Enhancing Omani EFL Learning Environments: A Participatory Action Research Study into the Application and Development of an appropriate SOLE Pedagogy

A thesis submitted by

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Author's declaration

I certify that, to best of my knowledge, all the material in this thesis represents my own work and that no material is included which has been submitted for any other award or qualification.

Abstract

This researcher explored English as a Foreign Language (EFL) students' experiences in learning English using Self-Organized Learning Environments (SOLEs) within the context of their English foundation year in a college setting in Oman. Three purposes guided this research: 1. to explore Omani EFL students' experience of and orientation toward SOLEs, 2. to investigate whether SOLE pedagogy is able to facilitate an effective English language learning environment for Omani students and 3. to theorize a model for effective and impactful SOLE adoption within an EFL learning context. Most of the previous studies on SOLEs have only examined students' achievements in SOLEs but have not explored participants' views, emotions and criticism of the new learning environment, a considerable omission from the research since SOLEs purport to be precisely a learning environment that is able to be responsive to and malleable and mutable by the participants themselves.

Using a participatory action research design, data sources included a series of diaries, semi-structured interviews, focus groups and the researcher's field notes. Interaction between the researcher and participants and among participants themselves helped to ensure the rigour of this research. Throughout the research, participants were involved in expressing their ideas and thoughts about SOLEs and in decision-making as they were offered numerous opportunities to continually reflect upon and refine their thoughts.

The results indicated that SOLEs can be a successful EFL pedagogical approach but any SOLE utilised for this purpose has to undergo structural changes which include the nature and role of big questions and the role of teachers. Results indicated that teachers should take more roles, such as, supervise, monitor, and adopt different behaviours, such as remaining in the classroom, supporting, encouraging and grouping students when appropriate. Results also indicated that big questions should not be the only questions asked. Some strengths of SOLEs that were indicated by the results include the suitability of SOLEs for tertiary level education, boosting learning and cooperation, giving students some freedom, creating the possibility for student autonomy, empowering students, allowing the use of the Internet, suitability for different learning styles, and motivating students in ways hitherto

unacknowledged by teachers. These results together form the contribution and significance of this empirical study.

This empirical study assists in understanding the construction of an effective English language learning environment in an under-researched international context. It also contributes to previous and ongoing studies that investigate SOLEs in different contexts and fields to explore and examine their impact on students' experiences. This study concludes with implications for future studies that include the investigation of SOLEs in relation to student retention and achievement in language learning courses.

Dedication

To EFL students and teachers in Oman

Acknowledgements

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List of Abbreviations

CALL   Computer assisted language learning

CSCL   Computer supported collaborative learning

ELT   English language teaching

EFL   English as a foreign language

PAR   Participatory action research

PBL   Problem-based learning

PLE   Personal learning environment

PLN   Personal learning network

SOLE   Self-organized learning environment

Chapter 1. Introduction

1.1 Chapter overview

This introduction chapter contains six short sections that provide an overview of the whole study: a background to the study, context and complexity of this study, the nature of this thesis, the contribution of this thesis, a definition of terms used in this thesis and the organization of the thesis.

1.2 Background to the study

In the context of Learning English as a Foreign Language (EFL), there are many factors that work either as catalysts or impediments to students' learning of EFL. Among these factors are the type of learning environment used and the pedagogy adopted by teachers. JCALT (2001 as cited in Zitter et al., 2011, p.372) states that learning environments are:

> *(1) the physical setting in which a learner or community of learners carry out their work, including all the tools, documents and other artefacts to be found in that setting and (2) the physical setting but also the social/cultural setting for such work.*

Another definition states that 'Learning environment refers to the social, physical, psychological and pedagogical contexts in which learning occurs and which affect student achievement and attitudes' (Fraser, 1989, p. 3). There is agreement among educators on the importance of learning environments where the teaching and learning take place as they are found to have a vital impact on students (e.g. Chickering and Reisser, 1993; Peter & Armstrong, 1998 as cited in Treff and Earnest, 2016). Higgins et al. (2005) confirm that this profound understanding of the impact of learning environments on both the learning process and learners' wellbeing encourages educators to rethink the design of learning environments. Therefore:

> *Learning environments have to be designed in such a way that they lead to the intended learning activities. The main goal of these activities is to lead to the intended learning outcomes, which we defined as transferable knowledge oriented learning outcomes and the learning, thinking, collaboration and regulation skills that can be applied to such transferable knowledge and the process of learning (Simons et al., 2000, cited in Zitter et al., 2011, p. 373).*

Learning environments and pedagogy matter: through the way they facilitate learning, the influence they exert on students, the engagement opportunities they provide to students (Chickering and Reisser, 1993). The EFL literature demonstrates strongly that students often find learning environments stressful, difficult and competitive (see e.g. Horwitz et al., 1986; Pappamihiel, 2002), so there is a recognized need for the adoption of unthreatening EFL environments that are conducive to learning (Tanveer, 2007). In the same way, Scrivener (1994, p. 15) advised teachers to 'encourage a friendly, relaxed learning environment' in order to boost interaction. Furthermore, learning environments should boost personal development (ibid), they should provide students with skills that are considered crucial, such as critical thinking, digital and innovation skills (Fandiño, 2013), they should empower students (Frymier et al., 1996) and should create autonomous learners who are able to make decisions on their learning strategies (Harmer, 2015).

During the reconnaissance stage of this study it was found that the EFL learning environment in *Future College* where this study took place worked as an impediment to students' EFL learning. *Future College* is a pseudonym for the college, the name has been changed to protect the identity and confidentiality of some of the observations. Many students in this college often find it challenging to grasp the intricacies of the English Language at the tertiary level, especially after they have pursued their primary and secondary level of education in their mother tongue. English in Omani schools is taught as a subject only and taught for approximately four hours a week. The medium of instruction in governmental schools is Arabic. Most Omani pupils rarely use English in schools and outside of the school setting. This approach to language learning in Omani schools sometimes affects students negatively in terms of adapting to the whole new English learning environment at the tertiary level where English is the medium of instruction; the sudden exposure to English at entry level to tertiary education further adds to the problem mentioned above. Students become shy, hesitant and lack confidence in using English due to their very low level of the language. Al-Mahrooqi and Denman (2018, p. 3) contend that:

> *A number of studies have reported that school graduates often have limited English language abilities which negatively impact upon their success in both tertiary level English medium environments and in a national workforce that has seemingly ever-increasing demand for employee English proficiency.*

Also, Omani students complain that English-medium instruction negatively affects their adjustment in college and their ability to understand other courses (Al-Mahrooqi et al., 2015).

Despite the time students spend on learning different English skills in *Future College*, it is observed that students face difficulties in English language that is the medium of teaching and learning. This consequently affects their ability to perform well in their studies that subsequently leads to an unnecessarily high withdrawal and dismissal rate every year. This researcher worked as an English teacher for three years and then as Assistant Dean for Student Affairs in this college, the latter role involved responsibility for all issues related to students from enrolment until graduation, dismissal or withdrawal. It is clear through counselling sessions that students decide to withdraw due to their negative attitude towards the way English is taught in the Language Centre which, according to them, is boring, conventional and not engaging. As an English teacher, this researcher believes that engaging learning environments are vital. Therefore, the main objective of this study is to explore the learning experience within Self-Organized Learning Environments (SOLEs). The aim is not to measure the effectiveness of SOLEs in English classes by numerical means, but to explore whether and how SOLEs affect the learning experience of English in *Future College* in Oman, as an ecological exploration of enhancement rather than an outcomes-based intervention.

A relatively new emerging pedagogical approach and learning environment is a Self-Organised Learning Environment (a SOLE). A SOLE refers to a type of learning environment in which learners self-organise in groups of approximately four students and are provided with a computer connected to the Internet. They are left unsupervised and the role of the teacher is minimal. S/he just facilitates a big challenging question that is hard or impossible to be answered without the use of the Internet and has no right or wrong answer. Teachers then ask learners to search for answers to the given question on the Internet. A SOLE as an approach provides more room and freedom for learners, they are allowed to talk to anyone, whether in their groups or not, they are allowed to walk around and to change groups. At the end of the session, they are asked to give an answer to the challenging question (Mitra et al., 2005; Mitra, 2015; Mitra and Dangwal, 2010; Mitra and Quiroga, 2012; Dolan et al., 2013; Mitra et al., 2016). 'Communication and collaboration are therefore key features of a SOLE' (Mitra et al., 2016, p. 232). With regard to the

design of SOLE centres, Mitra states that it is preferable that they are visible so that people outside like teachers, head teachers and parents can see what is going on inside in order to observe children work, especially as children are left unsupervised in SOLEs (Mitra et al., 2010).

In theory, SOLEs appear to be able to offer much to enhance EFL learning environments and that students would benefit from such environments. In my view, SOLEs seem to be compatible with two important assumptions in learning which are 'people learn more by doing things themselves rather by being told about them' and 'learners are intelligent, fully-functioning humans, not simply receptacles for passed-on knowledge' (Scrivener, 1994, p. 4). Although the evidence for how SOLEs work is incomplete and sparse, extant studies (see e.g. Mitra and Dangwal, 2010; Mitra, 2009; Mitra and Crawley 2014; Mitra and Quiroga, 2012; Donal et al. 2013) claim to demonstrate that in SOLES, students:

- Gain confidence
- Become capable of dealing with big challenging questions
- Learn things ahead of their age
- Retain knowledge longer
- Enjoy learning together, and individually
- Improve their computer and English language skills

Weisblat and McClellan (2017, p. 310) also believe that:

> *Education is undergoing tremendous change. Technology and communication are central to this change, as speed and accessibility have increased exponentially. Learners' content knowledge is no longer as valuable as their content navigation skills, and teachers' expertise is no longer beholden to didactic instruction. Education must accommodate this information age and the needs of undefined future employers. A new approach to education known as the Self-Organized Learning Environment (SOLE) offers a promising pathway through which to engage 21st-century learners.*

It should be highlighted that studies on SOLEs are not numerous and rigorous evidence is incomplete as acknowledged by the founder of SOLEs: 'the validity of our conclusions needs considerably more rigorous measurements over larger samples in diverse schools' (Mitra & Crawley, 2014, p. 87). Apart from mentioning that SOLEs help to improve English skills (Mitra et al., 2005; Mitra, 2013a; Mitra et al., 2016), there is no study that uniquely explores a SOLE as an English language learning environment. Moreover, research that is extant on SOLEs fails to acknowledge

concepts of learners' individual differences, learner diversity in relation to ability, and also, the nature of what is being taught and what is learned. In addition, most discussions about SOLEs are happening on social media platforms, shared by teachers and educators in informal exchanges. Recent series of tweets about SOLEs show that social media proliferate ideas about SOLEs but that these are not backed up by research, instead, being supported by anecdotal evidence and informal observation. Medeiros (2019), for example, tweeted messages of support to SOLEs, and many of her followers responded in kind. She stressed that students in SOLEs learn new knowledge and find new resources that are made available by SOLEs. StartSole (2019) also encourages teachers to implement SOLE approach for its claimed positive results on students and their learning. Research helps scrutinize claims and hypothesis; therefore, SOLEs have to be scrutinized in order to prove or reject the above claims.

In sum then, a SOLE is described as a friendly unthreatening environment that promises a great deal; not least that an unthreatening environment is the type of environment that is encouraged by some scholars like Scrivener (1994). Nevertheless, it cannot be taken for granted that interaction in a SOLE is fruitful without proper rigorous research as research informs which methods and techniques work and which do not (Harmer, 2015). Also, SOLE pedagogy is relatively new, and new methods of teaching and learning without systematic investigation may be considered questionable at best and dangerous at worst as stressed by Swan (2012, as cited in Harmer, 2015). Therefore, SOLEs' effects on students' learning of English deserves rigorous exploration that this research intends to do. This study aimed to add to the literature of SOLEs by investigating the experience of SOLEs to inquire how such an approach is enacted, embraced and how it affects students' experience of learning English. It is the first to explore the use of SOLEs in teaching and learning English as a foreign language in the Omani context and thus offers unique educational insights.

1.3 Context and Complexity of this Study

This study represents the end culmination part of a complex programme of work that encapsulates a movement toward the development of a more appropriate framework for SOLEs that is applicable to this study's context. The central issue with SOLEs

however, is that there are so many claims for them, but few are supported with any kind of systematic evidence base, so the first problem that this researcher had to negotiate was to actually try and adopt what was known about SOLEs from the SOLE toolkit, and to investigate how this works in action, hence the study's Participatory Action Research approach. Then the researcher had to assemble all the research findings and compare and contrast with both SOLE literature and also with the conceptual literature in the areas that SOLE claims it is effective, and then develop a new SOLE Framework.

In congruence with the research complexity, this researcher explored SOLEs as an intervention using Participatory Action Research (PAR) with twenty-two participants in the natural setting where they study English as a foreign language in *Future College*. The participants of this research were twenty-two students; the sample consisted of twelve male students and ten female students from level four of a foundation programme. The sample was recruited via multistage cluster sampling, so it is considered a probability sample that is believed to be representative of the whole population (Bryman, 2008). The sample is relatively small but, as mentioned before, it is believed to be representative of the whole population as 'size is less important than representativeness' (Burns, 2000, p. 83). It is also relatively small because the researcher believes that in such exploratory research, a small sample is desirable to delve deeper and to obtain a fuller image of the researched topic as confirmed by Crouch and McKenzie (2006) 'exploratory … studies for which it is not only reasonable to have a relatively small number of respondents but may even be positively advantageous' (p. 491).

PAR was chosen as the research design because the Self-Organised Learning Environments approach has been discussed among some researchers and practitioners since its emergence. It is a highly contested model; proponents see it as a very appropriate approach, and they stress that it is greater than the conventional approach of schooling while opponents point out its many limitations and weaknesses. Precisely because of these conflicting views and because there are no valid or rebuttable studies that subject SOLEs to detailed and systematic scrutiny, participatory action research method was an entirely appropriate method in order to accurately evaluate and improve SOLEs. This research is the first to conduct a participatory action research with two cycles to explore SOLEs as an EFL learning environment. That is, it explores the impact of an intervention of a new SOLE-based

EFL environment and examines students' behaviours, views, perceptions, emotions and reactions towards this model, and in addition, it investigates the researcher's evaluation of the whole process. A SOLE was implemented as it is in the first cycle and then evaluated by both the researcher and participants. Later, in the second cycle, necessary changes and improvements to the current SOLEs approach were made to make it more suitable for Omani students. Those changes included the role of teachers within SOLEs and the role of big questions.

Participants' views were taken into consideration and given a great deal of attention by the researcher. The participants were also involved throughout the conduct of SOLEs and were given room to express their views, emotions and attitudes towards the whole new experience. As it is PAR, their views and evaluation together with the researcher's evaluation of the whole process informed the improvements made to SOLEs. Participants were involved because they were the target of this study, they were unsatisfied with the current learning environments in their college. Their involvement in the decision-making process constitutes an important contribution because it gives value to their learning journey and consequently affects their studies of EFL and other subjects. Simmons et al. (2015) contend that students should be involved in improving learning environments. It is very important to listen to students' view points as it is they who can disclose their emotions, thoughts and attitudes towards the learning environments that are being researched (Henderson et al., 2012). Most of the previous studies on SOLEs have only examined students' achievements in SOLEs but have not explored participants' views, emotions and criticism of the new learning environment, a considerable omission from the research since SOLEs purport to be precisely a learning environment that is able to be responsive to and malleable and mutable by the participants themselves.

Three purposes framed this exploration:

1. To explore Omani EFL students' experiences of, and orientations toward SOLEs.

2. To investigate whether SOLE pedagogy is able to facilitate an effective English language learning environment for Omani students.

3. To theorize a model for effective and impactful SOLE adoption within an EFL learning context.

1.4 Nature of this thesis

The central thesis of this study is concerned with the journey in understanding whether SOLE pedagogy is able to facilitate an effective English language learning environment for Omani students and to gain an in- depth understanding of how SOLEs can improve Omani EFL learners' experience. Among the research areas examined in this study are: theories and practices of EFL and associated socio-constructivist learning theories of languages acquisition, the learner-centred approach and participatory action research.

To avoid shortcomings in the literature review of this research, the researcher has focused on the structure and purposes of learning environments and SOLE literature that form a major part of the literature review chapter. Besides this, theories relevant to EFL learning are examined in relation to SOLE application within the English Language Centre in a college in Oman. This study aimed to:

- Scrutinize SOLEs in order to ascertain whether or not they constitute a good EFL learning environment in Oman.
- Explore the impact of SOLEs on students and their experience of learning of English as a foreign language.

Therefore, the following research questions were asked:

1. What is the current state of literature in relation to the field of SOLEs and Language learning?
2. How are SOLEs experienced and perceived by EFL learners?
3. How do SOLEs impact students and their learning?
4. What does a SOLE model look like in the context of Omani tertiary level education in *Future College*?

This study used qualitative methodology adopting participatory action research as a design to explore the impact of an intervention of a new SOLE-based EFL environment and to examine students' behaviours, views, perceptions, emotions and reactions towards this model, and in addition, to investigate the researcher's evaluation of the whole process. Data collection methods included a series of diaries, semi-structured interviews, focus groups and the researcher's field notes.

The three objectives of the research are addressed by four questions as shown in Figure 1. Figure 2 presents the whole study and shows the relationship between the research objectives questions, big ideas and methods.

figure 1. Representation of how the research questions address the study's three major objectives

OBJECTIVES
1. To explore Omani EFL students' experience of and orientation toward SOLEs.
2. To investigate whether SOLE pedagogy is able to facilitate an effective English language learning environment for Omani students.
3. To theorize a model for effective and impactful SOLE adoption within an EFL learning context.

QUESTIONS
1. What is the current state of literature in relation to the field of SOLEs and language learning?
2. How are SOLEs experienced and perceived by EFL learners?
3. How do SOLEs impact students and their learning?
4. What does a SOLE model look like in the context of Omani tertiary level education in the Future College?

figure 2. Representation of the Whole Study

Objectives of the study

1. To explore Omani EFL students' experiences of, and orientations toward SOLEs.
2. To investigate whether SOLE pedagogy is able to facilitate an effective English language learning environment for Omani students.
3. To theorize a model for effective and impactful SOLE adoption within an EFL learning

Research questions

1. What is the current state of literature in relation to the field of SOLEs and Language learning?
2. How are SOLEs experienced and perceived by EFL learners?
3. How do SOLEs impact students and their learning?
4. What does a SOLE model look like in the context of Omani tertiary level education in the Future College?

Conceptual content

- Self-Organized Learning environments
- Social learning.
- Theories and practices of EFL.
- Theories of languages acquisition.
- Constructivism.
- Learner-centred approach
- Participatory action research

Data collection methods

- Semi-structured interviews.
- Diaries.
- Focus group interviews.
- Researcher's field notes.

1.5 The contribution of this thesis

One of the most complex problems that this study exposed was trying to solve the role of language learning environments as purposeful ways forward to enhance students' learning parallel with their learning trajectory and necessary associated achievements. This study intended to learn more about how language learning environments act as an affordance or barrier to students' learning and to ascertain whether SOLEs can fill that conceptual gap where difficulties currently occur. It also aimed at solving an existing problem in the researcher's own context that is the students' lack of interest in EFL learning environments which leads to high dismissal and withdrawal rates every academic semester. Therefore, this study introduced SOLEs as a new EFL learning environment. SOLEs were introduced as a solution and an intervention to the researched context in order to solve the above-mentioned problem. This study is the first study to shed light on the reasons that lead to high dismissal and withdrawal rates in the researcher's own context and to investigate a suggested intervention and solution.

As mentioned earlier, evidence on the effectiveness of SOLEs is sparse and more studies need to be conducted. Moreover, the SOLE approach is relatively new so it has to be examined and explored by many researchers and from different aspects. Furthermore, results may differ from one context to another and with different age groups as most studies on SOLEs are conducted in contexts where learners are children. This study contributes to the literature of SOLEs and language learning as it is the first study to explore the use of SOLEs in tertiary EFL learning environments. It is also the first study to introduce SOLEs to a whole new country which is Oman. This study has also uncovered and explored new areas that have not been investigated in relation to and within SOLEs. It has examined whether SOLEs are suitable for Omani tertiary level EFL learners, factors that make SOLEs unique and desirable and students' emotions towards this model. It has also explored the impact of SOLEs on students that include areas like motivation, empowerment, autonomy and personalities.

The study does not only add to the literature of EFL learning theories and approaches and to the literature of SOLEs, but it also adds new original knowledge to other areas linked to learning environments, curricula and teachers' roles.

1.6 Definition of terms used in this thesis

Terms like teachers, students and participants are frequently used in this thesis. The term 'teachers' is used to refer to all those working as educators in educational institutions including higher education institutions like the one in which this study was conducted. It is also used to refer to the researcher of this study as he carried out the intervention himself and taught using Self-Organised Learning Environments. The term 'students' is used to refer to tertiary level learners while learners at school level are referred to as 'pupils'. Participants are used in this thesis to refer to those students who participated in this study. 'Learning environments' in this research refer to classrooms, equipment within the classroom, supplementary materials and pedagogy.

1.7 Organization of this thesis

This thesis is divided into six chapters. Chapter one, which is the introduction chapter, presents the background to the problem that has guided this research. It also presents the overall objectives of the study, research questions, methodology adopted, definition of terms used and contribution of this study. The second chapter which incorporates the literature review includes major conceptual ideas and the theoretical framework of the study. The principal areas covered in this chapter include reviews of studies on EFL in the Omani context, learning environments, SOLEs, students' personalities, personal development, empowerment, personal learning journeys, learning career, formal learning, institutional learning, grammar of schooling, the role of the teacher, the role of curricula, constructivism, social learning, autonomy, learner motivation and learner behaviours and attributes. Chapter three outlines the main objectives of the research and questions arising from each objective. It also addresses the conceptual areas and big ideas that underpin this participatory action research study. In addition, it describes the qualitative research conducted in this study and justification of adopting participatory action research. Furthermore, it explains the researcher's position, role and beliefs. The procedures of data collection and analysis are also contained in this chapter. Chapter four elicits the findings of the whole study which is divided into two large sections: the findings from cycle one and findings from cycle two. Moreover, chapter four details the evaluation

of both cycles and themes that emerged during the research. Chapter five discusses the findings which are linked to the research's original objectives and are within the theoretical framework of this particular study. Chapter six concludes the study, includes the ensuing implications and suggests direction for future possible studies in relation to this research. The literature review chapter that follows presents the theoretical framework of this study and conceptual concepts that have been covered within this research. It is divided into four sections that are EFL, the design of learning environments, learners and SOLEs.

Chapter 2. Literature review

2.1 Literature overview

This study was designed to explore the impact of an intervention of a new SOLE-based EFL environment and to examine students' behaviours, views, perceptions, emotions and reactions towards this model, and in addition, to investigate the researcher's evaluation of the whole process. The research took place in *Future College* that is located in the north east of Oman and targeted EFL learners of English in the foundation programme. The research questions proposed related to a wide gamut of aspects pertaining to their implementation and usage of SOLEs from the perspective of students and the researcher. This study aims to answer the following primary research question:

How does embedding a SOLE in an EFL centre function in terms of improving students' experience of learning a foreign language?

The following objectives underpin four associated research questions:

Objective one: To explore Omani EFL students' experience of and orientation toward SOLEs.

Associated Research Questions
1. What is the current state of literature in relation to the field of SOLEs and Language learning?
2. How are SOLEs experienced and perceived by EFL learners?

