecessary repetition. Although participants who completed three open-ended responses and the open-ended survey (i.e. timepoint 6) were used to ensure richness in the within-case change, one participant, who showed decrease in SE and increase in job satisfaction (**Case se/JS**), completed only three open-ended responses out of six but was still included as it was the only case with the lowest number of years of teaching experience.

Within-case and cross-case coding and analyses were used to display and compare findings as a method to confirm or refute the quantitative findings and answer the research question. This was typically done through devising of case summary forms and visual graphs while conducting within- and across-case analyses (Miles & Huberman, 1994; Saldana, 2003). Saldana (2003) recommended following the longitudinal coding process to track changes in teachers' efficacy and satisfaction levels. Saldana's (2003) form of change tracking was employed and his five framing, descriptive and analytic questions guided the analysis to follow changes or progress in qualitative data analysis for each of the individual participants.

While the quantitative findings reported the ‘growth’ or otherwise of teacher self-efficacy and satisfaction levels, the qualitative findings focused on the ‘development’ of these two variables across time (Saldana, 2003). An eye was kept on any “change [that] may be indicated by surges, developmental “growth spurts”, or epiphanies” (Saldana, 2003, p. 111). Any increase or decrease or any settlement and constancy or -even more dramatically –any idiosyncratic (that is inconsistent and unpredictable) evidence were closely observed, as Saldana (2003) recommended. Appendix N presents the number of participants who fall under each case cluster (in percentages).

Participants' responses to the two open-ended weekly questions were used as quotes to explain the case clusters. These quotes were examples that show the participants' relation to the cases or patterns. Thus, these quote were representatives of the increase or decrease of teachers' self-efficacy and satisfaction belief ratings. Table 32.6 gives a summary of the demographics of the five cases.

Table 33.6 Within case change demographics (n=27)

Case label	Participants' IDs	Age	Years of experience	Gender	
				F	M
Case SE/JS	SI29, MA21, ME21, MO017, SL08, En121	26-49	2-36	4	2
Case se/js	IB14, JU23, VA31, AR33, SA20,khjanuary	33-63	10-38	3	3
Case SE/js	AH17, KA28, AV05, DE02, SA28,WN26	49-65	2-35	4	2
Case se/ JS	FD,YH05, BA06	29-42	5-21	1	2
Case Surprise	KH03, NA31, AR18, RU28, JO712, ANCH	26-43	2-21	5	1

6.2 Within-case change

1. Case SE/JS: increasing self-efficacy and increasing job satisfaction

Six participants (experience 2-36) were included in case SE/JS. These participants displayed a high sense of self-efficacy that was accompanied by a high level of job satisfaction. The coding for this case resulted in the highest number of codes (101 references) that reflected increased efficacy and job satisfaction throughout the six timepoints (1 to 5 online dairies plus the open-ended survey) due to various reasons. Increased self-efficacy was reflected by a frequent reference to student engagement such as “My students' writing has progressed and they are not reluctant to ask questions as before”. Students’ interest exceeded their teacher’s expectation as they were willing to do “written work in and outside their classroom” and they were “able to understand the instructions of classroom activities for themselves and ... progress in reading and writing”. Students also “can manage their mistakes and correct them with their peers”.

Having “motivated students boost[ed] teacher[’s] confidence” and ultimately the teacher’s confidence brings forth their students’ self-efficacy as one participant concluded, “my confidence is theirs”. Direct references to the students’ level of confidence (“improvement in their knowledge and their confidence level”, the “development in students' knowledge” and “Students motivation level and growing self-confidence”), all led to one conclusion that having high efficacy students resulted in strengthening teachers’ efficacy. However, having the other extreme of students, demotivated ones, could also boost the teachers’ creativity and “forced [them] to bring about improvised plans to the class”. Participants reported how succeeding in implementing the teaching program by “keeping a track of [the] learning objectives and keeping a track of delivery plan” boosted the teachers’ belief in their capabilities.

Participants referred constantly to their relationship with students and how having a “positive personal relationship” between teacher and students “enables me to understand their needs

and weaknesses, and thus helping me to make much effort on their difficulties and to fulfil their needs". The impact of this relation also affected "students' progress in the different skills". It motivated students at various levels as it made "students share their learning difficulties", positively changed "their attitudes to their English teacher" and took active part in their learning process as a result of "introducing the concept of personal responsibility and their role as responsible students [which actually] have started yielding fruit". In a more substantial way, one participant commented that "Now I do not have to motivate them on their responsibilities, which has resulted in smooth teaching/learning".

Furthermore, responses from this case also included examples of high self-efficacy to influence teachers' choice of effective instructional strategies such as teaching mixed ability classes by improvising new plans and being creative, teaching low achievers how to write "simple sentences" and teaching students how to build up an argument and put it in writing.

Sources of satisfaction simultaneously involved references to various other factors, some of which were directly related to students. Responses from this case highlighted the impact of having students who were ready to exert more efforts like "Students' willingness to seek my help", and "Lower achievers' interaction in classroom". One participant associated his satisfaction throughout the semester with students' efforts. He progressively reported, "seeing more improvement in my students' level", and "seeing progress in my students' level" and concluded that all of this enhanced his satisfaction level. Case SE/JS participants also revealed that students' attitude did impact their own satisfaction. They reported that "seeing students eager to learn was the most satisfying". Another participant stated that students' "positive attitudes towards learning boosted my satisfaction". Indications of high job satisfaction came from the way students behaved; "The students appeared more responsible and serious and their language had really improved, which

[made the teachers] confident and satisfied" and "The change in students' attitude towards learning English".

Participants offered incidences of self-evaluation of their strengths and powers when responding to the job satisfaction question. Some of their words in this regard are quoted here: "Self-confidence and teaching expertise", "Certainly recognition can go a long way if nothing else. There's no salary raise or bonus that I get. There's nothing actually to motivate me except myself", "... [students] are not self-motivated and therefore it's only me that influences them" and "My personality as being funny and helpful with them as well as the fun activities I use with them which sometimes involve collaborative learning".

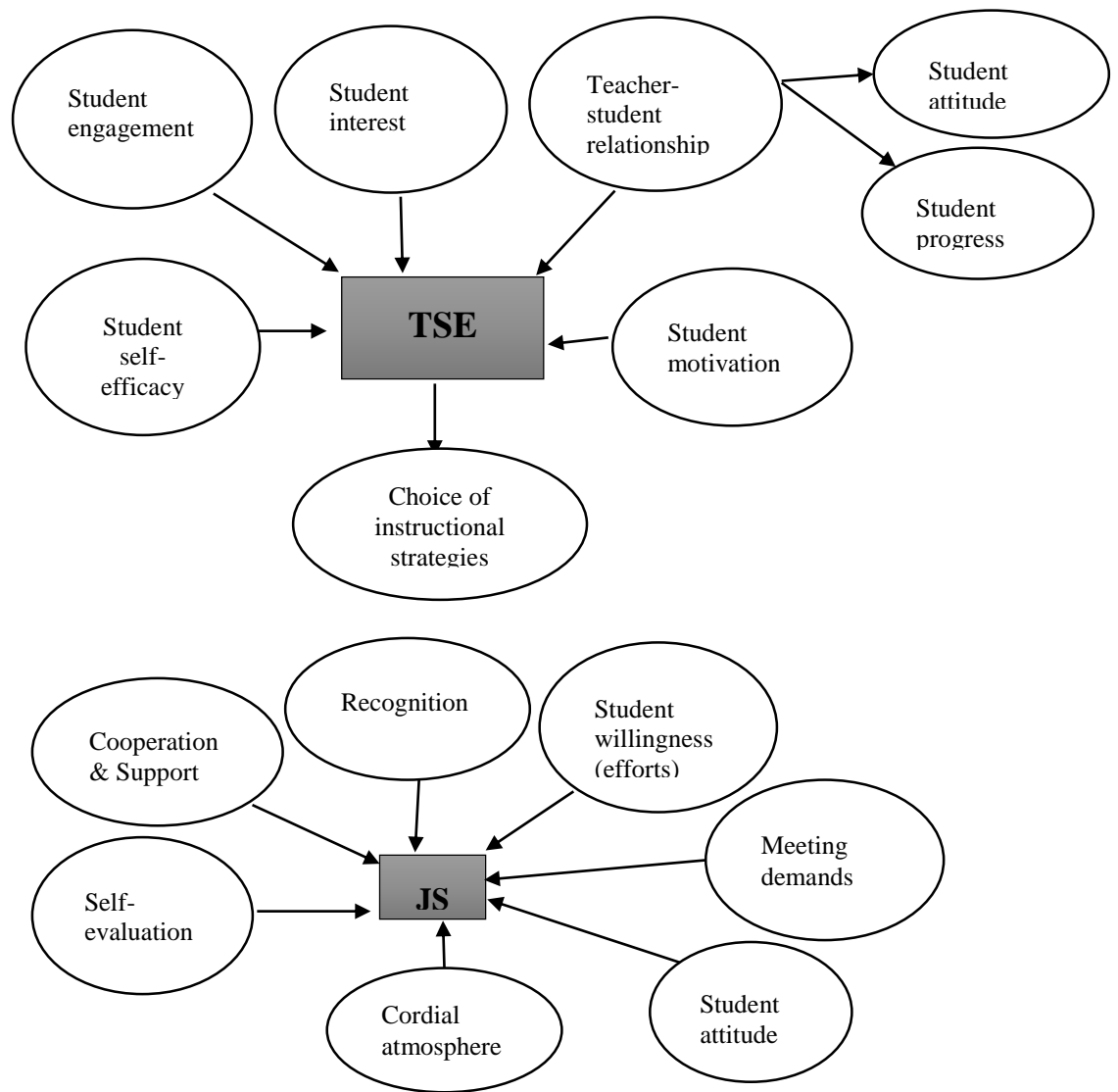
Participants of case SE/JS revealed the effect of meeting their job's demands in their sense of satisfaction. Their observations included reference to succeeding in meeting specific targets or generally meeting one of the job everyday teaching tasks such as "I am satisfied with all what I have been doing", "It took me two weeks. I used to encourage [students to present in front of the class]. Finally I did it and they did it", "My target of achieving the goals has been the factor for job satisfaction" and "That I was able to complete my lessons and review".

Sources of satisfaction also involved references to having a cordial atmosphere at the workplace. For example, the participants under this case observed that, "my good relationship with the administration and the colleagues", "personal discussion service on various job related techniques", "cooperation from my colleagues", "sharing job expertise [and] sharing teaching materials" and "some teachers were glad to use some of my teaching materials".

Furthermore, indications of high job satisfaction came from the management support, as participants reported: "Cooperation from my superior side treat me", "Their confidence in me that I can do my job well despite my drawbacks" and "Promotion & acknowledgements", from the right

amount of freedom and flexibility given at workplace (“Freedom to execute my job requirements by the authorities”, “timetable flexibility” and the “Freedom [given in the] classroom and at work place”). Participants also said that management support improved the teachers’ sense of efficacy especially when that was coupled with good “teacher-teacher interaction and conform level”.

Figure 22.6 Within Case SE/JS



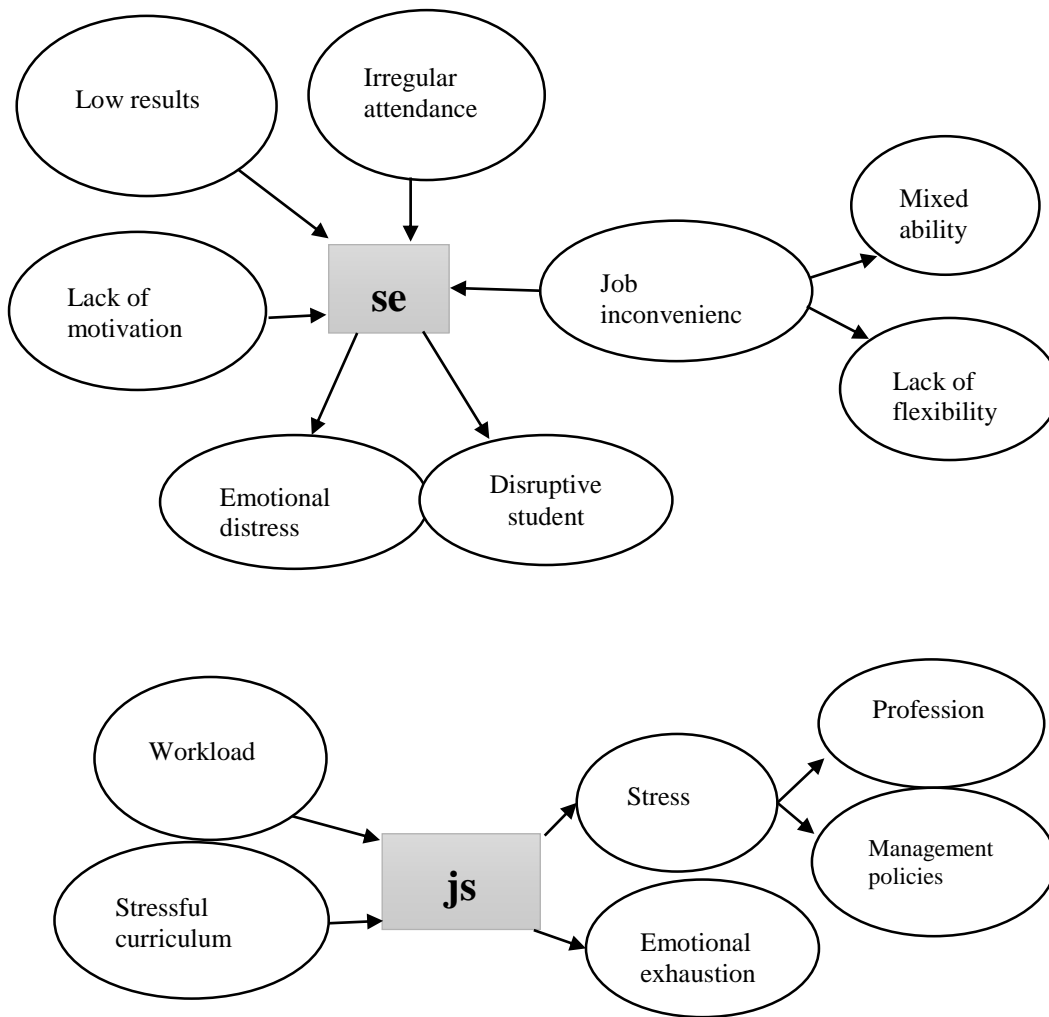
2. Case se/js: decreasing self-efficacy and decreasing job satisfaction

Six participants (experience 10-38) were included in case se/js. The case had the most frequent references to negative factors that attributed to low self-efficacy and job satisfaction. Participants reported students' behavioural issues lowered their own sense of efficacy in their abilities such as having an increasing number of irregular student (absentees) and a lack of motivation due to exam results, the end of semester stress and students' unwillingness to be in class. As one teacher reported "those who don't want to be here are hard to shake-up". Consequently, these students "realize how much work they have to do, they become disruptive and absent". They caused emotional distress to the teacher because "no one studies" leading the teacher to the painful conclusion "so what's the point! It's just an uphill battle here sometimes!"

Attribution to job inconveniences such as having a mixed ability class with a stressful delivery plan lowered teachers' self-efficacy because the "focus [was] on covering the syllabus as a priority" not on "adjusting lessons to different student abilities". One participant reported that despite the fact that she had "past experience teaching Level One-second intake students, [but these students] are very weak and a lot of effort is made by me". Additionally, things like a lack of flexibility at the workplace indicated a withdrawal manner on the part of the teacher. One teacher said, "I need variety and flexibility that's a big thing for me. For example if they introduced the thumb scan to monitor us I'd leave my job". Also, having "extreme work load [made it] impossible to stay motivated about teaching when you have to spend so much of your free time marking useless exam papers". The same participant summarized the effect of this in the fifth timepoint "proper evaluations are indeed needed but overloading teachers and students with endless quizzes and exams is in my opinion, demotivating". The responses of this particular participant indicated how demoralizing it was for her and suggested seeking duties reduction.

Participants in this case reported the lowest job satisfaction levels. Indications of dissatisfaction evidenced through the participants' complaints that ran through the timepoints reflecting a kind of emotional exhaustion, as one of them said, "I care too much of my students and I can't stand it if they don't get engaged so I keep pushing them to respond otherwise I feel bad and I don't want to have that feeling". They also displayed high stress level from the management decisions, as one teacher reported, "changes in the numbers of my students. Some students moved from my classes to other classes and some students joined my classes". Stress from the teaching profession itself was a cause as they conveyed, "insane amount of material to cover in a semester" and "A heavily loaded curriculum and delivery plan which is tailored to testing more than learning". They also talked about the students' behaviour, "students come late to classes. And sometimes they don't pay attention to what's being discussed" and "lack of students' motivation" and the institutional stress, "Lack of some teaching resources". Figure 23.6 summarize the factors leading to low self-efficacy and satisfaction.

Figure 23.6 Within-case se/js



3. Case SE/js: increasing self-efficacy and decreasing job satisfaction

Six participants (experience 2-35) were included in case SE/js. This case displayed a pattern of increasing self-efficacy (SE) and decreasing job satisfaction (js) during the semester. Students were the highest frequent source of teachers' efficacy for this case. For example, participants reported student engagement was the most important factor for influencing their self-efficacy, "What really impressed me more was that most of the students at the time revision were interested in writing reports individually and wants their work to be corrected. This made me think that they students have benefitted by my teaching". Engaged students "have a positive outlook in learning new things", "cooperate and participate in classroom discussion and group/pair work activities", and

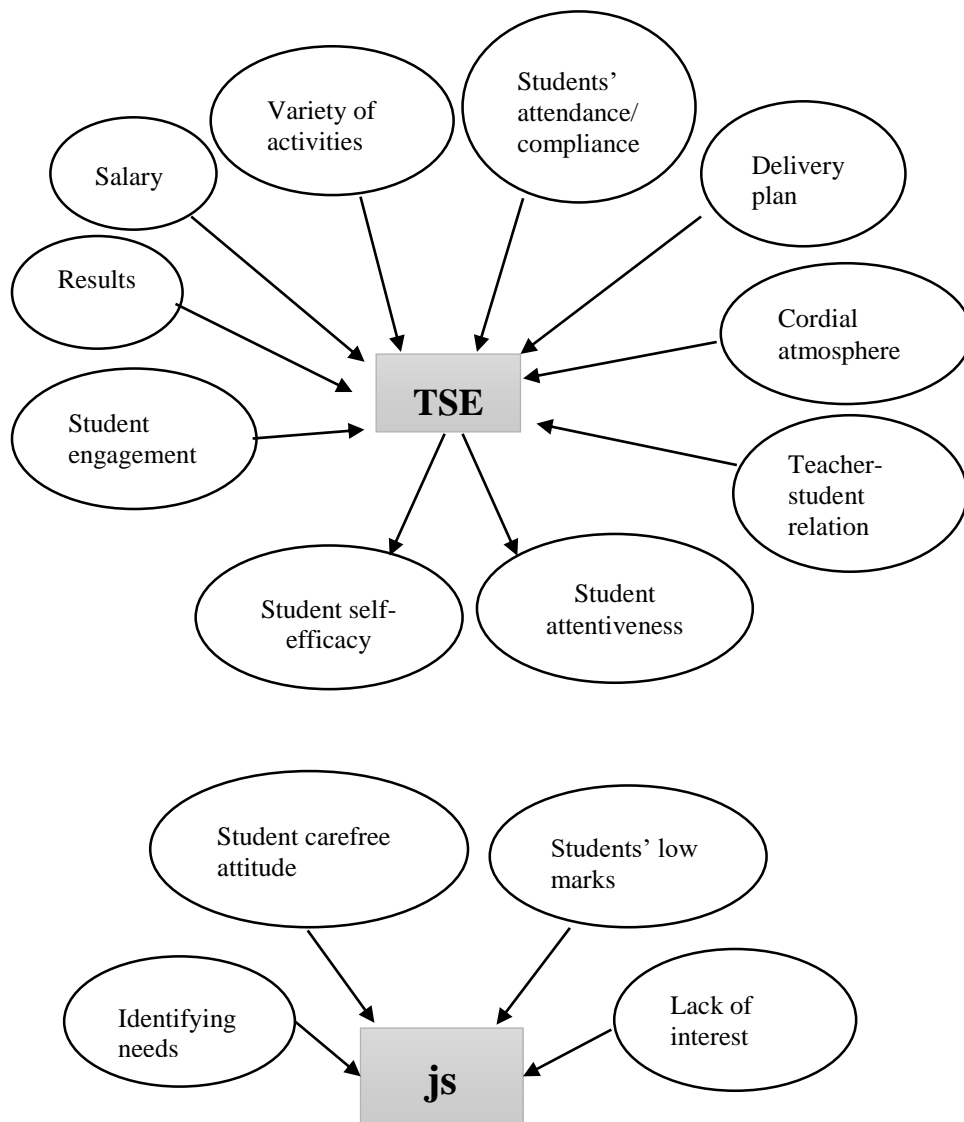
"are involved better now [and] turn in their homework". One participant summarized what an engaged group meant to her, "They are sort of regular in their homework and maintaining their portfolio. I am surprise that some of the students volunteer to attend academic advising classes. Most of the group work is successful. They seem to take an effort to come on time and actively take part in the class". The participants under this case positively talked about students' test results like "I can see that students are improving in writing as well as in grammar" and "most of the students have improved in their writing skill", students' feedback, students' attendance like "Absence has come down considerably", students' compliance like "compliance to the rules set in the beginning", student efficacy like "Some students showing good amount of confidence in the subject" and student emotional status like "potentiality of most of the students was encouraging and students were happy about it".

Increased self-efficacy was recognized professionally by the use of a variety of instructional strategies such as "Using the techniques of asking Instruction Checking Questions and Concept Checking Question", "using of technology in the classrooms [which] enhanced levels of concentration of the students", "using of technology like short educational video clips while teaching the concept of "Tornados", using of PowerPoint, and "making the students work in groups through scaffolding tasks besides giving chance to students to write some answers on the board for example drawing the tables for different reports ... etc.". The use of "different interactive activities" maintained having "attentive and motivated [student] all through the course". Another professional source of self-efficacy was having a well laid delivery plan. As one teacher said, "the Delivery Plan was indeed prepared with quite a research and deep understanding". This case had the only reference to finance as a source of efficacy, "I am very much delighted with the salary that was being offered which led me to work hard and do my best in the interest of the students and the Institution".

Case SE/js participants revealed that having a cordial atmosphere and building relations within workplace boosted their self-efficacy, just like the previous case. Five out of the six participants reported statements like "Good classroom climate", "Rapport at work with superiors and colleagues", "My relationship with co-staff as well as students. ... the working atmosphere is positive and I get what I expect from my students and colleagues", and "I can see that most of my colleagues are very support and helpful in terms of sharing ideas".

Low job satisfaction was attributed mainly to students through comments on the journey of 'finding', 'identifying' weak students and 'trying to find out ways to deal with them' and having to repeat what has already been repeated before for weak students with no sign of getting it. Students' carefree attitude regarding getting absence warnings and low marks in the continuous assessment raised the teacher's doubts on their ability to change these students' attitude, as "some students are not motivated at all". Although students showed willingness to be regular to class and do work, the teacher was "not too sure how much credit should I give to myself because I don't see drastic difference in their performance". For one participant, "Job satisfaction especially as a teacher we get only when we see the difference in student's behaviour, discipline and performance. If It's still not up to the mark then you keep improvising your ways", which explained the low satisfaction score she had.

Figure 24.6 Within case SE/js



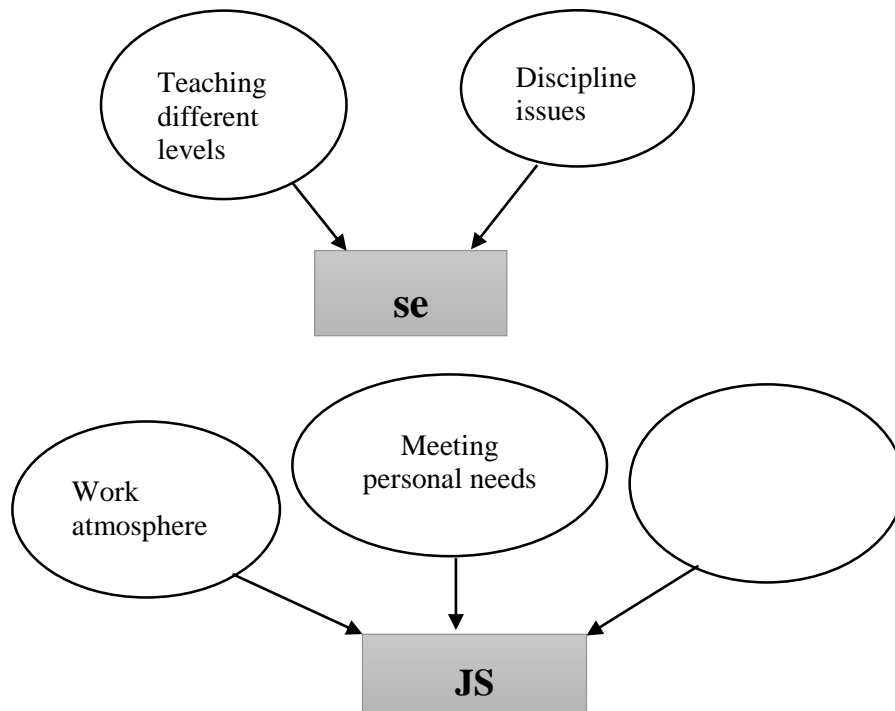
4. Case se/ JS: decreasing self-efficacy and increasing job satisfaction

Three participants were included in case se/JS, FD, YH05 and BA06 (experience 5-21). Although the participants quantitatively experienced decrease in self-efficacy, their responses did not reflect this. In fact, there were few responses, sometimes none, in some timepoints under the self-efficacy question. However, these couple of responses did not suggest a decreased self-efficacy. One participant indicated that he had some “problematic cases” in classes that he managed

to address “with the least efforts and taking less time” and that he had “better knowledge of the psychology of my learners”. Another participant stated that he “taught two different levels and [yet] managed to meet all the deadlines”.

The job satisfaction responses did include some data. The increased job satisfaction responses gave credit to three main aspects. The first aspect was the workplace atmosphere, about which participants said, “My colleagues provided any help I needed regarding the courses I am teaching” and “Good team work and comfortable atmosphere”, “I really feel important as I enjoy good relationship with students as well as my colleagues”, “My colleagues are more open to discuss with me their achievements and the difficulties they face” and “I voiced out my disagreement with my superiors over certain decisions and they were very attentive and understanding listening to my view”. The second aspect that was discussed was meeting the job demands like “I met all the deadlines in time. The third and last aspect was meeting personal needs as a participant commented, “I feel I am doing something that I enjoy. Pleasing myself has always been a major driving factor in doing what am doing”. Figure 25.6 shows factors leading to low efficacy and high satisfaction among participants of this case.

Figure 25.6 Within case: se/JS



5. Case Surprise

Six participants (experience 2-21) were included in case Surprise. After following the criteria set to choose participants in qualitative data analysis, one more criterion was added. Since this case had the largest number of participants, 18 teachers, it was viable to select participants who represented Huberman's five career stages. Thus, one participant was selected from each of the five stages. Participants of this case were purposefully selected based on the unexpected surprises they offered. It was noticed that the six participants can be further grouped based on their scores into: increased self-efficacy/increased job satisfaction, increased self-efficacy/ settled satisfaction and settled self-efficacy/settled satisfaction. The six participants displayed a marked change or otherwise (i.e. none at all) in self-efficacy and job satisfaction (as increase or decrease) across the

five timepoints. Table 33.6 presents the measured change for each participant. Figures 26.6 and 27.6 illustrate the change of TSE and job satisfaction change of the **Surprise** participants.

Two participants were included under increase self-efficacy/increased job satisfaction. NA31 (Omani, age 27) with two years of teaching experience had the lowest self-efficacy and job satisfaction among all 55 participants from the start of the semester until the end. AR18, with 16 years (Jordanian, age 45), scored the lowest in terms of job satisfaction scoring 3 on a scale of 0-10 and moved her way up the ladder to score 9 on the same scale (0-10) at the end of the semester. Scores of NA31 and AR18 reflected an increase in self-efficacy and job satisfaction as illustrated in Figures 26.6 and 27.6 below. Their responses explained these unexpected changes. NA31 had the lowest score of self-efficacy due to several out of control factors such as the managerial decisions regarding the class size, moving student into or out of her class list at the beginning of the semester and the level of students in a single class. NA31 reported, “[having] mixed ability classes [and] having late days” which led her to not “want to think of anything other than finishing my class and go home” because she was physically “exhausted”. Her semester started very stressful with the “management decisions on some issues related to teaching load [and] stressful schedules” left her dissatisfied scoring even lower in the satisfaction scale. Her limited experience- 2 years- and the fact that she did not voice out her disagreement with the management’s decisions negatively cornered her for the first four weeks of the semester. Her sources of self-efficacy came from career-focused activities such as taking part in the curriculum development role. She said that “being head of delivery plan which allows me good time to be more creative in the classroom” and experimenting a variety of teaching techniques through “using warm up activities at the beginning of each class because this will make students active, attentive and ready to participate in classroom activities”. Socializing with colleagues was another successful distractor, as stated, “having a time out [with colleagues] to celebrate teachers’ day”. Focusing on professional and social sides was effective. This was reflected in a statistical increase in the level of self-efficacy, an increase on her

“students’ sense of motivation” and mid-semester results. Nonetheless, she was still dragged down by the “overloaded work schedule” till the very end of the semester.