Objective two: To investigate whether SOLE pedagogy is able to facilitate an effective English language learning environment for Omani students.

Associated Research Questions
3. How do SOLEs impact students and their learning?

Objective three: To theorize a model for effective and impactful SOLE adoption within an EFL learning context.

Associated Research Question

4. What does a SOLE model look like in the context of Omani tertiary level education in *Future College*?

The conceptual areas that underpin this participatory action research study are the following:

- Self-Organized Learning Environments
- Social learning
- Learning environments
- Theories and practices of EFL
- Theories of languages acquisition
- Constructivism
- Learner-centred approach
- Participatory action research

The selection of articles, books, eBooks and other publications was based on the following criteria: (1) research that investigated different aspects of EFL learning and teaching; (2) research that examined and sought to understand different aspects of learning environments; (3) research that examined and sought to understand different areas linked to learners and their behaviours; (4) research that narrated and examined SOLEs.

As mentioned in the previous chapter, some studies (see e.g. Mitra and Dangwal, 2010; Mitra, 2009; Mitra and Crawley, 2014; Mitra and Quiroga, 2012; Donal et al., 2013) claim to demonstrate that in SOLEs, students gain confidence, retain knowledge longer, become capable of dealing with big challenging questions and improve their computer and English language skills.

The above claims are among many other diverse claims that will be discussed in this research. However, and saliently for the purposes of this research, SOLEs have a polarized reception and reputation: they have on one hand, garnered such a global educational following, largely uncritical in its adoption, as well as at the same time, attracted an extremely critical and arguably sceptical research-led response, that it is a phenomenon worth studying, moreover, one that needs to be studied in order to develop a detailed understanding of how and why this phenomenon is adopted multifariously, worldwide. In short, the Self-Organised Learning Environments

(SOLEs) approach has been discussed repeatedly among some researchers and practitioners since its emergence. It is a highly contested field as proponents see it as a very successful approach and they stress that it is more successful the conventional approach of schooling. On the other hand, opponents point out many limitations and weaknesses of this approach. SOLEs are under-researched, conceptually unclear and have very diverse claims and assumptions as seen above. Due to their wide and diverse claims, the literature review of this study is very wide ranging and hence necessitates an appropriate literature review.

The literature review chapter begins by exploring SOLEs in detail as it is a relatively new phenomenon. The section on SOLEs investigates SOLEs since they emerged. This part of the literature review also examines and seeks to understand SOLEs as a pedagogical approach and also highlights some of its merits as claimed by the research. This section concludes by exploring the few studies conducted on SOLEs, critiquing them and presenting a gap that is the absence of studies that scrutinize SOLEs and it investigates their pillars which are the marginal role of teachers, the absence of books and the use of the Internet.

The literature review subsequently present concepts in EFL practices, studies conducted in the Omani context and it highlights the areas that attract the attention of researchers interested in EFL learning and teaching in Oman, it also presents the impact of culture on EFL learning. This section also sheds light on an important gap in the Omani EFL literature that is the absence of studies on current EFL learning environments and the importance of examining and evaluating these.

The third section explores studies concerning learning environments. This section tries to emphasize the importance of learning environments and their impact on learning as highlighted by a great deal of research. It covers the definitions of learning environments, samples of studies conducted on learning environments and confirms their impact on students and their learning, and samples of studies that call for and emphasize the importance of improving the traditional environments. It also covers important issues linked to learning environments like formal learning, grammar of schooling and learners' behaviours, the role of teachers and the role of curricula.

Finally, areas linked to learners' behaviours as identified as being salient in SOLE settings, such as students' personalities, personal development, empowerment, personal learning journeys, autonomy and motivation are examined. This section explores those areas of learner behaviour and attributes that both intersect with learning environments inside educational institutions, as well as examining how accounts of learners' behaviours might affect their decisions regarding interactional processes such as are described in the current SOLE literature.

It is important to mention that there was little literature on SOLEs and the nature of participatory action research was that some of the areas covered in this study emerged afterwards, hence there was a constant process of iteration and clarification of the structure and content of the literature review chapter. These processes and this researcher's constant re-search strategies make the literature review even stronger.

table 1: Sections and sub-sections of the literature review chapter

Section No	Title	Content
2.2	SOLEs	- History of SOLEs - SOLEs as a pedagogical approach - Merits of a SOLE according to some studies - Previous studies on SOLEs
2.3	English as a Foreign Language (EFL): a critical review of its history, education and concepts	- EFL history, teaching, and learning - Concepts in EFL practices relevant to this study - EFL in Oman - Culture and EFL
2.4	Design of Learning Environments	- Learning environments - Formal Learning - Personal learning journey or informal learning - Grammar of schooling and learners' behaviour - The role of teachers - The role of curricula
2.5	Learners and the impact and influences of SOLES	- Students' personalities - Personal development - Empowerment - Autonomy - Learner motivation

2.2 SOLEs

'A SOLE is a mildly chaotic environment of children, clustered around the Internet, in search of answers to Big Questions. The teacher is a friend on this journey' (Mitra, 2018, slide 5). Another definition of SOLE is:

> *A SOLE is a simple approach that effectively uses technology in the classroom to provide scholastic equity to all children. It transforms the classroom into a student-centred learning adventure that is meant to last a lifetime. The method is simple. A teacher engages their students with a so called "big question," such as "What would happen to Earth if all the insects disappeared?" The students organize into groups and research the question using Technology* (Weisblat and McClellan, 2017, p. 310).

The SOLE approach was first suggested by Mitra after his experiments which took place in India between 1999 and 2004. Mitra (2005) originally maintained that the idea of a SOLE originated in, and was very much a part of, a context of underdevelopment in education where often remote and impoverished regions lack a large scale and sustainably planned teaching workforce. In parallel with a growing interest in alternative education and liberal models of individual educational development, the model of a SOLE was put forward as an educationally innovative response to a chronic and intractable problem in global educational terms. The SOLE as an approach is unique in terms of its nature and requirements as it does not require formal intervention from teachers, it does not require right answers and students are free to move around and speak to and share findings with anyone in the class (Mitra et al., 2005).

SOLEs have gained popularity and have been implemented in many schools in different countries including Argentina, Chile, England, India, Italy, the US, Uruguay and many others (Mitra et al., 2005). A SOLE toolkit was developed to help teachers all over the world to conduct SOLEs (see, Figure 3). However, SOLE's pedagogical basis and contributions remain unclear and informed by evidence. Whilst it is the role of educational research to develop theory and explore conceptualisations of learning, the SOLE however has remained at a level of opacity, both in its clear and cogent conceptualisation of education otherwise, and in its development and exposition of a rigorous and convincing evidence base.

figure 3. Conducting a SOLE Part of the SOLE toolkit

What is a SOLE? noun [sohl]

Self-Organised Learning Environment

SOLEs are created when educators encourage students to work as a community to answer their own vibrant questions using the Internet.

Rules of the Game

1) Students are given a big question or are challenged to think of their own

2) Students choose their own groups and can change groups at any time

3) Students can move around freely, speak to each other and share ideas

4) Students can explore in any direction that they choose: there may be no single right answer

5) Groups are expected to present what they have learned at the end of the session

The SOLE learning path is fuelled by big questions, self-discovery, sharing, and spontaneity. These parameters are needed to create a non-threatening environment in which children feel free to explore.

HOW TO RUN YOUR SOLE: APPROXIMATE TIMINGS

Below is an outline that can be adjusted to fit your schedule, space and specific circumstances.

5 MINS — QUESTION

30-45 MINS — INVESTIGATION

10-20 MINS — REVIEW

Source: extracted from SOLE toolkit. Retrieved from http://www.ted.com/pages/sole_toolkit.

The Self-Organised Learning Environment (SOLE) approach has been discussed among some researchers and practitioners since its emergence. It is a highly contested field as proponents see it as a very successful approach and they stress that it is greater than the conventional approach of schooling, on the other hand, opponents point out many limitations and weaknesses in this approach. This section will provide a brief description of the Self-Organised Learning Environment approach that includes its history and the SOLE as a pedagogical approach. Then it will highlight the most frequent assumptions made by researchers who have conducted SOLEs and later the literature upon which these assumptions are based will be critiqued.

2.2.1 *History of SOLEs*

The education system has changed throughout history due to many factors, however, the change brought in response to technology is not up to what technology can do and offer, it is lagging behind (Mitra et al., 2005). Throughout the history of education, any new technology that emerged was introduced to both classes and exams halls. This was done to ensure that learners are able to tackle problems in a way similar to dealing with problems in daily life, however the Internet was not introduced in exams (Mitra et al., 2005). The process of changing curricula, exams and pedagogy in the past was slow and so it is today (Mitra et al., 2005). The reason for this slow change is the old belief that a class involves a teacher, a large number of students and a one-hour time slot which is not the case in today's era (Mitra et al., 2005). In addition, Mitra (2009) argues that there are places in our world with very poor-quality schools and consequently learners in such schools have sparse access to good quality education and as a result, many score low. Therefore, Mitra (2013c) believes a radical change should be done to education system to the extent of allowing the Internet in examination halls to 'equalise' students' opportunities of success on the basis that the Internet is able to provide the knowledge that many learners simply do not have access to.

The above facts motivated Mitra to conduct an experiment called 'The Hole in the Wall' which refers to 'computers set up in public places such as streets and playgrounds for unsupervised use by children' (Costa, 2014, p. 160). Later, The Hole in the Wall experiments led to a new pedagogical approach called Self-Organised Learning Environments (SOLEs). Mitra (2004) who believes that the current learning system was designed to produce "identical people" like clerks and accountants, wanted to examine to what extent the Internet could teach students new knowledge. Therefore, with his colleagues, they put one computer connected to the Internet for poor children in a village in Delhi, India, called Kalkaji. Most of these children did not join schools and few joined schools with low quality (Mitra and Rana, 2001). They were also not aware of how to use computers and did not know English, but they worked as groups and taught each other (ibid). After months children were found to be able to 'discover and use features such as new folder creation, cutting and pasting, shortcuts, moving/resizing windows and using MS Word to create short messages even without a keyboard' (Mitra & Rana, 2001, p. 230). After the Kalkaji

experiment, Mitra conducted many other experiments in which he tried the 'Hole in the Wall' in different contexts in other slums in India between 1999 and 2004 (Mitra et al., 2005). In one experiment, he tried to answer the following question 'Could Tamil-speaking children in a remote Indian village learn basic molecular biology in English on their own?' (Mitra & Dangwal, 2010, p. 673). He installed some basic molecular biology content in English on a computer and left it to ten to fourteen-year-old Tamil-speaking children who did not speak English. Later, a mediator who knew nothing about the subject was asked to assist children by raising questions and giving admiration. After several months their learning outcomes were compared to the outcomes of two groups of children. The first group of children went to an average governmental school and the other to a high-performing private school. After comparison, it was found that those children who learnt from the Hole in the Wall experiment scored the same as those children who went to the government school and scored below the children who attended the private school. With the support and encouragement of the mediator the children in Mitra et al's (2005) experiment were able to score the same as their peers in private school. Interestingly, children who were both illiterate in computers and English were left unguided and with no instruction at all. The adults in those slums were also illiterate which indicates that children received no help or support from them. In one slum, Mitra had to ask an adult girl to just praise children and encourage them as, in his view, grandmothers usually do (Mitra et al., 2005).

The children in all cities crowded quickly around the computers and started exploring and teaching each other. These experiments revealed that a group of children sharing one computer and working collaboratively could acquire computer skills, improve English skills and search for and comprehend information that was ahead of their age (Mitra et al., 2005; Costa, 2014). As mentioned earlier, these results led to a new approach originated by Mitra and called Self-Organised Learning Environments 'A SOLE inside a school or any indoor environment attempts to stimulate the environment of the outdoor Hole in the Wall design' (Mitra et al., 2005, p 231).

SOLEs have been implemented in many schools in different countries including Argentina, Chile, England, India, Italy, the US, Uruguay and many others (Mitra et al., 2005). However, the widespread implementation of SOLEs was not as hoped until Mitra won a TED prize of $1 million in 2013 which was widely publicized (Donal et al., 2013). Since winning the prize, many experiments have been conducted in seven

SOLE centres. The 'Granny' concept was introduced, and it includes both male and female mediators who are in most cases retired teachers. The Grannies' job is to interact with children from all over the world through Skype to provide directions and praise and to hopefully supervise everything in SOLE centres (Mitra, 2014; Mitra, 2013b). These new SOLEs with 'Grannies' are called Schools in the Cloud, five are in India and two in north east England. It is claimed that initial observation shows that children find SOLEs more interesting and engaging compared to traditional education (Mitra et al., 2005; Mitra et al., 2016).

2.2.2 *SOLEs as a pedagogical approach*

Even though Clark's (2013) work criticised the previous Hole in the Wall experiments as lacking permanence and even argued that SOLE requirements are not novel, Mitra et al. (2005) argue that a SOLE is different from other approaches as it is more flexible and does not require formal intervention from teachers.

> *SOLEs can be seen from at least two perspectives as an educational innovation. Firstly, it is a technological innovation that potentially disturbs classroom ecology as the teacher shifts from being centre stage and, secondly, it is an enquiry-based approach where greater student autonomy is anticipated (Donal et al., 2013, p.12).*

Mitra (as stated in Costa, 2014) argues that schools prepare students to excel in very specific skills for a specific job while they can acquire many skills via the Internet that help them to excel in much more than one profession. He also emphasises that students nowadays learn more from their devices than from the materials provided by their teachers and this is what SOLEs offer. They gain a significant amount of information and skills from the huge platforms of social interactions by interacting and discussing with many people all around the world. Unlike traditional schooling, he believes that SOLEs prepare learners to be able to access, find and evaluate appropriate information which is more important than knowing.

The SOLE approach seeks to change the three pillars of education: curricula, pedagogy and exams so that the Internet should be allowed in all of them (Mitra et al., 2005). Mitra et al. (2005) also emphasise the importance of using the Internet as a core element in teaching because it influences the learning experience, especially by asking questions that are above the learners' levels to stimulate their thinking. Also, the SOLE approach calls for a change in the teacher's role, therefore, 'the role

of the teacher has become one that is contested rather than the respected role of a previous age' (Dolan et al., 2013, p. 15). In SOLEs the role of the teacher is just to give direction and praise because of the claim that this helps learners explore new information with confidence (Arora and Mitra, 2010). Therefore, Mitra comments on his experiments 'if we had involved teachers in the usage of these kiosks, they would have dictated the nature and pace of the learning, defeating the whole purpose of the project' (Arora and Mitra, 2010, p.1).

2.2.3 *Merits of a SOLE according to exisitng studies*

SOLEs can offer a solution in places lack good quality schools (Mitra, 2009) simply because SOLEs do not force learners to be subservient to a certain curriculum or to learn what is dictated by teachers only (Dolan et al., 2013). Also, Arora (2010) emphasises that Mitra's experiments are good initiatives to overcome the dearth of resources. SOLEs can be a solution, even with adults who are out of jail as one PhD student has experienced (Mitra, 2014). It is also argued that low achievers do very well in SOLEs due to the nature and facilities provided in SOLEs (ibid). He also asserts that students who are considered average in terms of achievement can produce excellent outputs in SOLE groups due to their awareness of each participant's strengths. Another strength of a SOLE is that it is not complicated, rather it is easily built in any existing school by simply having approximately five computers instead of many as in the old-fashioned labs (Mitra, 2013b). Mitra (2013b) asserts that he can create SOLE centres anywhere provided that the Internet is available and they can be run by any adult whose job is to ensure health and safety, and this adult does not have to have subject knowledge. Even in terms of curriculum, it just requires a different examination system where the Internet is allowed, which hopefully leads to clever conclusions drawn by students. Mitra (2014) argues that in order to bring about a quick positive change in any educational system, learning environments and assessment have to be changed and this is what SOLEs try to do. Arora (2010) confirms that SOLEs do not dismiss or disregard current education systems rather they provide an alternative where there are no schools or as mentioned by Mitra (2005) where good teachers will not go. This researcher believes that these claims should be confirmed via rigorous studies. If many studies confirm these advantages of SOLEs then it can be claimed that SOLEs with all their merits

can change the grammar of schooling and can equip learners with skills that help them face the rapid change in today's world. This current study has contributed to the SOLE literature and confirmed some of these claims as well as rejecting others, this will be shown in the findings and discussion chapters.

2.2.4 *Previous studies on SOLEs*

It is always emphasised that the Internet is able to help children learn and a SOLE is a very successful approach (Mitra et al., 2005; Mitra, 2015; Mitra and Dangwal, 2010; Mitra and Quiroga, 2012; Dolan et al., 2013; Mitra et al., 2016,). The first experiments conducted by Mitra and colleagues on the SOLE predecessor 'hole in the wall' revealed that a group of children sharing one computer and working collaboratively could acquire computer skills, improve English skills and search for and comprehend information that is ahead of their age. It is also claimed that initial observation shows that children find SOLEs more interesting and engaging compared to traditional education (Mitra et al., 2005; Mitra et al., 2016). A number of studies also suggest that students using SOLEs become not only capable of dealing with big challenging questions, but also retain knowledge longer (Mitra and Rana, 2001; Mitra et al., 2003; Mitra and Dangwal, 2010; Mitra, 2009; Mitra and Quiroga, 2012; Mitra et al.2005; Costa, 2014). These assumptions should be further investigated and examined especially as this new approach of ''SOLEs'' has gained popularity in many countries.

Most of the above studies talk about the initial experiments of Mitra. In this researcher's view, those initial experiments have many limitations. Mitra and Crawley (2014, p. 87) themselves admit that 'The validity of our conclusions needs considerably more rigorous measurements over larger samples in diverse schools'. One experiment (Mitra et al., 2005), which lasted for 75 days, was a case study of 22 locations in India and examined computer skills only. The experimental group consisted of 250 children from 17 locations and the controlled group consisted of 117 students who were not allowed to use computers in these locations. The results were compared to learners in a traditional school and a private one. It was found that students using SOLEs made more progress compared to other groups. The limitations of this study are that children in the experimental groups may have received some form of support in ways that the researchers did not realise or know about. Second, pupils in public and private schools studied many other subjects

besides computer skills whereas children in the experimental group spent all their time studying computer skills only. As emphasised by Arora (2010), children at school learn intensive materials not only one specific learning material and would not have spent the whole 75 days learning the same materials as done by the children in the experiment. Arora (2010, p. 12) also argues that 'without ensuring equal opportunities for children in learning and access to the Internet, the approach will encounter resistance'. In this study, Mitra et al. (2005) claim that learners can learn computer skills on their own. The question that arises here is as to whether learners can learn complex computer skills like programming on their own. They also claim that group self- instruction is as valuable as traditional classroom instruction. This researcher believes that conducting one experiment is not sufficient to produce such assumptions and generalisation. Furthermore, this kind of instruction leads to high cognitive cost (Sweller et al., 2007). These assumptions might be true for simple skills, but for complex ones more evidence is needed. Also, in these experiments, children were left unsupervised by the researchers so that means researchers are not and cannot be certain whether learners received any support from others or not.

Another experiment conducted by Mitra and Dangwal (2010) where they tried to answer the following question 'what and how much children can learn without a subject teacher?' They presented children with basic molecular biology in a remote area in India using a SOLE-like concept and left them without supervision or guidance and examined them after months. Later, they compared the results to the results of a state government school and of a high performing private school. Their findings revealed that children in the remote areas could score similar to pupils at public school and with a little encouragement from an adult who knew nothing about the subject, they were able to score the same as pupils of the high performing private school. Mitra's experiments revealed that without formal teaching, learners in his experiments could score as high as pupils in government schools (Jones et al., 2015; Costa, 2014). This study had major limitations as well. First, there was no guarantee that children in the remote area did not get some form of support. Second, schoolchildren whether in the private or public educational context learn many intensive materials whereas children in the remote area accessed nothing but the instilled materials by the researchers. Based on their findings they conducted another study in North East England; they claim that their findings suggest that unsupervised 8-12 years-old children could answer GCSE questions that are prepared for 16 year

olds. Not only have these studies failed to provide essential details which could lead to the transfer of the experiments to other contexts in order to examine them, but also, and critically, this researcher believes that these experiments should be replicated in diverse settings to produce a convincing conclusion. In addition, to compare SOLEs to normal schooling, randomised control experiments might be of significant benefit. However, it is not the remit of this current study to carry out such a study, since the researcher believes first that a detailed ecological examination of a SOLE is first required in order to explore exactly what is happening in such an environment.

Mitra (2014) also believes that one of the many strengths of SOLEs is that low achieves, as mentioned earlier, do very well in such an environment. He also asserts that students who are considered average in terms of achievement can produce excellent outputs in SOLE groups due to their awareness of each other's strengths. Unlike SOLEs, Mitra (2014) argues schools prepare students to excel in very specific skills for a specific job while they can acquire many skills via the Internet that helps them to excel in much more than one profession. He emphasises that students nowadays learn more from their devices than from the materials provided by their teachers and this is what SOLEs offer. They learn a significant amount of skills and knowledge from the huge platforms of social interaction by interacting and discussing with many people all around the world. Unlike traditional schooling, he believes that SOLEs prepare learners to be able to access, find and evaluate appropriate information that is more important than knowing (Costa, 2014). These assumptions need to be scrutinized through empirical studies in order to be confirmed or rejected, especially as there is no in-depth controlled experiment to confirm the assumption that SOLEs are superior to conventional schooling.

Rix & McElwee (2016) conducted a study one of the very few studies aimed at examining SOLEs impacts on students' engagement and achievement. The study was conducted in a school in England and the sample was some key stage 3 pupils who were considered disengaged learners. The study focused on teaching geography subject using SOLEs approach. Participatory action research was chosen as a research design and three research tools were utilized which are field notes, interviews and video recordings. The findings revealed that learners could gain knowledge about the taught subject in geography which is population and they were engaged and had positive attitudes towards SOLEs. However, it was found that

better results were achieved after involving mediators to scaffold learners as in some cases learners could not progress. This study is one of a very few that has attempted to investigate the SOLE phenomena, but significantly, it did not scrutinize SOLEs themselves, rather it examined its impacts on students' engagement and learning.

In addition, Donald et al. (2013, p. 7) stress that SOLEs have 'significant potential for learning in pupils'. The teacher who experimented with SOLEs with her students in their study revealed that:

> *She found herself using vocabulary of a greater complexity as a result of students doing so in their SOLE discussions and panel presentations. In order to consolidate children's understanding she collected words from SOLE presentations into a word bank and explored these further in subsequent lessons* (Donal et al., 2013, p. 8).

This study is an interesting one not least because it was longitudinal (two years long), but still has some limitations. It was conducted in one school and considered the perception of one teacher only. Therefore, the findings cannot be generalised (Donald et al., 2013) and cannot be compared to traditional schooling. Donald et al. (2013) claim that there was a significant interest in SOLEs by people visiting the school where the SOLE experiment was conducted. Therefore, more studies should be conducted and the opinions and perspectives teachers should be considered. Also, most studies on SOLEs need to be replicated to confirm or reject the initial findings, especially as most views are expressed through blogs (Donald et al., 2013).

As seen above and as acknowledged by Donald et al. (2013), the evidence of all the above assumptions are derived in most cases from case studies and small-scale quantitative studies. This researcher believes that SOLEs should be scrutinized to examine their impact on students' achievement, students' engagement, confidence, attitudes towards learning and other important areas. There is a real lack of studies on SOLEs, therefore it is very important to conduct many studies that tackle different aspects of SOLEs in order to produce assumptions that are based on solid ground. Therefore, this study enriches the SOLE literature because it is the first to use a SOLE in teaching and learning English as a foreign language in the Omani context in order to explore it as a new EFL learning environment. Figure 4 shows the research process followed in this study. SOLEs Toolkit instructions in Figure 3 above formed the starting point of this researcher's SOLEs sessions and was gradually improved to the final SOLEs model as displayed at the discussion chapter in Figure 15.

figure 4. a representation of PAR process
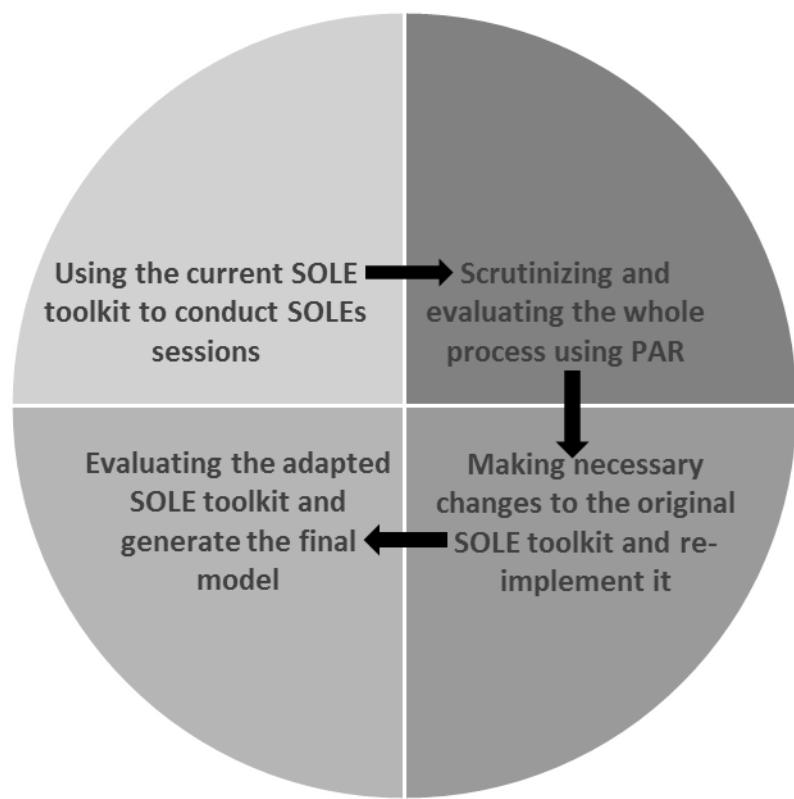
2.3 English as a Foreign Language (EFL): a critical review of its history, education and concepts

2.3.1 *EFL history, teaching and learning*

Language acquisition, learning and teaching are very wide fields that have remained under-researched:

> *Language acquisition is one of the key topics in the study of learning. Every theory of learning has tried to explain it and probably no other topic has aroused such controversy. Being able to use and understand a language is the quintessentially human characteristic: all normal humans speak, and no non-human animal does. Language is the main vehicle by which we express what we are thinking, which suggests that language and thought must be closely related* (Medwell et al., 2017, p. 19).

There are three competing theories of language acquisition which are behaviourist, innate and social interaction. The first theory argues that language is acquired through a stimulus-response-reward process, the second argues that there is an innate language acquisition device in human brains that helps them acquire language and the third argues that language is acquired through interaction (ibid). Those theories have formed the basis for some EFL learning and teaching theories. For example, audio-lingualism was derived from the behaviourist model (Harmer, 2001). This approach to EFL teaching relies heavily on drills by giving sentences to students and asking them to repeat them again and again. Audio-lingualism has been criticized for decontextualizing language and for a lack of communicative function (Harmer, 2001). As a response to audio-lingualism, the communicative approach to teaching language emerged; its main principle is using 'language forms appropriately in a variety of contexts and for a variety of purposes' (ibid, P. 84). It also focuses on giving language learners many opportunities to be exposed to the target language and to be allowed to use it frequently (ibid). Unlike audio-lingualism, the communicative approach involves language learners in more real communications and marginalised accuracy. Like audio-lingualism, the communicative approach has been criticized by educators because it pays little attention to accuracy and grammar, and because it favours native speaker teachers (ibid). Before these two approaches to language teaching, there was the grammar-translation approach; this approach follows the same approaches used in teaching ancient Greek and Latin (Zhou, & Niu, 2015). The grammar-translation method relies heavily on learners' native language

that is at the centre of learning as the instructions are given in students' first language, the target language is translated and grammar is taught in the learners' first language (ibid). This method was used in the 18th and 19th centuries and was subsequently attacked because it has no theoretical basis (ibid). As seen above, the history of language teaching shows that scholars have been working hard to theorize the best possible approach to teaching and learning foreign languages.

Behaviourist, innatist and social interaction are concerned with first language acquisition but can be beneficial in terms of learning new languages, social interaction especially has been discussed widely in the educational context in general and language education in specific. Vygotsky's (1987) social learning theory, that has been given a great deal of attention due to its significance, is an example of social interaction. One benefit of social interaction that has been widely stressed is that contended by Wray and Medwell (2013, p. 2):

> *It is a noticeable fact that groups collaborating on a particular problem can often achieve results which none of their members could have achieved individually. This works with groups of adults as well as groups of children. During this collaboration the groups are constructing what might be termed a shared consciousness, which outstrips each of their individual Consciousness. Following the collaboration they each take away a substantial part of this shared consciousness as their own learning.*

Wray and Medwell (2013) argue that social learning is vital for language learning as learners learn through discussion by trying to use language to express their views and thoughts. This theory is an important one in this study and thus will be explored in the coming sections. The history and importance of using computers in EFL will also be discussed in a separate section because SOLEs can be considered to be part of this field as computers are central in any SOLE. These three sub-sections together form the second section that deals with concepts in EFL practice. The third section is about EFL in Oman and the fourth is about culture and EFL. There are two sub-sections in the fourth section that are the impacting features of culture on students' learning journey and aspects of Omani culture in particular.

2.3.2 *Concepts and Language learning practices relevant to this study*

Social learning and Self-Organised Learning Environments

Vygotsky (1978) places emphasis on the significant role social interaction plays in one's cognitive development. Unlike Piaget (1972), Vygotsky (ibid) believes that social learning should and must precede child development. Vygotsky (1978, p.90) affirms that 'learning is a necessary and universal aspect of the process of developing culturally organized, specifically human psychological function'. Piaget (1972) perceives learners as active and self-motivated individuals who wish to construct their own learning while Vygotsky (1978) emphasizes that learners construct their knowledge through interactions with their partners and they all cooperatively co-construct their knowledge. Vygotsky (1978) also places more emphasis on the role of adults as they are vital in boosting children's cognitive development by transmitting their knowledge and experiences to children. Apart from social interaction, Vygotsky (1978) emphasizes another two concepts that are crucial to learning which are the More Knowledgeable Others and Zone of Proximal Development. By the former concept, he means that a partner who is more knowledgeable in the subject being studied is very important for one's learning. This person can be an adult, a teacher or even a younger peer with more knowledge than the learner. By the latter concept, Vygotsky (ibid) suggests that what learners cannot do alone, they can achieve when working with others. Schaffer (1996) mentions an example that supports Vygotsky's (ibid) theory; a father gave his daughter a jigsaw and asked her to do it independently. She tried hard but failed. Then together with her father's support and guidance, she successfully completed it. Kameda and Nakanishi (2003) are of the same opinion, they believe that social learning is more successful in arriving at solutions than individual trials.

Heyes (2016) argues that social learning is very effectual provided that the right person or people with whom to interact are selected because learning from the wrong person may be less conducive to learning than learning it by oneself. Furthermore, Derex et al. (2015) revealed that their study demonstrates that learners in social learning environments can find new solutions by combining knowledge received from different sources. This researcher believes that the SOLE's mechanism is compatible with Vygotsky's (1978) ideas as knowledge is collaboratively constructed through socialising and interacting with other people. Learners surf the Internet, interact with

partners and then discuss their findings to reach a consensus on the final answer. Also, adults are used in SOLEs to guide learners accomplish their tasks. This study confirms this relationship between social learning and SOLEs as shown in the findings and discussion chapters.

Constructivism and Self-Organised Learning Environments

Piaget (1972) describes constructivism as a theory that is based on the belief that learning is an active exercise and learners construct their own learning based on their past and current experience. Huitt (2003, cited in Brandon, 2010) emphasises that according to constructivism, learners are responsible for constructing their own learning experience and for adapting new behaviours through dealing with various stimuli whether cognitive or environmental. Some writers (e.g. Hoover, 1996; Brunning et al., 1995) also explain constructivism by stressing that individuals learn by creating and constructing new knowledge upon previous learning. Therefore, according to constructivism the role of the learner is to be active during the learning process by selecting information, discovering concepts and principles and solving problems without relying on teachers or textbooks (Brandon, 2010). Muirhead (2006) and Brunning et al. (1995) place emphasis on the main assumption of constructivism by stating that students' learning of new knowledge depends on the existing cognitive framework, knowledge and experience that includes social interaction. All the assumptions made by constructivism confirm that knowledge is not discovered but constructed (Richardson, 2003). Therefore, Krahenbuhl (2016) believes that in classes dominated by constructivism, active learning is more important than instructions and explanations from teachers. Some educators believe that classes dominated by constructivism require kinaesthetic activities and are more fun (Hausfather, 2001). It is believed that constructivism has dominated education for several decades (Schrader, 2015). One criticism of constructivism is that it pays less attention to the role of teachers (Brandon, 2010), however he states that constructivism is very powerful in cases of staff shortage as teachers can work with a large number of students and train them to take responsibility for their own learning. Krahenbuhl (2016) also warns that students may construct knowledge that is wrong when left unguided in classes dominated by constructivism. SOLEs supposedly meet constructivism in being enjoyable, require movement, and students are found to be able to construct knowledge dependently on their own while searching the web. Students in SOLEs are also reputedly active in their studies, they select information

and the evaluate it, they discover new concepts and their reliance on teachers is less than in traditional classrooms. However, SOLEs differ from constructivism in that most knowledge in SOLEs is discovered and does not rely on existing information.

Computer-Assisted Language Learning and its relationship with SOLEs

A very important concept that should be highlighted in this study is Computer-Assisted Language Learning (CALL). CALL refers to the use of computers as aids in teaching and learning English including all types of software and the Internet (Kern & Warschauer, 2000; Levy, 1997). Wray and Medwell (2013) argue that since their emergence computers have impacted both schools and learners. Bax (2003) provides an in-depth description of the history of using computers in English classes, he offers new analysis that he believes is more accurate than that of Warschauer (2000), the latter who claims that there are three stages of CALL. The first is called structural CALL that includes drills and practice software only and took place in the 1970s and 1980s, the second is called communicative CALL that involves communicative exercises and took place in the 1980s and 1990s and the third is called integrative CALL that uses authentic discourse and is currently used in the 21st century (Warschauer, 2000). Bax (2003) argues that there are three approaches and not stages of CALL that are restricted, open and integrated CALL. The first, which is the 'restricted' approach lasted from the 1960s to the 1980s and its main feature is that software, the teacher's role and feedback are restricted, while the second approach lasted from the 1980s to the time he wrote this article and its main feature is that software, the teacher's role and feedback are relatively open. The third approach is the future goal which he refers to as ''normalization'' (Bax, 2003, p. 23):

> *This concept is relevant to any kind of technological innovation and refers to the stage when the technology becomes invisible, embedded in everyday practice and hence 'normalised'. To take some commonplace examples, a wristwatch, a pen, shoes, writing—these are all technologies that have become normalised to the extent that we hardly even recognise them as technologies.*

Bax (2003, pp.23-24) claimed that this third approach does not exist and thus English teachers should consider it an aim on which to work. He argues that:

> *CALL will reach this state when computers are used every day by language students and teachers as an integral part of every lesson, like a pen or a book. Teachers and students will use them without fear or inhibition, and equally without an exaggerated respect for what they can do…They will be completely integrated into all other aspects of classroom life, alongside course books, teachers and notepads. They will go almost unnoticed.*

The reason to focus on CALL history here is to argue that Bax's (2003) aim has almost been accomplished today through the use of SOLEs as students in this environment use computers in all sessions to the extent that they have become invisible and unnoticed. Computers are an integral part of, and the centre of every lesson in a SOLE. Another reason is that SOLEs meet the criteria set by Wray and Medwell (2013) for good software used in English classes which refers to openness, stimulation of creativity and problem solving, good software can be used across the curriculum, allow flexibility and encourage cooperation. The centre of SOLE classes is the use of the Internet which meets all the above five criteria. The following paragraphs will highlight important aspects of the Internet.

The Internet

'The Internet that we use today was switched on in January 1983...for most of the first two decades, the real world remained blissfully unaware of the existence of the virtual one' (Naughton, 2015, p. 1). Warschauer et al. (2000, p. 1) believe that humanity is living in a communication revolution that is mainly caused by the Internet. Many writers (see e.g. Brändström, 2011; Sefton-Green, 2004) argue that Internet is an inseparable and crucial element of young people's identities as it plays a major role in their daily lives in almost every respect, including learning, socialising, health and language. Therefore, Warschauer (2000) encourages the use of the Internet in language classes. In the same way, Muehleisen (1997) urges English teachers not to ignore the merits of the Internet in English classes and thus to use it in their teaching of English as it motivates students to use English inside and outside of classrooms. Simons (2016, p.1) also encourages the use of the Internet as he emphasises that 'computers and the Internet are a great resource for classroom teachers…the Internet is an easy way of finding information without having to make a trip to the library'. Warschauer et al. (2000, p. 7) argue that there are five reasons to use the Internet in English learning environments 'language learning is most successful when it takes place in authentic ,meaningful contexts', 'the ability to read, write, communicate, research, and publish on the Internet represents important new forms of literacy needed in the 21st century', 'the Internet provides opportunities for students to interact 24 hours a day with native and non-native speakers from around the

world', 'the Internet can inject an element of vitality into teaching and motivate students', and the Internet 'allows them to become autonomous lifelong learners'.

There are many advantages for the use of the Internet. In a study conducted by Brändström (2011, p. 2), it was revealed that the Internet is a rich valuable source which 'motivate the students, make teaching more fun, and allows variation in teaching'. It was also found that students become more concentrated and give more efforts during sessions. Beside this, the Internet was also found to create responsible students that are able to take responsibility of their decisions and learning. Harmer (2007a) also stressed that learners can find any information on the Internet they need. Furthermore, Young (2003) found that among the advantages of the Internet in learning English is that students can practice English with people from all over the world. It was also found that stress and pressure was less as reported by students in her study. Chances to learn grammar rules, vocabulary, subject relevant information and to improve computer skills are reported to be high. Moreover, Young (2003, p. 477) asserts that:

> *The students overall had a positive perception toward using Internet tools. This study indicated that the integration of information communication technology on the Internet with English facilitated the creation of a virtual environment that transformed learning from a traditional passive experience to one of discovery, exploration, and excitement in a less stressful setting.*

The Internet also helps students feel that they are controlling their learning, feel that their teachers are facilitators and 'get exposed to authentic use of communicative English' (Kabilan, & Rajab, 2010, p. 56). In addition, Simons (2016) emphasises that the use of the Internet in English classes help students to acquire a survival skill which is searching skill. He also asserts that the Internet is both a valuable resource of information and fun. Muehleisen (1997) contends that the Internet increases students' intrinsic motivation and is a valuable interactive platform. That being said, Brändström (2011, p.2) highlighted in his study some problems associated with the use of the Internet, such as, 'students' cheating, unreliable information, technical problems, and students' extracurricular activities during lessons'. (p. 2). Harmer (2007b, p.190) also emphasises that 'it might be difficult to find the spot-on information that one is searching for, because it is a skill that must be acquired'.

Having talked about the advantages, is the Internet the answer for everything in classes? The Internet content and materials in general and primarily are not

designed solely or even mainly for teaching purposes, therefore, teachers need to be careful and knowledgeable about the content when using the Internet in their classes (Wallace, 2004). Wallace (2004) found in his study that the impacts of the Internet on teachers and students vary from one situation to another. This makes using the Internet as a teaching tool very complicated and challenging (ibid). 'It is good or bad, useful or useless, depending not only on its implementation but also on one's perspective about the purposes and goals of education and how technology might contribute to those goals' (ibid, 482). Purcell et al. (2013) found in their study that the majority of teachers use the Internet to get materials for their teaching. Those teachers also revealed that they use the Internet to have students search online for information and do interactive activities. However, some teachers believed that it is hard for students to find credible information in the Internet due to the huge amount of information available.

In general, studies conducted on the use of the Internet found that both teachers and students attitudes towards using the Internet is positive. Brändström (2011) for example, reported that all teachers in his study had a positive attitude towards the use of the Internet in their classes. He also reported that students found the Internet interesting and useful. Furthermore, Young (2003) stated that participants in her study revealed that their attitudes towards the Internet is positive.

Though it is quite obvious that we have already entered a new information age which links technology and the teaching of English, the promise of the Internet for educational use has not been fully explored yet in some countries and the average schools in those countries still only use the Internet to a limited extent (Kabilan & Rajab, 2010, p. 56).

This study is one that adds to the literature of the use of Internet in classes to fill in the reported gap. The Internet is a main element in SOLEs, therefore, this study explored the use of the Internet in English classes. Its impacts on students and their learning are reported in the finding chapter and discussed in chapter five.

Computer-supported collaborative learning and its relationship with SOLEs

Computer-supported collaborative learning is defined as using technology to enhance and promote learners' collaboration (Reis et al. 2018). Tchounikine et al. (2010, p. 447) also emphasized that 'the field of Computer Supported Collaborative

Learning (CSCL) focuses on how students learn by collaborating and how this collaboration can be supported by technology'. Studies on CSCL have covered many aspects, Reis et al. (2018, p. 29), for example covered 'emotional awareness, orchestration of students' interaction and group formation'. Popov et al. (2014) conducted a study that investigated students' perception and outcomes in CSCL environments when working with peers from the similar and dissimilar culture. The results indicated that students' outcome was higher when they worked with students from the same culture. However, their perception about CSCL was negative when working with peers from the same culture. This result indicates that culture is an important factor that should be given a great attention when applying any form of learning. Namdar & Shen (2018) also conducted a study that aimed at investigating knowledge organization in CSCL environments. They found that students benefited from some tools provided in CSCL environments like concept mapping in organizing knowledge. Another study conducted by Yang (2013) that aimed at exploring students' language awareness within CSCL environments has shown that students language awareness and performance has increased due to communicating with students from different culture and due to paying more attention to the accuracy of their language. Dealing with students from different cultures helped them acquire new vocabularies (ibid). Yang (2013, p. 338) believes that, 'in the CSCL community, students are trained to be independent learners who take control of their own learning goals, strategies, and evaluation'. Therefore, 'in the CSCL community, the role of the teacher should be as a facilitator who monitors students' learning processes and provides them with appropriate scaffolding when necessary' (ibid, 338). Tchounikine et al. (2010) also stated that studies on CSCL have indicated that collaboration among students has many advantages, such as, it promotes groups' performance, it increases students' achievements. However, in order to get the most out of CSCL, unequal learning chances among students must be avoided. Tchounikine et al. (2010) also emphasized that it is difficult to measure the correlation between interaction in CSCL and outcomes, therefore, 'Researchers attempting to understand how to foster collaborative learning have thus focused on how best to promote fruitful interactions among collaborative learners' (P. 448).

CSCL and SOLEs share many similarities. For example, both approaches use technology and students in both approaches work in groups. Moreover, in both forms of learning students interact more with each other's and less with the teacher so both

approaches are learner centred. However, there are some differences between the two approaches. Unlike SOLEs, students in CSCL environments are provided with guidance and instructions. For example, students in CSCL are given specific tasks and subtasks with specific sequence, are given specific roles, asked to adhere to certain constraints and rules and told which tools of the computer to utilize (Fischer et al. 2007). In SOLEs, the role of rules cannot be explicitly felt as there are almost no formal rules to follow. In SOLEs, there are no explicit rules for sanctions or rewards, there are only a few examples of problems and possible solutions mentioned in the SOLE toolkit. In a SOLEs, 'there are very few rules' (Mitra and Crawley, 2014, p. 81). Another difference between the two approaches is that in SOLEs the main form of technology used is the Internet whereas in CSCL many forms of technology are used beside the Internet. In a SOLE session, students are given a big question and asked to search for an answer using the Internet, whereas, 'computer-supported collaborative learning (CSCL) environments provide learners with multiple representational tools for storing, sharing, and constructing knowledge' (Namdar & Shen, 2018, p. 638).

Flipped learning and its relationship with SOLEs

Pierce and Fox (2012) argue that the term 'flipped learning' was used because this approach is the opposite of conventional pedagogy where students learn everything in their classes. Flipped learning means that learning materials are given to students online to study them at their convenience anywhere, any time and the class time is used to do the tasks and clarify difficult parts (Bergmann & Sams, 2012). In a more recent article, Abeysekera and Dawson (2015) emphasized the same idea as they stated that learner in flipped classrooms try to understand as much as they can from the given materials at home and come to class with questions to clarify some vague or difficult points. It is believed that flipped learning was first introduced by two chemistry teachers in the USA named Bergmann and Sam who mentioned in their book ''Flip your classroom: Reach every student in every class every day'' that in 2007 they started recoding their lectures and later posting them online so that their students can access them (Bergmann & Sams, 2012). They both believe that students benefit from this way of teaching as they can study the materials anywhere and in their own pace (ibid). They also emphasize that this way would allow students to use the class time to clarify points that they find difficult while studying in their

homes through the recorded videos (ibid). Bergmann & Sams (2012, p. 4) emphasized that flipped learning is beneficial as:

absent students loved the recorded lectures. Students who missed class were able to learn what they had missed. Some students who were in class and heard the live lecture began to re-watch the videos. Some would watch them when reviewing for exams. And we loved it because we didn't have to spend hours after school, at lunch, or during our planning time getting kids caught up.

There are many studies on using flipped learning to enhance English language learning (see e.g. Chen Hsieh et al., 2017; Huang & Hong, 2016; Hung, 2015). The study of Chen Hsieh et al. (2017) indicated that students were more engaged, motivated and satisfied about the new pedagogy in flipped classrooms. Students also learnt some English idioms more successfully. Huang & Hong (2016) revealed that their study's results showed that students' scores and English reading skill improved. Hung (2015) also emphasized that flipped learning approach better facilitated the learning process compared to the conventional classroom. However, there is no significant difference in performance between the students in the flipped classroom and students in the traditional one.

Is there any similarity between flipped learning and SOLEs? In my point of view, SOLEs meet Flipped learning in letting students deal with materials online and postpone the discussion to a later stage. One version of flipped learning is providing students with questions online by their teachers so that students can search the required information (Berrett, 2012). This version of flipped learning is similar in some respects to SOLEs. First, students are provided with a question at the beginning. Second, they are given time to search for answers and information related to the given question. Having said that, SOLEs is different as an approach as searching happen in class. Second, in a SOLE there is no materials prepared by the teacher as students use the Internet to find relevant information to the asked question. Third, in a SOLE there is no clarification stage, it is only students share their findings and listen to the teacher's comment at the end of the session. Furthermore, in SOLEs, students work in groups but in flipped learning students mostly study alone at home.