AR18 had an interesting story with loads of other factors to add. The first six weeks were hampered by students’ behaviour, “Having a couple of extremely disruptive students”) and class size, “The big number of students per class”. However, once she realized that she had the mental power of instructing and constructing through criticizing, “The effect of constructive criticism on the students' level of motivation worked like a miracle”, her “students' level of confidence, understanding and intrinsic motivation” significantly improved and, consequently affected her level of efficacy. AR18’s comments for the rest of the semester were surprisingly full of energy, which her classes were experiencing. Instructing and managing class was easier, “The more knowledge they acquire, the easier it is to teach them, and control their discipline”. Above all, teaching became a worthwhile experience, “Feeling that my effort with my students is fruitful instead of wasted”. The effect extended to influence her, “personal enthusiasm” and increased her sense of the common good, “My personal belief of my mission in society. As an English teacher, I have a great responsibility toward my students, myself and society. My success will reflect positively in both students and society”. She further added, “By seeing and feeling the positive changes I have made regarding their level of English, personality and the way they perceive life compared to how they were when I first met them (level 1)”. Her self-efficacy and satisfaction reached its highest level during the semester scoring a 9 on a scale of 0-10, as she could see a tangible change on her students.

Two participants were included under settled self-efficacy/settled job satisfaction: ANCH, with 21 years teaching experience (Indian, age 43) and JO712 with 22 years of experience (Indian, age 42). ANCH had a momentous settlement from the beginning till the end of the semester scoring 10 on a scale of 0-10 in self-efficacy and job satisfaction. ANCH's momentous settlement was

reflected in both the quantitative data and the qualitative statements. Teaching for her was living because she was, "Teaching from [her] heart". Teaching boosted her motivation because it was all about, "sharing knowledge, ideas and views for the benefit of learners. More than anything, I prefer to do my duties by following teaching ethics and standards". From her point of view, teaching was a lively and humane profession, "showing some patience when they make mistakes, giving them care, understanding their academic and personal issues, listening to them and counselling if necessary, highlighting human values, helping them throughout the semester" and "understanding their level and exposure. Motivating and helping them to set their goals". She realized that when students "understand their goals and how to achieve them", they moved "towards their goals". In return, teaching gave her "appreciation and motivation from superiors, colleagues and students" and she enjoyed "students' positive response" and "colleagues' positive feedback" and "support" throughout the semester. The second participant, JO712, with 22 years of experience, slightly scored a higher self-efficacy mean in timepoint 2 than timepoint 1, but remained stable thereafter, while having a consistent score in job satisfaction throughout the semester. She highlighted two factors that contributed in this consistency; the students and the variety of instructional strategies. She stated; "Students are receptive towards teaching and learning experience they get in their class" and that "Students are motivated and excited to take part, which usually boosts my ability to do something interesting". These were accompanied by selecting and implementing "Group activities, interactive games, think, pair and share activities [that] have been successful". JO712 repeatedly used the terms "Excellent experiences", "Good experiences" and "Great semester" to comment on what satisfied her with no further explanation or elaboration.

Two participants were included under increased self-efficacy/settled job satisfaction: KH03 with 3 years of experience (Omani, age 26), and Ru28 with 6 years of experience (Omani, age 29). The first participant's self-efficacy score increased slightly from timepoint 1 to timepoint 5. However, he openly and continuously reported several factors that affected his self-efficacy

throughout. The most notable and repeated ones were the tangible change he sensed from his students' side and the students' progressing sense of responsibility for their learning experience. He commented; "Noticing that my students are learning and enjoying the process of learning", "I keep noticing my students language level improvement" and "my students' results in the mid-semester exam". Early in the semester, he realized his power as a teacher and the amount of achievements with his students, as he found them "learning and benefiting from me [i.e. him]", encouraged and maintained his enthusiasm. Consequently, his efficacy affected his satisfaction as he conclude; "Being able to achieve my teaching aims and goals ... [made me] satisfied of my teaching abilities". He also highlighted that the "Management being supportive" and the "availability of the needed teaching facilities" positively influenced "the flow of work [which was] going well in general". The second participant, RU28, with six years of experience mainly attributed her satisfaction to observing students' improvement throughout the semester. However, she reported a number of experiences that boosted her self-efficacy such as attending staff development workshops to enhance their teaching and pedagogical skills, having the ability to evaluate and assess students' abilities which was gained due to experience, adopting different techniques to motivate students and closely studying students' personalities to cater for their needs.

Table 34.6 Case Surprise Change Process

ence)	T1TSE	T2TSE	T3TSE	T4TSE	T5TSE	T1JS	T2JS	T3JS	T4JS	T5JS	TSE measured change	JS measured change	change direction
2	5.11	5.56	5.44	5.22	5.78	4.00	3.75	5.00	5.50	5.25	0.67	1.25	Increase/ Increase
6	8.78	8.67	8.44	8.89	9.00	3.00	8.50	9.00	8.50	9.00	0.22	6.00	Increase/ Increase
2	7.89	8.00	8.00	8.00	8.00	8.00	9.25	9.25	8.00	8.00	0.11	0.00	Consisten SE/JS
1	10.00	10.00	10.00	10.00	10.00	10.00	10.0 0	10.00	10.00	10.00	0.00	0.00	consisten SE/JS
3	9.44	8.89	8.44	9.22	9.67	9.50	9.25	9.00	9.50	9.50	0.23	0.00	Increase/ settled
5	7.67	7.78	8.44	9.00	8.56	8.00	8.00	9.00	8.00	8.00	0.89	0.00	Increase/ settled

Note. TSE = teacher self-efficacy, JS = job satisfaction, TSE = the measured difference between the starting score and the finishing score for self-efficacy, JS = the measured difference between the starting score and the finishing score for job satisfaction, change direction = the increase or decrease of efficacy / satisfaction based on the scores on a scale of 0-10

Figure 26.6 Case Surprise: TSE Change over time

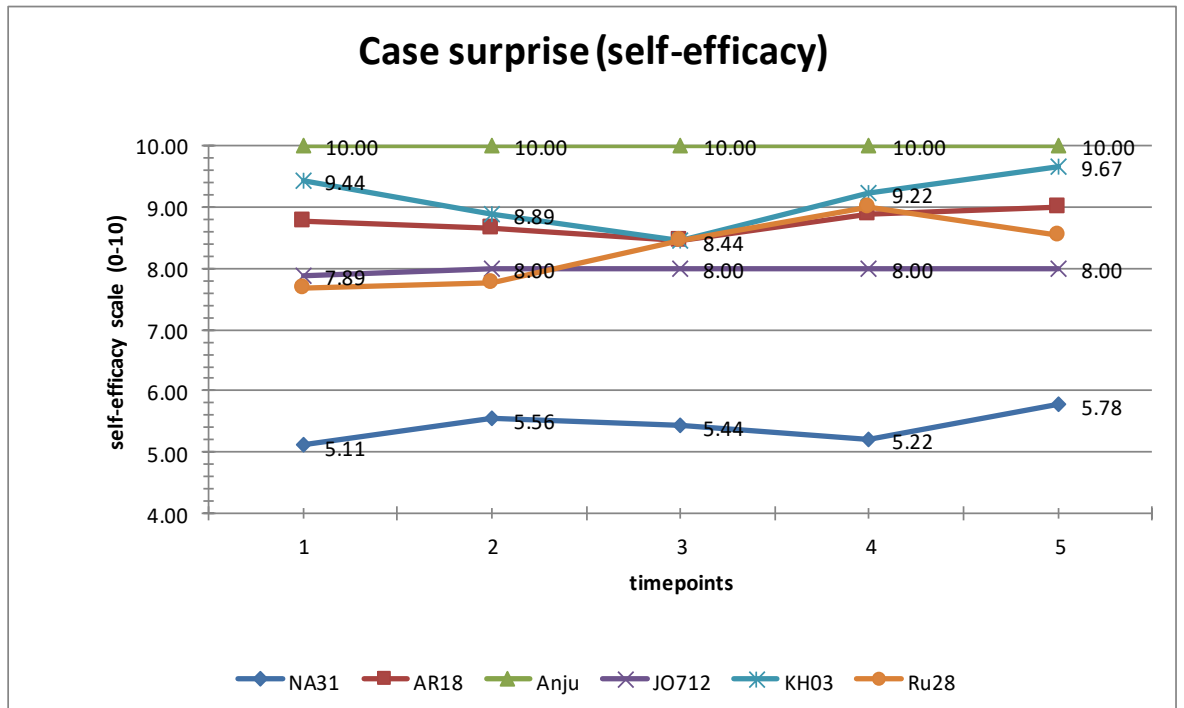
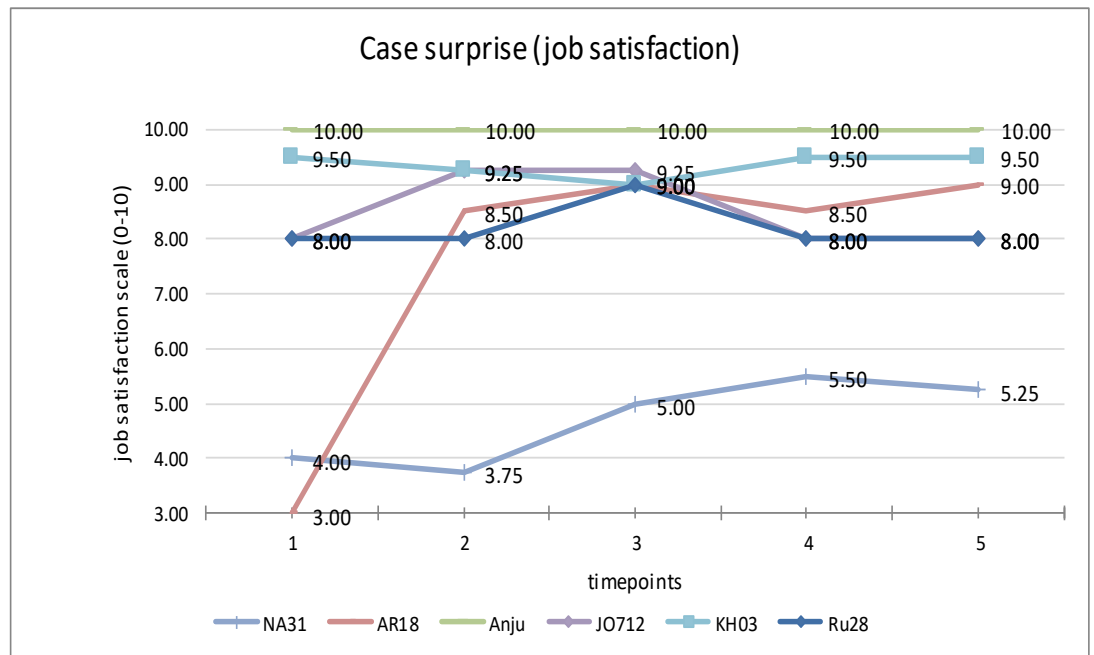


Figure 27.6 Case Surprise: JS Change over time



6.3 Cross-case change: a longitudinal analysis

Following Saldana's (2003) recommendation of scanning and examining linear data displays and matrices in order to track 'processual' flow of changes through time, five change processes have been identified across the five timepoints by examining the data categorically and thematically: positive, assisted, hindered, withdrawal and no-change. Examining the participants' responses shaped these patterns of change. I followed Saldana's (2003) and Klassen and Durksen's (2014) recommendations to look for change and no change, no matter how insignificant it might seem. In this study, the positive change referred to the participant's positive perspective of their experience which was evident through making use of anything that might increase their self-efficacy and add to their teaching experience as teachers. The assisted change referred to what the participants believed could assist them in their teaching task. The hindered change referred to any factor that hampered participants in carrying out their work. The withdrawal change referred to incidences where the participants developed a negative attitude towards their job because of feeling overwhelmed. The no-change referred to comments of consistency- either positive or negative – (e.g. "Not much of a change. Just the same feeling") or long periods of silence (i.e. no data provided) that suggested what words could not convey.

The matrices that were generated case-wise assisted in developing more specific and detail-rich new matrices that were nothing but new combinations of data clusters that were used to look for 'epiphanies' or significant events that embodied some sort of change not only from my point of view but also from that of the participants (Saldana, 2003). The same cases that were discussed in the section (6.2) to investigate within-case change are examined in the following section to investigate cross-case change. Appendix P presents details of the five cross-case matrices. All the cases fall under the three main categories: career-related, student-related and subject/content-related when experiencing change as Appendix P illustrates.

1. Case SE/JS

Participants of this case reported two types of adaptive change across time: positive change and assisted change. They frequently reported positive change due to their relationship with students throughout the semester with comments like “positive personal relationship between teacher & student's that created comfort and boosted our bonding”. A couple of participants referred to the impact of students’ efforts on them; “seeing students eager to learn”, “seeing progress in my students’ level and their positive attitudes” and “they are writing proper sentences”. They also talked about their own effort in “getting to know my students better, identifying the disruptive ones and getting them around” and “introducing the concept of personal responsibility and their role as responsible students, have started yielding fruit ... [and] has resulted in smooth teaching/learning”. In fact, “Students' interest and involvement in class”, their “written work in and outside their classroom”, their “motivation level and growing self-confidence” and “willingness to seek [their teacher's] help” signalled the positive change that Case SE/JS participants went through which was also related to the career factor. One participant referred to the “cooperation from my superior side [and how they] treat me. Their confidence in me that I can do my job well despite my drawbacks”. This highlighted the fact that having drawbacks did not have to hinder them from achieving their goals. In several comments, the participants referred positively to the effect of the subject/content of their teaching on them. For example, one of the participants said, “I am trying out different techniques in class which have turned out to be successful, and probably that is what has influenced my satisfaction”.

Case SE/JS reported assisted change that was mainly student-related in comments such as “The change in students' attitudes towards learning English and little progress in their writing”, “Lower achievers' interaction in classroom”, “Students' are able to understand the instructions of classroom activities by themselves and their obvious progress in reading and writing”. Additionally, the participants mentioned the “teacher-teacher interaction and comfort

level”, the “positive support by higher authorities of the department”, the “timetable flexibility”, “participating in ELC events”. They also talked about creating and devising teaching materials and sharing them with others (e.g. “the positive influence of the teaching materials on students’ progress in language learning” and “some teachers were glad to use some of my teaching materials”). These were a few examples of assisted change in relation to their career. The subject/content-related effect was also reported under the assisted change with one instance of “personal discussion service on various job related techniques” that contributed to increasing the participant’s capability beliefs. Furthermore, participants minimally reported hindrance related instances “mixed ability class with a number of repeaters” that was associated with positive change “creativity and Improvisation”. Another example was “Dealing with mixed ability is the challenge this term. This particular group has quite a few repeaters and a very few high achievers. The rest are just average, and dealing with this is what motivates to be more creative and I am forced to bring about improvised plans to the class”.

2. Case se/js

Case se/js witnessed various forms of adaptive change processes. Unexpectedly, participants of this case reported instances of positive change in relation to the teaching career development such as “I like getting to know a new class and lifting their expectations. I am also writing exams so that contributes as I love writing”. They expressed their satisfaction for “getting proper guidance” and “support” from management and colleagues. This resulted in emotionally positive influence on participants, “I am happy that the management supports me”. Furthermore, they reported positive change in relation to the students such as “I am happy with the test results and I can see many students improving. I like teaching Level One for this reason ... you can see an increase in ability over a semester in a more pronounced way” (JU23). Participants’ comments revealed that “getting positive response” from students, good “attendance” rate, good behaviour and class control over students had a progressive impact on them.

Case se/js participants reported a small number of assisted change instances related to their career in enhancing their skills (e.g. exam writing) and satisfying their thirst for variety, in comments like “I am an exam writer so that means I am not teaching as much as I was...I like the variety and I like exam writing. I feel as though I am good at both teaching and exam writing”. The cordial atmosphere at the work place was directly associated with the sense of comfort they had at work. As the participants stated, “I asked for an emergency leave and got all the possible help from my bosses and colleagues” and “The good treatment I receive from the administration and colleagues”. “The grouping of students”, “the active response of students”, the “management’ approaches” and timetabling all helped boosting the teachers’ self-efficacy beliefs as some participants reported. One participant reported some other factors related to students:

Level One in my experience show more enthusiasm and it is easy to form positive group cohesion because of this...which makes it easier to manage difficult students and to motivate the class...for now! I am also lucky not to have any complete beginners in this class. (JU23)

Most importantly, this case reported instances of hindrance-related issues more than any other case. Participants associated this hindrance with changes in class size, students’ movement between groups, being lateness to/ absence from classes, and developing a sense of demotivation. They also reported, “lack of some teaching resources” and “a heavily loaded curriculum and delivery plan which is tailored to testing more than learning”, which expressed hindered change associated with withdrawal. In several statements, case se/js participants reported frustrating events that signalled withdrawal change towards the end of the semester such as “lack of students' motivation, insane amount of material to cover in a semester” and “some students continue to be disruptive and unmotivated no matter what I do in class”. This sense of retreat continued to exist till the very end of the semester. One participant described the situation, “Time is running out with exam approaching so I have given a lower mark for my

confidence to adjusting lessons to different student abilities because we need to focus on covering the syllabus as a priority” and at some point, it made the teacher “feel less satisfied with my job temporarily as I had my entire class tell me how difficult the exam was and nothing was related to the book! Obviously that is not true but it made me feel as though no one studies so what's the point! It's just an uphill battle here sometimes!” With students who “are unmotivated ... don't want to be here...are hard to shake-up... disruptive and absent... [it is] not easy to get them to change their perspective”.

3. Case SE/js

Participants in case SE/js reported positive change due to finding themselves capable of some student-related issues. For example, “I could find individual student's area of weakness so, I can plan my lesson as well as academic advising hour accordingly”, “I could move according to my plan and the students were equally cooperative” and “I have identified the weak students and I am trying to find out ways to deal with them”. Students’ “outlook in learning”, their attentiveness and continuous engagement gave the participants a sense of confidence in their abilities; “Students are better involved not... They gave positive feedback by saying they don't want to miss my classes”. Participants expressed consistent instances of assisted change which were subject/content-related, career-related, and student-related. Using a variety of teaching techniques (e.g. educational video clips, online resources/sheets) and having a “well laid delivery plan” were exceptionally rewarding. Having a “good climate” in the classroom and with colleagues and a rapport with superiors and colleagues helped built up the participants’ self-efficacy. The career-related assisted change was associated with professional issues “given new responsibilities”, “effective feedback” and “valuable guidance provided by the senior officers in academic affairs”, “very supportive and helpful [colleagues] in terms of sharing ideas”, social issues “spending time with my colleagues has created a good equation amongst us”, organizational issues like being provided with resources like car access card, an office, an

intra-mail service. The participants' experiences with students contributed to this assisted change which was evident in comments like "students voluntarily agree to learn, of course, with a few exceptions", "students continue to be punctual as in the beginning", or "enhanced levels of concentration of the students due to the Mid Semester Examinations being round the corner". Students' behaviour and reaction towards their teachers' instructions and set of rules by understanding and following them and recording a higher attendance rate enhanced their teachers' belief in their capabilities.

Participants in Case SE/js reported few hindrance-related changes due to doubts in their capabilities. These changes were described in comments like, "Because of the warnings given to the students regarding their attendance and the continuous assignment marks, they have become regular and started doing their work. But I am not too sure how much credit should [I] give to myself because I don't see drastic difference in their performance" and "Job satisfaction especially as a teacher we get only when we see the difference in student's behaviour, discipline and performance. If it's still not up to the mark then you keep improvising your ways". With one particular participant, a low sense of capabilities ran throughout the five timepoints due to students as a negative source. They were de-motivated, repeatedly asked for repetition, showed no improvement and exhibited ill behaviour. However, satisfaction was acquired through workplace support, culture, social atmosphere and respect. This case was characterized by a high number of assisted change which was also associated with consistent non-change in statements like "Not much of a change. Just the same feeling" and "No change at all".

4. Case se/ JS

Participants in case se/JS expressed positive and assisted change mainly in the last four weeks which was associated with assistance from colleagues and administration. Participants reported positive change associated with how they felt about their career. As one of them said, "I feel I am doing something that I enjoy. Pleasing myself has always been a major driving factor in doing what am doing". They also addressed their ability to solve issues in comments

like “addressed the problematic cases that came up with the least efforts and taking less time”. Participants revealed assisted change experiences mainly career-related ones such as “I voiced out my disagreement with my superiors over certain decisions and they were very attentive and understanding listening to my view” and “My colleagues are more open to discuss with me their achievements and the difficulties they face”. They talked about subject/content-related experiences, “Good preparation and providing my students supplementary material boosted my confidence”. Although withdrawal change was not directly reported, it was suggested by not providing any comments or feedback for the first six weeks of the semester. Participants in case se/JS signalled retreating using avoidance technique where they ignored the open-ended questions as much as possible.

5. Case Surprise

The participants of increased/increased sub-case in Case Surprise both revealed hindrance related change across the five timepoints. NA31 in Case Surprise revealed a high level of hindrance-related change and withdrawal change throughout the semester, even when she started experiencing improvement in her students. The beginning of the semester (first four weeks) witnessed hindered change associated with withdrawal change “[having] mixed ability classes”, “late classes”, “management decisions on some issues related to teaching load”, and having “stressful schedules). The last couple of weeks of the semester expressed the same hindrance-related change “overloaded work schedule”. However, she reported one single positive change “being head of delivery plan which allows me good time to be more creative in the classroom” and an assisted change “having a time out to celebrate teachers' day”.

Like NA31, AR18 reported hindered change including comments like having “extremely disruptive students”, “big number of students per class”, “disruptive behaviour” in the first four weeks. She displayed a sign of refusal to interact, in week four, by using the expression (“Nothing”) and signalling withdrawal, in weeks five and six, by using the avoidance technique where she ignored expressing herself or writing any comments in the open-ended

questions. After that, the patterns of change took a completely different direction. Participant AR18 reported positive change associated with changing classroom management technique to adapting “constructive criticism”, which had a miraculous effect on the class’s level of performance, motivation and confidence and the teacher’s sense of achievement.

Participants of the settled self-efficacy/settled job satisfaction sub-case in the case Surprise reported high levels of consistent positive change as well as assisted change throughout the semester. When tracing the change patterns, it was noted that ANCH gave high credit to her “previous experiences of teaching and learning”. She also talked about her own preparation, “total involvement of preparing lessons according to the students' level, teaching according to their needs, giving them life based skills though English language, helping them to achieve their goals, and giving them counselling if needed”. Other influencing factors mentioned by her were the mastery of subject knowledge, and the dynamic passion for job, “Teaching from my heart”, “Understanding their level and exposure. Motivating and helping them to set their goals. Trust and care is important. Finding myself as a student of second language and getting into their basic levels helped a lot”. The positive change was closely linked to the assisted change which was indicated in support and positive feedback from administration, colleagues and students, in addition to students’ performance and ultimate results, as she said, “[students] understand their goals and how to achieve them”.

JO217, the second participant of this sub-case, mainly reported career-related positive change. His comments reflected a steady sense of self-efficacy and satisfaction throughout the semester. He reported having a boosted self-efficacy as he realized his “ability to do something interesting” and concluded that it was “fruitful”. Through consistent comments such as "Great semester so far", "Excellent experiences", "Good experiences", he expressed a settled sense of satisfaction. Assisted change was reported in terms of experimenting new teaching activities to ensure successful learning experience for his students. His students took part in forming this type of change as they kept being excited, motivated and engaged.

Participants of the increased self-efficacy/settled job satisfaction sub-case in the case Surprise expressed two patterns of change; positive change and assisted change throughout the semester. KH03 reported a steady sense of control over work demands and achievements throughout the semester. His comments were loaded with positive change as he constantly referred to achievements mainly related to career and students such as “Being able to achieve the teaching goals”, “Finding the flow of work going well in general”, “Noticing that my students are learning and enjoying the learning process”. Assisted change was highlighted in relation to the subject and its content as the comments showed, for example, “The pop quizzes helped me to know who is studying and who is not. Thus, I encourage those who are not studying to revise everything given in the classroom”.

The second participant of this sub-case, RU28, started the semester with assisted change that was related to her career by attending staff development training, “symposium”. Mingling with “experienced teachers” from other colleges and teaching environments was described as “useful”. In the last two timepoints, she expressed positive change related to knowing students’ needs and personalities and witnessing improvement in students’ level and motivation through comments like “The only thing is watching the improvement in my students level” and “Knowing their personalities closely! I know what motivates them and what not”. Positive change pattern was revealed through selecting suitable activities that motivate students. As a result, students became “serious” about their studies and “concentrate more”.

6.4 Summary of chapter

To sum up, the current study traced changes of self-efficacy and job satisfaction beliefs using within- and cross-case approach in order to highlight the patterns of change qualitatively. Five patterns were identified and used to find evidence of “developmental and processual” change (Saldana, 2003). A key finding was the case **Surprise** which included six participants who were different in the way their beliefs developed and progressed but similar in standing out

to form a case cluster on its own right. The next chapter links these findings to the quantitative findings of the current study and discusses them in relation to the literature.

7 Discussion of Quantitative & Qualitative Findings

This chapter is structured based on the research methods used in this study. First, the purpose of the study is restated. Next, there are two sections that provide a discussion of the quantitative and qualitative findings of this study, separately. Discussions from the study are outlined based on the research methods and research questions.

7.1 Purpose of study

In this study, teachers' self-efficacy, or confidence as it is commonly known and used in the surveys of the present study, was reviewed in the light of Bandura's (1977) theoretical framework of self-efficacy and defined in the light of Tschannen-Moran, Hoy and Hoy's (1998). When assessing perceptions of teachers, several factors emerged that meet the findings of efficacy in other contexts and some were attributed to the Omani context. Indeed, in a complex profession like teaching, there are many factors that could shape teachers' perception of their capabilities and their sense of satisfaction.

The purpose of this mixed methods study was to (a) investigate the teachers' perceptions of their capabilities and the relation between these perceptions and their job satisfaction beliefs, and (b) associate the teachers' perceptions of their capability to engage their students with their students' perceptions of their in-class level of engagement. Using a short-term longitudinal approach, this study was also designed to (c) investigate changes in teachers' beliefs over time during one academic semester at an English Language Centre at the Higher College of Technology in Oman. The mixed method approach of the study allowed for comparing the quantitative and qualitative findings to verify the results and explain the kinds of factors that could increase or decrease teachers' sense of efficacy and satisfaction. Therefore, the following discussion of quantitative and qualitative components of this study will shed some light on our understanding of factors influencing self-efficacy and job satisfaction beliefs during teaching.

7.2 Quantitative Findings

Using a longitudinal research approach, the quantitative component of the present study sought answers to five research questions. Three of the research questions were answered based on teachers' responses and two were answered based on students' responses. Teacher participants were required to biweekly respond to five online diaries. To lessen the burden on teachers, brief measures were used. Nine items from Tschannen-Moran and Woolfolk Hoy's (2001) Teacher Sense of Efficacy Scale (TSES) and four items from Caprara, Barbaranelli, Borgogni, and Steca's (2003) job satisfaction instrument were used.

The first research question **RQ 1 (A)** was used to investigate changes (if any) in teachers' self-efficacy and satisfaction beliefs over the course of one semester (three-month semester). **RQ 1 (B)** was designed to explore differences between novice and experienced teachers' experiences in terms of their efficacy and job satisfaction beliefs. **RQ 2** was designed to explore the teachers' self-efficacy and job satisfaction beliefs in relation to other variables such as gender, age, teaching level, and years of teaching experience. Research questions four and five were used to investigate the students' perception of their engagement level and test the validity of the student engagement scale, respectively.

7.2.1 Research Question 1(A) & 1(B).

How do teacher self-efficacy and job satisfaction beliefs change over the course of one semester? & Is the change over time related to experience?

The first discovery of note was that the participants' self-efficacy beliefs witnessed a statistically insignificant increase throughout the semester. This insignificant change in their beliefs over time is in line with Bandura's theory of SE beliefs. Bandura (1997) hypothesizes that once established, teacher self-efficacy (TSE) beliefs are hard to shake unless they are confronted or reassessed by a shocking experience. Meaning, this stability of TSE is likely to remain unchanged. This result seems to correspond with literature showing no raise in teacher self-efficacy over time (Roberts et al., 2001). A possible explanation for this result is that a big

number of respondents are experienced teachers whose efficacy beliefs have already been shaped as they moved further into their career. Additionally, the Foundation Program at Colleges of Technology (CoT) get two batches of new students per academic year. The first intake joins in September and these are the school graduates with good overall grades. The second intake joins in January and these are the ones who graduate from schools in the same academic year but their scores are lower than the September in-take and, thus, automatically are filtered to join the CoT as a second phase. Generally, these two batches have different characteristics as reported in teachers' comments including level of English competence, schooling background (public or private education), and gender as the CoT mainly admit boys since the specializations like mechanical and electrical engineering, are favoured by males. These factors may have played a role in the insignificant increase in teachers' beliefs. Having said that these are mere assumptions based on my understanding of the context and not data-driven conclusions.