Problem-based learning and its relationship with SOLEs

Woods et al. (1996) define problem-based learning (PBL) as:

> *one of the most innovative developments in education in the past 30 years. In PBL, the problem drives the learning. Instead of lecturing, we give the students a problem to solve. For that problem, small groups of students identify what they know already and what they need to know, set learning goals and make learning contracts with the group members. Each student learns the knowledge independently and then returns to the group to teach others that knowledge. The group uses that knowledge to solve the problem. The group reflects and elaborates on that knowledge. (p. 60)*

Hmelo-silver (2004) also defines PBL as is a motivating pedagogy where students solve ill-structured, real world problem collaboratively. Ansarian & Teoh (2018) explains that:

> *The problem is deliberately ill-structured, as well-structured problems may be self-explanatory and may reduce the students' cognitive engagement with the lesson. Additionally, the problems would ideally be based on real-life situations relevant to the students, drawing on the belief that the students ought to have a tangible understanding of the problem…Students are expected to select the strategies to solve the problems and reflect on the effectiveness of the strategies themselves. (p. 5)*

Many researchers from different fields have studied the PBL approach. Hmelo-silver (2004), for example, explored the impact of PBL on students learning experience and found that PBL is successful not only at improving students' learning experience but also their achievements. Haruehansawasin & Kiattikomol (2018) also studied the importance of scaffolding on PBL. They argue that extant studies emphasize that scaffolding is very important to reach the best results out of PBL. They conducted an experimental design study that examines the effectiveness of scaffolding in problem-based learning (PBL). The results of their study revealed that experimental groups performed better in posttest and progressed more than control group.

In the field of English language, there are many researchers who explored and examined the impact of PBL approach on language learning (Ansarian & Teoh, 2018). Mulya et al. (2013) conducted an experimental study using PBL to examine its impact on improving students' speaking skills in describing people and things. The result of their study revealed that students who used PBL improved their speaking

proficiency more than those in the control group. Another study that is experimental was conducted by Lin (2017) who tried to understand the impact of PBL on students' reading comprehension skill. The results showed that students who used PBL enjoyed reading more than those who did not. Furthermore, students who used PBL outperformed those who did not in the reading comprehension posttest at the end of the study.

Is there any similarity between SOLEs and PBL? Yes, the teacher in PBL is a facilitator who starts the lessons with a question, then encourages and monitors the students and at the end of the session provides feedback (Ertmer & Glazewski, 2005). Teachers in SOLEs also are facilitators and start the session by asking a big question, however, teachers in PBL do more roles than teachers in SOLEs. For example, in PBL teachers are expected to provide support during the task to students who needs support (Ertmer & Glazewski, 2005) while in SOLEs, teachers can leave students alone (Mitra et al., 2005). Another similarity is that both are approaches are collaborative where students negotiate and discuss ideas with others. Furthermore, the sessions in both approaches start with a leading problem/ a question and then students are asked to find solution. However, the problems in PBL are deliberately ill-structured (Hmelo-Silver, 2004) and the questions in SOLEs should not have direct answers and involve students working collaboratively, arguing, searching, synthesizing and evaluating information found while searching on the Internet. Big questions used in a SOLE are unique as they are the ones that provoke research, debate and critical thinking. They are more concerned with the skills that lead to finding the rigorous reliable information and not the right answer (Donald et al., 2013).

2.3.3 *EFL in Oman*

The modern educational system as it is known today started nationwide in Oman in 1970 when His Majesty Sultan Qaboos came to power and the first university was launched in 1986 (Al-Mahrooqi and Denman, 2018). Before 1970, there were three famous schools only; two in Muscat and one in Salalah and they were only for boys. Nowadays, there are approximately 1048 governmental schools and 486 private ones with around 620,000 male and female students (ibid). These digits show the

efforts made by the government, with the immediate supervision of the leader, to spread education nationwide rapidly. The same effort and support was given to English teaching and learning because it is believed that English is the dominant language of science and business (ibid). Al-Jardani (2012) states that Omani people consider English to be an essential language in today's world. He emphasises that it is used widely in private organizations and to a lesser extent in governmental ones; this is due to the fact that the private sector interacts more frequently globally. It is strongly believed in Oman that teaching English should be more functional in helping Omani pupils to master the English language. Al Jardani (2012) believes that English should be taught so that children can communicate and complete important daily life tasks that require English like filling in forms. Due to the position of English in today's world, Omani parents consider it not only a communication tool but also a tool that opens promising doors for their children (ibid). Al-Mahrooqi and Denman (2018, p.3) emphasize the same idea: 'private schools are becoming increasingly popular with middle-class parents due to the central role English plays in Omani society across a variety of domains and importance it assumes for their children's future academic, professional, and even social success'. Therefore, parents in Oman spend a significant amount of time and money to help their children master English, besides the tremendous effort they make in accomplishing this goal; parents in Oman enrol their children on English courses that are believed to help pupils excel in the English language (ibid). English in Omani Schools was taught from grade five until the implementation of a new education system called The Basic Education in the academic year 1998/1999 (Al-Mahrooqi and Denman, 2018). This is as a result of Omani government beliefs that in order to improve education, English language should be a significant focus of attention and thus it is taught now from grade one (ibid). The medium of instruction in Omani schools is Arabic while English is taught as a subject only with an average of five lessons a week, each lesson lasts for forty minutes. The Ministry of Education in Oman provides all English books to students and hires English teachers from within and outside Oman. Most non-Omani teachers belong to Arabic ethnicity or Asian such as Indian educators. It is worth mentioning that the level of English of Omani students in governmental schools is very low due to a lack of exposure to English within and outside schools. As mentioned earlier, the first university was established in 1986 and since then approximately forty higher education institutions have been launched in Oman (ibid). The situation at the tertiary level is different from schools as the English language is the medium of instruction in

most institutions, whether private or public. English at the tertiary level is taught intensively and mostly by very well qualified lecturers. Also, more facilities are available for tertiary level students compared to school pupils such as self-access centres, computer labs and libraries with many programmes and books that tackle different English skills. However, 'Omani English classrooms at both the school and college level have been characterized as continuing to have largely teacher-centred, non-communicative environments' (Al-Mahrooqi and Denman, 2018, p, 2). It is worth mentioning that the transition from schools which use Arabic as a medium of instruction to higher education institutions which use English has caused some difficulties for Omani students and has led to withdrawal and dismissal problems (ibid). Al-Mahrooqi and Denman (2018) state that in order to overcome this dilemma the general foundation programme (GFP) for the tertiary level was introduced in 2008. This GFP compels higher education institutions to offer one-year foundation programmes for students who do not pass English placement test that reflects students' English proficiency (ibid). The aim of the one-year foundation programme is to equip students with English skills that help them deal with their institution's courses and requirements and with their future profession.

There have been very few studies conducted on English learning in the Omani context in general and no study on the importance of exploring the nature of English learning environments in Oman specifically. Renard (2010, cited in Al-Mahrooqi and Denman, 2018) place emphasis on the importance of lending more focus on English in Omani higher education institutions in order for them to function well globally. Al-Mahrooqi and Denman (2018) also contend that the research on English teaching and learning in Oman is scarce. Such studies are crucial to produce recommendations and suggestions for suitable beneficial learning environments for Omani students. Extant studies that have targeted the Omani context have focused on the teaching of different English skills, curricula, students' achievements, mastering certain English skills and transfers from first language (Arabic) to second language (English) (see e.g. Al-Issa, 2006; Al-Jadidi, 2009; Al-Jardani, 2012; Al-Mahrooqi, 2012; Wyatt, 2013). Al-Mahrooqi (2012) conducted a study to explore the reasons behind the low English proficiency from the student perspective; a lack of interest was among the many reasons that students revealed. In her study, Al-Mahrooki (2012) did not suggest any remedy for the problem and did not explore how learning environments might be improved so that interest is roused. However, she

mentioned some suggestions provided by the participants of her study. There is no study in the Omani context to explore how the following issues: students' personalities, personal development, empowerment, the role of the teacher, the role of the curriculum, autonomy, learners' motivation and learner behaviours and attributes might be affected by different learning environments. This provides an indication of the importance of exploring the impact of a SOLE on English learning. This researcher believes that the focus should move to finding solutions for problems linked to learning English in Oman that include low proficiency, lack of interest and motivation, as Al- Issa (2005, p. 269) has put it 'times have changed and so have the experiences, perceptions and attitudes of the Omani students, which necessitate a change in the English language teaching (ELT) at the decision making and implementation level'. Therefore, conducting participatory action research helped find solutions and theorize a good model for constructive English learning environments for EFL Omani students. A SOLE was used in this study as an intervention to explore its effects on students' English learning experience.

2.3.4 *Culture and EFL*

Impact of culture on students' learning journeys

'Culture is a difficult, slippery, often hard-to-define concept' (Sampson, 1999, p. 74). Hofstede (1991, cited in Deveney, 2005) suggests that culture is like software in our minds that consists of values learnt unconsciously by humans from their environments and surroundings in the first decade of their lives.

Jiang (2000, p. 328) states that:

> *It is commonly accepted that language is a part of culture, and that it plays a very important role in it. Some social scientists consider that without language, culture would not be possible. Language simultaneously reflects culture, and is influenced and shaped by it. In the broadest sense, it is also the symbolic representation of a people, since it comprises their historical and cultural backgrounds, as well as their approach to life and their ways of living and thinking.*

She argues that language and culture form a whole and cannot be separated as they cannot stand without each other. Ryan (1996, cited in Sampson, 1999) and Peterson and Coltrane (2003, cited in Al-Issa, 2005) also argue that language and culture are inseparable, interwoven and reflect each other. Jiang (2000) produced many metaphors that explain the strong relationship between languages and culture; from

a philosophical perspective, she states that language is flesh and language is blood and together they form a living organism. 'Without culture, language would be dead; without language, culture would have no shape' (Jiang, 2000, p. 328). From a communicative perspective, she states that language is a swimming skill and culture is water and together they form swimming which represents communication: 'Without language, communication would remain to a very limited degree (in very shallow water); without culture, there would be no communication at all' (p. 329). From a pragmatic view, she states that language is a vehicle and culture is a traffic light and together they form transportation.

Many studies have confirmed the strong relationship between language and culture. Jiang (2000, p. 332), for example, found in her study in which she used a word association survey with two different cultures which are English and Chinese that:

> *The items filled in by native Chinese students convey Chinese culture, and the items written by native English students convey English culture. The referents of language are the entities, events, states, processes, characteristics, and relations that exist in the culture, whether these are referred to by single words or by phrases. Between language and culture there is always an interactive influence: the two cannot exist without each other. They combine to form a living organism.*

These findings confirm that the same language might be used to refer to different things according to students' culture and background. Therefore, it is very important not to ignore cultural issues in EFL learning environments. Sampson (1999) contends that it is necessary to include culture in language classes in order to boost passion; some areas related to any culture include 'holidays and observances, customs, religious groups, ethnic/racial groups, gender issues and conflicts' (ibid, p. 74). Ramsey (1998, cited in Deveney, 2005) also emphasises that it is very important to understand students' cultures in order to avoid both misinterpretations of their behaviour and underestimations of their abilities and potential by teachers and classmates. Deveney (2005) also argues in his study that tackled the impact of Thai culture on students that Thai students were passive and non-participative due to their culture. He found that pupils from other cultures, such as Western countries, outperformed their Thai peers. In this current study, the issue of culture stood out clearly. The impact of students' culture impacted their EFL learning journey during this project as is shown in the findings chapter and discussed in the discussion chapter.

Aspects of Omani culture

'Oman has a very long history and was known as Magan to ancient Persian and Mesopotamian civilizations and was an important producer of copper and ornamental stone. The Arab tribes in Oman adopted Islam during the lifetime of the prophet Muhammad' (Chatty and Peterson, no date). There are many writers who have dealt with the very long Omani history (see e.g. Ghubash, 2014; Landen, 2015; Wilkinson, 1987). Due to the country's long history, heritage and being an old civilisation, Omanis hold traditions that make them distinct and different even from their neighbours.

> *Oman is a distinct Arabian country with traditional characteristics. Its mores are known by foreigners as a masterpiece of its preserved inherited heritage. Clear evidence can be seen through greetings, invitations, food, family relationships and kinship, ceremonial occasions, and clothes. All of these aspects reflect social life in Oman and how Omani people live from day-to-day* (Omaninfo, 2016).

To discuss all Omani traditions and customs is beyond the scope of this thesis but it does focus on parts that are very relevant to the findings of this study. The issue of culture and social background stood out very clearly during this research; in the implementation of SOLEs, it was found that students tend to be quiet due to the presence of the opposite gender. Interaction between the two genders was totally absent. After in-depth investigation to obtain a more comprehensive understanding and the reasons behind such behaviour, participants revealed that due to the way in which they were raised, culture and religion, they did not feel comfortable dealing with the opposite gender. Oman is a Muslim country that follows the principles and teaching of Islam that are found in both the holy Quran and Sunnah that refer to the speeches of the Prophet Mohammed. By Western standards, Oman is considered conservative in many ways, especially in terms of interaction between the two genders (Peterson and Crystal, 2018). As Chatty and Peterson (no date, p. 1) have put it 'although men and women may interact in public, their contact should always be chaperoned or in the open. Even educated elite women often find it necessary to be chaperoned by a male relative at public events, parties, or receptions'. This particular social and religious issue is reflected in mixed classrooms and students in this research provided suggestions to overcome these challenges that include the separation of the two genders. These suggestions and findings were given great attention in this thesis, they were explored and as a result new knowledge covering this area was generated.

2.3.5 *Summary*

This section has highlighted some key conceptual frameworks and approaches used in teaching English and has shown how each one has replaced an earlier one. It has emphasized that scholars have been trying to find approaches to teaching English to speakers of other languages, and these approaches covered include the grammar-translation, audio-lingualism and communicative approaches. Also, two important educational theories were discussed which are constructivism and social learning. Constructivism and SOLEs meet in some respects such as less emphasis is paid to teachers' role in both of them and both encourage students to construct their own learning. Also, both constructivism and the SOLE approach can help in the case of a shortage in the number of teachers and possibly resources. In addition, social learning and SOLEs share some features such as social interaction which is central in both. Learners learn from each other and obtain guidance from adults when needed. Moreover, in a SOLE, the Zone of Proximal Development is used as learners are asked to produce a final product that is whole group work and not individual; this means they achieve tasks collaboratively that might be impossible at the individual level. This study has explored this assumption as is also shown in the discussion chapter. CALL is also covered in this section as SOLEs, when used in EFL classes, cannot be separated from the CALL field. EFL in Oman, its progression and significant attention received by the government have been discussed. This section of the literature has also explored the relation between language and culture, and the possible impact of culture on students' lives and on their learning journey. It has also shed light on Omani culture related to either social or religious aspects. The reason for covering this particular area is that it stood out clearly during the conduct of this study and has been found to impact students' learning in various ways as is demonstrated in the findings and discussion chapters.

2.4 Design of Learning Environments

This section highlights the importance of learning environments and their impact on learning as highlighted by a great deal of research. It covers the definitions of learning environments, samples of studies conducted on learning environments and confirms their impact on students and their learning. In addition, it sheds light on

studies that call for and emphasize the importance of improving the traditional learning environments. It also covers important issues linked to learning environments like formal learning, grammar of schooling, learners' behaviours, the role of teachers and the role of curricula.

2.4.1 *Learning environments: definition, importance and impact*

Due to the importance of learning environments, they have been explored widely (Dumont et al., 2010, cited in Aldridge and Galos, 2018). Aldridge and Galos (2018) contend that the field of learning environments has been researched for approximately forty years and many issues linked to learning environments have been investigated including innovations, students' engagement, students' achievements, students' outcomes and other aspects. 'Learning environment refers to the social, physical, psychological and pedagogical contexts in which learning occurs and which affect student achievement and attitudes' (Fraser, 1989, p. 3). Another definition by JCALT (2001, cited in Zitter et al., 2011, p.372) states that learning environments are '(1) the physical setting in which a learner or community of learners carry out their work, including all the tools, documents and other artefacts to be found in that setting and (2) the physical setting but also the social/cultural setting for such work'.

Many studies confirm the impact of the nature of learning environments on students' performance and outcomes (see e.g. Umek, 2014, cited in Lee & Quek, 2017; Kariippanon et al., 2017; Blackmore et al. 2011). Those studies argue that effectively designed learning environments affect students' development and engagement. In their study, Kariippanon et al, (2017) found that flexible learning environments that are spacious, include comfortable chairs, and allow usage of the Internet are better than traditional desk and chair rows environments. They found what they call flexible learning environments affected students in many ways, for example, student engagement and motivation increased, they became autonomous, their wellbeing improved, students became more social, their kinaesthetic skills improved, they also felt that these environmental advantages outweighed the advantages of traditional environments and they were more comfortable. Furthermore, 'Flexible learning spaces were reported to facilitate student-centred pedagogy and self-regulation, collaboration, and student autonomy and engagement. Modified spaces were

reportedly more enjoyable, comfortable and inclusive and allowed greater interaction' (Kariippanon et al., 2017, p. 301). Gislason (2009, cited in Kariippanon et al., 2017) argues that open learning environments boost social learning and interaction. Khalil and Aldridge (2019) also found in their study that students enjoy more in learning environments that are cooperative.

A great deal of research favours the type of environment that adopts a learner-centred approach (see e.g. Tynjälä et al., 2009; Uiboleht et al., 2018). Tynjälä et al. (2009) contend that learner-centred environments where students work collaboratively help them improve their thinking skills. Teachers using the learner-centred approach help learners to construct knowledge and not simply impart factual knowledge to them as in the teacher-centred approach (Uiboleht et al., 2018). In their study, Uiboleht et al. (2018) found that when teachers use a learner-centred approach, students gain deep knowledge. They also found that when teachers use a teacher-centred approach, students adopt a surface approach to learning. This study also indicates that boosting interaction and using a learner-centred approach leads to a positive change in thinking. They also report that using both approaches simultaneously does not result in good outcomes compared to solely using a learner-centred approach. However, a study by Baeten et al. (2016) indicates that students prefer to be taught using both approaches. This current study has explored both pedagogical approaches in detail resulting in recommendations that highlight the great significance of the learner-centred approach and at the same time confirming the important role that teachers can play during teaching.

In recognition of the evolving learning needs of twenty-first century school students, changes to teaching practices and the incorporation of technology are increasingly accompanied by modifications to the built classroom environment. Typically rows of desks and chairs are replaced with a range of furniture that can be configured in various ways to facilitate teaching and learning (Kariippanon et al., 2017, p. 301). Fisher (2010) believes that the traditional learning environments that consist of rows of chairs and tables are not suitable for today's classes as pedagogy has changed and a learner-centred approach is encouraged. Research also shows that learning environments should be created in a way that produce learners who are autonomous and independent (Schunk and Zimmerman, 2013). In their study, Kariippanon et al. (2017, p. 301) stress that:

Eight schools leadership teams and teachers identified that, in traditional classrooms, increasing numbers of students had become disengaged from educational content and processes and it was felt that students were no longer being adequately prepared for the demands of society and contemporary workplaces.

Therefore, Fisher (2016) calls for immediate studies that explore the importance of investment in learning environments because there is a lack of evidence of what works in learning environments and why. This researcher believes that current learning environments should be scrutinized and necessary changes should be made. This study is one that tries to introduce a new learning environment in the Omani context and to explore its effectiveness in terms of improving students' attitudes, feelings and views towards learning EFL.

Lim and Fraser (2018, p. 434) contend that:

Reviews of research clearly show that past studies on learning environments have involved numerous subject areas, but especially science and mathematics, and have focussed mainly on the middle- and high-school levels and higher education. However, there have been fewer learning environment studies involving the subject of English.

Therefore, it is very important to conduct many studies that investigate English language learning environments and this study is specifically designed for this purpose. This study involved students in the process of evaluating SOLEs because 'it is critical to investigate students' perceptions of their learning environments, especially in higher education, given the limited research in this sector' (Ovbiagbonhia et al., 2019, p.2). This study suggested and investigated a SOLE as an EFL learning environment which has resulted in many recommendations and direction for future studies in the same field. It is worth highlighting that classes in Oman are used for different subjects, whether at school or in higher education institutions, and almost all of them follow the traditional desk and chair rows environments. There are few rooms available in institutions with facilities like computers and readers that students can use occasionally. Also, some higher education institutions provide classes with smart boards, projectors and a computer which are mostly used by teachers. The following sections cover some elements that are linked to learning environments.

2.4.2 *Institutional and formal learning: definitions and function*

Siebenhuner and Suplie (2005, cited in Carayannis et al., 2011) define institutional learning as social activity in which knowledge is created and used by a group of beneficiaries and leads to a change in their characters, mostly through the process of formal learning. While Carayannis et al. (2011, p.142) define institutional learning as 'one-way transfer of formal knowledge from global epistemic communities to local actors with the ultimate goal of enabling local epistemic communities', by formal knowledge they mean the rigorous knowledge that is valid, reliable and replicable. Hale (2013) suggests that some believe that institutional learning focuses on the product by producing a certain predefined goal and others believe that institutional learning focuses on the process that aims at transforming students into better individuals. He emphasises that both aims are vital because focusing on the product alone will create students who can translate their skills into action, but not be creative, and focusing on the process will transform the characters of students but might not be able to create students who put their knowledge into application. Therefore, Steele (2011) concludes that institutional learning is essential for sustainable learning and effort. Knowledge is created and used in institutional learning mostly through the process of formal learning.

Mocker and spear (1982, cited in Park & Choi, 2016) define formal learning as a planned learning that takes place in traditional classrooms. Marsick and Watkins (1990, p. 12) also define it as 'typically institutionally sponsored, classroom-based, and highly structured', and it includes all different trainings whether they are lecture or web- based (Rowold & Kauffeld, 2009). They argue that formal learning impacts individuals by making them more competent, employable and committed. Brooks (2011) emphasises that the environments in which learning happens has a big effect on the learning process that occurs in formal learning institutions. He provided examples of research that made certain changes to the traditional environments and measured the impact on the learning outcomes. One example he provided is the project carried out in North Carolina State University where the researchers changed the setting of classes by replacing normal tables with round ones, provided Internet connection, laptops and projectors so that students could show their work to each other. These modifications, as claimed, improved the rates of interest and attendance, students' understanding and students' high order thinking skills like

problem solving. They also reduced failure rates. Another example he provided is the project that took place in Massachusetts Institute of Technology in which researchers added software, which increased the collaborative interaction among students, to the normal classroom and they also replaced normal tables with round ones. Their findings revealed that students' failure rate dropped and their conceptual understanding rate increased compared to students who did the same course in traditional classrooms. Brooks (2011) concludes that these two research studies confirm that environments equipped with technology are more powerful than traditional ones. Whiteside and Fitzgerald (2009) also state that the round tables used in both research studies were the most cited element in terms of facilitating collaborative work among students. With regard to the merits of formal learning, McGuire and Gubbins (2010) emphasise that formal learning is of great benefit in so-called modern learning classes or environments as it fosters both the general and functional knowledge of students. They are concerned with modern approaches to learning that have become more informal because they believe that informal learning may prepare students to deal with procedural knowledge, which means how to do something, but may fail in preparing students to deal with knowledge that prepares them well for life in general. They further emphasise their concerns when they state that the danger is to consider learning as infotainment and sacrifice knowledge. This study has tried to ascertain, as is shown in the findings chapter, whether or not SOLEs are able to optimise the process of transforming students into better individuals and consequently help achieve better products in current institutional settings. The SOLE approach has moved from outside of schools to the inside. Therefore, this study has also explored the existence of SOLEs within a formal learning institution and highlighted its impact from different aspects as presented in chapter four, with special consideration given to the fact that SOLEs as environments are different from formal learning environments in terms of rules, the role of teachers and curricula and pedagogy.