Another finding, which is probably as important as the previous one, is the general pattern of change for both TSE and job satisfaction variables. The results showed that each of these variables witnessed a change at different timing during the semester. The teachers' efficacy continued to rise throughout the semester (*Hypothesis 1a*) peaking at timepoint five (see Figure 11.4). However, the job satisfaction beliefs peaked at timepoint three and dropped towards the end of semester (*Hypothesis 1b*). These interestingly contrasting results are found in literature when comparing self-efficacy change over time. Roberts et al. (2001) reported a statistically significant difference when comparing mean scores from teachers in weeks 2 to 3 of the in-service program and in weeks 4 to 6 of the in-service program, showing an increase between the two program sessions. Woolfolk Hoy and Spero (2005) also reported changes in teacher efficacy from the moment of entry into a teacher preparation program through the induction year. One possible interpretation for the current study's significant finding was that at timepoint three, teachers had just finished marking the mid-semester exam, entered the exam results and handed over the exam papers back to students. Teachers must have seen the reward

of their hard work in their students' scores, which boosted their satisfaction. The fall in job satisfaction after timepoint three until the end of the semester could be attributed to the stressful nature of the teaching profession as some teachers struggle to complete the syllabus and have time to revise the curriculum towards the end.

The third main quantitative finding of the study was the impact of experience on teachers' efficacy and satisfaction beliefs. Owing to the inequality in the number of teachers in terms of years of experience, it was not viable to divide the respondents into two main groups: novice and experienced teachers as research question *1 (B)* suggested. For the purpose of assessing this impact, three experience groups were identified: (novices = 1-3 years; average experience = 13-20 years; and highest experience = 21 years and above). To make it possible to compare novices and experienced, six participants from each group were used in the analyses based on the number of novices which was only six genuine novices. The investigation revealed no statistically significant effect of experience on teachers' beliefs when comparing the three experience groups. However, the highest experience group teachers had the highest TSE mean score (see Figure 12.4). The six teachers in the highest experience group of the present study have more than 30 years of experience. Thus, it can be concluded that the more experience the teachers had, the greater was their belief in their capabilities. This finding may contradict some studies but it also supports others. Klassen and Chiu's (2010) results suggest that teacher self-efficacy increases from early career to mid-career and falls after 23 years of experience. It is noteworthy to highlight that the increase in self-efficacy factors is the same pattern of growth and gradual fall (Klassen and Chiu, 2010) which is something that the current study did not explore. However, the current study finding is in concert with Tschannen-Moran and Woolfolk Hoy's (2007) finding in which novices scored a lower mean for self-efficacy than experienced teachers and attributed this to the "relative inexperience". They attributed the higher mean among experienced teacher to the high novices' attrition, which is something beyond the scope of the current study.

The impact of experience on job satisfaction was also seen. The highest experience group had the highest mean score ($M = 9.43$, $SD = .58$) compared to the novices group, 1-3 years, which had the lowest mean score ($M = 8.04$, $SD = 1.71$). In terms of interpreting these score, Huberman's career stages cycle of teachers was used. When interpreting these results, it is important to remember that teachers make a lot of decisions in every moment, go through many changes and have different concerns at different stages of their career cycle. This is because teaching is filled with challenges (Huberman, 1995). Teachers move from one phase or stage to another with knowledge and experience that influence and shape the following stage. Fessler argues that "Teachers experience many shifts in stages throughout their careers, often meandering back and forth between periods of growth and frustration in response to factors in their personal and organizational lives" (1995, p. 172). Thus, sources of satisfaction may differ based on what stage they are at. The highest experience group teachers in the quantitative analyses have 30 years of experience (or more) which places them somewhere in Huberman's (1989) serenity/conservatism stage (years 19-30) or disengagement stage (years 31-40). My findings, however, indicate a steadiness in teachers' sense of satisfaction among the highest experience group which can be interpreted by reaching a stage of "a greater sense of confidence and self-acceptance" (Huberman, 1989). Perhaps this group no longer seeks perfection at work and has attained a level of peace within or achieved their self-actualization, the highest level of needs (Herzberg, 1964). Perhaps teachers of this group may have reached a level of efficacy to cope with unexpected situations and a state of internal motivation and self-directed education, which Gregorc (1973) described as features of the Fully Functional Professional stage. However, the average experience group teachers, who fall under Huberman's stocktaking stage, may be experiencing a sense of self-assessment of their career options which is marked by their low mean score especially at the beginning of semester (see Figure 14.4). Although the highest experience group and average experience group consisted of experienced teachers, it still can be argued that each stage has some unique features that acutely differentiate it from other career stages. Thus, a teacher with four years of experience has different preoccupations, aspirations

and concerns from the one with 30 years of experience- albeit both are experienced (Huberman, 1995).

7.2.2 Research Question 2.

To what extent are teacher self-efficacy (TSE) and job satisfaction (JS) related to (1) teacher gender, (2) teacher age, (3) teaching Level at the foundation program, and (4) teaching experience?

Using TSES and job satisfaction instruments, I examined research question two in order to ascertain if teachers' efficacy and satisfaction beliefs are affected by gender, age, and teaching level at the Foundation Program. With respect to gender, the findings did not associate it with TSE or job satisfaction (*Hypothesis 2a*). Thus, no difference was found between male and female teachers. This finding is inconsistent with previous studies showing gender differences in levels of job satisfaction (e.g. Ma & Macmillan, 1999; Raudenbush et al., 1992; Klassen & Chui, 2010). Ma & Macmillan (1999) reported that female teachers were generally more satisfied with the teaching profession than their male counterparts and that this satisfaction was supported by an increase in teaching competence. Bandura (1997) argues that women with a high sense of efficacy take on board the biggest share of familial and occupational responsibilities, exert more influence over their work schedules, seek partners' assistance to manage family and work demands, and have less physical and emotional anxieties. Consequently, this sense of efficacy may shape women's career choices (Bandura, 1997) and satisfaction. While gender is not directly linked to self-efficacy based on the results of this study, it is definitely an area for further research. As indicated by the number of female respondents of the current study (74.5%), teaching is a highly feminised profession in the present study's context. However, this study did not target gender in its objectives neither did gender trigger any assumption in the qualitative findings.

Although age was positively related to job satisfaction (*Hypothesis 2a*), which suggested that older teachers were more satisfied with their career than younger ones, it has a

weak but positive association with teacher self-efficacy. Literature indicates that older teachers may have a lower self-efficacy due to biological and psychological changes as well as psychosocial factors such as age, experience, school practices, resources (Klassen & Chiu, 2010; Bandura, 1997; Chester & Beaudin, 1996). The present study findings suggest that there is a lower likelihood of there being a relationship between age and self-efficacy. This might be related to the age range of the present study's participants as the majority of them (78.2%) are under the age of 55. This suggests that they, perhaps, are still in good biopsychological shape that has not been challenged with the impairment of old age. Bandura (1997) discusses the relation between age and perceived self-efficacy and describes it as "no easy matter" as it hard to interpret given that people respond differently to aging. One way to interpret the findings of this study, in the light of Bandura's self-efficacy theory and discussion of aging, is that people with high sense of efficacy do exercise control over their daily activities and, thus, feel satisfied when they manage to conquer them. When it becomes hard to move on with everyday life challenges and improve their skills at the same time, teachers seek assistance from others. This is when social and professional support becomes important, of-course, in the form of management and collegial relations in this case, which signals the need to increase proxy efficacy.

This study also indicates that the level the teachers are teaching at has a role to play. The higher the teaching level, the higher is the teacher efficacy, as indicated by the mean scores. Teachers teaching Levels One and Two of the Foundation Program had slightly lower self-efficacy than those teaching Levels Four and Post-foundation level. The same applies to the job satisfaction level with a more prominent difference between levels One and Post-foundation (See Table 24.4). This can be explained by the fact that Level One students are the weakest in terms of their language abilities and teachers have to do triple the effort of teachers of other levels. In some cases, Level One teachers have to start from teaching the alphabet. This is the level with the highest number of student burnout, according to the Foundation Program management. Teachers chosen to teach this level are carefully selected and are given much

more attention than the rest of the levels in terms of meeting with them and providing them with in-house materials. According to the Foundation Program policies, there are monthly level-wise meetings with teachers of levels One to Four. Behavioural and academic problems and challenges are discussed and solutions and advice are given. Additionally, these differences were also found across all five levels for all self-efficacy factors, that is classroom management, instructional strategies and student engagement. The biggest mean scores were in the teacher self-efficacy for classroom management across all five teaching levels (see Table 24.4, Chapter 4). The teachers did not seem to have major discipline or class control issues as indicated by the mean scores.

Research such as that of Klassen and Chiu (2010) is inconsistent with my findings. Their study reveals that teachers in higher grade levels have lower self-efficacy and that within the same school, teachers teaching younger students are more confident than those teaching older students in terms of classroom management and student engagement. Having said that it is important to consider an overlooked factor in teacher efficacy research, the context. First, Klassen and Chiu's study takes place at school level, while, the present study takes place at college level. That is to say, the context in which the teachers worked, as these studies showed, may have an impact- either positive or negative- on teachers' sense of efficacy. Second, the context is different in terms of the students' level. Teachers being examined in the present study teach freshmen as compared to the school-level teachers who teach different school-grades in Klassen and Chiu's study. Hence, it could conceivably be hypothesized that the context does matter and that teaching level within the same context makes even further variation in teachers' self-efficacy.

This is the first study, as identified within the limits of my review of literature, to examine the relationship between teachers' self-efficacy and job satisfaction beliefs and the impact of these on one another at higher education level in Oman and specifically at the Colleges of Technology. This study demonstrates a positive linear relationship between teacher

self-efficacy and job satisfaction, which concurs with other studies that reinforce this link between the two variables (Akomolafe & Ogunmakin, 2014; Caprara et al., 2003; Gian Vittorio Caprara et al., 2006; Coladarci, 1992; Collie, Shapka, & Perry, 2012; Klassen & Chiu, 2010). Studies have reported that the three self-efficacy factors are related differently to job satisfaction. More specifically, Klassen and Chiu (2010) found a direct influence of teachers' self-efficacies for classroom management and instructional strategies on job satisfaction, whereas, self-efficacy for student engagement did not have a direct impact. In the current study, the three factors of teacher self-efficacy correlated slightly differently with job satisfaction. Self-efficacy for student engagement had the strongest correlation with job satisfaction compared to teacher efficacy for classroom management and instructional strategies. These findings suggested that teachers, who had the ability to involve students in the learning experience, were happier with their job rewards. Thus, the more satisfied these teachers were with their teaching, the better they perceived their abilities to engage learners. Although teacher self-efficacy for classroom management and instructional strategy came second and third in the correlation to job satisfaction, respectively, they still had significant correlation with job satisfaction. A possible explanation for the relationship between student engagement factor and teacher job satisfaction could be due to the sociocultural impact on the teaching/learning process. Comparing Omani and Canadian teachers' motivation to choose teaching as a career, Klassen, AlDhafri, Hannok, and Betts (2010) found that both Omani and Canadian teachers reported high levels of motivation for choosing to teach due to intrinsic career value. They also reported that although individual motivation sources were salient for both, Omani teacher put more emphasis on familial and collective sources. Bandura states that "interdependence does not obliterate a personal self" (1997, p. 32). Since teachers in the present study come from various cultural settings (78.2% Asian, 7.3% African, 7.3% European, & 7.3% American) with almost half of them from Arabic background (45.5%), it may be viable to interpret the results in the light of teachers' cultural backgrounds. Omani education system is rooted in Islamic teachings (Klassen et al., 2010) and Omanis have 47 years of free formal education at school

level (Al-Issa & Al-Bulushi, 2012). As part of the Arab culture which is highly collective (Obeidat et al., 2012), Omani society believes in tribal power and social connections (Al-Barwani & Albeely, 2007) which may explain the level of student engagement perceived by the teachers, as students strive to be active and try to maintain the traditional trend of being part of a community, even in the class. This is supported by Item.4 mean score of the ESS that indicated that students valued relations they built with each other.

7.2.3 Research Question 3.

How do novice and experienced teachers differ in terms of their TSE beliefs (including “classroom management efficacy”, “in-class student engagement efficacy” and “instructional strategies efficacy”?)

Research question three focused on whether there is a difference between novice and experienced teachers in terms of the three self-efficacy factors. To answer this question, the three experience groups were employed to examine any differences. According to the present study findings, the novice teachers (1-3 years of experience) scored the lowest in all three TSE factors as compared to the average experience group (13-20 years) and the highest experience group (more than 21 years of experience). The analysis showed that the novice group teachers ($M = 7.86$, $SD = 1.09$) was not significantly different from the highest experience group teachers ($M = 9.07$, $SD = .86$) in choosing their instructional strategies at the $p = .06$. However, it can be argued that the p -value was very close to significance ($=.05$). Similarly, the novice group teachers ($M = 7.57$, $SD = 1.35$) were not significantly different from the highest experience group teachers ($M = 8.86$, $SD = .89$) in engaging their students at the $p = .10$. It can also be argued that the small number of participants used to compare novices with experienced teachers, that is six participants under each group, might have influenced the results.

Furthermore, the three experience groups did not show any significant difference in terms of their abilities to manage classes. This finding was unexpected (*Hypothesis 3a*) and inconsistent with studies reviewed in academic literature (e.g. Tschannen-Moran & Hoy, 2007;

Wolters & Daugherty, 2007; Schempp et al., 1993; Berliner, 2001). Tschannen-Moran & Hoy found that experienced teachers reported higher efficacy than novices in selecting instructional strategies and classroom management techniques. Schempp et al. (1993) reported that novice teachers' main worry and challenge is managing the class. The most likely explanation to my findings is related to the small sample size of each of the experience groups. The actual number of novices with one to three years of teaching in this experience group was only *six* out of 55 participants. The other likely reason can be having a good relationship with students due to which teachers are more stimulated to verify their instructional strategies and try to recognize more effective ways to involve students (Meristo & Eisenschmidt, 2014) rather than worrying about how to control them.

Interestingly, the present study found a significant positive relationship between experience and the three teacher self-efficacy factors. Thus, it can be argued that teachers with more experience had more confidence in choosing appreciative teaching strategies and ensuring that learners were involved in the learning process. Research shows that experienced teachers have richer knowledge of the subject matter, they can make intuitive judgements of students' abilities and needs based on their past successful experiences, which in turn, gives them the ability to integrate different kinds of knowledge (Mahmoudi & Ozkan, 2015). Experienced teacher tend to have greater flexibility, spontaneity in teaching and efficiency and effectiveness in lesson planning (Richards & Farrell, 2005). Novices tend to commence their lessons by directly relating to the topic in hand (Westerman, 1991) and they share materials and discuss their experiences informally with colleagues to ask for ways to improve themselves (Mahmoudi & Ozkan, 2015). Additionally, research shows that teachers with higher self-efficacy belief in their ability are able to engage students more in their learning as well as ensure a more effective use of instructional strategies and practices (Wolters & Daugherty, 2007). Experienced teachers seem to know, from experience, that good teaching makes students more involved. To improve their teaching, they welcome and take part in mentoring, peer observations, read professional

articles to inspire themselves, attend and participate in conferences or seminars (Fessler, 1995; Mahmoudi & Özkan, 2015).

The current study also found that teachers with a greater sense of self-efficacy were more satisfied with their jobs. Another way of presenting this is when teachers were satisfied with their job, they exerted more effort to engage their students which, in turn, raised the teachers' efficacy in their abilities. Perhaps, also, when teachers watched students being physically active by participating in the everyday class activities and mentally present as their tests scores showed, they experienced a sense of accomplishment and, consequently, a sense of self-efficacy that they were doing well in instructing, managing and engaging their students. After all, if there is evidence that students were receiving and producing what teachers were trying to teach, then this in itself was satisfying.

7.2.4 Research Questions 4 & 5.

To what extent do teachers' confidence in engaging their students relate to their students' view of this confidence? & Is the Engaged Student Scale (ESS) valid and reliable in the Omani context?

Student engagement is associated with effective learning (Dolezal et al., 2003) and it reflects the students' willingness to take part in classroom routine activities including doing and submitting homework, attending classes and following class instructions (Chapman, 2003a, 2003b). Furthermore, student engagement indicates the level of effort and investment that students put into their learning experience to acquire and master knowledge throughout their learning process (Lamborn et al., 1992). One of the main objectives of the present study was to validate engaged student scale (ESS) in the higher education Omani setting. The novel contributions of the present study are threefold in the context of ESS: the scale in the current study is created by selecting items from the original engaged teacher scale (ETS) that are suitable for students after transferring the teacher engagement scale into a student engagement scale; second, the study relates ESS to teacher self-efficacy to examine the impact of teacher

efficacy on students' level of engagement; third, ESS is created in two versions, Arabic and English, which makes it ready to be tested in international and Arab contexts in the future. According to my review of literature, this is the first study that tests a student engagement scale in the Omani higher education institution context.

A key finding of this study is that the 11- item engaged student scale (ESS) was found to be valid in the Omani context, as expected (*Hypothesis 5a*). ESS has a good internal consistency with overall of $\alpha=.87$ (DeVellis, 2003; DeVon et al., 2007; Field, 2006; Field, 2009). The three student engagement factors, that is cognitive, emotional and social, are related to one another. The most prominent correlation is between items of the cognitive and emotional factors. Although ESS has a good overall alpha, social engagement factor ($\alpha = .54$) has, unexpectedly, the lowest alpha compared to the cognitive factor $\alpha=.79$ and emotional factor $\alpha=.85$. Social integration and relations in classroom are important. In fact, social life is considered part of the successful transition to and through higher education (Hardy & Bryson, 2010) as it assists students to cope with stress and difficulties (Eggens, Van der Werf, & Bosker, 2008). Social networks are also considered important for student well-being and for achieving desired academic outcomes (Eggens et al., 2008; Hardy & Bryson, 2010; Robbins, Lauver, Le, Davis, Langley, & Carlstrom, 2004). One possible explanation can be that I, naïvely assumed, that in Oman, a collective society, where social relations are highly valued and supported, social engagement will be the highest form of engagement. However, the age of this group of students might have an impact on them as teenagers who look at college life as a place to practice individuality and personality shaping. Additionally, the Higher College of Technology (HCT) enrolls students from different parts of Oman with different experiences and socio-economic backgrounds which might have influenced their social relations in the classroom.

Surprisingly, ESS reported that teachers' perception of their capability to engage students had no association with their students' perception of their teachers' ability to engage them. This finding was unexpected. Yet, the scatter plot (see Figure 17.4) showed a linear

relationship between the teachers' perception and the students' perception which suggests that these findings need to be interpreted with caution. It is important to bear in mind that students did the student engagement scale online on their own and at their own leisure. This may suggest that some did not take it seriously given that they were instructed to do it at the end of the semester when everybody – teachers and students- were busy preparing for their final examinations. Furthermore, it is possible that ESS might have missed certain aspects that students may consider part of what engagement involves. This calls for a further study that should consider adding more items to the scale from the students' point of view. Thirdly, although every effort was taken to ensure a good translation of the scale using back-to-back translation (Hilton & Skrutkowski, 2002), students might have interpreted the Arabic items differently. In future investigations, it might be important to consider the survey dissemination timing and take extra care with the scale translation methods.

7.3 Qualitative Findings

Similar to the quantitative findings section, the qualitative component of the present study used a longitudinal research approach to seek answers to two research questions. In five online diaries, teacher participants were biweekly required to respond to two open-ended questions at the end of the TSES and job satisfaction instruments and were asked to answer an open-ended survey at the end of the semester. Responses to the two open-ended questions as well as the open-ended survey were used to answer the two qualitative research questions.

7.3.1 Research Question 6.

What factors influenced the teachers' self-efficacy and job satisfaction beliefs during the semester?

7.3.1.1 Teaching and learning through the lens of experience.

Teacher self-efficacy for instructional strategies. The most prominent teacher self-efficacy facet that teachers referred to in the data was their use and selection of instructional strategies. Experienced teachers were more likely to keep implementing instructional strategies that they believed to be effective from their long experience in teaching. They had a set of goals to achieve including those syllabus outcomes provided by the course coordinators. They also considered their students' goals when planning their materials and coupled that with good instructions and student-centred tasks. The less experienced teachers, tended to verify their instructional activities and included up-to-date strategies that they believed would catch their students' attention using technology such as a smart-board, video clips and mobile phone friendly activities. The study supports earlier research findings about differences between experienced and novice teachers' use of classroom instructions where novices fail to implement as large a variety of instructional strategies in response to students' performance in class, as those implemented by experienced teachers (Fogarty et al., 1983). As an example, an experienced teacher reported a sense of persistence that has not changed or been affected by having weak learners and work stress. Perhaps because she was backed with more than thirty years of teaching experience and a positive perception of her own abilities. Bandura (1997) hypothesizes that people judge their abilities based on the emotional state they are in, during the performance. It means teachers expect success when they are not feeling overwhelmed by a negative feeling. Although this particular teacher was hampered with under-performers and teaching load, her self-efficacy was well established that she was not negatively affected by the surrounding circumstances.

Teacher self-efficacy for Class management. A key finding of this study was the impact of experience on teachers' self-efficacy. When novice teachers wonder how they should transfer the knowledge they know of the subject matter (content) into a form that students can comprehend, frustration kicks in due to their lack of experience. For more experienced teachers, experience guides them and tells them what to do. The qualitative data suggested that there were vivid differences between the novice and experienced teachers' performance and reactions in the class. The teachers' responses also included ways of class management, settling in at the beginning of the semester, methods of instructing and introducing topics.

Teachers' perception of handling student behaviour and/or misbehaviour differed based on their experience level. In the present study, talking about class management and handling classroom issues was not very common among novice teachers. In fact, novice teachers avoided addressing classroom management issues in their comments with an exception of one teacher mentioning it towards the end of the semester (week ten). This can be explained by a lack of self-efficacy in bringing up this issue or even trying to face its existence. Another explanation is that novices were still following the context-free rules such as "never criticize a student" (Berliner, 1994) which can be interpreted as whatever happened in the class was quite normal and, therefore, they should not make an issue out of it. Berliner (1994) points out that novices "can be expected to have trouble interpreting events". This means that novice teachers may be confused in interpreting any classroom phenomenon due to lack of experience and, therefore, they tend to ignore classroom disorder (Veenman, 1984).

However, experienced teachers expressed their views of their first encounter with their classes at the beginning of the semester, the process of introducing, keeping and maintaining rules throughout the semester. This study found that setting up rules is quite common among experienced teachers. Teachers' comments emphasized the need for initiating class norms among a group of students when meeting for the first time. Wragg and Wood (1994) argue that when people meet, a number of aspects are meeting including individuals' personalities, social,

environmental, institutional varieties. Although teachers and students may be from the same country, teachers need to consider the students' different personality types. These students come from various cultural backgrounds, with different socio-economical orientations and educational experiences. Experienced teachers are equipped with experience that enable them to see the 'acuteness' of the precious first encounters with their students to create that first impression with all its rules, ethos, and relationships which will last them a whole semester (Wragg & Wood, 1994). In the current study, the experienced teachers also talked about how their established rules can be modified or enlarged as the semester went on but not eliminated. They believed that students' own goals can be incorporated within their class rules and objectives, leaving the students with more space to grow. Experienced teachers realized the effectiveness of considering students' goals and they coupled that with good instructional activities that were student-centred in nature.

Interestingly, this study showed that classroom management was not about how to solve discipline problems when they occur in the class, rather, it is about preventing them from happening in the first place (Fox, 1993; McManus, 2002). Experienced teachers talked about their own ways of tackling problems such as constructive criticism, strict in-class rules, active learning verses mind wandering, lightening class atmosphere through jokes, and empowering students' control. Novice teachers might have been extremely busy- perhaps overwhelmed- by thinking of ways to teach and circumventing distraction that might lead to unnecessary confrontations with students and diversion from the main task, teaching. This discrepancy in the reaction of experienced and novice teachers could be attributed to experience. Perhaps due to lack of experience, novices preferred turning a blind eye (McGuiness, 1993) and overlooked the management issues altogether. Their counterparts, on the other hand, viewed management issues as a creative task (McGuiness, 1993). Therefore, rather than depending on the teacher's voice tool to maintain order (McManus, 2002), experienced teachers tackled disruptive behaviour by cracking a joke, doing practical work, and allowing students to practice their responsibilities.

Teacher self-efficacy for student engagement. In the present study, teachers reported various forms and ways of student engagement. Teachers expressed that their students would pay more attention and interest if the task was linked to real world tasks such as CV writing or job interviews or role-plays. This is in line with Willm et al. (2009) who suggested that one of the main forms of student engagement is the intellectual engagement where the student linked what was inside the class with the outside world. Furthermore, teachers stated that students were interested, valued the class work, were physically active in class, created their own tasks, and asked for activities that were linked to real life experiences. Similar to other studies, students exhibit behavioural engagement when they are active doing class activities, motivational engagement by valuing class work, cognitive and intellectual engagement when taking part in creating their own activities and linking them to real life situations (e.g. Chapman, 2003a; Fredricks, Blumenfeld, & Paris, 2004; Linnenbrink & Pintrich, 2003; Mehdinezhad, 2011; van Uden, Ritzen, & Pieters, 2013, 2014).

Novice teachers' comments in relation to student engagement were mainly related to students' level of understanding of subject and in-class instructions and their tests results. They did not report any influence of student engagement on their own teaching in any way. This finding is parallel with the findings of Ozder (2011) who observed that novice teachers perceived themselves to be less adequate in ensuring student engagement than in class management and in using instructional strategies. The finding may stem from the fact that the induction program that new teachers receive once they join the CoT does not address student engagement issues. However, it is a prominent section of new staff evaluation sheet that is filled by the Foundation Program management during in-class observations.

Unlike novice teachers, experienced teachers, with high self-efficacy beliefs, commented on several effects of having engaged students on themselves as well as on students. They stated that student engagement directly affected them. One participant reported that the level of student engagement showed how much effort she put into teaching them. Another one

strongly stressed that it gave him confidence to teach in any situation and a third said she felt “lucky and blessed”. Other participants stated that they feel “important” and being taken “interest in” by students to the extent that students register in their class giving them preference over other teachers and send their friends to register with them. Thus, the effect of student engagement varied but was generally positive, which in turn, bolstered the teachers’ efficacy beliefs. These results are consistent with those of other studies. For example, Guo et al. (2011) found that a high level of student engagement is significantly associated with a higher level of teacher self-efficacy especially when teachers work in highly collaborative teaching environment. Although Guo et al.’s study is similar to the present study in terms of some of the demographics such as females forming the majority of participants in both studies, the average years of teaching experience is similar and the context in both studies is multi-ethnic, the major difference between the two studies is in the level of students. In the current study, students are freshmen at college level, while in Guo et al.’s the students are at preschool level with age range (3-7) years. However, in both studies students’ high level of engagement is associated with high self-efficacy and collaborative teaching environment.

Moreover, experienced teachers noted various instances of student engagement forms (e.g. related to students’ learning, personality and attitude). They noted that students (1) became more independent, (2) grew in terms of personality and knowledge, (3) maintained a positive attitude and showed signs of student self-efficacy. These findings are also in agreement with the results of Woolfolk Hoy, Rosoff, and Hoy (1990) who argue that immediate feedback in the form of participation in class supports teachers’ sense of efficacy. Pines (2002) posits that teachers are likely to consider themselves significant and their work meaningful when students are interested in and attending their lessons. Having said that, the level and impact of student engagement, that the qualitative data brought forth, were from the teachers’ point of view as they were reported by teachers. It would be interesting to prove these through investigating them with students.

Teachers' perceptions of their own engagement. In this study, teacher efficacy was linked to teachers' commitment, as a result of being engaged at work. In employee engagement literature, engagement is a multidimensional construct and employees can be physically, emotionally and cognitively engaged (Kahn, 1990). An overall personal engagement can be obtained from being engaged in each one of these forms of engagement. However, this is not universal as there are employees who are engaged in one dimension but not the other (Kahn, 1990). In the present study, there is evidence that teachers with high self-efficacy beliefs were more engaged than those with less self-efficacy. Interestingly, the findings suggested no differences between novice and experienced teachers in terms of their engagement. Highly engaged teachers showed signs of strong commitment (Durksen & Klassen, 2012). Some high efficacy teachers reported that they encouraged one-to-one academic counselling with students especially the underperforming ones and the ones with attendance issues, outside of class time. Engaged teachers expressed the importance of relatedness to students (Durksen & Klassen, 2012) through extending their efforts to find their needs, encourage and counsel them and experience empathy and concern for their feelings and future (Kahn, 1990). Furthermore, high self-efficacy teachers were more likely to exert extra effort in their everyday work to ensure that no students were left behind. Cognitively engaged teachers show awareness of their mission and role as teachers (Kahn, 1990). Perhaps consistent with this is Coladarci's (1992) study which reported that teacher efficacy is a very strong predictor of teachers' commitment. As a result, engaged teachers reported that their work has paid off in the form of progressing students who were willing to learn and were not reluctant to ask questions anymore. Obviously, students have progressed from just being willing to learn to take an initiative - a form of cognitive student engagement which is characterized by being involved in "minds-on" activities (Fredricks et al., 2004).

Engaged teachers corroborated that proper planning was done to meet students' needs, therefore, autonomy was sustained through good selection and use of tools and techniques. This finding is in agreement with Ross et al.'s (1996) findings that shows that teachers with higher

teaching efficacy are the ones who feel well prepared in terms of being equipped with the tools needed to teach. In the present study, experienced teachers mainly reported maintaining the suitability of these tools to students' level as well as ensuring that the activities were connected to real life situations (Klem & Connell, 2004) in order to bring forth socially desired human values such as responsibility. Engaged teachers had the tendency to attribute their students' failure to themselves as a couple of participants reflected. As an example, one teacher perceived that it was her own failure for failing to push a particular student to success. She realized that she was there to make an impact but failed to do so (Gay, 1995; Maslow, 1943). There were instances in the current study where teachers were not fully satisfied with the level of some of their students, however, that did not hold them back from being "unconsciously" motivated, engaged, and willing to exert more efforts for the sake of other students. According to Maslow's (1943) hierarchy of needs, a need does not have to be fully met in order for the next level of needs to emerge. Rather there are many situations in life where full satisfaction is not possible but that certainly does not mean that the next level of needs should not emerge or be met.

Although autonomy was mainly highlighted by experienced teachers, a couple of novice teachers with high self-efficacy reported it, too. The most likely explanation for this is that lack of experience motivated them to look harder for new materials to experiment. It seems that it was a part of their own learning process of how to teach. They had to depend on themselves to find suitable materials that suit their students' needs, learn how to manage the class and tackle disciplinary aspects, and find their own methods to explain something to students. As self-efficacy is a strong predictor of behaviour (Bandura, 1997), teachers generally need to adapt it in their everyday life. Woolfolk Hoy (2004) argues that self-efficacy is a powerful professional knowledge that all teachers need to equip themselves with, especially novices. This knowledge will help them make choices, set future goals, select more challenging tasks, be resistant to failure and less of afraid of it, and above all only consider the future and what they will be able to accomplish in a particular situation (Woolfolk Hoy, 2004).

7.3.1.2 Teachers' perceptions of their self-efficacy beliefs.

Influences of work environment on teachers' beliefs. A key finding was the significant interaction between teachers' self-efficacy and their work environment which depended on how students and colleagues positioned them. Experienced teacher, for example, reported that their confidence in their ability was reinforced by their old students' comments. Students would come back to their teachers and inform them that they referred new students to register in their classes. A teacher with high self-efficacy reported that her colleagues and course coordinator sought her advice in certain issues related to the course which also bolstered her capability beliefs. This corroborates Bandura's observation that feedback, which is a form of verbal persuasion, can influence self-efficacy. In the case of experienced teachers, they received effective feedback from old students and colleagues which was why their self-efficacy was boosted. According to Bandura's (1997) theory, the effect of verbal persuasion lies on the credibility, trustworthiness and expertise of the persuader and these three factors are present in the respect and acceptance of current colleagues and old students (Schempp, Sparkes, & Templin, 1993).

Bandura's social cognitive theory suggests that there is a reciprocal relationship between its three factors: personal factors (that is efficacy beliefs), behaviour and environment. Since this interaction exists, the teacher's self-efficacy beliefs should have a level of association with other contextual variables such as the environment (including the college itself, colleagues, students, management and possibly the resources/facilities) and behaviour of colleagues, students, management. Researchers (e.g. Labone, 2004) suggest the need to understand the effect of context variable on having and developing a higher sense of efficacy. Several studies (e.g. Raudenbush et al., 1992; Woolfolk Hoy and Spero, 2005; Guo et al., 2011) revealed that teachers who work in highly collaborative environments have elevated self-efficacy. The present study found, from the comments of two participants, that having professional collaboration among staff fostered their self-efficacy beliefs' level. Although this interaction between self-efficacy and relations with colleagues was not stressed in the factors affecting their

efficacy beliefs, it is stressed to a great degree in the job satisfaction factors as section 5.2.3 shows.

Teacher-student relationship was the most important form of relationships that was described by the participants. The present study revealed that high self-efficacy teachers set up good relations with students and strove to create one among students themselves through creating a small 'community' that was responsible for each other. It also demonstrated that creating and maintaining teacher-student relationships can be effective. It seemed that teachers with high efficacy beliefs fully understood the significance of building and maintaining relations with students and among students to establish a successful learning environment. The impact of this was not only to help students learn and progress and be responsible for their learning experience but also to ensure that teaching was smooth and achieved its objectives. Woolfolk and Davis (2005) argued that teachers may use this relationship as cognitive and emotional resources to press students to complete complex tasks and, thus, develop a deeper understanding. When teachers engage in a confident and respecting dialogue with students once misbehaviour takes place, conflicts are likely to become less (McGuinness, 1993).

In accordance with the present study, previous research has demonstrated that teachers with a great sense of efficacy are more willing to reduce class control and give students the opportunity to be responsible for solving classroom problems (e.g. Hoy & Woolfolk Hoy, 1990; Ross, 1992). Teachers in the current study refer to student behaviour (e.g. learning habits and lack of response) when expressing moments of low self-efficacy and dissatisfaction. This suggests that student behaviour might have an impact on teachers' self-efficacy and job satisfaction. This finding is supported by a previous quantitative study that indicates student behaviour stress, if coupled with a low self-efficacy, can negatively impact job satisfaction (Collie et al., 2012). However, Collie et al. also argue that students' misconduct does not necessarily act as a stressor. They advocate that when highly self-efficacy teachers face misbehaviour in class, then misbehaviour is not a stressor anymore, rather, it can be viewed as a

challenge. Experienced teachers, in the current study, believe that building a good relationship with students facilitate learning and teaching experiences. They perceive that such a relationship could result in making students active and attentive members of the classroom (Council, 2004).

Class size, which is the big number of students in a single class, overwhelmed teachers. Teachers who had a large class size, suffered exhaustion and showed signs of withdrawal. Interestingly, Raudenbush et al. (1992) report a negative association between the size of a class and teacher self-efficacy and gave no explanation of their finding. However, a possible explanation for the present study finding might be that it is hard to teach a big group of students with multi-abilities and, obviously, different needs. These students have graduated mainly from public schools where English is taught as a foreign language. Their proficiency level is often low and they “lack the ability to use language effectively and appropriately in all for skills throughout the range of social, personal, school and work situations” required for everyday life due to the level of English program in the public schools (Al-Issa & Al-Bulushi, 2012). Thus, having such low English level in large size classes may serve as a hindrance to reach out for their mixed needs’. Furthermore, these students come from different parts of the country, hence, their exposure to English language varies depending on where they lived before moving to the college in Muscat- the capital city. As an insider to the context of this study, many of the comments I used to hear from teachers were related to having academically *unserious* boys. As a matter of fact, they should not be considered “unserious” because they do not have adequate linguistic skills to help them survive at college level (Al-Mahrooqi, 2012). The teachers did not highlight whether they were having difficulty teaching boys or girls or whether the student background had an impact on their learning, a further study on the effect of students’ demographics is, therefore, suggested.

7.3.1.3 Influences of management on teacher self-efficacy.

The management feedback, according to this study’s findings, has the potential to promote teacher efficacy. Teachers with a high self-efficacy reported that the management’s

feedback on their efforts made a big difference and boosted their belief in themselves in situations like receiving a word of encouragement or being asked for input on certain issues related to the course's delivery plan. Hoy and Woolfolk Hoy (1990) argued that teachers who get immediate feedback for running their class smoothly or keeping up with the institution's expectations were more likely to be highly efficacious which, in turn, could be reflected in their students' achievement.

7.3.1.4 Teachers' perceptions of their job satisfaction beliefs.

Personal level (within the person). Teaching is a stressful profession (Kyriacou, 2001; Sayer, 1996) with high physical and mental demands. In the current study, teachers generally were satisfied with their job. Some stated that it brought personal satisfaction. While novice teacher said nothing about being passionate about their profession, experienced teachers' comments were loaded with references to their passion for teaching, teaching as a self-pleasing task, teaching to fulfil a personal need and teaching to help students in need. A couple of experienced teachers reported that teaching made them proud of who they were and made them feel important for others. Even when challenged with having underperforming students, experienced teachers showed persistence and maintained their self-efficacy (Bandura, 1997). Such determination to succeed was not reported by novices, nor were challenge-handling strategies. This observation is not new. Conducted in the Arab context, Chaaban and Du (2017) investigated the sources of job satisfaction among multi-cultural novice and experienced teachers at school level. Experienced teachers used numerous strategies to cope with contextual challenges such as resilience and persistence strategies to handle heavy workload. They also adapted multiple problem-solving skills to face challenges and palliative strategies like thinking positively, positive self-talk and acceptance. Novice teachers, on the other hand, coped by keeping to administrative support, help-seeking strategies and personal resilience.

In the current study, experienced teachers reported several sources of job satisfaction, some of which were job-related needs that they would like to or have already met and that

contributed to their overall satisfaction (Evans, 1997, 2000). For example, they would value a word of appreciation from their students and management, alike. Recognition was a major concept especially among highly experienced teachers. They perceived it in the form of positive feedback from colleagues, students and management. Sayer (1996) distinguished two distinct elements of the word 'recognition': of identity and of appreciation. Identity highlights the need of teachers to identify with each other and to identify their work with that of other teachers. Appreciation highlights the need for a sense of gratitude and acknowledgement of their efforts. When meeting their own *needs*, teachers feel responsible for the great effort they are putting, assimilating, developing their own teaching tasks, and feel professionally accountable for the quality of teaching they provide the society with (Sayer, 1996), and therefore, they become satisfied. Meeting those needs may result in achieving the kind of recognition teachers are after and, consequently, boost their capability beliefs to do more.

This study showed that dissatisfied teachers were those who were stressed out because of three elements of their profession: workplace policies, overloaded work, and standardized testing system. An experienced teacher reported a factor of dissatisfaction that was a mixture of profession-related aspect and out of job issue. She reported going through stressful time due to the quality assurance policies and having shy students which were coupled with personal worries related to immigration. In this example, the teacher associated her dissatisfaction with quality assurance policies, student disengagement and out-of-work nightmare (i.e. immigration). In a way, these unrelated issues explained her dissatisfaction that resulted in low sense of efficacy. Bandura (1997) and others (e.g. Skaalvik & Skaalvik, 2007; Schwarzer & Hallum, 2008) argue that low self-efficacy teachers would attribute their low times to their profession when overwhelmed by negative feeling (e.g. stress). In the case of this teacher, she judged her abilities based on her emotional state (Bandura, 1997) which was reflected in her sense of dissatisfaction.

Both novice and experienced teachers revealed the importance of having a sense of achievement and the effect of that on their satisfaction level. However, they were different in terms of the kind of achievement that stimulated this sense of satisfaction. For novices, achievement was mainly related to what they managed to get their students to do. In other words, their students' success in acquiring knowledge was the most significant thing for them. The experienced teachers, however, referred to a more comprehensive type of achievement that consisted of intrinsic and extrinsic sources such as meeting personal targets, job demands, work deadlines and students' progress. Furthermore, experienced teachers also revealed that taking part in decision-making at work, directly boosted their satisfaction. Considering the literature, efficacious teachers also have the ability to influence decision making positively (Klassen & Durksen, 2014). This may indicate that teachers with high sense of efficacy and job satisfaction feel effective in terms of making a change by taking part in the decision-making.

The quantitative results showed a general satisfaction among teachers of this study which was reflected by the qualitative results. Experienced teachers referred to the teaching career as "passion". Experienced teachers in this study expressed their sense of joy and attributed that to the fact that they were "teaching from heart", as one teacher remarked. In essence, they felt that they had reached a stage where they had become what they wanted to become. Maslow's (1943) theory defined this as "the desire for self-fulfilment ... to become more and more what one is, to become everything that one is capable of becoming" (p. 371). This is called the self-actualization stage, which is placed at the top of Maslow's Hierarchy of Needs. In the current study, this sense of being self-actualized stemmed from students' achievements for the novice teachers and from professional achievements, recognition and passion for the job for the experienced teachers. In her definition of job satisfaction, Evans (2000) argues that it has two main components: job fulfilment and job comfort. Job fulfilment refers to the personal emotional state people reach as a result of their personal achievements at a given performance of their valued job. That is to say, job satisfaction refers to the level of the

workers' mood which achievements at work put them in when doing a job that they value as was the case with the experienced teachers in the present study.

The sense of belonging was a contextual element that teachers' comments suggested. Based on the qualitative data, belonging to a place of work (as a teacher) and believing teaching is the right profession was one of the major reasons why teachers were satisfied. Regardless of how much experience they had, teachers' comments revealed that much of this sense of belonging was due to how passionate they were about teaching. Whether this sense included loving teaching profession, willingness to reach out and help others (students), belonging to the place after being there for so long, pleasing oneself, or feeling important, all participants who referred to this had a sense of place. This discussion links back to the concept of high self-efficacy teachers as it is established in self-efficacy literature. High efficacy teachers feel responsible for their students' learning, not only inside the class but also at a personal level which, in turn, explains why teachers in this study reported reaching out to students (Gay, 1995).

Interpersonal level (with others). The most important finding of the qualitative data was the teachers' report of staff collaboration and cordial environment at workplace. Teachers from various career stages reported that one factor that contributed to their job satisfaction was working in a cordial environment that, in turn, contributed in boosting their levels of efficacy. In fact, the results showed that teachers were feeling at ease because they could share their materials with colleagues, socialize with them, and get personal and professional support when needed. There are several explanations for this result. One explanation may be that many teachers who took part in this study have been teaching in the same college for several years or that the management of the Foundation Program has been doing its best to make work a comfortable place for its staff through establishing an open door policy with staff. Another explanation which is theoretical in nature is Bandura's (1977; 1997) social cognitive theory which suggests that there is a reciprocal relationship between its three factors: personal factors

(that is efficacy beliefs), behaviour and environment. Since this interaction exists, teachers' self-efficacy beliefs should have a level of interaction with other contextual variables such as the environment (including the college itself, colleagues, students, management and possibly the resources/facilities) and behaviour of colleagues, students, management. As a result, teachers get their sense of satisfaction because of the job satisfying elements (i.e. job comfort) that surround them (Evans, 1997; 2000). Researchers (e.g. Labone, 2004) suggested that there is a need to understand the effect of context variables on having and developing a higher sense of efficacy, which according to this study findings is a good predictor of job satisfaction. This accords with previous research observations (e.g. Raudenbush et al., 1992; Woolfolk Hoy and Spero, 2005; Guo et al., 2011), which reveals that teachers who work in highly collaborative environments have elevated self-efficacy suggesting that it is essential to encourage professional collaboration among staff to foster teachers' sense of efficacy, which in turn, enhances satisfaction at work.

All teachers expressed their satisfaction with the comfortable and ambient work environment where colleagues were helpful and easy going. Experienced teachers appreciated the respect they had earned from students and colleagues after working in the same place for some time. The environment encouraged them to volunteer some extra time to do the extra bits of their job outside working hours. Both novice and experienced teachers reported the effectiveness of having supportive environment. Some novices described it as "encouraging" and "cordial" and some experienced teachers described it as "comfortable" and "valuable". In fact, experienced teachers reported having good relations with each other and with students that resulted in having a "smooth flow" and enjoying "respect" from each other at workplace. These findings suggested that support is essential not only to promote and maintain their job satisfaction, which is in keeping with other research (e.g. Ma & Macmillan, 1999; Dinham, 1995; Raziq & Maulabakhsh, 2015), but also to maintain teachers' self-efficacy in a stressful profession like teaching. As such, this study also suggests that even when teachers are

overloaded (e.g. with workload), they are happy to take additional duties because they value their work, which might have contributed to their job satisfaction (Kyriacou, 2001).

Teachers also derive their job satisfaction from their relationship with students. They reported that their old students keep in touch with them and refer their newly registered peers to register in their previous teachers' classes. Guy's (1995) study revealed that the most effective teachers put great emphasis on teacher-student relationship. When studying the association that job satisfaction and teacher-student relationship have, Veldman and colleagues (2013) found that teachers who perceived their relationship with students as less good, also perceived less job satisfaction, and the opposite was also held true about their sample. This result was most common among teachers in their first years of teaching. Some teachers also perceived a good teacher-student relationship even when they perceived less job satisfaction (Veldman et al., 2013). Albelushi (2003) found that Omani teachers at school-level were generally satisfied with their career and that the career stages Omani teachers experience and their satisfaction with teaching profession are similar to their Western counterparts. Similar to the present study's findings, she (2003) found that workplace relationships and recognition were central to teachers' satisfaction.

Organizational level. At the organizational level, the findings of this study began to define the sources of satisfaction that teachers considered when commenting on their satisfaction beliefs and how these sources were weighed differently by teachers at different career stages. One of the most important findings of this study was the role that professional support played in teachers' job satisfaction. The management understood the need for emergency leaves, had and implemented clear policies, clarified staff queries, and practiced an open door policy with all staff. Novice teachers expressed their satisfaction with the guidance that the management provided, whenever needed. Another source of satisfaction that was highlighted and appreciated by novice teachers was the provision of physical and teaching resources. The present finding seems to be consistent with other research which found that

resources are important for novice teachers as a predictor of teacher's self-efficacy (Woolfolk Hoy & Spero, 2005; Tschannen-Moran & Woolfolk Hoy, 2007). Although evidence was small, Tschannen-Moran and Woolfolk Hoy (2007) argued that novice teachers gave higher ratings to the sufficiency of support at the end of the first year which demonstrated high self-efficacy beliefs.

Experienced teachers referred to various forms of support including cooperation from colleagues. They also reported that they have developed a level of autonomy at work to execute their job requirements. Such independence took the form of selecting instructing strategies that suit the level of their groups, total freedom in preparing lessons according to the students' needs, and integrating life-based skills that prepare students for out-of-class situations. Furthermore, experienced teacher expressed that they depended on their experience in teaching and previous training to be able to know what students' needs were and how to meet them. Bandura (1997) hypothesizes that mastery experiences are the most powerful. Thus, when these experiences accumulate and become so effective, other sources of efficacy will be less likely to be considered. The findings of the present study support previous research in terms of the relationship between years of experience and teacher self-efficacy which in turn influenced teacher job satisfaction (Klassen & Chiu, 2010).

Another key finding of the factors affecting job satisfaction in this study was that sources of satisfaction were related to personal, interpersonal and organizational aspects while, sources of dissatisfaction were only based on organizational aspects. Both novice and experienced teachers were not satisfied with some issues related to the Quality Assurance Committee's policies, the workload, the standardized testing system, the common delivery plan and the class size. For novice teachers, covering the delivery plan simultaneously with all other teachers teaching the same level should not have been a *must* as different groups have different learning pace. For the experienced teachers, the main worry was to cover "an insane amount of materials" which might compromise learning for testing. The experienced teachers were

discontent with their students' learning habits, low abilities and disruptive behaviour. However, these factors were never discussed by the novice teachers. Explaining this result in the light of Huberman's (1989) career model might help understand the differences between novice and experienced teachers. Huberman proposes that at the late stage of career, some teachers develop a tendency for complaining about various aspects and issues related to their job such as students. They may also acutely sense an intergenerational difference between themselves and students and disapprove existing policies and practices. In other words, teachers tend to "bemoan" their students' low motivation and discipline levels and high immorality level (Huberman, 1989) and negatively point out their dislike and gradual disengagement from investment in work.

7.3.2 Research Question 7.

How do teacher self-efficacy and job satisfaction beliefs change over the course of one semester?"

7.3.2.1 Change patterns of teacher self-efficacy and job satisfaction beliefs.

The qualitative component of the present study investigates changes (if any) in teachers' self-efficacy and satisfaction beliefs over the course of one semester (three-month semester). It also attempts to explore these changes in relation to teachers' length of experience. Patterns within cases generally demonstrate the variance offered by the quantitative trajectories of teachers' self-efficacy and job satisfaction. Two expected patterns emerged from the data: Case SE/JS where teachers reported high self-efficacy coupled with high job satisfaction and Case se/js where teachers reported low self-efficacy coupled with low job satisfaction. These two cases provided support for previous research on the association between self-efficacy and job satisfaction. Three unexpected cases were also found where teachers reported high self-efficacy with low satisfaction (labelled Case SE/js), or low self-efficacy with high job satisfaction (labelled Case se/JS). The third unexpected case, Case Surprise, was a unique representation of a marked straight change or none at all (i.e. settlement) in self-efficacy and job satisfaction (as

increase or decrease) across the five timepoints (Huberman & Miles, 1994). One participant of Case Surprise had the lowest job satisfaction mean score ($M = 3.00$) in timepoint one and finished the semester with a high mean score ($M = 9.00$). One possible explanation was the lack of experience and efficacy beliefs in her capabilities, perhaps. However, the qualitative findings illustrated that she experienced an epiphany in the middle of the semester (Saldaña, 2003) that made her mean score significantly increased as she managed to control her disruptive class. Another remarkable Surprise participant had a consistent low self-efficacy and low job satisfaction throughout the semester with almost no notable improvement in both variables. Although, she had high self-efficacy throughout the semester, as the mean score showed, her comments were loaded with negative attitude due to issues related to managerial decisions regarding class size and students' movement between classes at the beginning of the semester. Another Surprise participant interestingly walked in a straight line of mean scores for both efficacy and satisfaction by scoring 10 out of 10 throughout the semester. She had 23 years of teaching experience and attributed her high self-efficacy to past successful experiences of dealing with students' needs and proper past training on teaching skills. Her case supported Bandura's (1997) view that firm high self-efficacy beliefs are hard to shake once established. Therefore, suggesting that managements should take self-efficacy building and developing seriously in order to eliminate attrition among experienced teachers (Woolfolk Hoy, 2000).

Cross-cases longitudinal analysis showed five patterns of change (positive, assisted, hindered, withdrawal and no-change) in teachers' efficacy and job satisfaction beliefs, some of which were more evident than the others. For the first expected case SE/JS (increasing self-efficacy and increasing job satisfaction), participants mainly reported instances of positive and assisted changes that were related to having positive interaction with students and colleagues, meeting job demands (e.g. delivery plan, learning objectives), and teaching desired subjects/Level. There were a couple of instances of hindered change that was linked to students (e.g. switching to Arabic language and dealing with mixed ability classes). For the second expected case se/js (decreasing self-efficacy and decreasing job satisfaction), participants

unpredictably reported all five patterns of change. They associated positive change with getting to know the students and having motivated students and assisted change with the support from management and colleagues, and teaching the desired level and courses. They attributed the decline in beliefs to class size, students' lack of motivation and unpunctuality, lack of resources, and workload (hindrance-related change). In withdrawal change, teachers referred to mixed ability classes, tests' results, students' behaviour and over-loaded curriculum.

Participants of the two unexpected cases, that is Case SE/js (increased self-efficacy/decreased job satisfaction) and Case se/JS (decreased self-efficacy/increased job satisfaction), experienced positive and assisted changes due to going through successful experiences at work with students, management, instructional strategies, and class management. However, development of their beliefs was hindered by students' behaviour, discipline, workplace policies (regarding student movement, class size, scheduling). Like Case se/js, participants of these two cases signalled a sense of retreat by avoiding filling out the online dairies or choosing to, reluctantly, comment "Nothing", "Not much of a change", "Just the same feeling".

In the light of Huberman's (1989) model of teacher career cycle, the current study's participating teachers who reported no-change or withdrawal may be experiencing a phase of their career where they are comfortable with their classroom life and their role and would like to stay like that and keep away from any new roles and responsibilities because they have done their share (Huberman, 1989). The counter explanation is that they have reached a stage, where they are bitterly disenchanted with their career and attempt to distance themselves from their profession by looking for a change elsewhere.

7.3.2.2 Relation between change patterns of teachers' beliefs and experience.

Upon closer examination of the three experience groups that were created based on a set of criteria: novices, average experience and highest experience, this study demonstrated that the three experience groups relied on different patterns of change (see Appendix Q that gives a

summary of these change patterns within each experience group). Briefly, the most important result was that the novice group teachers (1-3 years of experience) experienced mostly positive and assisted change, indicating the significance of support from students, colleagues and management. The average experience group reported the highest frequencies in four change patterns: positive, assisted, hindrance-related and withdrawal, compared to the other two experience groups. The following is a detailed account of these specific change patterns for each experience group.

The average experience group expressed the highest frequencies of positive change throughout the semester with high indications of assisted change increasing alongside. It reported the highest incidents of positive change associated with a sense of accomplishment, “The improvement in my students' level of confidence, understanding and intrinsic motivation” and “Feeling that my effort with my students is fruitful instead of wasted”. They also talked about a sense of giving and sharing with students and colleagues, “... providing my students [with] supplementary material boosted my confidence”, “I really feel important as I enjoy good relationship with students as well as my colleagues” and “sharing of resources”. This experience group mainly reflected upon their accomplishments in terms of their ability to make a difference in students' level, which was coupled by students' interest levels, and to identify and help under-performers. It also demonstrated that the workplace atmosphere played a key role that contributed to this positive change. Cooperation and positive interaction with colleagues which took the form of sharing resources and teaching experiences mattered. Tracing other forms of changes within this experience group suggested a withdrawal due to students' behaviour. This was the only group that reported withdrawal pattern that was mainly related to students and subject matter.

The novice group included teachers with 1-3 years of experience. Participants of this group were considered beginners in the learning/teaching environment. They sought others to help them learn how to teach, determine what to teach, how to deal with students, how/where to

find useful materials and what helps to develop their sense of efficacy (discovery and survival stage).

There are several explanations for the immense dominance of the positive and assisted patterns in the novice and average groups. One can be a lack of experience that drives the novices and early experienced teachers to seek assistance. Huberman's (1993) teachers' career cycle model classified these teachers into two stages: the survival/discovery stage and the stabilization stage. A lot of things go on during these stages like exploring, making provisional choices, feeling responsible and committed (Huberman, 1989; 1993) which explains why the novice group mainly fall under positive and assisted change patterns. Interestingly, some of this study's findings mirror Huberman's model for these two stages. Teachers reported feeling proud for creating teaching materials and being asked to share them, for example "Students' willingness to seek my help and some teachers were glad to use some of my teaching materials". They enjoyed having a sense of belonging at the workplace and being able to socialize with its members, for example "having a time out to celebrate teachers' day". They expressed interest in seeking a new important role within their job, such as being assigned the role of delivery plan coordinator which contributed to widening the teachers' perception of teaching within the boundaries of curriculum planning, for example "being head of delivery plan which allows me good time to be more creative in the classroom". In essence, Huberman describes the first two career stages as "pleasurable" (1993, p. 99).

The highest experience group displayed the highest frequencies in hindered change – compared to other experience groups - which was associated with availability of resources, managerial decisions and students' attendance. This hindrance-related change can be explained, in part, by Huberman's career cycle model. Huberman (1989) argues that after spending a long time doing the same job, teachers show signs of conservatism or disengagement that can be bitter sometimes. They express discontent with aspects of their job including managerial decisions, "Lack of some teaching resources" and "Some changes in the numbers of my

students. Some students moved from my classes to other classes and some students joined my classes". They further question the commitments of students and other teachers, "students come late to classes. And sometimes they don't pay attention to what's being discussed" and "Students have become less motivated the number of those who miss classes has increased". Despite this, participants of this group did not report any withdrawal change. In a couple of instances, they reported no-change pattern marked by comments like "Nothing for the time being" & "Nothing special". These examples were reported at the very beginning of the semester. Perhaps it is fair to say that no-change pattern was more related to the timing of the semester –where teachers just got to know their students and establish a repertoire - rather than not giving a thought to what had been going on for the last couple of weeks.

This experience group also reported an almost equal number of incidents of positive and assisted changes that were mainly related to workplace environment elements such as management, colleagues, students and job duties. Participants expressed a sense of satisfaction with what they were doing which affected their level of performance, "I am pleased", "Total involvement of preparing lessons according to the students' level, teaching according to their needs, giving them life based skills though English language, helping them to achieve their goals, and giving them counselling if needed". In essence, the comments of this experience group echo the perception that a happy worker is a productive worker (Saari & Judge, 2004) whereby job satisfaction is achieved due to feeling happy, which, in turn, influences performance (Weiss, Nicholas, & Daus, 1999). In their review of quantitative and qualitative articles of the relationship between job satisfaction and job performance, Judge, Thoresen, Bono, and Patton's (2001) argued that the relationship between performance and job satisfaction can be stronger for professional jobs, for example, teaching as compared to other professions. They found that the correlation between them can be higher if the correlations for sampling and measurement errors were appropriately corrected. Cockerham (2013) investigated CoT's English language teachers' satisfaction and found that teachers were generally satisfied with their performance (9% very satisfied and 54.5% satisfied) which supports Judge et al.'s

findings. Considering the fact that Cockerham conducted her study in the same context as the present study and that both her study's quantitative and this study qualitative findings support the relationship between job satisfaction and job performance, there is abundant room for further research to verify the impact of job satisfaction on job performance.