2.4.3 *Personal learning journeys/environments/networks or informal learning and their similarities to SOLEs*

The term Personal Learning Environment/Networks (PLE/N) has been defined by many writers as it 'is used in a variety of different ways in the field' (Van Harmelen,

2006, p. 815). Tsui & Dragicevic (2018, p. 848) argue that 'PLE&N… serves as a learning space which stimulates self-regulated and network-based learning'. a PLE is 'a single user's e-learning system that allows collaboration with other users and teachers who use other PLEs and/or VLEs' (Van Harmelen, 2006, p. 815). Tsang & Tsui (2017) also define PLE/N as an interactive collaborative platform that is learner-centred and aims at fostering students' abilities to network, to be lifelong learners with the participation of practitioners and newly graduated students. Tsui & Dragicevic (2018) stress that the interaction with practitioners and other students positively impacts students understanding of the studied topic. Xu et al. (2018, p. 2) defines PLEs 'as personal systems/environments or collections of tools and external services can be defined from knowledge management perspective and technical perspective'. A PLE is 'both a technology and a pedagogical approach' (ibid, p. 4). It is believed that PLE occurs as a response to the demands for creating lifelong learners, to the demands for creating learners who are in control of their own learning and to the demands for enabling students work offline when needed (Van Harmelen, 2006). Therefore, PLEs are attracting increasing interest in the e-learning domain' (Van Harmelen, 2006, p. 815). Similarly, Tsui & Dragicevic (2018) emphasized that it is essential to move away from conventional curriculums to dynamics ones like the ones offered by PLE/N. Xu et al. (2018) found out in their study which aimed at designing a curriculum using both learning management system and PLE that the participants in their study improved their computer skills and teaching English for specific purposes skills.

Personal learning journeys or informal learning experiences are a type of learning that is principally under the control of learners and constructed by themselves and it happens by observation, searching, asking others and trial and error, while formal learning is one that takes place in institutions and is decided by teachers and other authorities (Cross, 2007; Selwyn, 2007, cited in Dabbagh & Kitsantas, 2012). Personal learning has many merits as it takes place in different contexts and allows learners to seek knowledge from different providers (Attwell, 2007). It also helps learners to organise their own learning journeys and can feed the formal learning experience (Attwell, 2007). In their use of technology, learners do not only seek information but also share knowledge so this means they are active learners (Dabbagh & Kitsantas, 2012). This type of learning makes students self-motivated as stressed by McGloughlin & Lee (2010). Nowadays, the 'net generation' uses

technology in different ways (Attwell, 2007, p.1). Technology has made it easy to learn things informally and leaners keep discovering new ways of learning through the use of this technology (Attwell, 2007). Apart from communication, they use technology to share new ideas, to publish and to complete a variety of tasks that support their learning journeys (Attwell, 2007).

Despite the merits of personal learning, there is relatively little attention paid to it (Attwell, 2007) in relation to experiences and outcomes in particular learner contexts. Therefore, there is a need to bring together formal and informal learning which can be achieved through personal learning environments (Attwell, 2007; McGloughlin & Lee, 2010). Dabbagh and Kitsantas (2012) confirm that there is enough evidence to support that personal learning environments can be created through the integration of social media. Smith and Caruso (2010, cited in Dabbagh & Kitsantas, 2012) reveal that students' use of social media has dramatically increased since 2007 and their findings also show that students use social media for both formal and informal learning. Moreover, Selwyn (2007, cited in Dabbagh & Kitsantas, 2012) has found in his study that informal learning through social media has become an important element of one's learning journey. Personal learning environments make students more responsible and independent that consequently affects formal learning positively (Attwell, 2007). Personal learning environments also connect formal learning to the world outside institutions (Attwell, 2007). Hall (2009) emphasises the importance of connecting both types of learning so that the overall learning journey of individuals is optimised. Clark et al. (2009) suggest that learners need to be trained to be able to use technology to support their own learning.

The SOLE as an approach includes both formal and informal learning together. It shares some characteristics with formal education that are the presence of the teacher and sitting in a room with other students to execute a particular task. However, it differs in some respects that are similar to those found in informal learning, such as, choosing how to deal with the given task, choosing where and with whom to sit, choosing which website to surf and other characteristics. This study has explored both sides of SOLEs and put all of these under rigid scrutiny and produces recommendations as detailed in chapters four, five and six.

2.4.4 *Presence of grammar of schooling and learners' behaviour in SOLEs*

Rules are vital to any group of people working together and therefore also in schools (Merrett and Jones, 1994). Rules are also crucial to schools as they manage the complicated social interactions and relationships among external authorities, school management, teachers, pupils and also parents (Demirkasimoğlu et al., 2012). They determine the rights and obligations of each member of the aforementioned groups. They also help to create a healthy classroom atmosphere which concerns many people as without a healthy atmosphere, learning will not take place (Buluc, 2006). Rules also 'give structure to social interaction and help to reduce uncertainty, confusions and ambiguity' (Tattum, 1986, cited in Merrett and Jones, 1994, p. 346) and they lead to a high level of safety (Coulby & Harper, 1985, cited in Merrett and Jones, 1994).

Desai (2010) believes that rules are vital as they determine desirable behaviour and guide individuals towards organisations' goals. Woolfolk (1998, cited in Buluc, 2006) also believes that rules make pupils aware of what is expected from them in terms of achievement and they also prevent undesirable behaviour in classrooms and schools which, according to Wayson (1985, cited in Buluc, 2006), prepares pupils to confront difficulties in life. Studies on schools' rules has indicated that all stakeholders involved in education should be consulted in the formulation of rules (Buluc, 2006; Merrett and Jones, 1994). Buluc (2006) conducted a study to evaluate the process of formulating rules in schools in Turkey and among their findings is that pupils normally reject and dislike rules that are made by teachers alone. They also found that rules that respect all pupils' rights led to healthy engaging attractive classroom environments. The findings also revealed that rules should be desirable and compatible with pupils' values and traditions. In their study, which included 21 primary schools in England, Merrett and Jones (1994) state that in the UK head teachers tend to involve teachers and other colleagues in the process of formulation of rules and to a lesser extent, parents and pupils. Studies also stress that the number of rules should be minimal (Merrett and Jones, 1994).

Barbetta et al. (2005) place emphasis on the importance of teachers' role in influencing learners' behaviours. They argue that teachers should look for reasons behind both the desirable and undesirable behaviour of learners and work on these reasons to foster desirable and prevent undesirable behaviour. This policy helps

teachers to save time and effort compared to dealing with misbehaviour after occurrence. Some writers (see e.g. Leung & Lee, 2006; Barbetta et al., 2005) also emphasise the importance of rules and the importance of attending them regularly throughout the academic year to encourage desirable and prevent undesirable behaviour, especially with today's classrooms as they are becoming progressively challenging due to cultural and demographical changes (Grossman, 2004). Mtsweni (2008) argues that enforcing rules in schools teaches learners the importance of order in life in general, the importance of following rules throughout their lives and the importance of self-control. Sullivan et al. (2014) conducted a survey to find out teachers' concerns about students' behaviour and they found out that a little disruptive behaviour occurs frequently, and aggressive behaviour rarely happens. They conclude that the classroom environment has a vital impact on students' engagement and consequently on students' behaviour. LeeFon et al. (2013) also argue that teachers should be knowledgeable about learners' behaviour and should show appreciation of all learners as this has a positive impact on them. Showing respect and appreciation to students will inspire them to show the same for all people around them (Psunder, 2005).

The above area has been widely covered in the EFL literature as well. Den Brok et al. (2004) emphasize that besides delivering subject content, teachers are responsible for maintaining classroom discipline. They also contend that theorists have highlighted three types of teacher control of classroom behaviour that are strong, shared and loose. The first type is when teachers take full control of the tasks, the second refers to when teachers and students share responsibility and the third is when teachers leave it fully to students to decide what to do. Interestingly, in the EFL literature there is evidence that the type of control affects student achievement. For example, Kiany and Shayestefar (2011) found in their study which recruited 732 EFL students that student achievement was lowest when teacher control is strong and was highest when the control was shared. This indicates that neither strong nor lose control is preferred by students. This result is logical in this researcher's view because when student behaviour is fully controlled, students may become passive and when a class is free of control, students may not take their studies seriously. Therefore, moderation may be a solution. Wei et al. (2015) reached a similar result in their study which recruited 823 EFL learners. These learners revealed that their teachers were too controlling and asked to be given a room where

teachers still demonstrated their leadership of the class while providing more freedom to learners, simply they sought moderation in the teachers' control over the classes. Increasing student engagement is found to help eliminate undesirable behaviour such as passivity and disregarding teachers. Technology is found to assist in increasing engagement and eliminating unacceptable behaviour as highlighted in the following study. Wang et al. (2009) tried to contribute to overcoming the problem of lack of interaction in Chinese EFL classes by using mobile learning as an intervention. Their findings revealed that students' undesirable behaviour significantly changed, and they became active learners; these findings point to the importance of innovation in classrooms and to the importance of moving from traditional pedagogy to one that is preferred by 21st century EFL learners.

Demirkasimoğlu et al. (2012) emphasize that an important role of schools is to train individuals to follow rules which is crucial to all stages of life. In SOLEs, the role of rules cannot be explicitly felt as there are almost no formal rules to follow. In SOLEs there are no explicit rules for sanctions or rewards, there are only a few examples of problems and possible solutions mentioned in the SOLE toolkit. This researcher believes that it is essential to explore the SOLE approach with its current nature in different cultures and parts of the world because it has very few and no strict rules and all rules that it does have are generated by its founder Mitra (Mitra and Crawley, 2014). The teacher's role is also marginal which can lead to undesirable behaviour by students. This study has explored this issue in detail and reported many undesirable behaviours that can occur in SOLEs because of the absence of rules and teachers as well. All these behaviours are reported in the findings chapter and recommendations and solutions are presented in the subsequent chapters.

2.4.5 *The Role of teachers as suggested by scholars and as suggested by Mitra in SOLEs*

Even though some teachers believe that their roles rarely change, and their work is a routine task (Valli et al., 2007), Richardson and Placier (2001, cited in Valli et al., 2007) disagree and believe that teachers' roles have changed over time. Xiao et al. (2005) emphasise that in the era of technology teachers should not consider themselves to be the only experts of content in the classroom especially with technological materials. He believes that teachers should be organisers and let

students work in groups and learn from each other. In their study which focused on website design, they noticed that in many cases teachers learnt some technical skills and knowledge from students. They concluded that, in their study, the student role was learning and designing while the teacher's role was facilitating and not imparting knowledge as in traditional classes.

Reeve (2006) believes that student interaction depends to a large extent on the classroom supportive environment. Therefore, Reeve (2006) and Cuconato et al. (2015) assert that teachers should play the role of motivators who encourage autonomy. Reeve (2006) maintains that the teacher's role is not merely to structure the learning process, but also to motivate students to develop desirable skills, improve interpersonal skills and nurture their hobbies. Reeve (2006) focuses sharply on the role of teachers as supporters and motivators because according to the self-determination theory students have inner resources responsible for motivation. In order for these resources to work well, they need to be nurtured and fostered by teachers. This fact is supported by Deci et al. (1981, cited in Reeve, 2006) as they contend that students who are taught by supportive teachers benefit more in terms of achieving targeted outcomes than those taught by controlling educators.

Cuconato et al. (2015) also believe that in addition to their many roles, teachers should be school representatives in their societies by establishing relationships with parents and other academic bodies to inform and enhance the teaching learning process. These networks with societies help teachers to learn about concrete life experienced by children in their daily routines (Lima& Guimares, 2011, cited in Cuconato, 2015). In their study which sought teachers' opinions about their role in preparing students for their future in Germany, the Netherlands, Italy and Finland, Cuconato et al. (2015) concluded that some teachers believe that their job is to impart subject knowledge to students, others believe that their job is to create educational opportunities for students and some teachers consider students' well-being as their priority. Also, teachers have a vital role in helping students to construct knowledge (Brandon, 2010).

Many studies shed light on the roles of English language teachers (Harmer, 2015; Nunan, 1988; Broughton et al., 2002). Harmer (2015) contended that English teachers have many roles and good ones can adopt different roles depending on the situation or task with which they are dealing. He asserted that teachers sometimes

act as controllers, sometimes as prompters, sometimes as feedback providers or assessors, sometimes as a resource and sometimes as language tutors. In addition, Nunan (1998) stated that English teachers should link the learning inside classrooms with the world outside so that English learners can easily communicate in different contexts. Furthermore, Broughton et al. (2002) emphasised that one of the teacher's roles is to broaden their awareness of the context where they teach and which teaching methodology to adopt. They also emphasised that tertiary English teachers' role is 'to utilise … student's motivation so that his needs … are optimally fulfilled' (Ibid, p. 187). Renjie (2011) conducted a study where he divided 112 participants into two groups; the first group learnt English in a traditional way as a whole class group and the other group learnt English autonomously. The findings of this study reveal that students in both groups need to receive reinforcement and encouragement from teachers and both groups prefer teachers who are facilitators and motivators. Another study conducted by Gochitashvili (2012) on the role of teachers in computer-assisted classes highlights the intensive roles that teachers should have in such classes. Some of these roles include choosing appropriate materials in accordance with the students' level of English and culture, deciding the role of the teacher and learners, preparing students well for tasks, providing feedback and evaluating these tasks. Nwokolo (2012) goes further by stressing the important role of English teachers in facilitating and enhancing the learning process of different fields of their students, such as science and technology, because English is the medium of all other fields in most contexts.

Having detailed the different roles of teachers above a question arises as to whether the role of the teacher in SOLEs is healthy and productive. In a SOLE, the teacher's role is to facilitate a big challenging question and to motivate students (Mitra et al., 2005). This role given to teachers in a SOLE is a desirable role as seen earlier and stressed by Reeve (2006) and Cuconato et al. (2015), however it is still very minimal as it eliminates all other roles teachers can play, as mentioned by Harmer (2015). The founder of the SOLE insists that the teacher's role remains at a minimal level, therefore, 'the role of the teacher has become one that is contested rather than the respected role of a previous age' (Dolan et al., 2013, p .15). In a SOLE, teachers leave classes for most of the duration of the sessions in order to leave students unsupervised. This study has explored in depth the current role of teachers in SOLEs

and suggested many recommendations as detailed in the findings, discussion and conclusion chapters.

2.4.6 *The Role of curriculum in education in general and in SOLEs in particular*

A curriculum is the most important element of the teaching and learning process as without it institutions have no value (Alvior, 2014). The curriculum is a planned structure that provides all stakeholders involved in the teaching and learning process with a measurable plan of what they should achieve which includes learning outcomes and crucial skills (Glenn, no date). George (2009) emphasises the main elements of any curriculum that are aims, objectives and outcomes, assessment, learning needs and evaluation. Aims, objectives and outcomes pave the teachers' and learners' way towards the desired target. Assessment is central as it informs what has been learnt. Learning needs will be drawn from the aims and assessment types and will inform teachers of what to teach and how to support students. Finally, an evaluation of the whole curriculum must be carried out after first cycle implementation (George, 2009).

A curriculum is important for administrators as it ensures that students achieve the standards set by the state (Browder et al., 2007; Glenn, no date), it is important for teachers as it clarifies the overall picture of goals to be achieved for all different levels and it is important for students as it works as a map that shows them what is required from them to earn the desired certificate or degree (Glenn, no date). A curriculum is expected to help students acquire not only academic but also life skills (Bouck, 2004) and to make them more responsible citizens and more loyal to their home countries (Glenn, no date). Furthermore, Halle and Dymond (2010) suggest that a curriculum should not be taught to help students pass exams but should be taught in a meaningful way by linking it to the skills needed in real life activities. This is compatible with the findings of a study conducted by Dymond et al. (2015) in which they explore the perception of preservice teachers who stress the importance of teaching life skills.

The EFL literature has also investigated the English curriculum from different aspects and in different contexts. Alastrué (2010) conducted a longitudinal study that lasted for five years to explore different constructs within the English curriculum in Spain.

Among their findings is the need to tailor the English curriculum by adding more time for oral skills so that students have the time to master them which implies the importance of constant evaluation of existing curricula. There are many examples of studies conducted on language curricula but this work will focus on one conducted by Macalister and Nation (2011), it deals with an educator, Joe, and her experience of designing an English course for Omani tertiary English learners. She emphasises the importance of conducting a situational needs analysis by interviewing all stakeholders including students in order for designers to familiarise themselves with the targeted context and in order to write materials that are appropriate for the students' level and culture. She also asserts that designing a curriculum is a dynamic process because constant changes and improvements are always needed due to ongoing evaluation and feedback. From the latter example, it can be inferred that involving learners in developing a curriculum might be of significant benefit which is also evidenced in the following examples. Bista (2011, p. 2) claims that a successful English curriculum is one in which 'educational experiences are designed for the convenience of learners rather than for the convenience of institutions and their staff'. In his book 'The Learner-Centred Curriculum', Nunan (1998) also stresses that traditional curricula followed a top down approach that means that they were developed by government departments and then disseminated to teachers to implement, but the learner-centred curriculum is designed after negotiation takes place between teachers and students. He emphasises that language learners benefit in many ways from the latter type of curricula because they aim 'to provide learners with efficient learning strategies, to assist learners identify their own preferred ways of learning, to develop skills needed to negotiate the curriculum, to encourage learners to set their own objectives, to encourage learners to adopt realistic goals and time frames and to develop learners' skills in self-evaluation' (Ibid, p.3).

Until this date, there has been no curriculum designed for SOLEs but it is stressed that current curricula, which are used in institutions that wish to implement SOLEs, can be tailored to suit the SOLE approach by transforming them into big questions. This research has investigated the absence of curricula in SOLEs and explored the big questions used.

2.4.7 *Summary*

This section has sought to understand various areas linked to educational organisations that were investigated in this study. As emphasised by Brooks (2011), environments equipped with technology are more functional than traditional ones. Can a SOLE improve current educational institutions? Because it relies on technology to a large extent and also because it is based on collaborative learning which is very important for the learning process (Whiteside and Fitzgerald, 2009), this study has investigated whether a SOLE can improve the context of this study or not, as will be discussed in the discussion chapter. Moreover, the ability of a SOLE to enable students to transfer their knowledge to products and to transform them into better individuals which, according to Hale (2013), are both important in institutional learning, was explored and discussed in the discussion chapter. Furthermore, a SOLE can help learners enjoy their own learning journeys as it provides knowledge from different sources. It is worth mentioning that besides formal learning, a SOLE can play a major role in one's learning journey especially as it can be conducted without the teacher's physical presence. Therefore, it can happen at any time of the day and in any place provided that Internet connection is available. In addition, the section on the grammar of schools highlights the merits and significance of rules in schools and in life in general. A SOLE lacks rigid rules which might reflect negatively on students' behaviour. This study attempts to assist in this issue as it has explored the current SOLE rules and students' behaviour as is reported in the findings chapter. A SOLE also ignores almost all different roles of teachers mentioned in the literature and confines their role in facilitating a big challenging question. This study is the first to shed light on the role of the teacher in a SOLE and tries to explore it from different aspects and angles as is detailed in the discussion chapter. Additionally, a SOLE has had no specific curriculum until this point in time but its advocates simply suggest changing current curricula to big questions and that, according to proponents, this will work for a SOLE session. In this researcher's point of view, doing this requires expertise to ensure that all objectives are included and can be achieved. Also, a reliance on big questions to deliver a whole curriculum without appropriate explanations and guidance from teachers needs to be explored. Hence, all the above areas which are formal and institutional learning, grammar of schools, the role of teachers and the role of the curriculum were investigated in this study.

2.5 Learners and the impact and influences of SOLEs

This third section has examined areas linked to learners such as students' personalities, personal development, empowerment, personal learning journeys, autonomy, and learner motivation. It has also described EFL Omani learners and highlights some important issues linked to them in the Omani context.

2.5.1 *Students' personalities and learning preferences and means of nurturing them*

Each student is a unique individual with a distinct personality (Quinn, 2006). There is much discussion about self and personality in the literature. Some authors like Burkitt (2008, p. 4) argue that 'self is something to be created with other people in joint activities and through shared ideas'. Others like Rogers as mentioned in (Hall et al., 1998) argue that the self is linked with consciousness that is an individual's perception about his/her personality which takes place while being conscious and self-aware. While others like Gallagher (2000) emphasise the importance of considering both the conscious and non-conscious aspects of the self that contribute to making any individual unique. For LeDoux (2003) what makes any individual unique is his/her memories because they keep sending messages to them of who they are and they are responsible in forming the essence of the uniqueness of each individual. It is argued that genes are to some extent responsible for shaping some personal traits of any individual as well (Tellegan et al., 1988). However, life experiences through learning, for example, arguably have a greater impact on personalities of learners (LeDoux, 2003). LeDoux (2002) stresses that both nature and nurture are important in fostering one's self, and he also emphasises that there are certain factors that affect people including language and emotions. For him, language helps individuals to compare, contrast and see the experienced world clearly which undoubtedly impacts one's personality. He also believes that emotions play a vital role in shaping and maintaining individual personalities because emotions can easily restrict the brain's resources to only the emotional experience being experienced. Rogers (1959, cited in Mcleod, 2014) highlights that the closer our self-image is how we see ourselves, and our ideal self refers to how we want to be, the more we appreciate our self-worth is how we think about ourselves.

Literature also discusses the field of learning styles which is a contested concept. Some writers like Riener & Willingham (2010) believe that learning styles do not exist. Others have the opposite opinion as reviewed by Coffield, Moseley, Hall, & Ecclestone (2004). Learning styles are defined as 'students have different modes of learning, and their learning could be improved by matching one's teaching with that preferred learning mode' (Riener & Willingham, 2010, P. 33). Riener & Willingham (2010) argue that ability, interest, background knowledge and specific learning disabilities lead to differences among students and not what is so-called learning styles. However, they believe that students have preferences in the way they learn but those preferences have no impact on their learning. Coffield, Moseley, Hall, & Ecclestone (2004) reviewed many models of learning styles. They emphasize that Dunn and Dunn model about learning styles, for example, has a number of strengths. First, this model confirm that any individual can learn if his/her preference is accommodated. Second, this model encourages teachers to respect differences among their students. Third, this model encourages dialogues about some behaviours between teachers and their students. The field of learning preferences, styles or characteristics encourage teachers to diagnose students' preferences and design teaching materials accordingly (ibid). It is believed that students whose preferences were being fulfilled by their teachers could perform better than those whose preferences were not being fulfilled. It is also emphasized that:

> *The logic of lifelong learning suggests that students will become more motivated to learn by knowing more about their own strengths and weaknesses as learners. In turn, if teachers can respond to individuals' strengths and weaknesses, then retention and achievement rates in formal programmes are likely to rise and 'learning to learn' skills may provide a foundation for lifelong learning (ibid, P. 1).*

The EFL literature widely covers the area of students' personalities. For example, language learners respond to different stimuli differently. For some learners, music stimulates them more than movement. For others, pictures stimulate them more than the written language (Harmer, 2007a). This is so because learners have the different 'personality traits of introvert/extrovert, sensing/intuition, thinking/feeling, and judging / perceiving' (Maleki, 2017, p. 1). Therefore, visual learners tend to remember pictures, auditory learners tend to remember what they hear. Kinaesthetic learners tend to be more active when dealing with tasks that involve movement and physical effort (ibid). In each classroom, teachers need to prepare a variety of tasks for different personalities and learning styles because learners in any class are different

in their personalities and learning styles (ibid). Many studies have been conducted on the relation between EFL and personalities, some stress that there is a significant relationship between personalities and cognitive burnout whether in learning English in general or in specific aspects like communication and reading comprehension (see e.g. Maleki, 2017; Davis, 2004; Cetinkaya, 2005). Another study conducted by Kao and Craigie (2014, p.21) on the impact of English usage in Facebook (EUF) and personalities on EFL achievement emphasises that 'personality traits and EUF together had a statistically significant impact on EFL achievement'. Chen and Hung (2012) also found in their study which recruited 364 high school pupils that there is a significant relationship between these pupils' personalities and their English language learning strategies. All the above studies and many others confirm the relationship between personalities and English language learning.

Positive desirable attributes, which positively affect students' personalities, can be achieved through healthy interaction that supports basic needs (Cameron & Caza, 2004) and aims at finding 'actions that lead to healthy, engaging, meaningful, and thriving schools where students flourish, learn, and are happy (Hoy & Tarter, 2011, p. 429). One vital attribute of learners is the ability to adjust in any new culture and setting and to be highly prepared for any globalisation demands (Colin, 2006). Rubie-Davies (2010) argues that teachers' views on students reflect their expectations and affect students' attributes, such as, confidence, interest, interpersonal skills and self-esteem, positively.

For the above discussion, it is crucial to conduct studies that not only focus on the relationship between personalities and language learning but also on how these personalities can be nurtured and improved. Therefore, this study found it essential to explore how SOLEs nurture learners' personalities, especially as language and communication are core elements of SOLEs (Mitra et al., 2005). Furthermore, SOLEs are claimed to help students gain confidence (Mitra, 2009) which undoubtedly positively nurtures and fosters students' personalities.

2.5.2 *Personal development and the role of learning environments*

According to Treff and Earnest (2016), personal development means becoming mature. In order for a person to develop, s/he needs to become involved in dialogues

with oneself and other people and never stop learning (Taylor et al., 2000). Chickering and Reisser (1993) identify seven indicators for personal development which are intellectual, physical and interpersonal competence, an ability to manage emotions, interdependence, an ability to build relations with others, an ability to establish identity, developing integrity and being able to determine goals and targets. According to Chickering and Reisser (1993), learning environments have a vital role and influence on students' personal development and they believe that the smaller the learning environment the better the development and friendships relations among students. It is found that the size of the environment, students' opportunities to engage and participate through group work, student-teacher relations and friendship among students impact students' personal development (ibid). Nowadays, most learning environments involve some kind of group work (Treff and Earnest, 2016) which helps students to construct knowledge collaboratively which might not be produced individually (Peter & Armstrong, 1998, cited in Treff and Earnest, 2016). Arendale and Hane (2014) conducted a study on peer-assisted learning which involves working with groups and found that students' confidence, engagement, interpersonal skills and critical thinking increased. Also, Arendale (2014b, cited in Aredale and Hane, 2014) conducted a meta-analysis study on approaches involving group work and found that a change in students' behaviours is always revealed including communication skills, decision making skills, making new friends and adopting new learning strategies. Also, Herrera et al. (2014) found in their study that students' academic knowledge improved while working in groups and consequentially positively affected their development as individuals. According to Iulia (2015), personal development is as important as cognitive development. In her study that sought opinions from 50 teachers about the importance of personal development activities in schools, 72% of teachers expressed the importance of such activities in developing students' personalities and characters. She also emphasises that teachers should take part in developing students' personalities that includes all the seven indicators mentioned earlier and they should not leave this task to the parents only. Personal development is considered very important in both learning and occupation journeys (Heckman & Kautz, 2012; Iulia, 2015).

Personal development, nurturing and fostering different skills of learners have been widely discussed in the EFL literature. Ning (2013, p.1), for example, conducted a study to compare the impact of both the traditional pedagogical approach and the

cooperative learning approach on students' social skills that include 'self-confidence, sense of cohesion, initiative in socialization, being positive, checking for understanding, equal participation and accountability, acceptance and empathy, and conflict management'. The study recruited two classes and used a quasi-experimental design where one class was the experimental group and the other acted as a control group. The findings revealed that cooperative learning has a stronger positive impact on students' social skills than conventional learning. In his study which is entitled '21st Century Skills and the English Foreign Language Classroom…' Fandiño (2013) draws attention to what EFL classrooms should provide for students. He emphasises that EFL classrooms should provide students with skills that are considered crucial such as critical thinking, digital and innovation skills. Therefore, he believes that today's EFL classes should be different from those in the past by focusing on skills that are needed for life. In the same vein, Taylor (2009) states that EFL classes should focus more on fostering lifelong skills rather than language mastery alone. These lifelong skills include four major categories that are suitable for the 21st century which are 'digital-age literacy, inventive thinking, effective communication and high productivity' (Lemke, 2003, cited in Fandiño, 2013, p. 194). Warschauer (2001) places emphasis on the role of educators in fostering specific essential skills which are generating complex activities to encourage learners to work collaboratively, to negotiate and to set goals together as a group in order for them to come up with a valuable product. There are many studies that deal with EFL classes and fostering students' skills however, in order to be concise and precise the EFL literature in general places emphasis on the importance of changing the EFL environment and pedagogy in order to foster students' necessary skills for the current century and for the future.

For the above discussion of the importance of personal development, this study has explored the change caused by SOLEs in all indicators and factors that affect learners' development. Especially, it is claimed that a SOLE has the potential required to foster students' skills. That is because students in a SOLE are involved in creating dialogues, building relations with others, working in groups, making decisions on which group to work for and which materials to explore on the Web, negotiation and setting goals which are key factors in fostering students' skills and personal development as mentioned above. This study conducted in-depth research to explore the influences caused by this new environment on different aspects of EFL

learners' personal development that include establishing identity, building rapport, managing emotions and others. All these findings are reported and discussed in chapters four and five, respectively.

2.5.3 *Empowerment: definition, importance and possible presence in SOLEs*

According to Frymier et al. (1996), empowerment is linked to motivation and consists of three main pillars which are meaningfulness, competence and impact. By meaningfulness they mean that students should find materials interesting and valuable, by competence they mean that students should feel capable and able to perform the given tasks and impact signifies that students should feel that their input is important and has an influence on the task. In their study that aimed at examining teachers' power impact on students' empowerment, Diaz et al. (2016) found that referent power, which is the ability to build rapport with students, expert power, which is teachers' expertise in the subject, and reward power, which encourages students to perform well, are very much desired by students and have a significant impact on students' empowerment. Other factors that affect student empowerment are the classroom environment, teachers' communication and teachers' clarity (Frymier et al., 1996). Houser and Frymier (2009) also add to the previous factors the students' traits. Schrodt et al. (2006) stressed that students perceived the understanding of the teachers' communication and behaviour had a direct impact on their empowerment. The same result was confirmed by Schrodt and Finn (2011). Novak (2002) found that collaborative learning serves as a factor to enhance empowerment as it eliminates the frustration and disempowerment that learners might encounter when dealing with real world problems. Zimmerman (1990) also emphasises that learners' ability to foster skills impacts their empowerment positively. Another factor that affects empowerment is the relevance of learned materials or content for learners (Brunton & Jeffrey, 2014). Why is it important to empower learners? Houser & Frymier (2009) argue that empowered learners are always motivated as they understand the meaning of the given tasks, feel competent and see the impact of their efforts. Frymier et al. (1996) also add that empowered students learn more than their peers and feel more enthusiastic in accomplishing the educational objectives as they feel in control of their own learning environment and they also appreciate and see the value of what they are doing. Furthermore, Brunton and Jeffrey (2014) argue that

increasing students' empowerment may lead to an increase in the educative and cultural experiences of students. If students are disempowered, they may feel helpless (Zimmerman, 1990).

The EFL literature has covered the area of English learners' empowerment. Mok (1997), for example, conducted an action research where she involved pupils in English language activities in order to explore their empowerment. In her study, Mok (1997) designed four types of activities in order to increase the students' empowerment. The first type encourages pupils to create networks with the whole school, the second encourages pupils to interact with classes similar to theirs, the third type encourages pupils to interact with their classmates and the fourth one was conducted in small groups only. She found that pupils started taking the initiative, organising events and developing leadership skills. She also reported that the pupils who participated in her study revealed that they learnt more and enjoyed the experience. This empowerment was reflected in pupils' self-motivation and self-image (ibid). Therefore, she believes that empowered pupils work harder than non-empowered ones because empowered pupils are given the opportunity to choose what activities they do and are in control of their own learning. She also contends that in order to obtain the best performance, attainment and motivation out of learners, teachers should empower them. In a more recent study, Diaz et al. (2016) conducted a study where they examined and explored the impact of different teachers' powers in English learners' empowerment. They found that teachers' encouragement to their pupils, subject knowledge and good relationship with pupils have a significant impact on their empowerment. These findings point to the important role that teachers can play in empowering pupils. Furthermore, learning networks via computers are found to positively impact English language learners' empowerment when used appropriately (Warschauer et al., 1996).

As seen above, both teachers and classroom environments play a vital role in empowering students. Students in a SOLE are free to choose materials from the Web which means they can choose materials that are interesting and suitable for their level. Also, student input is very important because it is a core element of any SOLE session. This means the three pillars of empowerment mentioned earlier are all emphasised in SOLEs. Furthermore, in a SOLE, students work collaboratively which is considered a crucial factor to empower students (Novak, 2002). It is also

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mentioned above that learning networks via computers have a positive impact on EFL learners and from which students in a SOLE can benefit. Having mentioned the potential of a SOLE, the role of teachers, which is very important in empowering students as mentioned earlier, is minimal (Mitra et al., 2016). Therefore, all the above issues related to empowerment are explored deeply in this study.

2.5.4 *Autonomy: definition, importance and possible presence in SOLEs*

Bakhurst (2011) defines autonomy as the learner's ability to choose what to do and think. He also asserts that autonomy should be the ultimate goal of education. Little (1990, p. 81) defines autonomy as 'a matter of the learner's psychological relation to the process and content of learning'. According to him, learners should be able to make decisions on their own learning and be able to take independent action that is congruent with their preferences, learning styles and strategies. Thanasoulas (2000, p. 47) also asserts that autonomous learners should take greater responsibility for their learning but he also emphasises that the teacher's role is crucial and not redundant as teachers 'adapt resources, materials, and methods to the learners' needs and even abandon all this if need be'. Benson & Voller (1997) provide some examples of autonomy such as when learners learn on their own, when learning takes place in self-directed environments and when learners are given the right to give directions for the learning process. Thanasoulas (2000) believes that autonomy is in harmony with constructivism, as autonomous learners are active agents who construct their own learning through generating ideas, setting goals and linking new knowledge with existing knowledge, rather than receiving content from teachers (Kohonen, 1992).

Since its first emergence in the language teaching and learning field in 1971 (Holec, 1981, cited in Benson, 2001), autonomy has been widely discussed in the EFL literature. As in any other field, autonomy is very important for language learners because it leads to good achievement (Diaz-Rico, 2008). Nunan (2000) and Little (2003) shed light on some characteristics of autonomous learners that include enthusiasm to learn, being active, acceptance of responsibility for their own learning, taking the initiative and being able to constantly evaluate and improve their learning strategy preferences. In the same vein, Harmer (2015) asserts that students can become autonomous learners when they are able to make decisions on their learning

strategies. One way to help students become autonomous is to provide them with technology (Benson, 2001). This claim is supported by many studies (see e.g. Muchlis, 2015; Sanprasert, 2010; Snodin, 2013). Sanprasert (2010) found in his study that a course management system, which is a part of technology, significantly fostered EFL learners' autonomy. The same result was obtained by Snodin (2013) who emphasises that through a course management system, students can autonomously achieve many tasks, such as organising learning materials, adding to the given materials, evaluating content and setting goals. There are many other empirical studies focusing on ways of fostering learners' autonomy which cannot be mentioned here because they are beyond the scope of this work. The most important factor in this researcher's point of view is that almost all studies agree on the importance of fostering learners' autonomy and this is supported by the European Language Portfolio among the objectives of which is "to promote learner autonomy" (Council of Europe, 2004, p. 3). Thus, how to foster language learners' autonomy? Benson (2001) in his book 'Teaching and Researching Autonomy in Language Learning' provides an answer to this question. He believes that learner autonomy can be nurtured if students are given the freedom to interact with learning materials and technology, if they are given the chance to evaluate and control both the learning process and curriculum, if the importance of their behavioural changes is stressed and if they are supported by teachers to foster their autonomy. Like Benson, Diaz-Rico (2008) also draws attention to the important role teachers and curricula can play in enhancing language learners' autonomy.

Current SOLE methodology includes most of the suggested ways mentioned above that help to increase autonomy in classes. For example, in a SOLE, students choose what to do and think, they are able to make decisions, are responsible for their learning, learn on their own, learn in a self-directed environment and are able to choose their preferred learning strategies. However, this assumption must be empirically explored and studied. Therefore, this study has explored SOLEs' influences on learners of EFL autonomy. Students in this researcher's project were given independent interaction in the learning environment, their input and evaluation of both the process and curriculum were considered and their decisions of learning styles and strategy preferences were taken into consideration. All these privileges given to students were scrutinized and, as a result, provided the researcher with a

fuller picture that assisted in an in-depth understanding of the influence of a SOLE on student autonomy as shown in the finding and discussion chapters.

2.5.5 *Learner motivation: definition and Importance in one's learning journey*

Motivation in the EFL literature is viewed as a core essential element that can facilitate learning in general and a new language learning in specific (Gardner, 2010; Markus and Nurius, 1986). Moskovsky et al. (2013) also assert that in the language learning field there is a lack of consensus among scholars in almost all issues except for the importance of motivation. Gardner (2010) defines motivation as the love, desire and positive attitude towards acquiring and learning a new language. According to Higgins et al. (1985), there are two factors that affect one's hopes and motivations. One is the ideal self which is considered internal motivation and refers to what one wishes to achieve and become. Another is the out-to self which is considered external and refers to the desire to meet the expectations of other people. Dörnyei (2005) believes that both are crucial for L2 (second language) learners. Several studies have revealed that students' motivation decreases as they mature (Murphy and Alexander, 2000; Lepper et al., 2005; Watt, 2008). Lepper et al. (2005) examined the relationship between intrinsic and extrinsic motivation and academic attainment. They used a sample that is ethnically different and from grade 3 to 8. Their findings revealed that there is a significant decrease in motivation as students grow up. Watt (2008) has also found that there are non-cognitive factors that affect students' motivation including the learning environment. Another factor that is pivotal in enhancing learners' motivation is the role of teachers (Guilloteaux & Dörnyei, 2008). Moskovsky et al. (2013) also reached the same conclusion in their experimental study in which they asked teachers to use some pre-identified motivational strategies for experimental groups but not for control ones. Their findings revealed very strong and compelling evidence that teachers' motivational behaviour strongly and positively affect learners' motivation. One of this research main goals was to explore the influence of SOLEs on motivation whose importance has gained consensus among scholars. Approaches similar to a SOLE in terms of encouraging collaborative learning have been found to increase students' motivation, therefore, scholars like Johnson and Johnson (1987) place emphasis on the importance of utilizing collaborative learning strategies. It is also claimed that initial

observation shows that children find SOLEs more interesting and engaging compared to traditional education (Mitra et al., 2005; Mitra et al., 2016). Therefore, this research has aimed to explore the influence of SOLEs on motivation and has achieved very interesting findings as will be shown in the findings and discussion chapters.

2.5.6 *EFL Omani Learners*

As highlighted earlier, most Omani pupils rarely use English at schools and almost never outside school. This approach to language learning in Omani schools sometimes affects students negatively in terms of adapting to the whole new English learning environment at the tertiary level where English is the medium of instruction. The sudden exposure to English at the entry level of tertiary education further adds to the problem mentioned above. They become shy, hesitant and lack confidence in using English due to their very low level of English. Al-Mahrooqi and Denman (2018, p. 3) contend that:

> *A number of studies have reported that school graduates often have limited English language abilities which negatively impact upon their success in both tertiary level English medium environments and in a national workforce that has seemingly ever-increasing demand for employee English proficiency.*

Also, Omani students complain that English-medium instruction negatively affects their adjustment in colleges and their ability to understand courses (Al-Mahrooqi et al., 2015).

Despite the time students spend on learning different English skills in *Future College*, it is observed that students face difficulties in English language that is the medium of teaching and learning. This consequently affects their ability to perform well in their studies and as a result leads to a high unnecessary withdrawal and dismissal rate every year. Having worked as an English teacher for three years and then as Assistant Dean for Student Affairs in this college, a role that manages all issues related to students from enrolment until graduation, dismissal or withdrawal, it was clear for me this researcher through counselling sessions that students decide to withdraw due to their negative attitude towards the way English is taught in the language Centre which they consider to be boring, conventional and not engaging. As an English teacher, this researcher believes that learning environments are vital

and should be improved. This research is the first trial to improve EFL learning environments in the aforementioned college.

2.5.7 *Summary*

The section above has examined some important areas linked to learners. This study has paid a great deal of attention to them due to their significance as shown above. The impact of SOLEs on students' personalities was explored because language, experience and emotions, which are central to fostering personalities, are strongly present in a SOLE. The question as to how students' personalities are influenced by SOLEs will be answered in the findings and discussion chapters. Also, the section on personal development is very relevant in SOLEs. Dialogue with others, which is the core element of a SOLE, is vital for personal development. Beside this, all the seven indicators suggested by Chickering and Reisser (1993) are able to flourish in a SOLE. Moreover, the environment in which learning takes place has a significant impact on personal development, hence the impact of a SOLE on students' personal development has been investigated in this study. Empowerment can also be claimed to be high in a SOLE because students take full responsibility for most of the session. Students choose which search engine to use and which website to explore and surf so the materials they choose are meaningful to them. They also choose the materials with which they feel themselves capable and competent to work on. Moreover, the final product is reached through a consensus of all members so everyone feels their input is taken into consideration and valued. The environment is also found to have a great impact on students' empowerment (Frymier, 1996). Can A SOLE optimise and increase empowerment? This question is also answered and discussed in detail in this study and with supportive data extracts. It is also can be claimed that learning in a SOLE is autonomous because learners choose what to do and think; they are given most of the session time to work by themselves with freedom to answer the given question the way they like. They are given the freedom to surf and explore the web, to work in any group and to move around to share their findings and to check others' findings. This assumption and its various dimensions are examined and presented in the discussion chapter. Motivation is found to decline as students grow up (Murphy & Alexander, 2000; Lepper et al., 2005; Watt, 2008). A SOLE by virtue of its nature can increase autonomy of involvement and consequently can keep

motivation high even when students grow up. Having said that, this assumption should be based on rigorous studies. Furthermore, advocates of a SOLE should rethink the role of the teacher as it is found to be vital in motivating students (Guilloteaux & Dörnyei, 2008). Therefore, in order to confirm that a SOLE is able to boost motivation, this study has paid a considerable amount of attention to this issue as will be shown in the discussion chapter. Regarding learners' attributes, a SOLE seems to have the qualities to help desirable attributes to flourish, however this needs to be confirmed via empirical studies. All the above-mentioned points are still assumptions at this point and this study has conducted in-depth research in order to either confirm or reject them as shown in the discussion chapter.

2.6 Chapter overview

This research contributes a significant piece of work as it tries to understand the SOLE wider context which includes EFL, learning environment design and learners. After understanding the contribution of SOLEs to these overlapping concepts and vice versa, a new SOLE toolkit was generated. The literature review of this study forms the theoretical and conceptual framework of this study. This theoretical and conceptual framework consists of various research fields that are interrelated as they are all present in learning environments. It started by explaining SOLE theory and research conducted to date on this relatively new approach. It also covers important EFL theories and issues. Also, EFL in the Omani context forms an important part of this framework as it is the context of this study. Then, it discusses areas related to learners like students' personalities, personal development, empowerment, learning career, autonomy and motivation. This framework is massive and includes many areas in order to obtain a full image of the studied phenomenon and to try to understand it from different aspects. As it is a PAR, many areas were explored in depth and some of these emerged while conducting the research, however both types fed and greatly contributed to building this theoretical and conceptual framework. This researcher delved deeper via semi-structured interviews, focus groups, series of diaries and field notes to obtain the full image that provides a full understanding of SOLEs in relation of the above fields. The following chapter will detail the methodology adopted for this study. It will provide details and justifications for the research design, methods, analysis of data and the conduct of research.

Chapter 3. Research Methodology

3.1 Chapter Overview

This methodology chapter is divided into fifteen sections, which cover the following main areas:

3.2 Guiding objectives and questions

This study was designed to explore the impact of an intervention of a new SOLE-based EFL environment and to examine students' behaviours, views, perceptions, emotions and reactions towards this, and in addition, to investigate the researcher's evaluation of the whole process. The research took place in *Future College* which is located in the north east of Oman and targeted EFL learners of English in the foundation program. The research questions proposed related to a wide gamut of aspects pertaining to their implementation and usage of SOLEs from the perspective of students and the researcher. The study intended to address the following questions-

This study aims to answer the following primary research question:

- How does embedding a SOLE in an EFL centre function in terms of improving students' experience of learning a foreign language?

3.3 Research design/ Participatory Action Research (PAR) case study

3.3.1 *Research design in practice*

The motivation that has driven this research is the high rate of withdrawal and dismissal cases in the researcher's own context and an incident that will be mentioned below. Several hundreds of the college students where the researcher works are dismissed or withdraw every academic semester, especially those newcomers who are still in the foundation year. It is also worth mentioning that the dismissal rate is much higher than the withdrawal one. For example, one semester prior to the conduct of this research, 159 students were dismissed; 146 students out of 159 were dismissed because of failing the English foundation year and the other 13 because of low attendance. This situation is not paid the attention that should be paid to such a significant educational issue, and one that is life-changing for those students whom it affects. Working as an English teacher and then as Assistant Dean for Student Affairs in the same college has made this researcher more aware about this issue, especially as he was among those who sign students' clearance forms when they leave the college. This made him wish to investigate the reasons for the high dismissal rates. Therefore, the counselling department staff and this researcher consulted with students with poor academic performance in the foundation year to gain feedback from them.

The incident below also represents why this researcher love to work in this area, it was when a graduate student at the graduation ceremony came to shake hands with him and said, 'without your support, I would not have been here today'. Then the student continued by saying that 'I was dismissed from the college and I came to your office and you asked me to write an appeal, then you have kindly presented and discussed my case with the college council which has agreed to reduce my punishment. Now I am an engineer working for a very good company, without your support I could have been at home asking my father for money'. This particular incident encouraged the researcher to think, search and enquire about the mentioned problem in order to help to retain as many students as possible. The researcher found that English acts as an impediment that stops students from continuing their education, especially as they spend twelve years at school learning in Arabic which is the medium of instruction. English is taught in Omani schools as a subject only and

usually not used by students outside school. After delving deeper, as is highlighted in the research strategy and detailed description of the research conduct section below, it emerged that many students complained about the way they are taught English and about the nature of the existing learning environments. This motivated the researcher to carry out robust research on EFL learning environments which are deeply explored in the theoretical framework of this research.