7.3.2.3 Relation between change patterns of teachers' beliefs and teaching elements.

The analysis of the five patterns of change showed that each pattern was mainly related to three elements of teaching: career, students and subject-content (see Appendix P & Q for representative quotations & frequencies of each element). According to the findings, positive change was mainly linked to students. When reporting any positive incident that affected their perceptions of their capabilities, teachers associated it with students, teacher-student relationship and interaction, students' attitude to/ responsibility for learning, students' interest, performance (i.e. exams scores and continuous assessment), under-performing students' progress, student motivation and enthusiasm, and finding students' needs and weaknesses. In addition to relating positive change to students, teachers attributed any assisted change to (1) career-related elements, such as professional support from management and colleagues, teacher-teacher interaction, scheduling flexibility according to staff's needs, provision and sharing of resources, and receiving effective feedback and (2) to students-related elements such as students' participation, motivation, appreciation and progress.

The findings also showed that hindered change and withdrawal change were mainly related to students. According to the analysis, some participants were challenged by having to deal with mixed abilities class, disruptive and demotivated students, and unpunctual students. There are several explanations for these findings. One explanation may be the level of the freshmen who join the college with no interest in learning English language and who make it through high school English examinations with the least scores. Most of the students who join the colleges of technology (CoT) are public school graduates who studied English as a foreign language. According to Al-Mahrooqi (2012), there is a lack of a reading culture in the Omani

context, just like most Arab societies which casts its shadow on Arab English readers whose level of “reading in Arabic is *underdeveloped*, which makes a positive transfer of learning into English almost *impossible*” (italics added for emphasis) (Al-Mahrooqi, 2012, p. 27). Another important aspect to consider is the massive difference between college life and its expectations, and school life. Co-education may be one aspect. Indeed, some students moved to college with an old perception of studying in a single-gendered class as they used to for 12 years. This must have had an impact on the way they wanted to present themselves in this co-education atmosphere. Additionally, these school graduates had an utterly different experience of English learning classes where the class size was much bigger with up to 35 students per class (Al-Issa & Al-Bulushi, 2012). The educational system at schools puts a lot of weight on English as a subject rather than an international language that is used to communicate (Al-Issa, 2005). Furthermore, learning at school is exam-based which encourages students to study for the sake of passing exams and not to learn for developmental purposes (Al-Toubi, 1998 cited in Al-Issa & Al-Bulushi, 2012). Student bring this assumption with them to the college. Teachers’ sense of efficacy may be undermined due to having disinterested students. This finding is important, given that it supports empirical evidence such as that of Ross, Cousins, and Gadalla (1996). When teaching low engaged or disinterested students, teachers’ self-efficacy diminishes as they struggle to cope with the increasing demands on them, which in turn, hinders their self-efficacy development and increases the level of job dissatisfaction.

7.4 Summary of chapter

After discussing the findings of this study, it is evident that teachers with high self-efficacy have a positive approach towards their profession and its demands. Such teachers believe in their instructing, managing and engaging abilities. They are autonomous and are ready to exert more efforts provided that their students show signs of willingness to learn. Teachers believe in empowering students to take more responsibility of their learning through student-centred tasks. Relationships with learners positively influence teachers’ efficacy beliefs

and facilitate more teacher and student engagement levels in class. Teachers attributed their satisfaction to work environment including the management's considerations of personal issues and collegial relations. These teachers, as a result, expended more efforts and worked hard to meet their own goals of self-growth.

Factors enhancing teachers' sense of efficacy and job satisfaction for novice and experienced teachers were part of the focus of this study. It can be said that both novice and experienced teachers considered students the centre of the factors that could bolster their self-efficacy and satisfaction beliefs or undermine them. Teachers valued having supportive environment at work from students who came back to their old teachers to say a word of appreciation, from the management that supported them during stressful times and professionally answer their queries, from colleagues who willingly shared expertise and socialized with them. They thrived on the teaching profession itself and their relationships with students.

An additional focus was investigating changes in teachers' efficacy and satisfaction over time. Although statistically insignificant, teachers in this study experienced some change in their beliefs, as the qualitative data revealed. The change in their beliefs was mainly attributed to student- and career-related aspects. The stability of teachers' beliefs found in this study closely aligned with Bandura's self-efficacy theory that postulates that efficacy beliefs are hard to change once established. This finding, therefore, confirms the need for well-planned teacher training and staff induction program that involves strengthening teachers' beliefs in their capabilities for both experienced and novice teachers.

The next chapter attempts to integrate the quantitative and qualitative findings of this mixed method study, discuss the contribution of this study and recommendations and implications of the research for teachers' professional development at the higher education institutions level, in general, and the colleges of technology, in particular.

8 Overarching Discussion & Conclusion

Forty years ago, researchers and theorists realized the significant role of self-efficacy in teaching and learning. Since then researchers have been exploring the influence of this powerful construct. Teacher self-efficacy, which refers to one's perception of their capability to achieve desired outcomes, has been associated with many variables such as student motivation and engagement, teachers' selection of instructional and management strategies, and time allocated to teaching specific subjects and tasks (Woolfolk Hoy, 2000). However, researchers agree that there is much to be learned about this potent construct and how it develops.

Bandura (1997) proposes four sources of information that develop the sense of efficacy, the most influential of which is the mastery experiences. Bandura theorizes that efficacy may be malleable early on in learning and, therefore, it is very critical in the establishment of long-term efficacy beliefs. He also argues that once established, these beliefs are hard to shake unless re-evaluated or reassessed by a shocking experience. Research suggests that student teachers can build in a strong self-efficacy which is based on their high sense of idealism during teaching practicum (e.g. Hoy & Woolfolk Hoy, 1990). However, once they start teaching and encounter all the challenges associated with teaching, they go through a reality shock (Huberman, 1989) as early years of teaching are best described as a "time of intense learning ...[and] intense loneliness" (Nemser, 2012, p. 10). Research tells us that because novice teachers commence their teaching career with a high sense of efficacy, they find greater satisfaction in teaching and experience less stress (Woolfolk Hoy, 2000). Self-efficacy theory suggests that efficacy beliefs seem to be resistant to change (Bandura, 1997). Therefore, understanding the development of, and factors that help establish, a strong sense of efficacy is vital. Worldwide, researchers realize its significance and, so, more and more research in this area is being conducted. In the Arab world, where the present study was conducted, researchers who measure self-efficacy are urged to conduct studies in the Arab context in English to build an understanding of teacher self-

efficacy in the Arabic context to enrich an international understanding of self-efficacy and its development across contexts.

The purposes of this study were to (a) assess changes in efficacy and satisfaction beliefs among novice and experienced teachers, (b) identify factors that might be associated with changes (if any), (c) compare teachers' perception of their own capability to engage students with their students' perception of this capability, and (d) validate an engaged student scale to improve and add to the measurement of student engagement research body.

In order to answer the research questions of this study, I conducted a short-term longitudinal study using a mixed method design: quantitative and qualitative approaches. The context was the English Language Centre at the Higher College of Technology in Oman. The results of both quantitative and qualitative components of this study contribute to our understanding of the pivotal role that efficacy beliefs play as a dynamic construct of teacher job satisfaction and student engagement. The following paragraphs present my overarching discussion that integrates the quantitative and qualitative findings. This chapter also discusses the weaknesses and strengths of this study. Next, the chapter discusses implications of the present study and recommendations to inform the Colleges of Technology (CoT) in Oman and the Ministry of Manpower under which the colleges are affiliated. Finally, limitations of this study are presented.

8.1 Does experience matter?

The quantitative and qualitative findings, in this study, show that distinctions among the three facets of teachers' sense of efficacy are related to teachers' experience. Findings indicate that the more experience teachers have, the greater the belief in their abilities to instruct students and choose the most effective methods. This results in having a higher level of student engagement. However, the less experienced teachers continued to vary and experiment with a

number of strategies in order to understand what methods best suit their students. Furthermore, in the quantitative results, there is an insignificant difference between the three experience groups in terms of managing their classes. However, the emerging picture from the qualitative findings is different. For instance, more experienced teachers reported management-related issues that unsettled them and how they managed to tackle them, whereas, less experienced teachers did not report any, and paid no attention to, management challenges. The qualitative findings suggest that experience matters in terms of managing a class which is consistent with prior research showing that more experienced teachers have greater beliefs in their abilities to manage students than less experienced ones (Wolters & Daugherty, 2007).

One of the main findings in this short-term longitudinal study is that teacher self-efficacy beliefs do not change significantly over time. Bandura (1977, 1997) argues that once established, self-efficacy beliefs are hard to change. However, researchers propose that self-efficacy is malleable at its first stage and, therefore, it is important to find out what factors can strengthen these beliefs and focus on these to bring out the desired outcome, which is teachers' belief in their capabilities. When quantifying the teachers' responses in terms of change patterns, the qualitative findings suggest that less experienced teachers reported more signs of withdrawal than more experienced teachers did. One explanation can be the high rate of attrition for teachers newly joining the teaching profession (Ingersoll & Strong, 2011). Bandura (1997) posits that, generally, those with less confidence in their abilities leave a profession faster than others. In relation to preparing newly joined experienced teachers and novices, I argue that CoT need to consider a well-planned induction program that has self-efficacy building as a priority. Establishing the right kind of beliefs and attitudes (Veenman, 1984) is essential through either a good induction program or a good choice of experienced mentor teachers.

8.1.1 Impact of experience on TSE & job satisfaction

The quantitative findings show slight or insignificant change in TSE and job satisfaction beliefs. Although this is consistent with Bandura's self-efficacy theory, which

postulates that efficacy beliefs are stable once formed, I believe that in the teaching career there are many factors that could stimulate change in teachers' beliefs. With everyday stresses, misbehaviours, workload, stressful schedules, piles of papers to mark, plus personal and social life responsibilities, there may be some kind of change. Saldana (2003) argues that change itself can take a constant or consistent form that reveals something "significant" at work. The qualitative findings revealed five patterns of change in teachers' beliefs: positive, assisted, hindered, withdrawal and no-change patterns. Hindrance-related, withdrawal and no-change patterns may serve to explain some aspects that could have contributed to this statistically insignificant change. The novice experience group is the most prominent in terms of the patterns of change the participating teachers experienced throughout the semester, compared to the other two experience groups. The novice experience group teachers mainly adopted positive and assisted change, perhaps due to the lack of experience or their enthusiasm for the new profession, and the support available at work (Tschannen-Moran & Woolfolk Hoy, 2007) and the fact that new teachers generally like the feeling of being committed to a profession (Huberman, 1993).

The qualitative results explained the difference in mean scores between the novice experience and the highest experience groups (See Figure 14.4). Although both the novice and the highest experience groups witnessed positive and assisted patterns of changes, the highest experience group also experienced hindrance-related and no-change patterns. This difference indicates that more experienced teachers were not satisfied with aspects of their job, which resulted in a drop in their efficacy and satisfaction beliefs. Experienced teachers reported disappointment with their students, which was an issue that was not raised by the novice teachers. Huberman's (1989) model highlights that experienced teachers in the late-career stage are discontented with aspects of their profession including students, school practices and management policies. In many instances, the data supports this argument. Some experienced teachers consider it their personal failure when they cannot help students move up the learning

ladder due to various factors, which are listed by teachers in the qualitative data, such as students' level and learning habits.

Teachers of the low experience group did not witness a massive change in their TSE or job satisfaction beliefs – as the mean scores showed – but they highlighted certain aspects that may explain this result such as class size, overloaded work, students' discipline issues and late classes, which resulted in physical exhaustion. When under stress, teachers may decide to adapt their role or simply leave the profession (Troman & Woods, 2000). Stressed teachers in the present study, especially those who decided to share their feelings, chose to make some adaptation to their roles. One noted that she felt happier doing administrative work like coordinating delivery plans which represented a sense of “self-actualization” when the teacher realized that she was better off doing something else but still related to teaching. While another teacher reported that she just wanted to finish classes and go home- favouring isolation over workplace socializing, which represented a sense of “retreatism” (Troman & Woods, 2000). Considering that the three experience groups consisted of participants from around the world, including Omanis, further research studies should be conducted to investigate the impact of teachers' backgrounds in relation to years of teaching experience in order to better understand their self-efficacy and satisfaction beliefs.

Interestingly, the result of this study in terms of the relationship between experience and self-efficacy is not new in the literature. Chester and Beaudin (1996) reported that old novice teachers, who are experienced teachers and join a new teaching context, have entered the teaching profession and are staying in it because of how they feel about it. Similar to the findings of the current study, teachers express their sentiments for teaching by using emotionally driven description: a “beneficial profession”, “loved” to teach, teaching is an opportunity to serve and contribute to the success of society and the desire to make a difference (Chester & Beaudin, 1996, p. 251). Chester and Beaudin inferred that this change in efficacy beliefs of novice experienced teachers was due to the fact that they were “teachers by choice”

and that they were confident of what commitments to make as they possessed a “sense of mission” (1996, p. 251).

8.2 Teachers’ perceptions of students’ engagement

Although my quantitative findings show no association between teachers’ report of their self-efficacy for students’ engagement and their students’ perceptions of this engagement in class, there was evidence from the qualitative findings that teachers value their students’ engagement and considered it a key source of self-efficacy and satisfaction. The qualitative results strongly presented student engagement as a strong driving factor that affected both teacher’s confidence, engagement and satisfaction at work. One explanation for this mismatch may be that students found it hard to judge what affected their engagement in the classroom and reporting it using close-ended statements did not help. Although the Engaged Student Scale (ESS) was found to be valid in the current study, the instrument might not have been clear enough to help students assess their understanding of engagement. My analyses did not offer the reasons for this result. However, it seems plausible to assume that teachers’ self-efficacy and student engagement are very much related based on the qualitative findings of this study.

In addition, teachers who reported that their students were involved in class, also reported that students did well in exams. Newman (1992) strongly argues that the most persisting issue that policy makers, school managements, professionals and educators worry about is student achievement – an outcome that cannot be attained until the impact of student engagement is understood and enhanced. In other words, maintaining and improving students’ achievement levels is preserved through enhancing student engagement. Linking the three facets of self-efficacy construct to Newman’s argument, students learn better when activities are personalized to suit their needs which involves them more in the process of learning and reduces chances of misbehaviour, consequently, improving their level of achievement.

It is interesting to note that the high experience group scored the highest mean in self-efficacy for instructional strategies and for student engagement in the quantitative results. The qualitative results showed that novice teachers talked about their engagement and instructional strategy preferences (e.g. using technology) to attract students towards them. More experienced teachers, however, highlighted that they preferred to rely on their past successful mastery experiences and training in teaching. They constantly reminded students of their personal goals of studying at college and create student-centred activities. These differences between novice and experienced teachers can be attributed in part to their experience. Novice teachers, who were closer in age to their students, were able to find out what attracted teenagers and kept them focused, in this case the use of technology in learning. Teachers mentioned that students liked to use their mobile phones and, hence, began using them during the teaching and learning process. According to Klem and Connell (2004), when students feel that their teachers care about their needs, involve them in decision making, and teach them something related to their present and future lives, they are remain engaged and willing to learn. On the other hand, experienced teachers were much more confident in what could work best, for example, reminding students of study targets and, designing activities to help students achieve them- something that long term experience had taught them. Through techniques such as these, teachers perform what is called autonomy support, which according to research (Deci & Ryan, 1985; Skinner & Belmont, 1993) leads to a high level of student engagement. Teachers in this study revealed the enormous impact students' engagement had on them. They used statements such as they felt "happy and confident enough to teach in any situation" and "lucky and blessed" of all of which reflect the influence of their students' engagement on their self-efficacy. Consequently, it can be argued here that by possessing and exhibiting an encouraging attitude, teachers can actually engage students in the class. Guo et al. (2011) observe that a high level of student engagement was significantly associated with a higher level of teacher self-efficacy, especially when teachers worked in schools with high levels of teacher collaboration.

Although the quantitative findings of the Student engagement Scale reported that social engagement had the lowest mean score compared to cognitive engagement and emotional engagement, the qualitative findings contradicted this. Teachers reported the importance of creating a classroom environment where everybody felt like a part of a small community. According to teachers, their students realized that collaborative learning with their peers was fruitful and rewarding. The qualitative data revealed that teachers with high self-efficacy promoted social relationships. This finding mirrors the findings of previous studies that showed that having a communal atmosphere in schools positively influences the teachers' level of efficacy (e.g. Tschannen-Moran & Hoy, 2007). One explanation of the current study's findings is that 39.3% of the participants were Arab. Given that Arab culture is characterized as highly collectivist, a trait which is evident in the presence of close groups (Obeidat et al., 2012) as in the Omani society, the participants' belief in social connection is important. That is, having a sense of belonging to a social community is highly valued and favoured. Non- Arab teachers who have been teaching in Oman or in any other Arab country understand this mentality and may consider it when teaching.

In student engagement literature, it is reported that emotionally engaged students take responsibility for their classmates' learning (Fredricks, Blumenfeld, & Paris, 2004). In this study, responses of teachers with high self-efficacy indicated that they managed to create a bond within the class. Students were encouraged to assist one another and be a family. A number of experienced teachers expressed their pride in being leaders of a small community inside their classrooms, which were built based on 'trust' and good relations with the students. Reflecting back on the concept of efficacious teachers, it is an attribute of effective teachers and those with high self-efficacy to reach out to learners, develop a bond with them by forming a community within the class, and feel responsible for their learning (Gay, 1995). In light of the teachers' comments, it can be concluded that teachers with high efficacy chose to use counselling as a strategy to tackle misbehaviour, unpunctuality and underperformance. Teachers used the social

persuasion source (i.e. counselling) in motivating students, solving their problems (e.g. absence) and guiding them to be good students and citizens (e.g. etiquette and discipline advice).

8.3 Linking teachers' perceptions of self-efficacy and job satisfaction beliefs

The findings presented in this study significantly contribute to the understanding of the role of self-efficacy beliefs in empowering teachers in their complex and stressful occupation. This contribution is significant because self-efficacy is an influential motivational construct (Bandura, 1997; Pajares, 1996) that can massively influence people's actions. Unless people believe they can achieve their goals and produce desired outcomes, they have little incentive to take action (Bandura, 1986). Self-efficacy beliefs refer to the individual's beliefs in their capabilities to carry out a particular course of action successfully. People with high self-efficacy challenge problems as something to be mastered, develop a deeper interest in activities they take part in, have the ability to recover from setbacks and form strong commitment to their interest. In the teaching profession, teachers with high efficacy use effective instructional strategies, manage classes well, and engage students and encourage them to be responsible for their own learning (Tschannen-Moran & Hoy, 2001; Wolters & Daugherty, 2007). They also dedicate themselves to their profession and develop a desire to remain in it for as long as possible (Coladarci, 1992) and work hard to motivate students and lead them to better performance (Midgley et al., 1989).

In addition to the advantages of developing teacher self-efficacy discussed by previous studies, the current study also found that teacher self-efficacy significantly relates to job satisfaction. This finding of the relationship between these two constructs is consistent with findings from literature, particularly in the last couple of decades (Akomolafe & Ogunmakin, 2014; G.V. Caprara et al., 2003; Gian Vittorio Caprara et al., 2006; Coladarci, 1992; Coladarci & Breton, 1997; Duffy & Lent, 2009). Although there is no quantitative evidence, the qualitative findings of the present study suggest that this relationship could have an impact on students' performance, because satisfied teachers with high levels of efficacy highlighted their

students' progress, whereas, teachers with low self-efficacy did not. Specifically, using a short-term longitudinal approach, this study explored the factors that bolstered teachers' belief in their abilities and enhanced their job satisfaction. Some of the factors that affected their self-efficacy were found to influence their satisfaction as well (e.g. students-related issues).

8.3.1 A confident teacher is a satisfied teacher.

Results of the present study reveal that achieving satisfaction at intrapersonal, interpersonal and organizational levels is fundamental to accomplishing success and ultimate satisfaction at work. Teachers, who have the skills to achieve such satisfaction, tend to have more control over their performance and confidence in themselves. Consequently, this perception influences their satisfaction levels. Teachers with high self-efficacy referred to student achievement, student willingness to learn, recognition, co-staff cooperation, support and cordial atmosphere as main factors of satisfaction. These aspects are important for novice as well as experienced teachers with some variations, as discussed in section 7.3.1.4. These factors are also in line with job satisfaction and self-efficacy research. Ma and Macmillan (1999), for example, found that a positive relationship with the management made a big difference in teachers' satisfaction levels and reduced the negative impact at different career stages. Herzberg (1968) hypothesizes six factors that cause job satisfaction. He labels them as "Hygiene" factors. Four out of the six factors are found as positive factors in the current study: achievement, recognition, work itself, and growth. In the present study, teachers highlight that their own daily achievements, their students' achievements and progress, the nature of teaching tasks all contribute to their satisfaction. This study also reveals that satisfied teachers believe in and have a good teacher-student relationship (Veldman, 2013; Friedman, 2006). Teachers also report that positive feedback from students and a word of encouragement from management equally play a central role. Appreciation, gratitude and acknowledgement, for example, in the form of students referring friends to register with the same teacher, indicate the importance of creating and having good relationships at work which, in turn, lead to personal and job satisfaction.

Relating these findings to self-efficacy literature, one of Bandura's four efficacy sources is social persuasion. Teachers with high self-efficacy are persuaded to believe that they have the capabilities to succeed through verbal encouragement they hear from others as it helps them give their best effort to the task at hand. Therefore, I argue that teachers, who exert more effort after being persuaded that they can do something and succeed, manage to overcome any self-doubt and feel satisfied once they accomplish their target. Contradicting the findings of the current study, Pajares (1997) claims that social persuasion is weaker than mastery and vicarious experiences because of its devastating effect (Artino, 2012) if not used properly by the right people (see section 2.3.2.1.3). Bandura asserts that it is much easier for social persuasion to decrease self-efficacy than increase it (Bandura, 1994). In other words, social persuasion may result in higher self-efficacy if the social messages that one receives come from a credible, trustworthy and expert source for it to be effective (Bandura, 1986). Those in managements should therefore, adapt this form of efficacy building when giving class-observation feedback and during staff induction programs to ensure its success. Reporting a related finding in literature, teachers with high self-efficacy, when compared to those with low self-efficacy, displayed a preference for collaborative work with their peers (Morrison, Wakefield, Walker, & Solberg, 1994). I conclude therefore, that those in management and peer teachers can be very good persuaders because they have a more accurate reading of their colleagues' abilities in addition to fully understanding the demands of teaching tasks. However, I would also like to highlight that this source should be handled with care, as the self-efficacy literature also warns.

Furthermore, the present study asserts that teachers are very much engaged in their work and that boosted their self-efficacy beliefs, which in turn influences their level of satisfaction. Previous studies have shown that engaged teachers are satisfied. Klassen, Aldhafri, Mansfield, Purwanto, Siu, Wong, & Woods-McConney (2012) find, across five different settings (Canada, Australia, Oman, China, & Indonesia), that teachers who report high level of engagement also report high level of satisfaction. Klassen et al. (2012) conclude that although teacher engagement and satisfaction are not synonymous, they are highly correlated and that

engaged teachers are less likely to have an intention to leave the teaching profession. They also found weak association between years of experience and teacher engagement in two out of five settings: Oman and Canada. The qualitative findings of the present study assert that experience is related to teacher engagement in the Omani context. Teachers with four or more years of experience report more indicators of teacher engagement than novices with one to three years of experience (e.g. being autonomous, striving to be creative in teaching, and exerting more effort through counseling and motivating students).

8.4 Recommendations for future research

The following recommendations are suggested based on this study's findings:

1. Duplicate this study in other CoT to get an insight on the commonalities between the colleges and the effect of the geographical location on teachers' efficacy and job satisfaction. However, it should be noted that this research is area-specific which may result in new insights based on the cultural, geographical and socio-economic status of the governorates (muhafazah) in which these CoT are located. Thus, enriching the teacher self-efficacy research in Oman.
2. One main issue that needs to be considered when replicating this study is to consider using Tschannen-Moran and Hoy's TSES long-version or short-version instead of selecting some items from these scales. The quantitative data that compared novice and experienced teachers' beliefs in terms of the three self-efficacy factors, suggests that the differences between the novice and experienced teachers' groups did not indicate major differences between them due to the groupings because each experience group had only six participants which might have influenced the results. Results of this replication can be compared to those of the current study.
3. Duplicate this study with a recommendation to control the class size to find out its effect on teachers' efficacy.

4. This study suggested some unsupported findings of cultural differences that existed in this context. Thus, conducting a study that examines the impact of teachers' backgrounds on their self-efficacy in a multi-cultural workplace, like CoT, will be enlightening.
5. Use the Tschannen-Moran and Hoy's TSES in a bigger sample size to compare to the current study findings, possibly in the same context.

8.5 Implications for future research and for practice

The present research have given rise to several implications for future research and policy making at the CoT as the following paragraphs show.

Although this study does not investigate the relationship between TSE and student achievement, research suggest that teacher self-efficacy affects their teaching as well as their students. Findings of the current study indicate that teachers associate their sense of efficacy with their students' improvement, progress and willingness to learn. Research demonstrates that the teachers' perceptions of their abilities to affect their students' successful learning do matter (Ashton & Webb, 1986). Therefore, when planning professional development training for teachers - especially novices, focus should be given to improve teachers' instructional strategies as it plays a direct role on teachers' efficacy. Teachers need to know and be trained on how to gain and sustain their self-efficacy beliefs by preparing for what is coming and what challenges await them (Woolfolk Hoy, 2004). Novice teachers in the present study attribute their self-efficacy to their students' in-class achievements and gains and they believe that these achievements matter to them. In short, "*Beliefs matter, self-efficacy is a powerful belief, and teachers can make a difference for their students and themselves through self-efficacy*" (italics from original) (Woolfolk Hoy, 2004). Experienced teachers perceived that professional development training guides and assists them in improving their instructing skills and directly influenced their students' achievement level, according to this study. Thus, professional

development training should also address ways to tackle job-related stress and everyday challenges such as student misbehaviour and student de-motivation. This study found that some students came to college with certain goals that were the result of the school system mentality such as to pass exams and avoid getting absence warning that parents will be notified about. Such objectives are realistic from the students' point of view. Teachers need to be trained to accept them and help students develop other objectives that are related to academic life.

The class size in this study ranged between 22 and 30 students in Levels One to Four. The Post-foundation English classes had up to 40 students per class. Students in the Post-foundation classes were taking Academic Writing 1 and 2, Public Speaking and Communication courses. Even though this study did not explore the issue of class size, teachers from across all these teaching levels brought up the issue of class size at some point in the qualitative data. It is definitely not easy to mark 40 papers and give one-to-one feedback on written work and oral presentations. It seems that class size's challenge had widened the problem of having multi-ability grouping. Students in the CoT are streamed in levels based on their placement test scores. No teachers mentioned or related the mixed-ability classes to the in-house placement test results. However, teachers who mentioned the class size issue connected it to the differences in their students' abilities. As an insider to the context of the current study, I have experienced and witnessed the Centre's continuous attempts to find solutions for the over-sized classes with the Ministry of Manpower, the government body that is responsible for these seven Colleges of Technology across the country. However, the Ministry's efforts to solve this issue are not sufficient yet. Since class size is not something that the Centre has any control over, professional development training is the best solution. Teachers need to be trained and guided on how to tackle large groups' variations, management and instruction. Teachers also need to be trained to believe in their ability to manage, instruct, and engage small and large groups. They need to be equipped with the necessary skills to cope with all factors that class size may be associated with in order to complete their mission of enhancing students' learning and avoiding early teacher burnout.

Self-efficacy, the beliefs of one's capabilities to accomplish desired outcomes, has a powerful influence on how people behave, what motivates them to move on and persist and whether they are going to succeed or otherwise (Bandura, 1997). Self-efficacy beliefs help people expend efforts to attempt any endeavour simply because they believe that their goals can be attained. Bandura suggests that teacher's self-efficacy beliefs are related to the efforts they put into their teaching, the goals that they set for themselves, their determined persistence to overcome obstacles through sustained efforts and their resilience when experiencing setbacks (Bandura, 1977; 1997). Research (e.g. Hoy, 2000) suggested that successful mastery experiences during student-teacher program and induction year for novices have an influential impact on the development of teacher efficacy. Additionally, Bandura's (1997) other sources of information (i.e. vicarious experiences and social persuasion) in the form of peer or management observations and informative feedback that highlight effective teaching behaviours and provide ways for growing and developing (Anita Woolfolk Hoy, 2000) should be considered during classroom observations and post-observation feedback. In the English Language Centres at the CoT, class observations are not implemented for all. Only new staff are observed in the first three months (i.e. probation period) and one more time soon after the first visit, if their performance is not satisfactory. This policy needs to be rethought in order to minimize staff attrition and increase ways to enhance job satisfaction.

Teacher self-efficacy needs to be considered in the staff induction programs when introducing new staff to the Omani culture, students, and life (Tschannen-Moran & Hoy, 2001, p. 803) as they may be challenged by teaching less desirable levels or subjects and more challenging teaching assignments. These may negatively affect their self-efficacy for the rest of their teaching career. Self-efficacy is a foundation for and a product of experiences (Tschannen-Moran et al., 1998). Therefore, staff development training needs to offer staff with proper training on new instruction strategies that could support teachers' efficacy in order to improve students' learning experience and teachers' teaching experience (Tschannen-Moran & McMaster, 2009).

The Ministry of Manpower, under which all CoT are affiliated, has long adapted the replacing expat forces with Omanis project since 2004 – not only in the teaching division but also in the private sector establishments to increase and sustain *Omanization*. There is always a new group of Omani teachers joining the CoT every academic year. This group includes fresh Master's degree graduates who were either employed right after graduating with B.Ed or experienced teachers who just graduated with a Master's degree but had teaching experience from other institutions. Tschannen and Hoy (2001) recommend that teacher preparation programs should come to look like apprenticeships where TSE is enhanced. Thus, if TSE is incorporated within the preparation program of new Omani assistant lecturers, through teaching them ways to boost their efficacy beliefs by using effective teaching strategies, management and engagement methods, they will be prepared to face their profession's everyday challenges and develop a sense of resilience and persistence in the face of difficulties.

Future research studies should examine the new Omani teachers' self-efficacy (both with prior experience and without) using a longitudinal approach whereby the teachers' efficacy is examined during the training course at the college before leaving for their Master's degree and during the first academic year once they join the college after getting their Masters. Such research will inform the research body on pre-service and in-service teachers' experiences and what could be done to enhance their self-efficacy. It would also inform the *Omanization* replacement project in terms of what needs of the novice teachers' are to be considered when designing and planning their pre-Masters training course at the CoT.

Replication studies with a larger sample of teachers from other colleges of technology as well as other public and private colleges across Oman may be useful in specifying areas of differences between novice and experienced teachers in terms of their factors affecting their choices of instructional decisions, their techniques in involving their students and their ways of handling and managing classes. This larger sample will add to our understanding of self-

efficacy and job satisfaction beliefs in the higher education institutions in Oman and give us an opportunity to make generalizations that are specific to the Omani context.

Student engagement is a dynamic and important aspect of everyday classroom life for both teachers and students. However, it is a complex construct in terms of defining it and investigating the factors that contribute to it. In this study, I constructed a scale that has proved to be valid. The main purpose was to compare the teachers' perceptions of their students' engagement with their students' perception. The outcome was statistically insignificant. However, more research on student engagement needs to be undertaken to understand any association, or lack of it, between teachers' and students' perceptions. Future studies on first year students are also recommended as it is important to understand what factors could contribute to engaging students, and how engagement varies across different demographic groups and whether it changes over time during the first year. The findings of these future studies could be integrated in the teachers' development training to enhance student engagement.

8.6 Limitations

There were some limitations of this study that need to be addressed. One weakness of this study is the small number of teachers who completed all five surveys. I decided to include those who did three timepoints or more to reduce the effect of missing data. Once I chose the teachers with the least amount of *missingness*, I then replaced missing data with means. Although I cannot completely rule out the influence of choosing to substitute missing data by means, I tried to reduce its negativity by using three timepoints to analyse instead of all five. Handling *missingness* (Hedeker & Gibbon, 2006, p. 6) of longitudinal timepoints using mean substitution is considered unacceptable in literature (Heck, Thomas & Tabata, 2010, p. 8). I attempted other methods to handle *missingness* (e.g. multiple-imputation) but the result was too complicated due to the fact that I had five datasets to handle instead of one. It can be argued, however, that each method of

data substitution has advantages and disadvantages but what is important is to shift the focus from what is missing in the dataset to what is present (Saldana, 2003).

Another weakness that is related to the small sample size is that it limited the generalizability of the findings due to its longitudinal nature where many teachers dropped out along the way for various reasons. A third weakness of the study is the inequality in the numbers of novice and experienced teachers. After taking the decision of selecting participants who did three or more online-diaries, the distribution of participants in terms of novice vs. experienced, male vs. female, Omani vs non-Omani, Arab vs non-Arab, etc. was unequal as there are more experienced than novices, more non-Omanis than Omanis, more non-Arabs than Arabs. These limited the comparison between these groups. For one thing, this unequal sample size constrained comparing the self-efficacy and satisfaction levels among novices and experienced. To handle this, I grouped the participants into three experience groups in which each group had six participants based on the number of the genuine number of the novice teachers in the entire dataset (i.e. six only). These groups were used to answers the research questions that were only related to years of experience. All data were self-reported by teachers. It would have been ideal to include data from the college context to strengthen the findings such as students' scores, college statistics of teacher and student burnout, teacher evaluation forms of in-class observations...etc.

8.7 Strengths of this study

The following are some of the study's strengths that make it stand out:

1. A key strength of this research is the use of longitudinal research design to track change in teachers' beliefs over time. This allows comparing patterns of change using five time waves instead of two and getting an in-depth understanding of teachers' beliefs, as recommended by researchers (e.g. Tschannen-Moran & Hoy, 2001). A key aspect of this design is its richness in building up from one wave to

another making it possible to tell a story that happened over time and draw on what has been learned previously to understand and interpret any changes.

2. Another fundamental methodological decision is the use of mixed methods approach by combining and integrating quantitative and qualitative methods. This makes it feasible to understand changes and developmental processes that happened over time by providing support to each other.
3. Although no previous study has tested the Engaged Student Scale (ESS), this scale is undoubtedly an addition to the body of student engagement literature especially since it proved to be valid in the context of the present study. Using ESS to explore first year students' engagement is enriching as first year of academia is essential in developing student engagement in the long run (Krause & Coates, 2008). Further work is needed to refine the semantic equivalence of the scale as results showed a discrepancy between teachers' perception of their students' level of engagement and the students' perception.
4. No study, based on my review of literature, have investigated the relationship between teacher self-efficacy and job satisfaction in Oman. Additionally, no longitudinal research has been done to investigate changes in teachers' self-efficacy and job satisfaction over time in this context. Although predominantly studied separately, not many studies have been conducted to examine teacher self-efficacy and job satisfaction beliefs at the higher education level in the Omani context (Aldhafri, 2016). Therefore, this study addressed that gap and has made a significant contribution to the limited Arabic-context studies on self-efficacy that are published in English.
5. This study, particularly contributed to the understanding of factors that influence teachers' efficacy and job satisfaction combined at the Colleges of Technology level in Oman. A couple of studies (Cockerham, 2013 & Kumar, 2015) investigated

teachers' job satisfaction issue at the Colleges of Technology (CoT) but none related it to teacher self-efficacy or student engagement constructs.

8.8 Conclusion

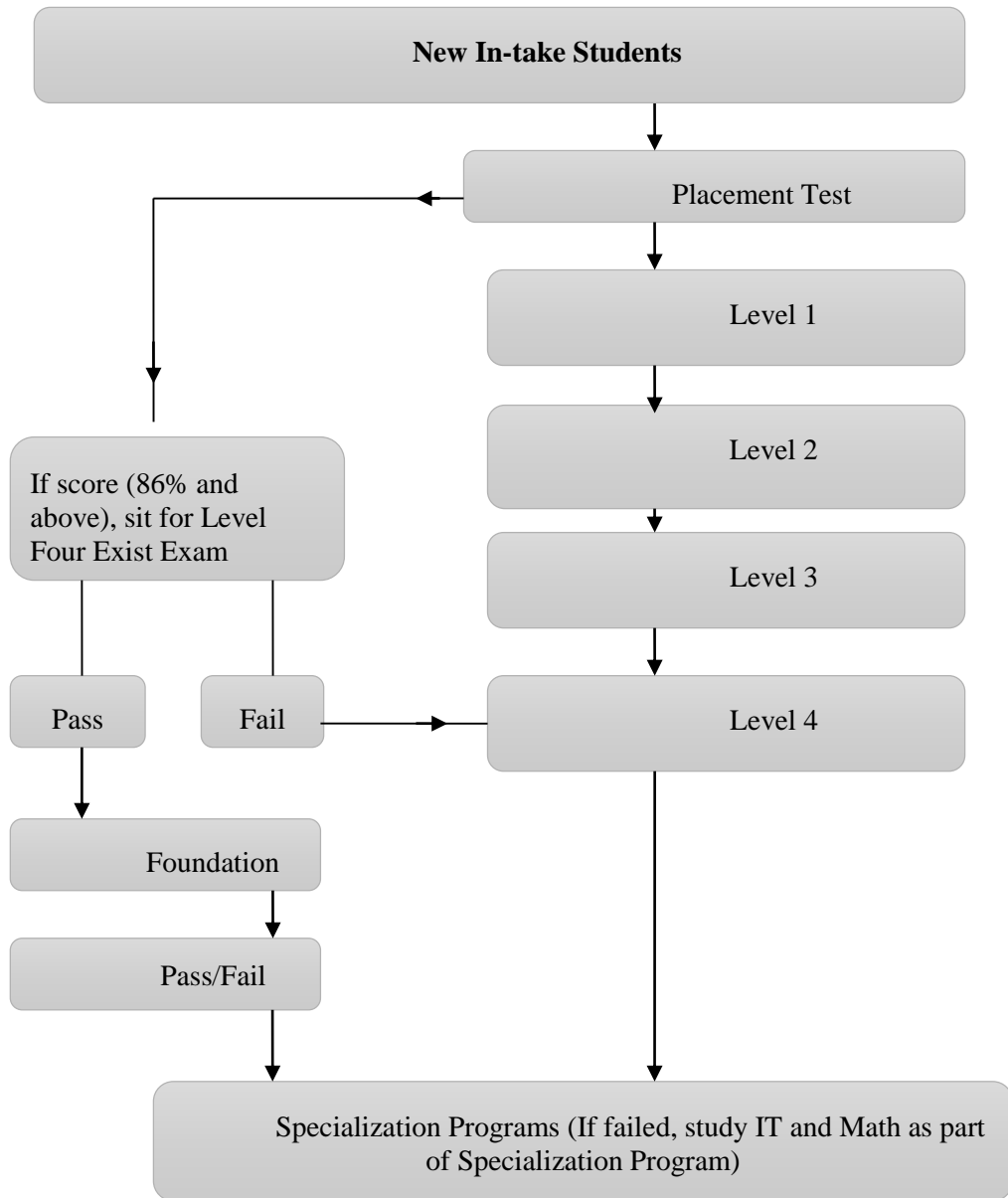
In this study, I investigated teacher self-efficacy and job satisfaction beliefs. I asked whether there exists a relationship between teachers' perceptions of student engagement and their students' perception of their own engagement in the classroom. Furthermore, I sought to uncover whether the three factors of teacher efficacy: teacher efficacy for instructional strategies, teacher efficacy for classroom management and teacher efficacy for student engagement (Tschannen-Moran & Hoy, 2001) and job satisfaction change over time and what factors could contribute to these changes (if any).

Teachers' beliefs in their own abilities to teach and affect student learning and motivation in the classroom is salient in the findings of the present study. It is also proved to be a good predictor of teacher engagement, student engagement and job satisfaction. Although the concept of teacher efficacy has been investigated at school level in Oman (Aldhafri, 2016), it has been all but overlooked in higher education. Based on the literature that evidenced the power of teacher self-efficacy and job satisfaction as prevailing and correlated constructs, this study was designed to investigate them in a Colleges of Technology in Oman. Similar to previous research, this study found that these two constructs are positively correlated and have a linear relationship. It also showed that teachers with higher self-efficacy are more satisfied in their job. Additionally, teachers' perceptions of their student engagement appeared to be insignificantly related to students' perceptions of this engagement. Although the positive retrospective of teachers on their ability to engage their students in the qualitative data was not supported by the quantitative findings from the students' point of view, teachers still had a positive perception of their capabilities to engage students. This perception played a key role in boosting their job satisfaction and bolstering their own engagement at work. In summary, the

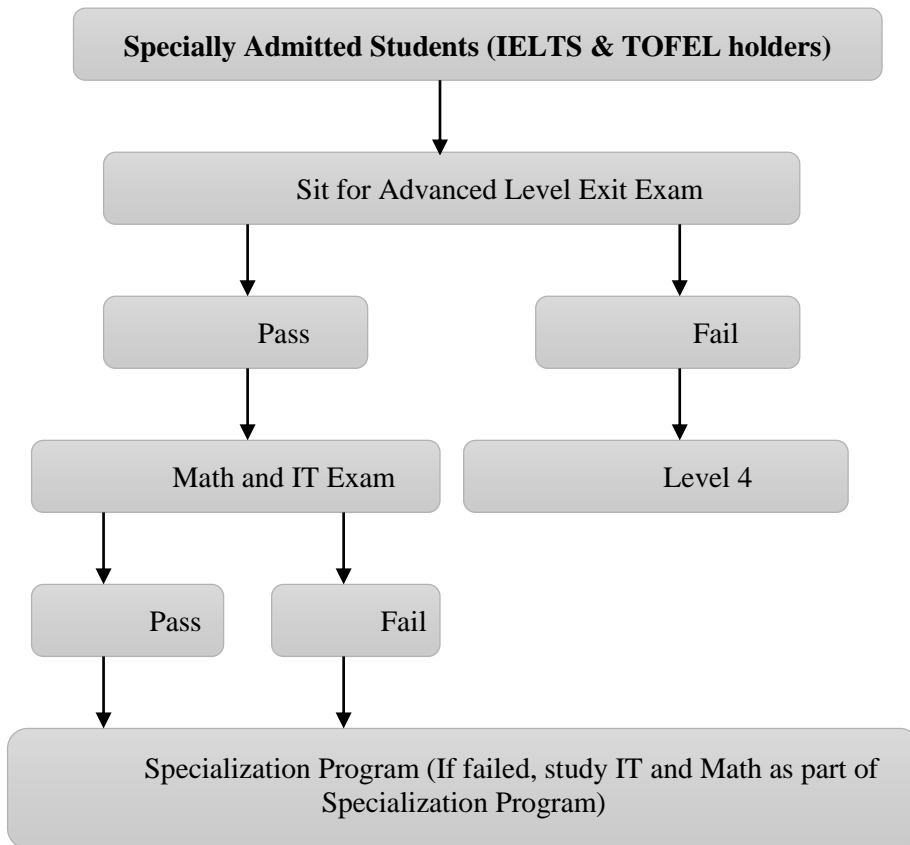
qualitative findings helped elucidate the efficacy factors that protect teachers against feeling unconfident in their abilities as well as those factors that feed in their sense of dissatisfaction, which, in turn, prepare them to be in charge of creating positive beliefs that empower them.

Appendices

Appendix A.1 & A.2 The structure of the General Foundation Program at the CoT in Oman³



³ This diagram was borrowed from the ELC's Student Handbook (2014-2015)



Appendix B subjects taught in General Foundation Program at the CoT in Oman⁴

COURSE	Level-1	Level-2	Level-3	Level-4
	No. of Hrs	No. of Hrs	No. of Hrs	No. of Hrs
Writing	4	4	5	6
Reading	5	4	4	4
Listening & Speaking	5	4	4	4
Core Course	4	4	4	NA
Learning Skills	1	1	NA	NA
Projects & Presentation	NA	NA	NA	3
Multi-media	1	1	1	1
English- Total Hours	20	18	18	18
Math	NA	4	NA	NA
IT	NA	NA	4	

⁴ This diagram was borrowed from the ELC's Student Handbook (2014-2015)

Appendix C.1 engaged teacher scale(ETS)-original version

Engaged Teacher Scale1

Below you will find a list of statements describing your experiences as a teacher. Please indicate your personal response to each of these statements by checking the number that best represents your answer.

	0 = Never	3 = Sometimes	6 = Always	Never	Rarely	On occasion	Sometimes	Often	Frequently	Always
1	At school, I connect well with my colleagues (SEC)			0	1	2	3	4	5	6
2	I am excited about teaching (EE)			0	1	2	3	4	5	6
3	In class, I show warmth to my students (SES)			0	1	2	3	4	5	6
4	I try my hardest to perform well while teaching (CE)			0	1	2	3	4	5	6
5	I feel happy while teaching (EE)			0	1	2	3	4	5	6
6	In class, I am aware of my students' feelings (SES)			0	1	2	3	4	5	6
7	At school, I am committed to helping my colleagues (SEC)			0	1	2	3	4	5	6
8	While teaching, I really "throw" myself into my work (CE)			0	1	2	3	4	5	6
9	At school, I value the relationships I build with my colleagues (SEC)			0	1	2	3	4	5	6
10	I love teaching (EE)			0	1	2	3	4	5	6
11	While teaching I pay a lot of attention to my work (CE)			0	1	2	3	4	5	6
12	At school, I care about the problems of my colleagues (SEC)			0	1	2	3	4	5	6
13	I find teaching fun (EE)			0	1	2	3	4	5	6
14	In class, I care about the problems of my students (SES)			0	1	2	3	4	5	6
15	While teaching, I work with intensity (CE)			0	1	2	3	4	5	6
16	In class, I am empathetic towards my students (SES)			0	1	2	3	4	5	6

Note. SEC = social engagement: colleagues; EE = emotional engagement; SES = social engagement: students; CE = cognitive engagement.

1 Measuring Teacher Engagement: Development of the Engaged Teachers Scale (ETS). Klassen, R. M., Yerdelen, S., & Durksen, T. L. Manuscript submitted. If using this scale, please cite. Correspondence regarding this scale should be directed to Robert Klassen. robert.klassen@york.ac.uk

Appendix C 2 Engaged Student Scale (ESS)

Dear students,

Thank you for agreeing to complete this survey. The main purpose of it is to investigate your engagement in the classroom. Your participation in this study is voluntary. You may withdraw from the study at any time for any reason and without prejudice. Also, you may request that your data be withdrawn. All data will be treated confidentially. Information obtained about you and the views you express in your answers will not be shared with your College; neither will your identity be disclosed in the research report.

If you have any questions about the project/study that you would like to ask before giving consent or after the data collection, please feel free to contact Faiza Alhasni by email fnah501@york.ac.uk , or the Chair of Ethics Committee via email education-research-administrator@york.ac.uk

Your completion of this survey indicates your consent. Once more, thank you for participating in this study.

Sincerely,
Faiza Al-Hasni
PhD Candidate
University of York

أعزائي الطلبة و الطالبات
بداية أتوجه بالشكر الجزيل لكم على مشاركتكم في الإجابة على هذا الاستبيان .
يهدف هذا الاستبيان إلى دراسة مدى ارتباط أداء الطالب بمستوى قدرات وأداء المعلم في البرنامج التأسيسي
بمركز اللغة الانجليزية وإستطلاع آراء الطلبة فيما يتعلق بكفاءة المدرسين في دفع عملية المشاركة الطلابية
داخل قاعة الصف .
تستغرق الإجابة على هذا الاستبيان حوالي 5 دقيقة ولن تتطلب المشاركة طباعة إجاباتكم باللغة العربية
أو الانجليزية حيث ان كل ما عليكم فعله هو اختيار الاجابة التي تتوافق مع رأيكم الشخصي بجانب كل سؤال
أود التأكيد هنا على أن جميع الإجابات و المعلومات التي ستدلوّن بها ستعامل بسرية تامة و لن يتم استخدامها إلا
من قبل الباحث. كما أؤكد على أن حقكم مكفول في
الانسحاب من الدراسة في أي وقت تشاءون و بدون إبداء الأسباب
يتكون الاستبيان من جزئين حيث ان الجزء الأول يوثق بعض البيانات الشخصية عن المشارك أما الجزء الثاني
فيتكون من 11 عبارة تمثل موضوع البحث
بعد الإجابة على الاستبيان، الرجاء اغلاق شاشة الاستبيان والخروج من الموقع
شاكراً لكم حسن تعاونكم

فايزة الحسنى
طالبة دراسات عليا
جامعة يورك
المملكة المتحدة

Block 2

الرجاء ادخال رقم التعريف الخاص بالمدرس

unique ID

في المربع ادناه

Q1 به الخاص الاستبيان تعبئة في الرقم هذا باستخدام قام انه حيث به، الخاص التعريفي الرقم **Q1** Please enter your teacher's unique ID below. Your teacher must have provided you with it by now.

Q2 What level are you in this semester? حاليا؟ مقيد انت مستوى اي في

- Level One (1)
- Level Two (2)
- Level Three (3)
- Level Four (4)
- Post-foundation (5)

Q3 What is your gender?

- Male مذكر (1)
- Female مؤنث (2)

Below you will find a list of statements describing your level of engagement with this teacher and class. Please indicate your personal response to each of these statements by ticking the number that best represents your answer.

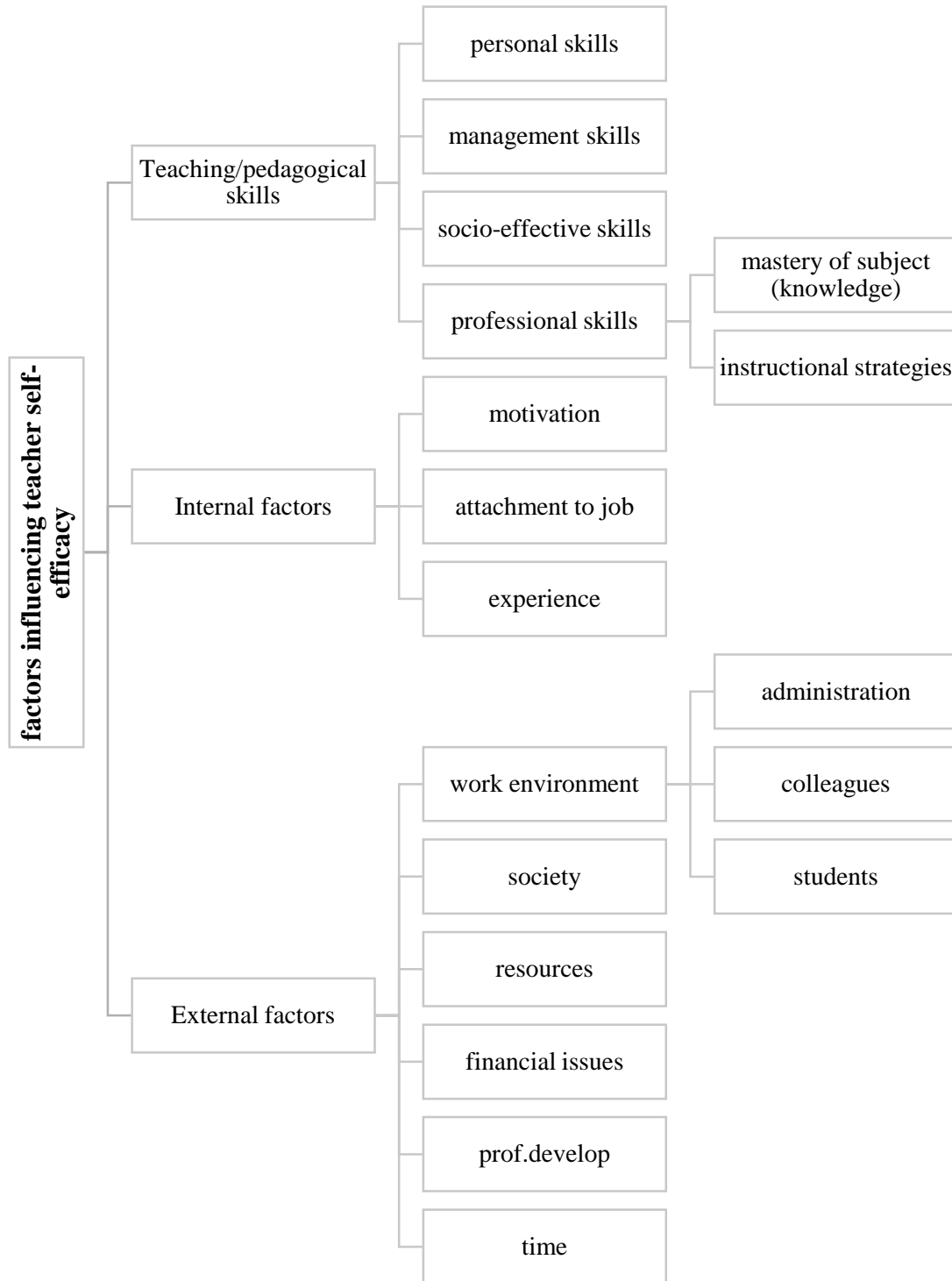
بزملائك وعلاقتك ، الشرح اثناء في معلمك قدرات بمستوى اداءك ارتباط مدى تصف قائمة ادناه تجد الشخصي رأيك يطابق الذي الوصف تحديد الرجاء. الطلاب

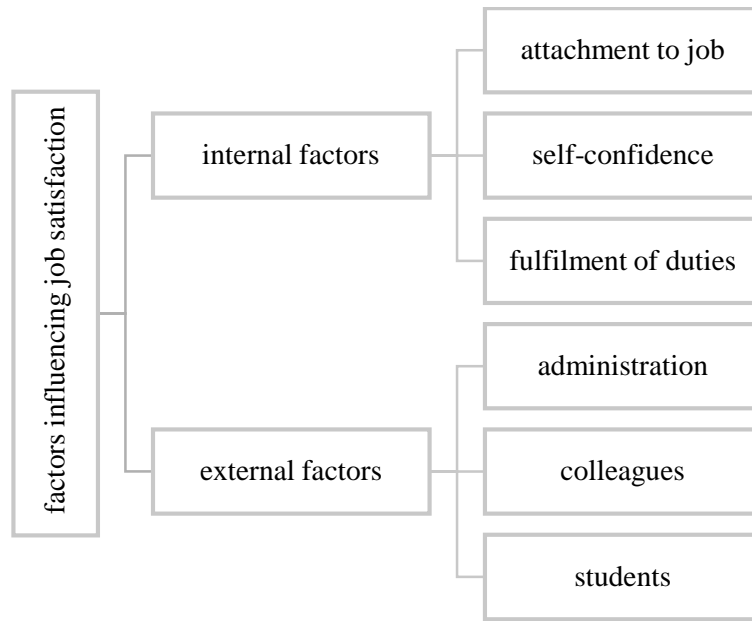
	0 Never أبدا (1)	1 Rarely نادرا (2)	2 On occassions لاخر وقت من (3)	3 Sometimes احيانا (4)	4 Often غالبا (5)	5 Frequently تكرار (6)	6 Always دائما (7)
1. In this class, I connect well with my peers. جيدا اتواصل الفصل هذا في زملائي مع (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I am excited about learning أنا للدراسة جدا متحمس (التعلم) (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I try my hardest to perform well while learning. قصار أبذل (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

أثناء جيد أداء لتحقيق الجهد (3) الدراسه / التعلم							
4. I feel happy while learning. بالسعادة أشعر. (4) التعلم اثناء	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. While learning, I really "throw" myself into my work. أنخرط التعلم أثناء تماما عملي في (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. At college, I value the relationships I build with my peers. التي العلاقات أقدر. في زملائي. مع بنائها أقوم (6) الكليه	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I love learning. (7) التعلم / الدراسه احب	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. While learning, I pay a lot of attention t my work. جيدا اركز. (8) التعلم او الدراسه اثناء	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. At college, I care about the problems of my peers. أهتم الكليه في زملائي بمشاكل (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I find learning fun. لي بالنسبة التعلم. (10) ممتع شي	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. While learning, I work with intensity. وانتباه تركيز بكل أعمل (11) التعلم أثناء	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

الفصل؟ في معلمك بقدرات ادائك ارتباط بمدى يتعلق فيما اضافته تريد تعليق اي لديك هل
Would you like to add anything related to your engagement in the classroom? Please feel free to add any comments, suggestions or thoughts here. Thank you very much.