'Learning environment refers to the social, physical, psychological and pedagogical contexts in which learning occurs and which affect student achievement and attitudes' (Fraser, 1989, p. 3). Another definition by JCALT (2001, cited in Zitter et al., 2011, p.372) states that learning environments are:

> *(1) the physical setting in which a learner or community of learners carry out their work, including all the tools, documents and other artefacts to be found in that setting and (2) the physical setting but also the social/cultural setting for such work.*

The importance of learning environments where the teaching and learning take place cannot be ignored, they are found to have a vital impact on students (e.g. Chickering and Reisser, 1993; Peter & Armstrong, 1998, cited in Treff and Earnest, 2016). Higgins et al. (2005) confirm that this profound understanding of the impact of learning environments on both the learning process and learners' wellbeing encourages educators to rethink the design of learning environments. Therefore:

> *Learning environments have to be designed in such a way that they lead to the intended learning activities. The main goal of these activities is to lead to the intended learning outcomes, which we defined as transferable knowledge oriented learning outcomes and the learning-, thinking-, collaboration- and regulation-skills that can be applied to such transferable knowledge and the process of learning* (Simons et al., 2000, cited in Zitter et al., 2011, p. 373).

Consequently, the research design of this study covers the learning environments from several different aspects in order to produce SOLE design for Omani students.

One important quality of any learning environment is that it should keep stress to its minimum level. In terms of EFL learning environments, some scholars contend that some EFL learners find EFL environments stressful (see e.g. Horwitz et al., 1986; Pappamihiel, 2002). Stress can be an impediment to language learning especially as it can remain with students throughout their learning journey. Hence, unthreatening, friendly environments are preferable as they increase interaction and decrease the stress (Tanveer, 2007; Scrivener, 1994). This is very relevant to the situation where

this research took place; students were very stressed due to their very low level of English as is discussed in the detailed steps section. Subsequently, this research is the first in its context to trial an intervention in order to reduce stress and produce an environment that students like and enjoy. When designing this study, there were essential methodological thoughts and considerations to study this particular element. Therefore, it was decided during the design of this study to use SOLEs as an intervention because it is believed that SOLEs are friendly and non-threatening environments (Mitra et al., 2005).

Appropriate and powerful learning environments also contribute in fostering and improving students' personal development (Chickering and Reisser, 1993), confidence, engagement, interpersonal skills and critical thinking (Arendale and Hane, 2014), empowerment (Novak, 2002), motivation (Watt, 2008) and autonomy (Benson & Voller, 1997). Fandiño (2013) believes that today's EFL learning environments have to be different from those of the past and pay major attention to skills that are needed for life. These lifelong skills include four major categories that are suitable for the 21st century which are 'digital-age literacy, inventive thinking, effective communication and high productivity' (Lemke, 2003, cited in Fandiño, 2013, p. 194). Ning (2013) also argues that some types of learning environments (cooperative) are superior to others (conventional) in fostering students' social skills. These cooperative learning environments are available in SOLEs, which are the intervention of this study. All these areas and some more have received much attention from the researcher during the design process of this study. When searching very complex and massive topics like learning environments, a researcher has to keep in mind and cover as many related areas as possible that are part of the researched topic. Therefore, the researcher of this work tried to cover all important areas linked to learning environments when designing this study. A thorough reading of the literature helped to devise a massive conceptual framework that guided this study and highlights what a learning environment has to offer to students and which areas require improvement.

Classroom environments also have a major impact on student empowerment (Frymier et al., 1996). Some types of learning environments are more effectual than others in terms of students' empowerment as suggested by Novak (2002), as collaborative learning environments empower students more than other environments because they help students to overcome frustration and feel that their

progress is personalised to them. Also, environments with computer networks are found to positively impact English language learners' empowerment when used appropriately (Warschauer et al., 1996). Empowering learners is very important because it leads to motivation (Houser & Frymier, 2009), it leads to better learning and accomplishment of learning objectives (Frymier et al., 1996) and leads to an increase in the educative and cultural experiences of students (Brunton & Jeffrey., 2014). Mok (1997) also believes that empowered students work harder than disempowered ones. Being aware of the importance of empowerment, especially to language learners, the research design chosen for this study is PAR that can examine the impact of the intervention on students' empowerment.

After focused and thorough reading on different learning environments, it became apparent that Self- Organised Learning Environments have many qualities that can help solve the problem that guided this research, especially as SOLEs have been implemented and praised by teachers in many schools in different countries including Argentina, Chile, England, India, Italy, the US, Uruguay and many others (Mitra et al., 2005). Therefore, this study is designed to explore SOLEs as a new learning environment introduced in *Future College*. The reason for choosing SOLEs is that the researcher believes that SOLEs have some qualities and potential that can make them a good English as a foreign language-learning environment. Some studies (see e.g. Mitra and Dangwal, 2010; Mitra, 2009; Mitra and Crawley 2014; Mitra and Quiroga, 2012; Donal et al., 2013) claim to show that in a SOLE, students English is improved, their confidence increases, and they retain knowledge longer.

Weisblat and McClellan (2017, p.310) also believe that 'the Self-Organized Learning Environment (SOLE) offers a promising pathway through which to engage 21st-century learners'.

In SOLEs, students talking time is very high and they work in groups. SOLEs are also learner-centred and the Internet, as one form of technology, is a core element of SOLEs. Therefore, the researcher used SOLEs as an intervention aimed at exploring the nature of a SOLE within a foreign language centre and investigating whether SOLE pedagogy is able to facilitate a functional English language-learning environment for Omani students.

However, to date, there has been no particular curriculum followed in SOLEs but instead current curricula used in any institution can be used to generate big

questions which are used in SOLE sessions. Also, the teacher's role is minimal in SOLEs. Furthermore, there are very few rules for students to follow in SOLEs and they are left unsupervised for most of the time. Classroom environments have been found to have a vital impact on students' engagement and consequently on their behaviour (Sullivan et al., 2014). Therefore, big questions, teachers' roles, students' behaviour and attributes are among the elements to which this study has paid attention during the design stage.

All the above discussion shows, the critical importance of EFL learning environments in the learning process and their great impact on students' personalities and learning, therefore, this research adds to the knowledge pool by exploring and understanding the construction of a learning environment that suits Omani EFL learners. This section has emphasised that English language learning environments are very complex and vital as they not only impact students' language learning but also their personalities, behaviour, personal development and other aspects. Therefore, a deep understanding of EFL learning environments will help construct the best EFL learning environments that positively impact students' language learning and their desirable attributes. In order to reach such a goal, students should be involved in improving learning environments (Simmons et al., 2015). It is very important to listen to students' view points as they are the people who can provide feedback on their emotions, thoughts and attitudes towards the learning environments that are being researched (Henderson et al. (2012). Flutter (2006) emphasises that involving students in any change related to learning environments leads to desirable and good quality changes. Not only that but involving them also gives them an opportunity to make their voice and opinions on issues related to their education heard (Frost and Holden, 2008). Mäkelä et al. (2018 p.20) contend that 'Student participation in design and change processes is expected to positively influence both student learning processes and their wellbeing'. This was one of many reasons behind choosing PAR as a research design for this study. PAR gives participants room to contribute with the researcher in evaluating the intervention and suggesting changes as is clarified in the following section.

3.3.2 *Introducing Participatory Action Research*

Action research was 'originally coined by American psychologist Kurt Lewin in the 1940s, the term Action Research broadly refers to an applied form of social research that overtly aims at improving the social situation under study while simultaneously generating knowledge about it' (Gilbert, 2008, p.103). Lewin contends that action research does not merely generate information but more importantly it is used to assess an intervention (Gilbert, 2008). Another definition coined by Kemmis (1981, cited in Tripp, 2005) is that action research is 'identification of strategies of planned action which are implemented, and then systematically submitted to observation, reflection and change'. A later definition by Elliot (1991, p. 69) is 'the study of a social situation with a view to improving the quality of action within it'. Tripp (2005, p. 446) prefers to define action research as 'a form of action inquiry that employs recognised research techniques to inform the action taken to improve practice'. Action research is widely used in education in order to improve unsatisfactory practices (Lesha, 2014). It is a cyclical process in which an intervention is tried out and then evaluated. After evaluation, it is re-implemented again and re-evaluated again as well. This process should be repeated until obtaining the desired improvement and change. Action research follows a cycle that is followed in any basic action inquiry in which 'one plans, implements, describes, and evaluates an improving change to one's practice' (Tripp, 2005, p. 444), as shown in Figure 5 below:

figure 5. Representation of basic action inquiry cycle

Act to
implement the

Monitor and
describe the
effects of the

Evaluate the
outcomes of
the action

Plan an
improvement to
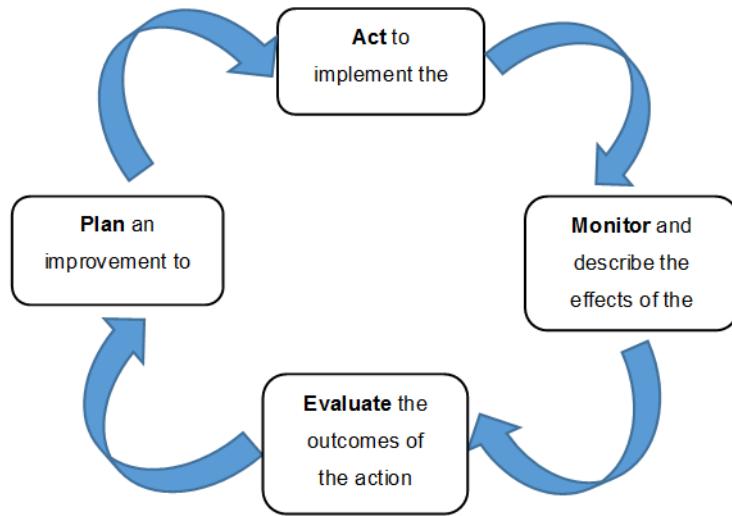
Source: extracted from Tripp (2005).

Action research differs from other forms of action inquiry because 'action research, as a form of action inquiry, is an ongoing, repetitive process in which what is achieved in each cycle provides the starting point for further improvement in the next' (Tripp, 2005, p. 452). The table below represents the exact detailed steps conducted in action research after doing the reconnaissance.

table 2. Representation of action research cycle

	Action Taken in the Field of	
Action sequence	Practice	Inquiry
Planning of	A change to practice	The evaluation of results of the change to practice
Implementation of	The change to practice	Data production, analysis and reporting
Evaluation Of		A) The change to practice and; B) The action inquiry process

Source: extracted from Tripp (2005).

This researcher decided to adopt the action research design for its merits and because it is the most powerful and suitable design for the ideas and questions in this research. One reason for adopting the action research design is that this researcher aimed to bring about a change in his own context, as Swinglehurst et al. (2008), for example, emphasise, action research is a very strong design when the researcher aims at both generating knowledge and making improvements to current practices. Rawlinson and Little (2004, cited in Lesha, 2014, p. 381) express the same idea as they state that 'Within the action research process, educators study student learning related to their own teaching. It is a process that allows educators to learn about their own instructional practices and to continue to monitor improved student learning'. This is in accordance with this researcher's aim which is to make the research both informative and educative. Educative in the sense that it will lead to a change and informative in that it will generate new knowledge that will be disseminated to interested ones as asserted by Tripp (2005) when he states that knowledge generated by action research is usually shared with people interested in the same field. Also, it is believed that practitioners work best when improving practices in their own settings and 'on problems they have identified for themselves' (Ferrance, 2000) which is typical for this research because it was conducted in the researcher's own context and in a problem that was identified by him as a practitioner

and a scholar, and critically also by other colleagues. In the same vein, Guskey (2000, cited in Lesha, 2014, p. 381) emphasise that:

> *The idea of action research is that educational problems and issues are best identified and investigated where the action is at the classroom and school level. By integrating research into these settings and engaging those who work at this level in research activities, findings can be applied immediately and problems solved more quickly.*

This researcher also believes that conducting action research is very powerful because 'the consequences of our own teaching is more likely to change and improve our practices than is reading about what someone else has discovered of his teaching' (Corey, 1953, p. 70, cited in Ferrance, 2000).

Furthermore, action research allows researchers to act while researching by the use of interventions, which in this study were SOLEs. Another useful feature of action research which was crucial in this research is that action research is an ongoing process in which a researcher can conduct more than one cycle within the same research (Tripp, 2005). This is what this researcher has done; two cycles were conducted, in the first one the intervention was implemented as it was and in cycle two it was implemented with some crucial changes informed by the findings from cycle one. This feature of action research provided the necessary room to make changes to the SOLEs in order to produce the final suitable model because action research is able 'to provide valid, reliable, and systematic protocols for classroom inquiry' (Hong & Lawrence, 2011, p. 2). Another advantage of utilizing action research is that it is both participatory and collaborative (Tripp, 2005) which means that the thinking, reflection, decisions and planning are all collective. In this study, the results of analysis were achieved after the analysis of collective views, reflections and evaluations by both this researcher and participants.

It is worth highlighting that reflection is a very important feature of action research (Mills, 2003). The same fact is stressed by Tripp (2005) as he emphasises that reflection is included in all stages of an action research cycle which are reconnaissance, planning, implementing and evaluation. Reflection is important as it helps both the researcher and the participants to always reflect on their practices and then suggest areas for improvement. In this particular study, reflection took place throughout the whole study. This researcher reflected not only on all events that occurred during the research, but also on participants and their views. This

researcher has reflected on all the different stages throughout the research. Participants have also reflected on their experience during interviews, focus group interviews and most importantly in their diaries. Reflection was found to be a useful element that helped to produce the desirable changes in cycle two and to design the final model of SOLEs.

Participatory action research is one type of action research (PAR). PAR focuses more on the participation of research participants or sample (Whyte, 1991, cited in Gilbert, 2008). As in this research, PAR 'is conceived and driven by those experiencing the unsatisfactory situation' (Gilbert, 2008, p. 105). PAR was adopted as it enables researchers to not only try out an intervention but also to improve it with the help of participants, which was essential in this research.

According to Gilbert (2008, pp. 105-106):

'*PAR has three main elements: people, power, and praxis:*

People: the participatory nature of PAR is its fundamental characteristic. PAR differs from other forms of research because lay people are not just involved in the research, but actively inform and direct it. Research is conducted not only for but also by the participants. In this way, PAR is people-centred. Often employed when researching sensitive topics and when the population involved is marginalised or disadvantaged, the focus is clearly on action with the goal of achieving discernible and effective changes in policy, practice or both to the benefit of the population involved.

Power: A factor underlying the interest in increasing participation in social research is an acknowledgement of and reaction against the imbalance of power between the researcher and the researched in much conventional research. Proponents of PAR challenge such hierarchical power relationship, seeking to empower research participants through the process of undertaking the research. They do not see research participants as research 'subjects', as doing so objectifies and further marginalises them, but as equal partners in the process.

Praxis: Praxis is the transformation of academic or purely theoretical knowledge into applied practice. One focus of PAR, therefore, is on praxis, recognising that theory and practice in research are both inseparable and iterative. Many PAR projects are explicitly informed by a political stance and set of values that aim to assert the rights and improve the social circumstances of disenfranchised or marginalised groups'.

Regarding the first element which is people, students, in the context of this study, who are marginalised by authorities in making decisions about learning in general and about learning facilities and environments in specific, were a main part of this research. The research was conducted both for and by them, with the support of the

researcher. They were fully involved through semi-structured interviews, diaries and focus groups to freely express their views about SOLEs. Those views, besides the researcher's own evaluation, reflection, field notes and analysis, form the basis for making fruitful changes in cycle two of the SOLEs.

Regarding the second element, which is power, participants in this research felt empowered because they believed that their views and daily experiences were taken into consideration for future changes, which occurred in cycle two of the SOLEs. Unlike other research designs, PAR allows participants not only to participate but also to see the improvements during the research itself which undoubtedly makes them feel heard and valued. This is one strength of PAR as the researcher of this study felt that throughout the whole process the participants were open and engaged in terms of reflecting and expressing their views and emotions due to the power they felt they owned.

Regarding the third element that is praxis, the researcher was able to place all theories about SOLEs under scrutiny. Not only that, other theories and conceptual areas, especially those related to language learning and learning environments were closely investigated. This enabled the researcher to apply his theoretical knowledge in practice.

3.3.3 *SOLEs: PAR in action*

This study is designed to explore SOLEs as an intervention to English as a foreign language centre. The decision to conduct this research was due to a practical necessity in the researcher's own context. The researcher who worked both as an English teacher and Assistant Dean for Student Affairs found that English learners do not like the way English is taught, they consider it to be conventional and it makes them passive learners. They believe this because learning happens in one direction that is from teachers to students which means that teachers' talking time is high and students' talking time is low. This also means that the pedagogy is teacher-centred which restricts students from being active. Another reason that makes students dislike the current environment is that technology is rarely used and when used not in their own classes but in computer labs which they rarely visit. This lack of interest in

the current English class environment leads to high rates of both withdrawal and dismissal.

After a thorough analysis of SOLEs, it became obvious that SOLEs may in theory help to resolve the lack of interest expressed by EFL learners at *Future College* it also became obvious that SOLEs might be able to be adopted within this context, and put to test the claims that had been made for its successful incorporation. The researcher believes that the SOLE has some qualities and potential that can make it a very good English as a foreign language learning environment. This is confirmed by some studies, as mentioned earlier, (see e.g. Mitra and Dangwal, 2010; Mitra, 2009; Mitra and Crawley 2014; Mitra and Quiroga, 2012; Donal et al., 2013) which claim to demonstrate that in SOLEs, students:

- Gain confidence
- Become capable of dealing with big challenging questions
- Learn things ahead of their age
- Retain knowledge longer
- Enjoy learning together, and individually
- Improve their computer and English language skills

Furthermore, in a SOLE, students talking time is very high because the SOLE, as stated by Weisblat and McClellan (2017, p. 310), 'transforms the classroom into a student-centred learning adventure that is meant to last a lifetime'. Moreover, the Internet, as one form of technology, is a core element of SOLEs, as emphasised by Weisblat and McClellan, (2017, p. 310), the 'SOLE is a simple approach that effectively uses technology in the classroom to provide scholastic equity to all children. Moreover, learners experiencing SOLEs are believed to be active and engaged in their learning journey because 'SOLE sessions are characterized by discovery, sharing, spontaneity, and limited teacher intervention' (ibid, p. 310).

Therefore, this researcher used SOLEs as an intervention aimed at exploring the nature of learning within a foreign language centre and investigating whether SOLE pedagogy is able to facilitate an efficacious English language-learning environment for Omani students. In order to achieve these goals and to make necessary changes to current SOLEs that suit Omani students, a participatory action research design was adopted. The reason for choosing PAR is that it allows researchers to not only

try out an intervention but also to make improvements and changes to it. As mentioned in the previous section, PAR is a cyclical process that includes four main steps which are reconnaissance, planning, implementation and evaluation. In this research after the reconnaissance stage, it became obvious that a new EFL learning environment had to be introduced to *Future College*. A SOLE was chosen for its merits and qualities as mentioned earlier. Due to the time limit, it was decided to conduct two cycles of PAR. Cycle one, which lasted for 10 weeks, was meant to explore the SOLE exactly as it was in order to find out its strengths and also in order to ascertain areas of improvement. Cycle two, which lasted for six weeks, was meant to trial improvements suggested by cycle one. Below is a description of both cycles (please note that more details are added in the section entitled "Research strategy and detailed description of the research conduct".

Cycle one started directly after the reconnaissance stage by setting up a SOLE centre in the college. This SOLE centre included six round tables, six computers, twenty-two chairs, a white board and large sheets of paper. After that, this researcher conducted two sessions a week using SOLE pedagogy. Each session started by raising a big question that was generated from the students' syllabus. The big question was introduced and clarified for five minutes and then students were asked to search for answers for approximately forty minutes. During the students' search, the researcher left them unsupervised. At the end of each session, students were asked to present their findings for the rest of the session time, the teacher also commented after students gave their answers. As a main part of PAR, this intervention was examined through cycle one using four research tools which were the researcher's field notes, students' diaries (these two methods were conducted during and after each session), semi-structured interviews with all participants and focus groups (these two methods were conducted at the end of cycle one). The data generated by the first two tools were analysed immediately after each session and the data generated by the other two methods were analysed right after getting them ready. The analysis of the data clearly shows the strengths and weaknesses of SOLEs. The strengths were retained and the weaknesses or areas for improvement were worked out and necessary changes were made to them. The necessary changes were made after obtaining a collective decision by the researcher and participants through the data they provided in all different research methods. These necessary changes included the role of the teacher, the role of the curriculum/big

questions, students' behaviour and other areas. These changes were introduced in cycle two in order to improve the intervention that is the SOLE, this is one significant strength and merit of PAR.

figure 6. Representation of Cycle One.

| Setting up a SOLE centre | Conducting two sessions a week using SOLE | Evaluation of the whole process using data generated by research tools | Suggesting changes for Cycle Two |

Reflection
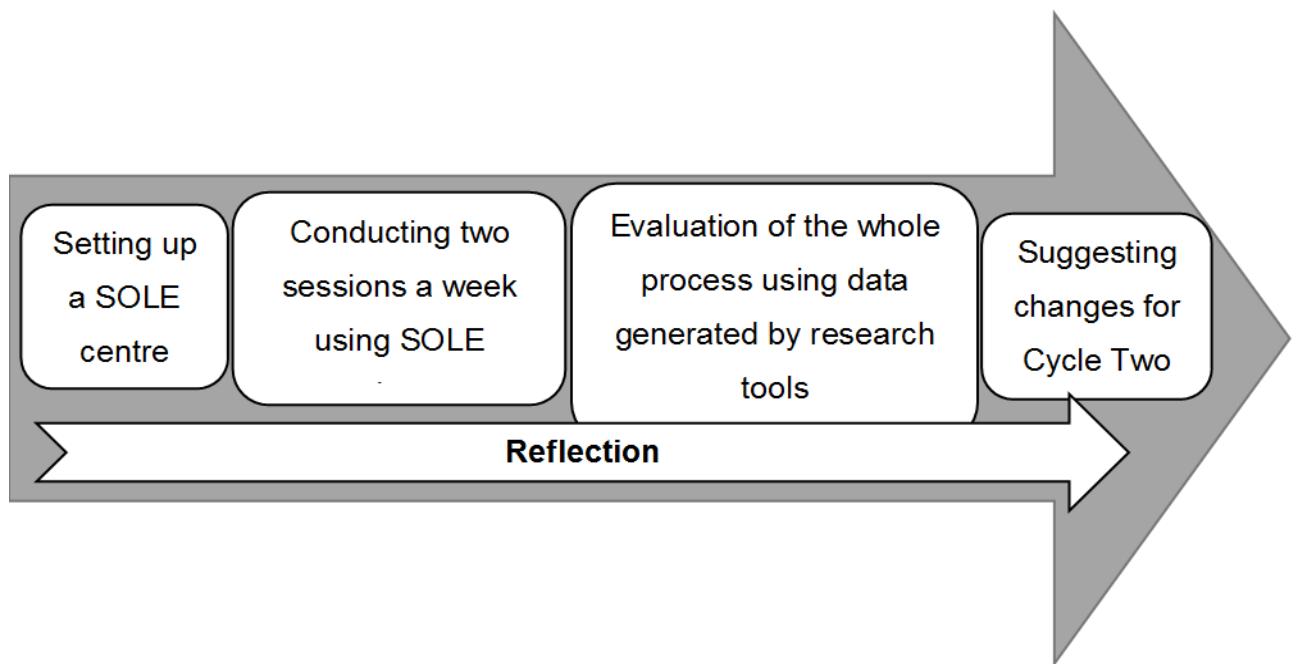
Cycle two started one month after the end of cycle one. This one month gap was used by this researcher for accurate analysis of the data collected in cycle one. It was also used to prepare and plan for cycle two which was the first step of the PAR second cycle. As in cycle one, the researcher conducted two sessions a week in cycle two in the implementation stage of PAR. The improvements made to SOLEs in the second cycle were that the teacher took on more roles such as guiding students, he was available all time so students could ask for help when needed, he visited all groups to offer clarification and support, he also selected whom to answer the given questions, and other roles. Another improvement made is student grouping where students were asked by the teacher to change groups when needed. The teacher also tried out to encourage desirable and overcome undesirable behaviour. The rationale behind this change is explained in the findings chapter. Another change was made related to the role of the curriculum/big questions: besides asking one big question, the teacher asked more than one question with specific answers and limited time in some session. Again, the rationale behind this change is explained in the findings chapter. After the implementation stage and in order to confirm that

improvements made to the intervention were good, continuous reflection was conducted by the researcher on his field notes, continuous reflection was conducted by participants in their diaries and semi-structured interviews were conducted with many of the participants. The analysis of data generated in cycle two shows that improvements made to the intervention were good and suitable for the students' level of English, behaviour and culture.

figure 7. Representation of cycle two.