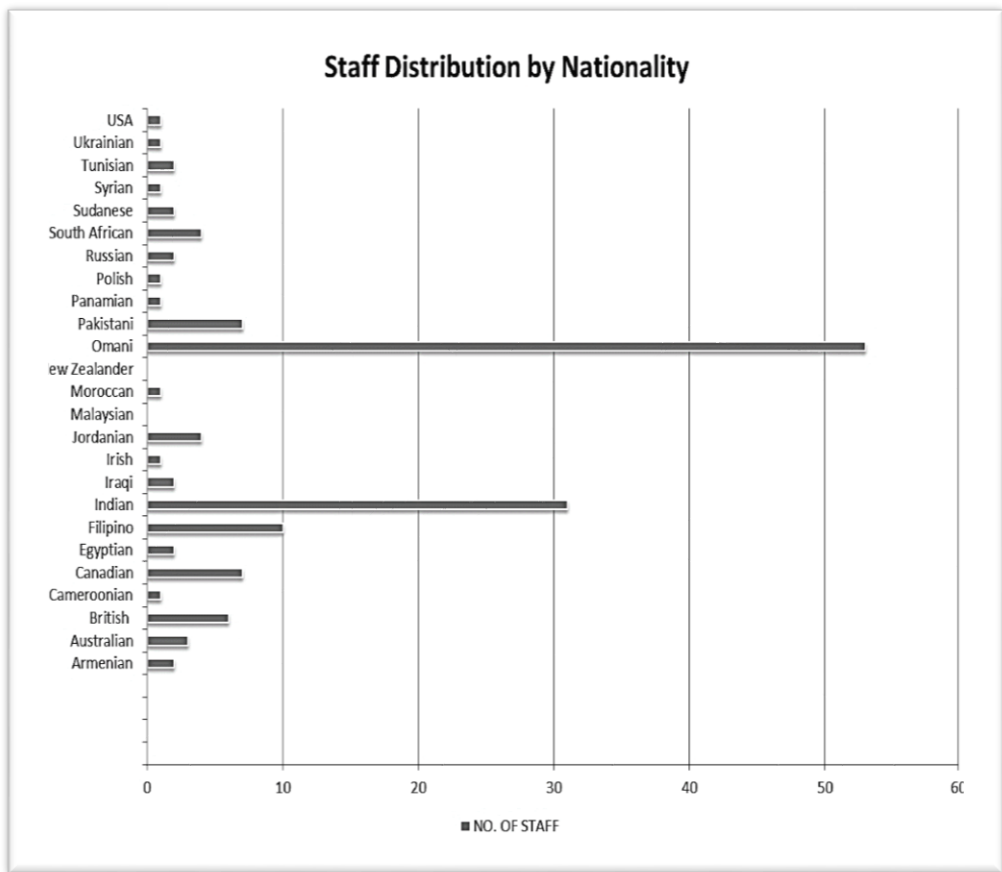
Appendix D Pilot study – qualitative findings’ themes





Appendix E Staff distribution based on demographics & nationality (sem two, 2015/2016)

Category for staff distribution	# of staff in each category
Male	34
Female	101
Omanis	47
Expats	88
Academic	129
Non-Academic	6



Appendix F: Demographics of academics at Higher Education Institutions (HEI), Oman

<i>Variable</i>		<i>f</i>	<i>%</i>
Gender	Male	5072	64.34
	Female	2811	35.66
Background	Omani	2184	27.71
	Non-Omani	5699	72.29
HEI sector	Public	5109	64.81
	Private	2774	35.19
Total		7883	100

Appendix G: Teacher Online Diary: Timepoint 1⁵

section1: Information & Consent

Here is the consent Letter for participating in this survey. Please read carefully.

Dear Teachers,

The purpose of this study is to investigate the factors affecting teachers' confidence, job satisfaction and their students' engagement in the Foundation Program in the Higher College of Technology.

Data will be collected throughout this semester using an online diary. Participants are asked to complete a brief survey every fortnight (two weeks). The online survey takes 5 minutes and asks about your teaching experience in the past couple of weeks. I will send you a survey every other week throughout the semester and ask that you complete the survey on Thursday or Friday or Saturday of that week.

Your participation is highly appreciated. However, you have the right not to participate or withdraw from the study at any point. You may also request that your data be withdrawn. Because this study is longitudinal, I am asking you to create a unique ID that will allow me to link your survey from week to week. However, you won't be able to have access to your previous surveys. Only the researcher could have access to your entries.

Your participation is completely voluntary. You are guaranteed anonymity and will only be identified by your unique ID (code you created). More instructions will be given to create it. Confidentiality is a priority, so the collected data will be securely stored and will only be used for this research purposes. The results of this study will be presented in a doctoral thesis and will likely be presented in academic conferences.

This research adheres to the student research ethics approved by the Department of Education, University of York. If you have any questions regarding the research, please contact the Chair of Ethics Committee on educationresearchadministrator@york.ac.uk. If you have any questions or concerns please contact me, Faiza AlHasni (postgraduate student – University of York) at

fnah501@york.ac.uk or 00968 9925 8394 (What's App).

Your completion of this survey indicates your consent.

Sincerely,

Faiza AlHasni

PhD Student

⁵ The same online diary was sent to participants five times during the semester.

Section 2: ID & Demographics

Q1 Unique ID

To create your unique ID, please write the first 2 letters of your last name (e.g. Smith = SM) + the day in your date of birth (e.g. March 7= 07). Thus, your ID is SM07. If your last name starts with AL (e.g. Al-Bulushi), please avoid using (AL) and write (BU) instead. This is to avoid confusion and duplication as many Arabic last names start with an (Al). This is not a password. It is a unique code (or ID) for the software to identify you every time you fill in the on-line diary and to link your responses. So, you are requested to use the same ID every time you are on-line complete this survey in the coming weeks. Note this ID down so that you don't forget it. Please enter your ID below.

Q2 What is your gender?

Q3 Level you are currently teaching? (e.g. Level one, two, three, four or post-foundation)

Q4 What is your age? Please give a number (e.g. 33)

Q5 What is your ethnic /cultural background? (e.g. Canadian)

Q6 How many years of teaching experience do you have? Please give a number (e.g. 33)

Section 3: Teacher Confidence

Q1 At this point of the semester, how confident are you that you can implement a variety of assessment strategies in class?

Not at all confident				Moderately confident				Extremely confident			
0	1	2	3	4	5	6	7	8	9	10	

Q2 At this point of the semester, how confident are you that you can adjust your lessons to the proper level for individual students?

Not at all confident				Moderately confident				Extremely confident			
0	1	2	3	4	5	6	7	8	9	10	

Q3 At this point of the semester, how confident are you that you can provide an alternative explanation or example when students are confused?

Not at all confident				Moderately confident				Extremely confident			
0	1	2	3	4	5	6	7	8	9	10	

Q4 At this point of the semester, how confident are you that you can manage disruptive behavior in the classroom?

Not at all confident				Moderately confident				Extremely confident			
0	1	2	3	4	5	6	7	8	9	10	

Q5 At this point of the semester, how confident are you that you can get students to follow classroom rules?

Not at all confident				Moderately confident				Extremely confident			
0	1	2	3	4	5	6	7	8	9	10	

Q6 At this point of the semester, how confident are you that you can keep a few problem students from ruining an entire lesson?

Not at all confident				Moderately confident				Extremely confident			
0	1	2	3	4	5	6	7	8	9	10	

Q7 At this point of the semester, how confident are you that you can motivate students who show low interest in class work?

Not at all confident				Moderately confident				Extremely confident			
0	1	2	3	4	5	6	7	8	9	10	

Q8 At this point of the semester, how confident are you that you can get students to believe they can do well in classwork?

Not at all confident				Moderately confident				Extremely confident			
0	1	2	3	4	5	6	7	8	9	10	

Q9 At this point of the semester, how confident are you that you can help your students value learning?

Not at all confident				Moderately confident				Extremely confident			
0	1	2	3	4	5	6	7	8	9	10	

Q10 What experiences in the past two weeks have influenced your confidence in your ability to teach your class well?

Not at all confident				Moderately confident				Extremely confident			
0	1	2	3	4	5	6	7	8	9	10	

Section 4: Job Satisfaction

Q11 In general, I am satisfied with my job.

Not at all confident			Moderately confident					Extremely confident		
0	1	2	3	4	5	6	7	8	9	10

Q12 I am happy with the way my colleagues and superiors treat me.

Not at all confident			Moderately confident					Extremely confident		
0	1	2	3	4	5	6	7	8	9	10

Q13 I am satisfied with what I achieve at work.

Not at all confident			Moderately confident					Extremely confident		
0	1	2	3	4	5	6	7	8	9	10

Q14 I feel good at work.

Not at all confident			Moderately confident					Extremely confident		
0	1	2	3	4	5	6	7	8	9	10

Q15 What experiences in the past two weeks have influenced your job satisfaction?

I appreciate that you've taken the time to complete this survey. I will be sending you a similar survey next Thursday. Any additional comments or questions?

Appendix H1 Request for conducting research at Higher College of Technology- Oman

المحترم

الفاضل/ د. خالد البوسعيدي

عميد الكلية التقنية العليا

تحية طيبة وبعد، ، ،

الموضوع/ طلب تطبيق دراسة The ELC Teachers & Students

بالإشارة إلى الموضوع أعلاه، أود إفادتكم بأني الطالبة فايذة بنت ناصر بن سالم الحسنية طالبة الدكتوراه تخصص لغة انجليزية في جامعة يورك بالمملكة المتحدة وموظفة في الكلية التقنية العليا بمركز اللغة الانجليزية ومفرغة للدراسة، أقوم حاليا بالعمل على رسالتي البحثية بعنوان (فعالية التحكم بالقدرات Teacher Self-efficacy). ويتضمن مجتمع الدراسة مدرسي اللغة الانجليزية وطلبة البرنامج التأسيسي بمركز اللغة الانجليزية بكل مستوياتهم ؛ إذ أن المركز اللغة الانجليزية تمثل مجتمع البحث المناسب لتطبيق هذه الدراسة ، نظراً للخصائص الديمغرافية التي تتميز بها مدرسي وطلبة مركز اللغة الانجليزية ، ولما لهذه الخصائص من تأثيرا على اداء المعلمين وقدراتهم.

ومن هذا المنطلق، فإني أتقدم لكم بطلب نشر الاستبيان المعد لهذه الدراسة وذلك عبر ارسال بريد الكتروني من قبلكم لدعوة المدرسين والطلبة للمشاركة في دراستي هذه التي ستكون على مرحلتين. المرحلة الاولى تجميع البيانات من المدرسين طول الفصل بتعبئة استبيان خمس مرات خلال الفصل الدراسي، متبوعا بالمرحلة الثانية التي تتمثل في تعبئة استبيان من قبل طلبة المركز ويمكنكم الإطلاع على نسخة من الاستبيان الخاص بالدراسة عن طريق هذا الرابط:

https://york.qualtrics.com/SE/?SID=SV_eyZ0SOLaOJa8iMJ

https://york.qualtrics.com/SE/?SID=SV_5j9fJ2T8NAIcv2Z

https://york.qualtrics.com/SE/?SID=SV_5bYiOJwtuBoX0hL

أملة الحصول على موافقتكم الكريمة، وشاكرة لكم ما تبذلوه من جهد ملموس في تعزيز مكانة السلطنة في مجال البحث العلمي. وفي حال كان لديكم أي استفسار الرجاء التكرم بالتواصل معي شخصياً على رقم XXXX نظراً لتواجدي داخل السلطنة حالياً أو على ايميلي fnah501@york.ac.uk

وتفضلوا بقبول فائق الإحترام والتقدير

مقدمة الطلب/ فائزة بنت ناصر بن سالم الحسنية

يوليو 2015م

Appendix H2 HCT permission to conduct study

SULTANATE OF OMAN
MINISTRY OF MANPOWER
Directorate General for Technological Education


الكلية التقنية العليا
Higher College of Technology

سلطنة عمان
وزارة القوى العاملة
الديريّة العامّة للتعليم التقنيّ

No. _____
DATE: _____
DATE: _____

التيم، ل. ن. ع. / بدو. ٢٠١٥
التاريخ، ٢٦ ذو القعدة ١٤٣٦ هـ
الموافق، ١٠/٩/٢٠١٥ م

Dear Faiza AlHasni

Referring to our previous correspondences regarding your PhD research topic (Teacher Self-efficacy) you are study at University of York and also to your request to conduct a questionnaire in college that will include English teachers and students on the foundation level.

I would like to inform you that the college administration has no objection to conduct the said questionnaire for the purpose of scientific research only.

Wishing you excellence in your study

Best Regards



Dr. Khalid Salim Al-Abri
Assistant Dean for Administration and Financial Affarirs
Higher College of Technology
P.O.Box 74, PC 133
Contact No. +968-24473655
Al-Khuwair, Muscat
Oman



ص.ب: ٧٤، الرمز البريدي: ١٣٣ الخوير، سلطنة عمان. هاتف: ٢٤٤٧٣٦٥٥، فاكس: ٢٤٤٧٣٦١١، الموقع على الإنترنت: www.hct.edu.om
P.O. Box : 74 Al-Khuwair, Postal Code : 133, Sultanate of Oman, Tel. : 24473600, Fax: 24473611, Website : www.hct.edu.om

Appendix I Pilot Study Feedback form

The On-line Diary Survey					
General Questions		Your Feedback and Suggestions			
How long did it take you to complete the on-line diary?					
Was the introduction of the diary simple & clear? Is it missing anything?					
Was the consent form clear and appropriate? Do you have any suggestions to improve it?					
Was the instruction for the unique ID clear and easy to follow? Do you have any suggestions to improve it?					
Do you have any concerns about the personal details asked?					
Section One: Teacher self-efficacy and confidence Scale: not at all confident, moderately confident, extremely confident (0-10)	Was the item understandable? Was the question clear and straightforward?	Was the scale used to answer the question adequate & appropriate?	Was the item written in such a way that you could choose only ONE response?	Did you find the item offensive or inappropriate in any way?	Any other comments or/and suggestions ?
Q1. At this point of the semester, how confident are you that you can implement a variety of assessment strategies in class?					
Q2. At this point of the semester, how confident are you that you can adjust your lessons to the proper level for individual students?					

Q3. At this point of the semester, how confident are you that you can provide an alternative explanation or example when students are confused?					
Q4. At this point of the semester, how confident are you that you can manage disruptive behaviour in the classroom?					
Q5. At this point of the semester, how confident are you that you can get students to follow classroom rules?					
Q6. At this point of the semester, how confident are you that you can keep a few problem students from ruining an entire lesson?					
Q7. At this point of the semester, how confident are you that you can motivate students who show low interest in class work?					
Q8. At this point of the semester, how confident are you that you can get students to believe they can do well in classwork?					
Q9. At this point of the semester, how confident are you that you can help your students value learning?					
Q10. What experiences in the past two weeks influenced your view?					

Section Two: Job satisfaction Scale: not at all satisfied, moderately satisfied, extremely satisfied (0-10)	Was the item understandable? Was the question clear and straightforward?	Was the scale used to answer the question adequate & appropriate?	Was the item written in such a way that you could choose only ONE response?	Did you find the item offensive or inappropriate in any way?	Any other comments or/and suggestions ?
Q11. In general, I am satisfied with my job.					
Q12. I am happy with the way my colleagues and superiors treat me.					
Q13. I am satisfied with what I achieve at work.					
Q14. I feel good at work.					
Q15. What experiences in the past two weeks influenced you view?					

The open-ended survey					
General Questions		Your Feedback and Suggestions			
Was the consent form clear and appropriate? Do you have any suggestions to improve it?					
Is it easy to remember your unique ID?					
Section One: self-efficacy and confidence	Was the item understandable? Was the question clear and straightforward?	Was the scale used to answer the question adequate & appropriate?	Was the item written in such a way that you could choose only ONE response?	Did you find the item offensive or inappropriate in any way?	Any other comments or/and suggestions?
1. What gives you the confidence that you can manage your class well ?		NA			
Q2. What gives you the confidence that you can engage your students?		NA			
Q3. What gives you the confidence that you can use the appropriate instructional strategies?		NA			
Q4. What external factors affected your level of motivation in the class? Please specify and elaborate (e.g. salary, promotions, administration, textbooks, society's view of English teachers....)		NA			

Q5. What factors <u>can</u> influence your student motivation in class?		NA			
Q6. How do your colleagues influence your confidence to be a good teacher?		NA			
Q7. How is your confidence influenced by the type of students you were working with?		NA			
Section Two: Job satisfaction	Was the item understandable? Was the question clear and straightforward?	Was the scale used to answer the question adequate & appropriate?	Was the item written in such a way that you could choose only ONE response?	Did you find the item offensive or inappropriate in any way?	Any other comments or/and suggestions?
Q8. What makes you satisfied with your job? Elaborate or give examples, please.		NA			

Appendix J Schedule of Data Collection

Data collection phase	Action	Teaching Week	Dates	Comments
Planning	General staff meeting introduce self/project LEVEL-WISE MEETINGS	WEEK 1 WEEK 2	14\1\16	Level-wise meetings Email PF coordinator
	1 st email summary of was said in staff meetings 2nd mail: stages of research	Beginning of WEEK 3	17\1\16	Email with incentive for participants Email explain phases of data collection (diary, open-ended survey, student survey)
	3rd mail: reminder of dates to fill in diary	Beginning OF WEEK4	24\1\16	
	4th email: contacting interviewees. Sent text message as well	END OF WEEK 3	21\1\16	To be sent separately to individuals via mail+ what's app
TEACHERS Online diary	Send off diary through Head-C&TM, Coor.PF & What's app Diary-time 1	WEEK 4	Wednesday 27\1\16	This is second teaching week (4 th week of sem)
	Diary-time 2	WEEK 6	Wednesday 10\2\16	

	Diary-time 3	WEEK 8	Wednesday 24\2\16	
	Diary-time 4	WEEK 10	Wednesday 9\3\16	Level-wise meetings 10\3\16 remind staff to participate
	Diary-time 5	WEEK 11	Wednesday 23\3\16	Last teaching day 30/3/16 FINALS 31\3\16- 14\4\16
TEACHERS Open-ended survey	Email to teachers with instructions and link to survey What's App link if preferred	Beginning of WEEK 13	27\3\16 To 7\4\16	
STUDENT SURVEY	Student engagement scale: <ul style="list-style-type: none"> Email to teachers with instructions and link to survey What's App link if preferred 	Beginning of WEEK 12 – leave survey active till 7\4\16	27\3\16 To 7\4\16	Most teachers did this. About 11 groups did the hard copy survey via the help of volunteering teachers the week before/during FINALS week. Via what's App, teachers were asked to specify a time when the volunteers could visit their class to distribute hard copy survey.

Appendix K Summary of Engaged Student Scale (ESS) data screening

<i>Engaged Student Scale</i>	<i>No of participants</i>	<i>Action taken</i>
Opened survey link	1241	-
No ID/No Data (empty rows)	82	DELETED
ID &/OR Demo- yes Data – No	81	DELETED
Missing or incorrect Teacher ID / Full Demographics & Data	34	DELETED
Teacher’s name + full data	2 groups (14+24=38)	DELETED
Full Demo& data/ TID no match	14	DELETED
Teacher ID not in (<i>n</i> =55)	122	DELETED
Total left	849	Included in analyses

Note. No ID = no teacher’s identifier given, Demo= Demographic information, All teacher IDs in student dataset that has no match to teachers final list, that’s the (*n*=55) who did 3 or more surveys, were excluded from the final dataset version which is used for analysis purpose in this study.

Appendix L: Timepoint 6 Teacher open-ended survey

Have you completed any previous survey sent by me?

- Yes (4)
- No (5)

Dear Colleague,

Here is the consent Letter for participating in this survey. Please read carefully.

The purpose of this study is to investigate the new and experienced teachers' experiences. The findings will help understand the factors affecting their teaching experience in the Foundation Program in the Higher College of Technology.

Data will be treated confidentially. Information obtained about you and the views you express in your answers will not be shared with your College; neither will your identity be disclosed in the research report. The data will be handled and stored in a manner that ensures that only the researcher can identify you through the identification code given by you. Your responses will be held electronically on a password protected or encrypted area and hard copies (if any) will be stored in a locked filing cabinet and will be used solely for the purpose of analysis.

Your participation in this study is voluntary. You may withdraw from the study at any time for any reason and without prejudice. You may also request that your data be withdrawn. Should you wish to ask questions about the project prior to taking part in the study, this option is available via contacting the researcher on the email given below.

This research study has been reviewed and received ethics approval following the procedures of the Department of Educational Studies, University of York.

The survey consists of three sections. The first two sections are drawn from your responses given in the on-line diary. In a way, this open-ended survey is meant to investigate why you felt the way you did during the semester. Space is provided for you to type the answer under each question. Section 3 is a blank section for you to add any additional comments that you may have about the subject under investigation, or any other related issues you think are of importance to this study or that require further attention.

Completion of this survey indicates your consent to participate. If you have any questions about the project/study that you would like to ask before giving consent or after the data collection,

please feel free to contact Faiza Alhasni by email fnah501@york.ac.uk , or the Chair of Ethics Committee via email education-research-administrator@york.ac.uk

Yours,

Faiza Nasser Alhasni
PhD Candidate
Department of Education
University of York
United Kingdom

Unique ID

Please enter your unique identifier that you have been using to fill in the on-line diary (e.g. SM07). Reminder: To create your unique ID, please write the first 2 letters of your last name (e.g. Smith = SM) + the day in your date of birth (e.g. March 7= 07). Thus, your ID is SM07. If your last name starts with Al (e.g. AlB-ulushi), please avoid using (Al) and write (BU) instead. This is to avoid confusion and duplication as many Arabic last names start with an (Al).

This is not a password. It is a unique code (or ID) for the software to identify you and to link your responses every time you fill in the on-line surveys .

Q1 What is your gender?

Q2 What level are you teaching now? (Level one, two, three , four or Post-foundation)

Q3 What is your age? (in number please e.g. 40)

Q4 What is your ethnic/cultural back ground? (E.g. Canadian)

Q5 How many years of teaching experience do you have? (give number e.g. 20)

Q6 What gives you the confidence that you can manage your class well ?

Q7 What gives you the confidence that you can engage your students?

Q8 What gives you the confidence that you can use the appropriate instructional strategies?

Q9 What external factors affect your level of motivation in the class? Please specify and elaborate (e.g. salary, promotions, administration, textbooks, society's view of English teachers....).

Q10 What factors influence your students' motivation in class?

Q11 How do your colleagues influence your confidence to be a good teacher?

Q12 How is your confidence influenced by your students?

Q13 What makes you satisfied with your job? Please list below the main sources of job satisfaction.

Main source 1

Main source 2

Main source 3

Q15 Any additional comments that you may have about confidence in teaching and job satisfaction, or any other related issues you think are of importance to this study or that require further attention?

Important note: Please note that you will receive a link of a survey to be filled in by your students. You may have more than one group so you could choose which group you want to participate. The student survey will only take 5 minutes. You could take your students to the lab to do it or do it in the last 5 minutes of the MMC class. Alternatively, you could text to your students via What's App and ask them to do it in the last 5 minutes of your class. Also note that you have to give your group your unique identifier (ID) to enter in the survey so that the software could link your data and your students' data. Thank you very much.

Appendix M1 themes & codes of factors influencing teacher self-efficacy and job satisfaction

<i>Factors influencing teacher self-efficacy</i>			
Themes	Sub-themes	Definition/Description	Example of evidence from data
Theme 1: The influence of teaching experiences on teachers self-efficacy beliefs	I can control my class!	Any references to strategies used to control class, manage misbehaviour, discipline students, encourage participation	The effect of constructive criticism on the students' level of motivation worked like a miracle (AR18)
	Yes, I can teach!	Any references to teaching instructional strategies including the use of technology, board, pair and group activities, peer-tutoring, use of mobile friendly activities and website, scaffolding. Coding examples:	Use of technology in the classroom. There has been a remarkable increase in the number of students actively participating(IM24)
	Improving student learning experience	Any references to teacher's strategies to engage students in and out-side the class, activities or tasks where students were the focus of attention. Coding examples: student motivation, student responsible for learning, student interest & enthusiasm, student improving and achieving	A few students volunteered to perform a role-play based on a listening unit. It was really good. It showed that my style of teaching was really effective and boosted my level of confidence.(VA04)

Theme 2: The impact of Teacher's engagement on their self-efficacy beliefs	Understanding learners (needs)	References to finding and meeting students' needs (through knowing their levels and weakness)	Discovering more about my students' levels, individual needs and attitudes helped me to get a clearer picture of how to deal with different situations in my classroom. (MA21)
	Autonomy	References to teacher's creativity in teaching	Dealing with mixed ability is the challenge this term. this particular group has quite a few repeaters and a very few high achievers. The rest are just average, and dealing with this is what motivates to be more creative and I am forced to bring about improvised plans to the class (ME21)
	Walking the extra mile	References to teachers efforts to put on more efforts to maximize the students' learning experience	I ve spoken to the students (who seem to be slow learners) individually and have encouraged them. Everyday before I begin I keep talking about classroom etiquette and discipline. I am meeting the irregular students to discuss their problems for absence. (SA28)

<p>Theme 3: The impact of relationships on teacher's self-efficacy</p>	<p>Relations among teachers</p>	<p>References to the effect that teachers' could have on each other</p>	<p>My colleagues are warm and caring aside from the fact that they are very professional in dealing with me. From both men and women colleagues, I have struck a very friendly relationship with them which makes life and work and teaching much fun and easier. (GA29)</p>
	<p>Relations with students</p>	<p>References to the importance of teacher-student relationships and its impact on both teacher's efficacy and student's learning</p>	<p>I built a friendly but strong foundation between the students and the teacher in the class and then I started teaching. It worked well and all the students were attentive and focused in doing their class work.</p>

Factors influencing teacher job satisfaction

Themes	Sub-themes	Definition/Description	Example of evidence
Theme 1: I am growing	Teacher Achievements	References to teacher’s sense of achievement which boosted teacher’s efficacy beliefs including meeting job demands and goals, taking part in decision making	I taught two different levels and managed to meet all the deadlines. (YH05)
	Student achievements	References to students’ achievements and improvements that gave the teachers a sense of satisfaction and proud including test results, and regular attendance	When I saw some of the shy students from my skill group speaking about certain topics standing in front of the group I felt very happy. It took me two weeks. I used to encourage them. Finally I did it and they did it.is a small thing but...(SL08)

	Teach for teaching	References to teacher's emotional state that helped them maintained their self-efficacy in a stressful job like teaching. E.g. self-pleasing, sense of belonging, inner sense of duty, passion for job	I like my job. Motivation to help those who are in need (MO017)
	Recognition	References to various forms of recognition through feedback from students, colleagues, or management and through promotions like new responsibilities at work	Appreciation from seniors have greatly influenced my level of job satisfaction (PA)
Theme 2: Work environment	For their willingness, I do it	References to students' efforts to be in charge of their learning and taking responsibility for it (which was reflected on their achievements, behaviour, attitude, interest), satisfied teachers	"job satisfaction increased perhaps because of the students' enthusiasm and motivation for learning. These two factors are mutually important if a teacher wants to gain job satisfaction".(TU12)
	Discontentment with students	Any negative references that affected teacher's satisfaction such as student low abilities and learning habits	[It is] rather disappointing.. [when] you try your best to help but they seem not to value it or even care about what you tell them (JU23)

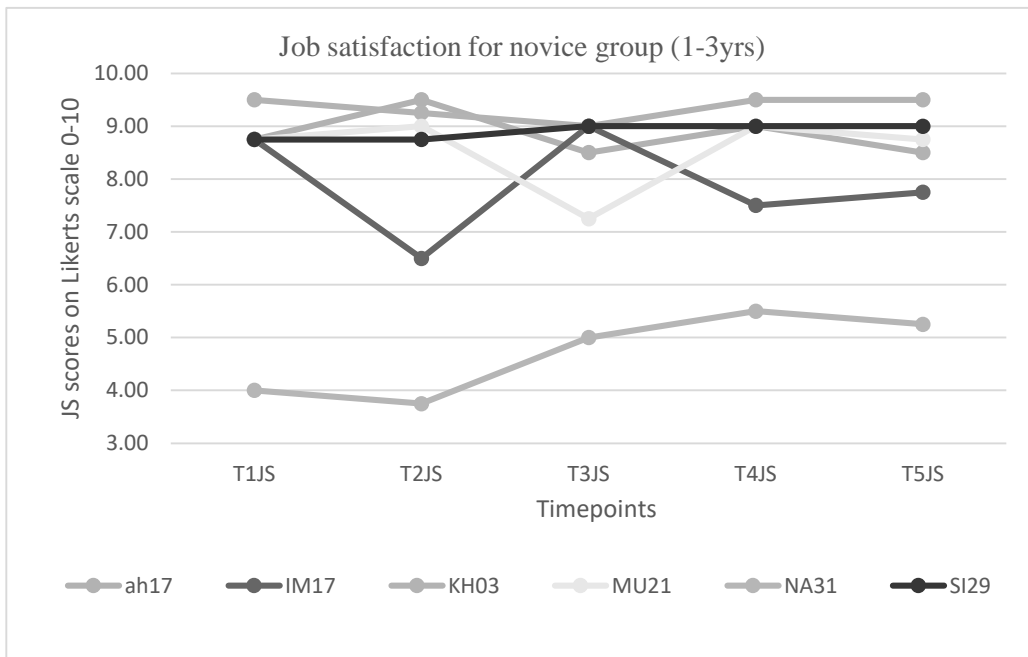
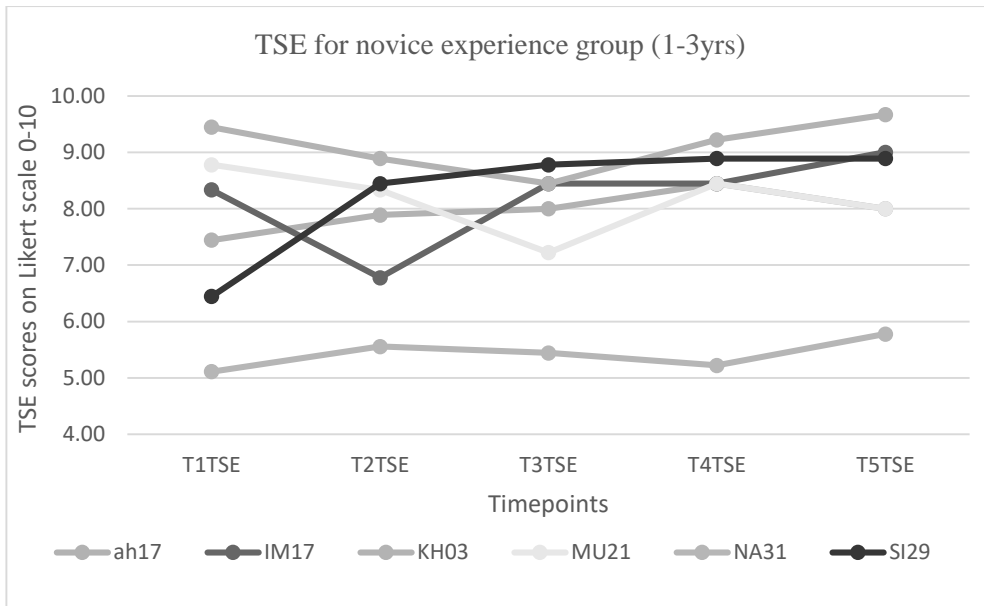
	Working conditions	Reference to aspects of job that satisfied teachers including professional support from colleagues and management (flexibility & policies), provision of resources, and professional development training.	We had a symposium which we gained a lot from. We met experienced teachers and attended useful workshops. (RU28)
	Ambient environment	References to effect of having a cordial atmosphere at work with management, colleagues and students	Nice atmosphere, helpful staff and colleagues ... Feeling happy... [and] ready to work. (MU23)

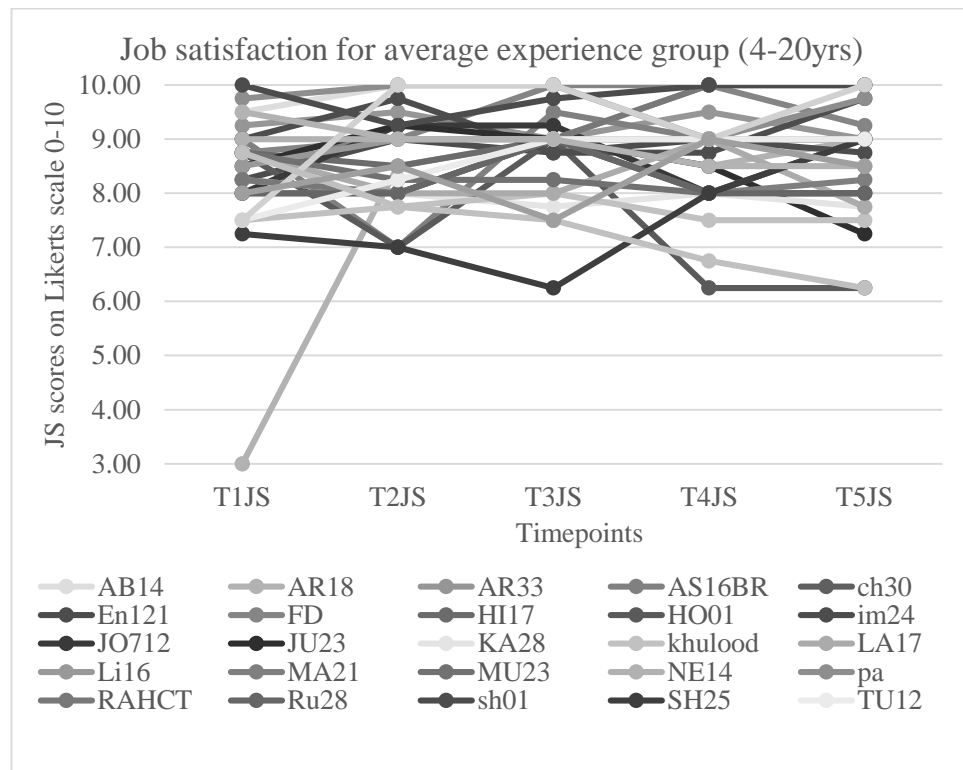
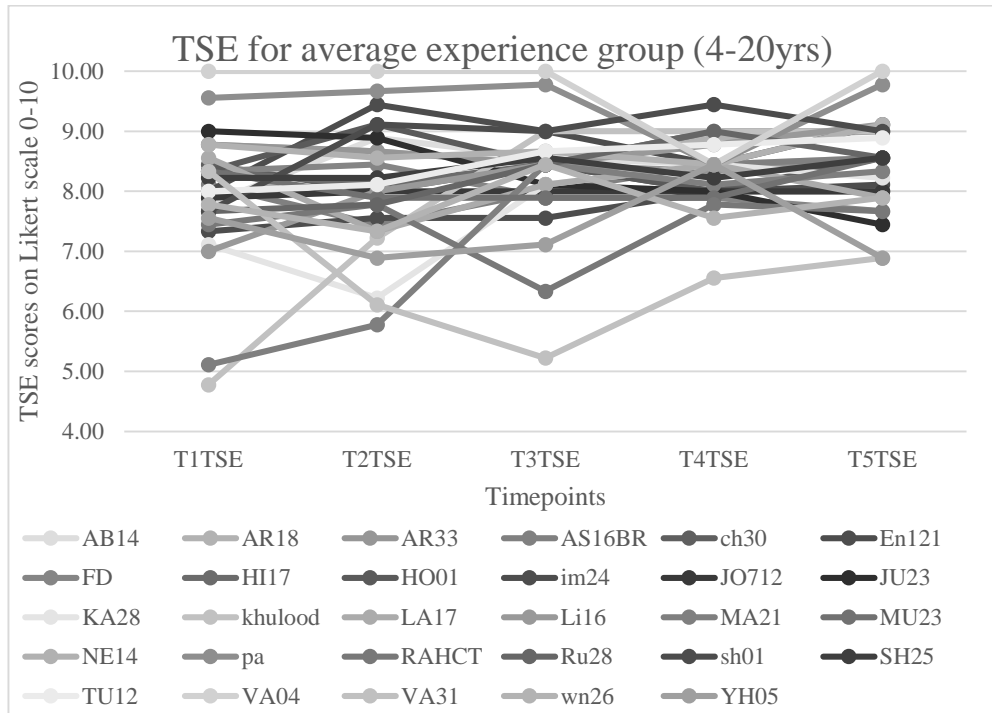
Appendix M2 Frequency of themes and codes per experience group

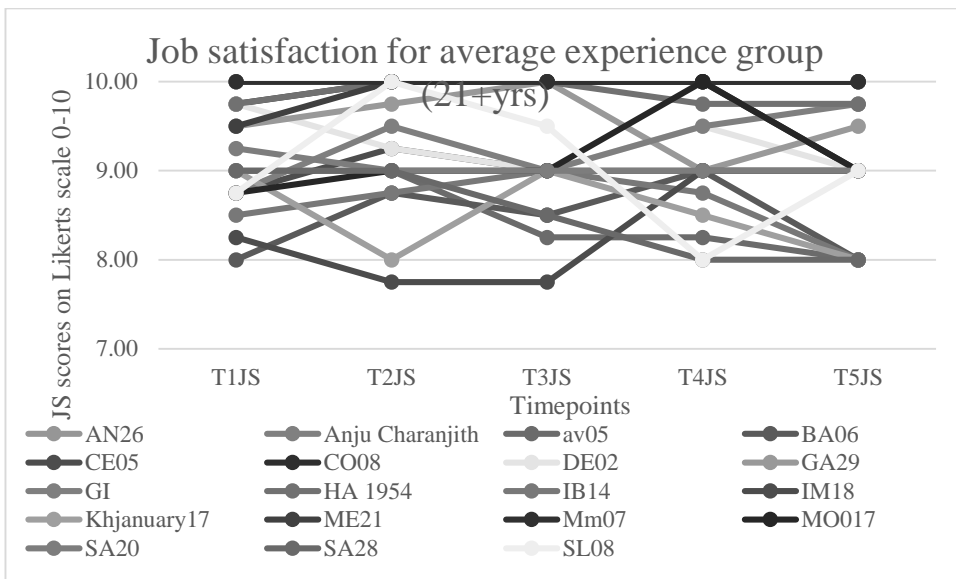
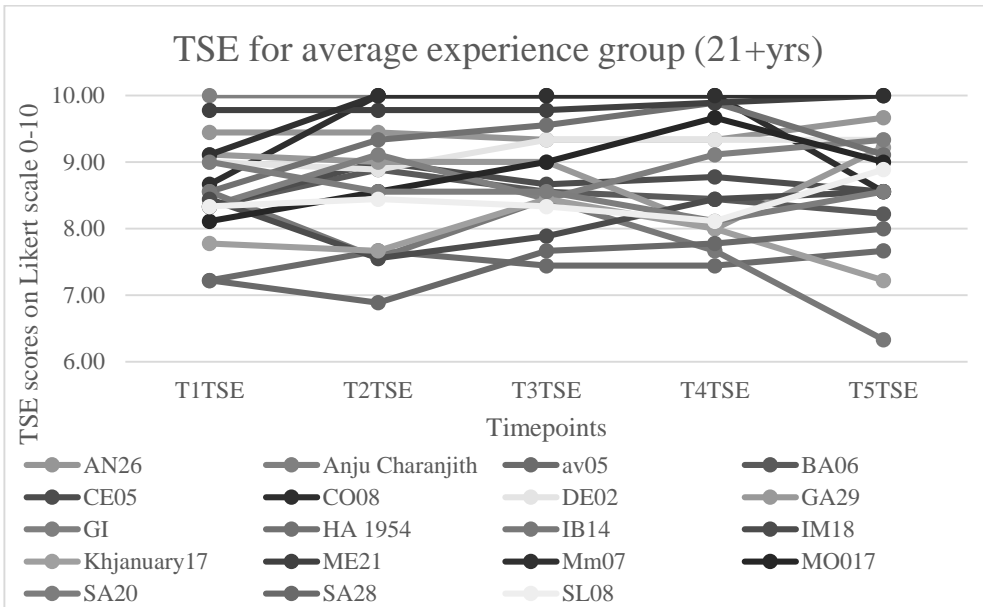
Sub- themes	Codes	Frequency of code per years of experience				
		1-3	4-6	7-18	19-30	31 +
Factors influencing teacher self-efficacy						
I can control my class!	Attendance, follow rules, criticize, humor, community		2	4	6	2
Yes, I can teach!	Verify instructional strategies, use teaching activities, experimenting		4		8	1
Improving student learning experience	Engaging students		3	3	3	2
Understanding learners (needs)	Finding needs, meeting needs		8	11	12	1
Autonomy	Teacher creativity, autonomous				4	
Walking the extra mile	Teachers' efforts, working hard, counselling, encouraging, motivating, reminding of goals & achieving them		1		6	1
Relations among teachers	Collegial relations, socializing					
Relations with students	T-st relationship, in-class atmosphere, student-student relationships		2	13	7	
Factors influencing teacher job satisfaction						

Teacher Achievements	Meet job demands, achieve goals, counsel, motivate, regular to work, decision making				10	
Student achievements	Student improve, achieve, attend, good results		4		15	
Teach for teaching	Inner state, pleasing, sense of belong, resilience, sense of duty		3		10	
Recognition	Positive feedback(management, students, colleagues), new responsibility, positive reflection		1		4	
For their willingness, I do it	Students willingness, responsible,, interest, cooperative, behaved, positive attitude, motivated & enthusiastic		7		19	
Discontentment with students	Student low abilities, learning habits, student behaviour, lack of motivation & interest	1			9	
Working conditions	Resources (e.g. sheets), autonomy, professional support, desired teaching level, flexibility		8	24	20	
Ambient environment	Culture, peaceful place, ambience, smooth atmosphere		8		13	

Appendix N: Teacher's efficacy level among participants of the 3 experience groups (using scale means)







Appendix O Number of participants identified within each case

Case	Experience Groups			total
	Novice experience group	Average experience group	Highest experience group	
Case SE/JS: increasing self-efficacy and increasing job satisfaction	1(1.82%)	10(18.18%)	6(10.91%)	17(30.91%)
Case SE/js: increasing self-efficacy and decreasing job satisfaction	2(3.64%)	1(1.82%)	5(9.09%)	8(14.55%)
Case se/ JS: decreasing self-efficacy and increasing job satisfaction	0(0%)	2(3.64%)	0(0%)	2(3.64%)
Case se/js: decreasing self-efficacy and decreasing job satisfaction	0(0%)	4(7.27%)	5(9.09%)	9(16.36%)
Case Surprise	2(3.64%)	8(14.55%)	9(16.36%)	19(34.55%)
Total number of participants in each experience group	5(9.09%)	25(45.45%)	25(45.45%)	55(100%)

Note. Values represent percentage of participants across data ($n= 55$). Six participants are chosen from each case to be analysed (that is, 27 in total were analysed to answer research question #7).

Appendix P: Change Processes Cross-case⁶

<i>Case SURPRISE</i>	<i>Career-related</i>	<i>Student-related</i>	<i>Subject/content-related</i>
<p>POSITIVE</p>	<ul style="list-style-type: none"> ➤ Teaching from my heart and students positive responses encouraged me. ➤ Students' Quiz & MSE marks and their attendance for both Quizzes and MSE made me realize that they are moving towards their goals. ➤ being head of delivery plan which allows me good time to be more creative in the classroom. ➤ having a time out to celebrate teachers' day. 	<ul style="list-style-type: none"> ➤ Total involvement of preparing lessons according to the students' level, teaching according to their needs, giving them life based skills though English language, helping them to achieve their goals, and giving them counselling if needed. ➤ The effect of constructive criticism on the students' level of motivation worked like a miracle. EPIPHANY ➤ The improvement in my students' level of confidence, understanding and intrinsic motivation. ➤ The more knowledge they acquire, the easier it is to teach them, and control their discipline. ➤ Feeling that my effort with my students is fruitful instead of wasted. ➤ students' results in the MSE exam. ➤ students sense of motivation. 	<ul style="list-style-type: none"> ➤ Making use of previous experiences of teaching and learning from students. ➤ Clear idea about the subjects, teaching. ➤ Well planned lesson plan. ➤ using warm up activities at the beginning of each class because this will make students active, attentive and ready to participate in classroom activities.
<p>ASSISTED</p>	<ul style="list-style-type: none"> ➤ Appreciation and motivation from superiors, colleagues and students. 	<ul style="list-style-type: none"> ➤ Students and colleagues positive feedback. ➤ 1.My students are following the set rules thoroughly. ➤ 2.They understand their goals and how to achieve them. 	<ul style="list-style-type: none"> ➤ The pop quizzes helped me to know who is studying and who is not. Thus, I encouraged those who are not studying to

⁶ All the evidence presented under the career-related, student-related and subject/content-related columns are **representative** quotations from the 1-5 timepoints stated by participants of each Case.

	<ul style="list-style-type: none"> ➤ We had a symposium, which we gained slot from it. We met experienced teachers and attended useful workshops 	<ul style="list-style-type: none"> ➤ Appreciation and motivation from superiors, colleagues and students. ➤ Students' positive responses. Their internal assessment marks also made me realize that they could completely follow me. 	<p>revise everything given in the classroom. And I keep reminding them that the exam is next week.</p>
HINDRANCE	<ul style="list-style-type: none"> ➤ management decisions on some issues related to teaching load. ➤ stressful schedules. ➤ overloaded work schedule. 	<ul style="list-style-type: none"> ➤ Having a couple of extremely disruptive students. ➤ The big number of students per class. Two students with disruptive behaviour. Lots of movements of students from one group to the other. Having too many students in one group. ➤ Two students with disruptive behaviour. ➤ mixed ability classes. ➤ having late days because I'll be exhausted by the end of the day and don't want to think of anything other than finishing my class and go home. 	
WITHDRAWAL	<ul style="list-style-type: none"> ➤ Nothing. 		

<i>Case SE/JS</i>	<i>Career-related</i>	<i>Student-related</i>	<i>Subject/content-related</i>
POSITIVE	<ul style="list-style-type: none"> ➤ Cooperation from my superior side treat me, Their confidence in me that I can do my job well despite my drawbacks. ➤ My target of achieving the goals has been the factor for job satisfaction. ➤ I like my job. Motivation [is] to help those who are in need. 	<ul style="list-style-type: none"> ➤ positive personal relationship between T & S'S that created comfort and boosted our bonding. ➤ Students' interest and involvement in class. ➤ student written work in and outside their classroom ➤ Several assignments taken by students. ➤ Students motivation level and growing self confidence ➤ Getting to know my students better, identifying the disruptive ones and getting them around. ➤ The results of introducing the concept of personal responsibility and their role as responsible students, have started yielding fruit. Now I do not have to motivate them on their responsibilities, which has resulted in smooth teaching/learning. ➤ A very weak student, who was unable write a word correctly is on paragraphs! Whether or not I will get him to essays, I don't know, but I am satisfied with his progress. ➤ I have gained a clearer picture of my students' level and personalities. ➤ Students' willingness to seek my help and 	<ul style="list-style-type: none"> ➤ Keeping a track of learning objectives ➤ 2. Keeping a track of delivery plan ➤ General feedback from the entire continuous assessments ➤ I am trying out different techniques in class which have turned out to be successful, and probably that is what has influenced my satisfaction. ➤ That I was able to complete my lessons and review.
ASSISTED	<ul style="list-style-type: none"> ➤ teacher-teacher interaction and comfort level. ➤ positive support by higher authorities of the department ➤ timetable flexibility 	<ul style="list-style-type: none"> ➤ Teacher-student comfortable interaction and relationship. ➤ The change in students' attitudes towards learning English and little progress in their writing. ➤ My students' writing has progressed and they are not reluctant to ask questions as before. 	<ul style="list-style-type: none"> ➤ personal discussion service on various job related techniques

	<ul style="list-style-type: none"> ➤ Participating in ELC events. ➤ My previous experience in teaching level one last semester and the positive influence of the teaching materials on students' progress in language learning. ➤ Sharing of resources ➤ some teachers were glad to use some of my teaching materials. 	<ul style="list-style-type: none"> ➤ Students' are able to understand the instructions of classroom activities of themselves and their obvious progress in reading and writing. ➤ The students' good scores in mid semester exam. ➤ Lower achievers' interaction in classroom. 	
HINDRANCE		<ul style="list-style-type: none"> ➤ Dealing with mixed ability is the challenge this term. This particular group has quite a few repeaters and a very few high achievers. The rest are just average, and dealing with this is what motivates to be more creative and I am forced to bring about improvised plans to the class. ➤ Code-switching to Arabic was one major problem. 	

<i>Case se/js</i>	<i>Career-related</i>	<i>Student-related</i>	<i>Subject/content-related</i>
POSITIVE	<ul style="list-style-type: none"> ➤ I like getting to know a new class and lifting their expectations. I am also writing exams so that contributes as I love writing. 	<ul style="list-style-type: none"> ➤ I am happy with the test results and I can see many students improving. I like teaching level 1 for this reason. ..you can see an increase in ability over a semester in a more pronounced way than other levels. ➤ Many of my students are 'unusually more motivated' this semester. ➤ Motivation of students. 	
ASSISTED	<ul style="list-style-type: none"> ➤ I asked for an emergency leave and got all the possible help from my bosses and colleagues. EPIPHANY ➤ The good treatment I receive from the administration and colleagues. ➤ I like teaching but student motivation I think plays a big part in the teaching experience. At level 1 I find student motivation high in the first few weeks at least, especially compared to other levels. In addition I am an exam writer so that means I am not teaching as much as I was...I like the variety and I like exam writing. I feel as 	<ul style="list-style-type: none"> ➤ Level 1 in my experience show more enthusiasm and it is easy to form positive group cohesion because of this...which makes it easier to manage difficult students and to motivate the class...for now! These issues do get more complicated but during the middle of the semester. I am also lucky not to have any complete beginners in this class. 	<ul style="list-style-type: none"> ➤ I have past experience teaching level one second intake the students are very weak and a lot of effort is made my me to teach them and I feel very nice in the end.

	though I am good at both teaching and exam writing, which contributes to my job satisfaction.		
HINDRANCE		<ul style="list-style-type: none"> ➤ Some changes in the numbers of my students. Some students moved from my classes to other classes and some students joined my classes. ➤ Students come late to classes. And sometimes they don't pay attention to what's being discussed. ➤ Students have become less motivated since we are approaching the end of the semester. And the number of those who miss classes has increased. ➤ Students' results in exams were not satisfactory. They became less motivated. 	<ul style="list-style-type: none"> ➤ Lack of some teaching resources. ➤ A heavily loaded curriculum and delivery plan which is tailored to testing more than learning.
WITHDRAWAL		<ul style="list-style-type: none"> ➤ I have a great class but as usual there are a few who are unmotivated and don't want to be here. It's easy to adjust classes according to level and mix-up groups or have students helping each other with certain tasks but those who don't want to be here are hard to shake-up. They start off OK, but as they realise how much work they have to do, they become disruptive and absent. It's easy to manage that but not easy to get them to change their perspective. Mostly because there are so many reasons why a student may not want to be here. There are only so many personal questions you can ask to get 	<ul style="list-style-type: none"> ➤ Time is running out with exam approaching so I have given a lower mark for my confidence to adjusting lessons to different student abilities because we need to focus on covering the syllabus as a priority.

		<p>to the bottom of something.: (FRUSTRATION)</p> <ul style="list-style-type: none"> ➤ The exam has made me feel less satisfied with my job temporarily as I had my entire class tell me how difficult the exam was and nothing was related to the book! Obviously that is not true but it made me feel as though no one studies so what's the point! It's just an uphill battle here sometimes! ➤ Some students continue to be disruptive and unmotivated no matter what I do in class which makes me feel less satisfied. ➤ Lack of students' motivation, insane amount of material to cover in a semester. <p>EPIPHANY: WITHDRAWELL</p>	
NO CHANGE	➤ Nothing for the time being.		

<i>Case SE/js</i>	<i>Career-related</i>	<i>Student-related</i>	<i>Subject/content-related</i>
POSITIVE	<ul style="list-style-type: none"> ➤ Was regular for duty ➤ Feel comfortable while at work. ➤ My satisfaction is based on working here for a long time , so I have gained respect and friendship of many people at work. 	<ul style="list-style-type: none"> ➤ Higher level of interaction from the students' side. ➤ Some students showing good amount of confidence in the subject. ➤ I could find individual student's area of weakness so, I can plan my lesson as well as academic advising hour accordingly. I feel satisfied because I could move according to my plan and the students were equally cooperative. ➤ I have identified the weak students and I am trying to find out ways to deal with them. ➤ I made the students work in groups in writing the process essay on The Life Cycle of a Plant. I was monitoring their work giving them necessary scaffolding and encouraging their good work. Potentiality of most of the students was encouraging and students were happy about it. 	
ASSISTED	<ul style="list-style-type: none"> ➤ Sufficient time has been allotted to each class rendering adequate time to deal with the subject. Superiors are always ready to provide guidance at times of necessity. Perfect 	<ul style="list-style-type: none"> ➤ Using of technology in the classrooms and enhanced levels of concentration of the students due to the Mid Semester Examinations being round the corner. ➤ Student feedback on learning ➤ Punctuality of students 	<ul style="list-style-type: none"> ➤ The first and foremost element is the well laid down delivery plan. This helped me in revising what has been learnt in the previous course which led the students to participate well and at the same time helped some

	<p>ambience both at the office and the classes. All necessary support is provided. Cordial relationship exists among the colleagues.</p> <ul style="list-style-type: none"> ➤ I was allotted an office in a very short time. ➤ Provided with the car access card to enter the college in a very short time. ➤ I was provided with an e-mail id to access the college web site. ➤ The valuable guidance provided by the senior officers in academic affairs. The cordial atmosphere at the work place and the permission being provided to work in the office during holidays. ➤ Effective feedback and guidance provided by the superiors and very good relations among the colleagues. I was also provided by the necessary technical inputs for effective discharging of 	<ul style="list-style-type: none"> ➤ Attendance ➤ Compliance to the rules set in the beginning. ➤ Students voluntarily agree to learn, of course, with a few exceptions. ➤ Students continue to be punctual as in the beginning. ➤ Most of the students are doing well in the internal assessments. ➤ Good performance of students in the MSE exam. ➤ Attendance in class. 	<p>slow learners to get clarified their doubts, eventually leading to fairly well participation in the class. Using the techniques of asking Instruction Checking Questions and Concept Checking Question has also helped me in this regard.</p> <ul style="list-style-type: none"> ➤ I have used a variety of techniques in teaching: <ul style="list-style-type: none"> (i)students have a lesson on the Life Cycle of Tornadoes which they need to write an outline for the process essay. This being a new concept in Oman I have shown an education video clipping which shows the different the stages of the life cycle of tornadoes while giving its details. Students watched the video with interest and in fact, it supplemented them to follow the text and complete the tasks with much ease. (ii) As the students need to learn the spellings of Business vocabulary, I gave them spelling test in the class and I found students have taken it up as a challenge, they memorized at home, and performed very well in the test.(iii) I made the
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	<p>my duties. Feedback from superiors and colleagues.</p> <ul style="list-style-type: none"> ➤ Given new responsibilities. <p>EPIPHANY</p> <ul style="list-style-type: none"> ➤ Spending time with my colleagues has created a good equation amongst us. Nothing specific. 		<p>students work in groups in writing the process essay on The Life Cycle of a Plant. I was monitoring their work giving them necessary scaffolding and encouraging their good work. Potentiality of most of the students was encouraging and students were happy about it.</p> <ul style="list-style-type: none"> ➤ I tried revising vocabulary using the link called kahoot.it. which worked very well. ➤ In the speaking class, I tried an activity for the usage of vocabulary covered in that chapter which was also useful. Yeh!
HINDRANCE		<ul style="list-style-type: none"> ➤ Because of the warnings given to the students regarding their attendance and the continuous assignment marks, they have become regular and started doing their work. But I am not too sure how much credit should I give to myself because I don't see drastic difference in their performance. EPIPHANY: ➤ Job satisfaction especially as a teacher we get only when we see the difference in student's behaviour, discipline and performance. If It's still not up to the mark then you keep improvising your ways. 	<ul style="list-style-type: none"> ➤ Having to repeat some points in writing the essay again and again

		➤ weakness of some students though many points are repeated again and again.	
NO CHANGE	<ul style="list-style-type: none"> ➤ Not much of a change. Just the same feeling. ➤ No change at all. 		

<i>Case se/ JS</i>	<i>Career-related</i>	<i>Student-related</i>	<i>Subject/content-related</i>
POSITIVE	<ul style="list-style-type: none"> ➤ addressed the problematic cases that came up with the least efforts and taking less time. ➤ I feel I am doing something that I enjoy. Pleasing myself has always been a major driving factor in doing what am doing. ➤ I met all the dead lines in time. 	<ul style="list-style-type: none"> ➤ Better knowledge of the psychology of my learners. ➤ Most students have improved and eager to learn more. ➤ I really feel important as I enjoy good relationship with students as well as my colleagues. 	<ul style="list-style-type: none"> ➤ I taught two different levels and managed to meet all the deadlines.
ASSISTED	<ul style="list-style-type: none"> ➤ I voiced out my disagreement with my superiors over certain decisions and they were very attentive and understanding listening to my view. ➤ The flexibility of my superiors. ➤ My colleagues are more open to discuss with me their achievements and the difficulties they face. ➤ Good teamwork and comfortable atmosphere. 	<ul style="list-style-type: none"> ➤ Most students have improved and eager to learn more. 	<ul style="list-style-type: none"> ➤ My colleagues provided any help I needed regarding the courses I am teaching. ➤ Good preparation and providing my students supplementary material boosted my confidence.
WITHDRAWAL 7			

⁷ Withdrawal in this case was sometimes suggested by not providing any comments or feedback for the first six weeks of the semester from a particular participant.

Appendix Q Change patterns in relation to experience groups & teaching-related elements

Change Pattern	Novice group	Average experience group	Highest experience group
Positive	20	74	25
Assisted	21	47	19
Hindered	2	7	12
Withdrawal	-	8	-
No change	-	-	5

Note. The frequencies provided in this table are inclusive of case Surprise. Twenty-seven participants are used to calculate the frequencies of the patterns based on the criteria used to select participants to answer research question #7.

Change Pattern	Career-related	Student-related	Subject/content-related
Positive	37	67	5
Assisted	39	43	12
Hindered	3	18	2
Withdrawal	-	4	2

Note. The frequencies provided in this table are inclusive of case Surprise.

List of Abbreviations

ACRONYM	DESCRIPTION OR NAME
HCT	Higher College of Technology
ELC	English language Centre
TSE	Teacher's sense of efficacy
T1TSE	Time Point 1 Teacher self-efficacy (e.g. of reporting TSE in time point)
T1JS	Time point 1 Job satisfaction(e.g. of reporting JS in time point)
TSESE	Teacher self-efficacy for Student Engagement (subscale)
TSECM	Teacher self-efficacy for Class management (subscale)
TSEIS	Teacher self-efficacy for Instructional strategy (subscale)
PF	Post-foundation
MCAR	Missing completely at random

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