Conducting two sessions a week using SOLE after changes

Evaluation of the whole process using data generated by research tools

Theorizing a model for effective SOLE adoption for Future College context.

Reflection
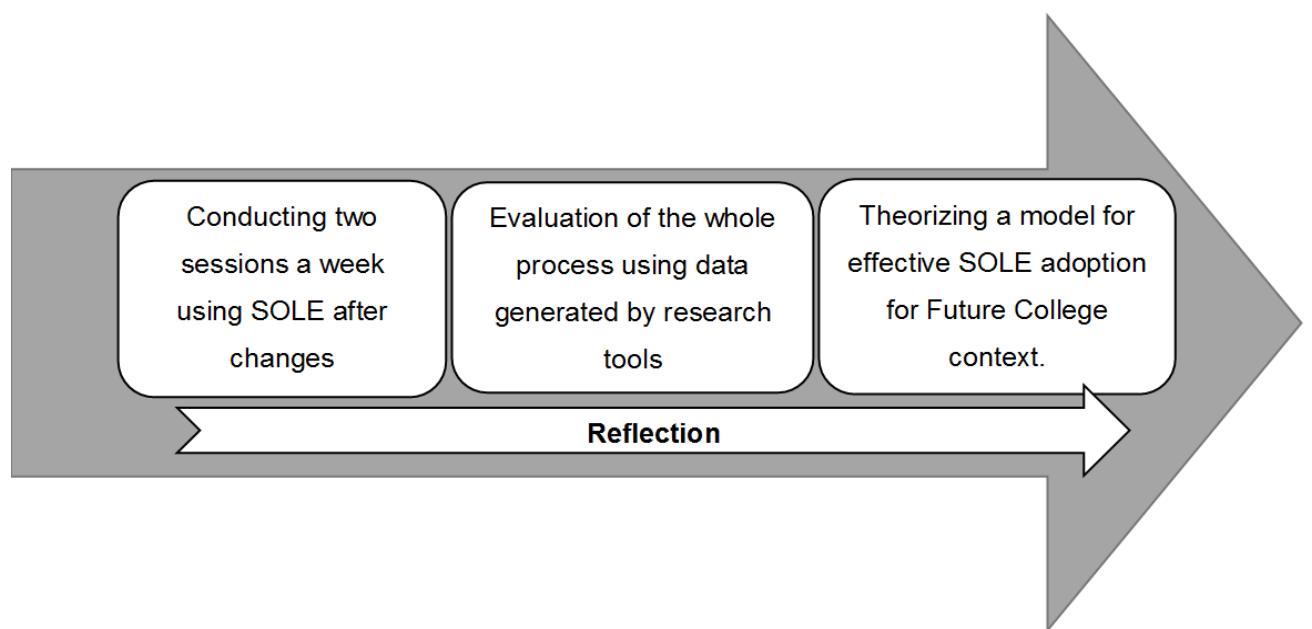
table 3. Participant involvement during different stages of the research

Action	Implication
Reconnaissance	The researcher, staff and some of the college students were involved
Deciding the intervention	The researcher decided the intervention after obtaining feedback from staff and students during the Reconnaissance stage
Implementing the intervention	Participants were involved
Evaluating the intervention	Participants were involved
Deciding the changes	Participants were involved
Implementing the intervention after improvement	Participants were involved
Evaluating the intervention after improvement	Participants were involved

3.4 Research position and the researcher's role and beliefs

This researcher had not planned to examine students' behaviour as a variable in its own right, nor was he planning to measure their academic attainment. He was more concerned and interested in understanding their behaviour, views, perceptions, emotions, attitudes and reactions towards the whole new experience in a SOLE. Therefore, this researcher adopted the stance of interpretivists and his task was to 'gain access to people's 'common-sense thinking' and hence to interpret their actions and their social world from their point of view' (Bryman, 2008, p. 16) which is believed to help researchers achieve 'surprising findings' (Bryman, 2008, p. 17). In order to understand the researched topic and gain the targeted knowledge, the researcher adopted the constructivist ontological position. This is because this researcher

believes that in order to achieve the reality in such research it has to be constructed and reconstructed by the researcher and other actors.

Working as a practising college lecturer, a former school teacher and assistant dean for student affairs who was always close to students for approximately ten years, this researcher has come to believe that improvement of learning environments to an extent that positively affects students' emotions and attitude towards learning can help in the retention of students and improve the ranking and level of education in any organisation. Working as assistant dean for student affairs for four years has made me aware of some ignored issues that have not received the required attention. One major issue is the dismissal and withdrawal rate which is very high in the college that this researcher works for. For example, one semester before the conduct of this research 159 students were dismissed, 146 out of 159 were dismissed because of failing the English foundation year. Therefore, the researcher actively did not want to be neutral – had had agency in relation to the problem ans as such, he wanted to help to achieve the desired change that could help the remaining students not to face the same fate, as encouraged by Maksimović (2012).

There are two types of research: one that aims at generating knowledge (Hammersely, 2003) and another that aims at bringing about a change or improvement to current practices (Carr 2007; Wilson and Wilson, 1998). After thorough and continuous reading, the researcher decided to work on learning environments and to conduct participatory action research which is believed to be an effective design that can improve current practices in any educational organisation (Maksimović, 2012). At that time, he felt confident and envisioned that this research could contribute to the improvement of current practice at *Future College* and would increase student retention. Such qualities are very important in any action research researcher (Postholm, and Skrøvset, 2013). He was an insider to the college and his role was emic as he was an insider who was a main part and participant of the research (Punch, 2013). However, he was a stranger to the participants, and they were for him because when he worked there before his study leave, they were not students in the college.

Being an insider means 'conducting research with communities or identity groups of which one is a member' (Kanuha, 2000, p. 440). Being an insider makes the researcher more aware of the culture, makes selection of participants easier, makes

establishment of rapport quicker (Taylor, 2011). Furthermore, 'being an insider researcher enhances the depth and breadth of understanding a population that may not be accessible to a non-native scientist' (Kanuha, 2000, p. 444). Another advantage of being an insider is that the group accepts the researcher because they feel that he is one of them so they might reveal information and feelings that they might not do to an outsider (Dwyer and Buckle, 2009). However, it is believed that being an insider can influence research (Hockey, 1993 cited in Hanson, 2013), thus it can affect the quality of the research (Taylor, 2011). Therefore, this researcher took into consideration the advice that insider researchers are advised to assume: that they do not know anything about the researched subject, they should just gather data carefully and with full concentration (Asselin, 2003, cited in Dwyer and Buckle, 2009). Also, in the case of this study, he was a stranger to the participants as mentioned above and the SOLE approach was new to the context which reduced insider research concerns. He had also left the college for more than two years before the conduct of this research and stopped teaching for almost six years before this research due to his administrative post; this helped him not to experience the conflict reported by some insider researchers of being researchers and academics in the same institution (Handson, 2013).

Having read the literature, the studies on SOLEs are so few and so unsupported in rigorous research that this researcher had doubts about their efficacy, their conceptual rigour and thus replicability. As a result, the researcher had to be immensely vigilant to minimise bias so that he could present a rigorous and transparent study.

3.5 Setting of the research

The purpose of the study is to solve an existing dilemma in this researcher's own context. The aim of the research is to improve EFL learning environments in the researcher's college through the use of an intervention that was believed to serve this purpose. Therefore, this research had to be done in the researcher's own context because the intervention had to be evaluated and improved within the college where the dilemma exists and by the researcher and students from the same college. The English language centre was chosen as the setting of this research because it is the place where students learn English intensively. In the next section, the college

context is outlined. A brief description about the history of the college is also given, its departments, its vision and mission, staff and students.

The college in this study

Future College in the Sultanate of Oman is part of the higher education system that prepares students to graduate at different levels such as diploma, advanced diploma and bachelor's degree. This college was initially a vocational training centre and in 1984 it was changed to a technical industrial college. Later in 2001, its name was changed and the number of students enrolled increased dramatically from approximately one hundred at the beginning to more than four thousand in the year when this research was conducted. It is also worth noting that the medium of instruction was Arabic until 1996: in 1996, this changed to English when a new British system called ''GNVQs'' was introduced.

Future College is located in the north east of Oman and consists of two centres and three academic departments. The two centres are the Educational Technology Centre and the English Language Centre. The three departments are the IT Department, Engineering Department and Business Studies Department. There are 54 lecturers including the administrators in the IT Department, 97 lecturers and technicians in the Engineering Department including administrators and 32 lecturers including the administrators in the Business Studies Department. These three departments run three degrees which are diploma, advanced diploma and bachelor's degree and there are two pre-requisites for students to move from one degree level to another which are the overall grade and IELTS score which should not be less than 4.0 to join the advanced diploma and not less than 4.5 to join the bachelor's degree. There is also the English Language Centre which offers extensive English courses at four different levels which are level one (low ability students), level two, level three and level four (high ability students). Level one is for beginners and level four is considered to be advanced. There are 90 English lecturers in the centre including the administrators and myself. In total, there are 292 academic staff and 94 non-academic staff in the college. The number of students enrolled in the academic year 2017/2018 when this research was conducted was 4263.

3.6 The participants in this research and the process of selection (sampling)

The aim of this research is to bring about a change and to generate new knowledge that is true and beneficial for the whole targeted population. Therefore, this researcher was very careful and aware that the suitable sampling procedure should be chosen to select the final sample because 'since we can rarely test the defined population, our only hope of making any generalization from the sample is if the latter is a replica of that population reflecting accurately the proportion or relative frequency of relevant characteristics in the defined population' (Burns, 2000, p. 83). After a thorough reading on sampling procedures as in Bryman (2008), it was clear that random sampling is a good one that represents the whole population, but it is not suitable for this research because a group and not individuals from different groups was required because if the final sample was from different groups with different timetables, it would be difficult to find a time that suits all of them. Also, if participants are chosen randomly, they might be from different levels with different English levels which would negatively affect the research. Unlike cluster sampling, random sampling is normally applied to select individuals from the whole population and not a group or a cluster (Burns, 2000). Therefore, the decision was to conduct multistage cluster sampling which includes random sampling as one procedure within it. Multistage cluster sampling is good when there are clusters in the population as in the case of this research. Cluster sampling is 'sampling of entire natural groups rather than individuals' (ibid, p. 90). There is a cluster that includes levels one to four and a cluster that includes groups of approximately twelve at each level. The target was to select one group from the whole population which is groups in Language Centre so multistage sampling is the suitable sampling for this research as one of its qualities is that it 'allows interviewers to be far more geographically concentrated than would be the case if a simple random or stratified sample were selected' (Bryman, 2004, p. 94). The research sample was recruited from the English foundation year (year one), male and female students aged 17-18 in the English Language Centre at the college. The sample was randomly recruited using multistage cluster sampling. At the beginning, one level was randomly chosen from the four available levels in the foundation program which are level one (low ability students), level two, level three and level four (high ability students) using simple random sampling (SRS), with all levels having the same chance to be selected. The researcher wrote each level on a slip of paper and then put them in a container as

advised by Burns (2000). Then, these were mixed up and one was drawn. The selected level was level four. Then, one group was randomly chosen from level four using SRS with all groups having the same chance to be selected. The researcher wrote all groups on a different slip of paper, they were mixed up and one was drawn. The drawn group was group one in level four that included 22 students. The sample consisted of 12 male students and 10 female students. The whole procedure is shown in Figure 8. Thus, the sample recruited is considered a probability sample which is believed to be representative of the whole population which is in this study consists of students in the Language Centre where this study took place (Bryman, 2008). The sample is relatively small but believed to be representative of the whole population 'size is less important than representativeness' (Burns, 2000, p. 83). It is also relatively small because the researcher believes that in such exploratory research, a small sample is desirable to delve deeper and to obtain a fuller image of the researched topic as confirmed by Crouch and McKenzie (2006, p. 491) 'exploratory … studies for which it is not only reasonable to have a relatively small number of respondents but may even be positively advantageous'. It is worth highlighting that the population in this study is students in foundation year program at Language Centre in the Future College only and not EFL students in the whole country. Hence, all groups in the four clusters had the same chance to be selected, the group that was randomly selected from the Language Centre was believed to represent other groups in the centre. It is also worth noting that participation in this study did not negatively affect participants' academic study. Also, participants were provided with a participant information sheet, informed consent form and a summary of the nature and objectives of the study.

figure 8. Steps of selecting the final sample

English Language Centre

Divided
into

Level one   Level two   Level three
Level four

Simple random
sampling

Level Four was selected

Divided
into

Group 1; Group 2; Group 3;
Group 4; Group 5; Group 6;
Group 7; Group 8; Group 9;
Group 10; Group 11; Group 12

Simple random
sampling

Group One
was selected
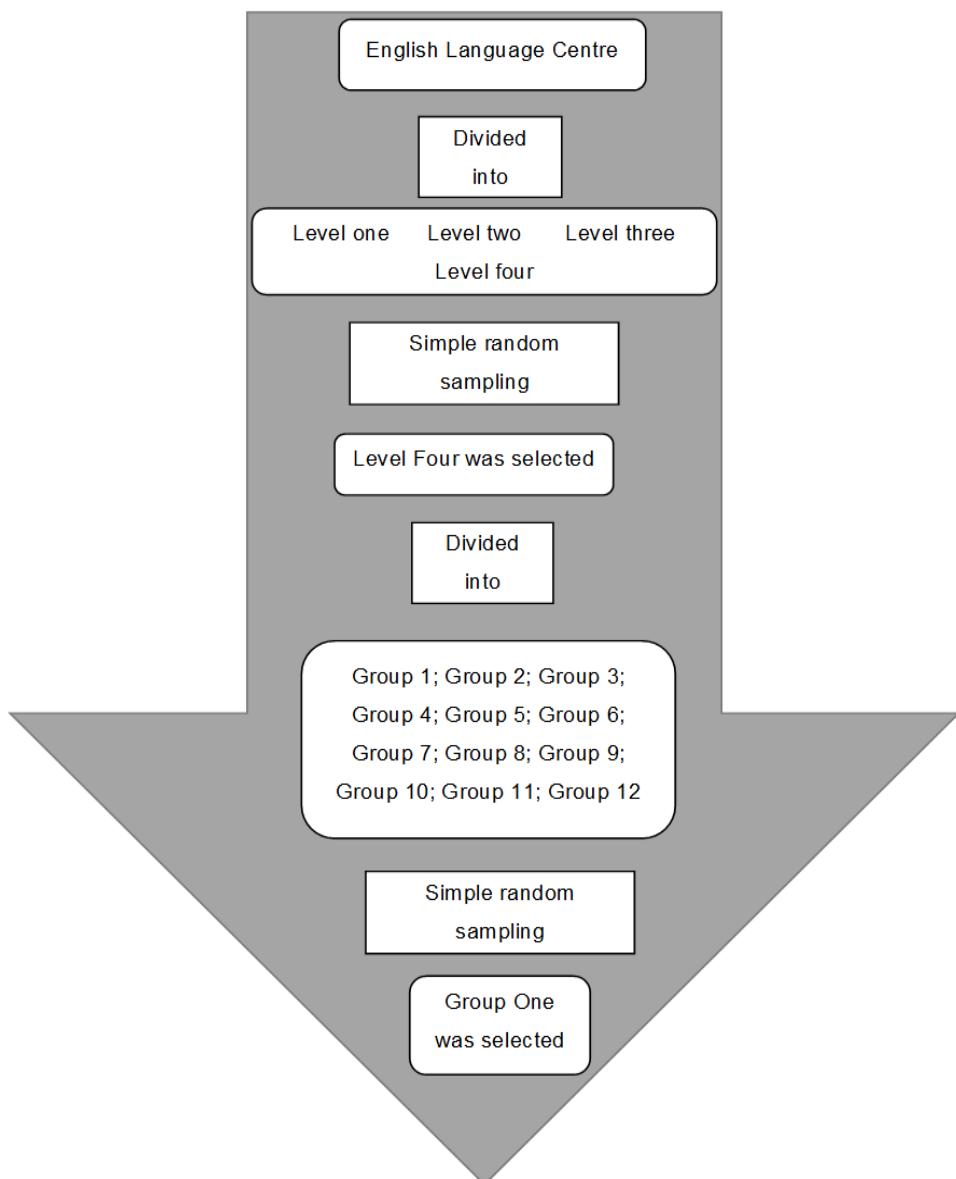
Background of the students which describes their behaviours, attitudes and perceptions before the start of the intervention.

S3 is a 17 year old male Omani student. He lives near the college so that he had the opportunity to chat with English-speaking nationals since his childhood which made his English good compared to other students in the group. However, he is very introverted and shy in using spoken English. His attitude towards learning English is positive. He believes that English should be a compulsorily-learnt language as people need it for jobs, travel and learning. He believes that the way English is taught in Oman is not efficient because the students do not get the chance to practice it.

S1 is a 17 year old female Omani student who belongs to a remote area. She is very enthusiastic about learning in general. Her English is weak, but she tries to improve because she believes that her life with English will be easier. Her attitude towards English is positive but she thinks that the way English is taught in Omani schools is not functional and therefore not desirable. S1 is also outgoing and tries to use English and she also likes working with her classmates and helping them. She also believes that the Internet helps in terms of improving English due to the big resources it has, however, she complains repeatedly about the speed of the Internet which is very slow in her home village.

S2 is an 18 year old female student who belongs to a Bedouin family that lives in a desert. She is very introverted and quiet. She likes English language but thinks that it is difficult to learn. She believes that education system in Oman does not help students master English. She also believes that either school system or university system should be changed so that students learn either in Arabic or in English only during their learning journey.

S4 is a 17 year old female Omani student whose English is better than lots of her classmates. she mentioned that her older brothers and sisters speak English so that the whole family speak in English sometimes. She is very enthusiastic and keen to improve her English. She is also very active, outgoing and shows initiative. She believes in herself and believes that through reading and college learning experience, her English will improve a lot. She believes that Omani schools do not prepare students well in terms of acquiring English language due to the pedagogy

adopted where teachers are the centre of the learning process and students hardly use or practice English.

S5 is an 18 year old female Omani student who comes from a remote rural town in Oman. Her English is very good as she belongs to an educated family, her mother is a PhD holder. She practices using English with her mother most of the time. She also studied abroad in an international school where she could dramatically improve her English. However, her attitude towards English is negative. She said that she learnt English because her family insisted on her doing so and because English is very important nowadays. She added that if it was her choice, she would not have learnt English. She also believes that technology should be incorporated in education as without it learning is boring. S5 thinks that Omani universities should do lots of efforts to improve the way English is taught. She stressed that English should not be taught in the controversial way. She explained that she meant that it should not be teacher centred.

S7 is a 17 year old female student. She lives near the college where the Internet connection is very good, and all facilities are available. S7 is very serious and speaks good English. She mentioned that she tries to improve her English through searching on the Internet and watching movies. She thinks that it is impossible to acquire English depending on our school system due to the lack of exposure to English. She also revealed that she prefers to learn individually but working in groups is fine occasionally. She also believes that classes in both higher education and schools should be equipped with technology so that students have access to the unlimited sources of learning materials.

S8 is an 18 year old female Omani student. She is Bedouin with a very low level of English. She is very quiet and shy. She believes that she needs to spend lots of time and give lots of efforts to improve her English. This is because she thinks that English is a difficult language to learn. She is pessimistic to improve her English because she believes that her English is very weak, and it will take her ages to reach her classmates level. She mentioned that she doesn't try to improve her English because she thinks that she will never improve.

S9 is a 17 year old female Omani student. She lives in a remote area surrounded by mountains where the Internet networks are not available, and facilities are very few. There, English is never used by locals, so most students' English is weak. S9 is very shy and she knows that she is withdrawn and introverted. She revealed that she wants to overcome shyness and participate in classes. She also believes that shyness works as an impediment towards her progression in acquiring English. Her attitudes towards English learning is positive. She believes that English is a must learnt language, but one needs to be daring and sociable in order to learn it.

S10 is an 18 year old female Omani student. She came from a very small remote village where English is never spoken. Her attitude towards learning in general and learning English in specific is positive. She said that learning English is a must in today's world as it is important for education, travel and jobs. S10 is very social and tries to communicate in English in order to improve her English. She complained from the way English is taught in Omani schools as she thinks that pupils should use English more in schools because they do not use it outside.

S13 is an 18 year old male Omani student. He belongs to a Bedouin tribe. His English is good, according to him that, he improved his English through reading lots of stories written in English since his childhood. He thinks that English cannot be learnt without huge exposure to it which is not the case in Omani schools. He believes that English should be the medium of instruction in Omani schools so that university students encounter no problems with English. S13 is very quiet but serious in his studies. He is also very cooperative with his classmates.

S14 is a 17 year old male Omani student. He lives in a rural region in Oman and is the oldest among his siblings. He is not serious about his studies. He admits that he doesn't concentrate and does not listen to his teachers, preferring his attention to wander during classes. He also thinks that English is not important. S14 doesn't like communicating in English and admits that he disturbs classes as he thinks that the job is better than pursuing studies. He also mentioned that he does not think that one day he will speak a good English. His attitude towards learning is negative due to his belief that starting a business or getting a job is better than studying as lots of graduates are unemployed.

S15 is a 17 year old male Omani student. He belongs to an educated family; both of his parents are teachers. He is very serious about his education. The researcher was impressed with his level of English. He said that he improved his English through watching movies. He likes using English when communicating with his teachers. S15 believes that university life should help him improve his English further. He believes that school life was not up to his expectations in terms of learning English. He also thinks that Omani schools do not prepare students well in terms of English language acquisition due to the lack of exposure to English and the lack of technology usage.

S16 is an 18 year old male Omani student. He lives by the sea where he mingles with tourists from around the world having good spoken English and as such his English is of good standard. He believes that he is sociable and friendly as he has no problem interacting with strangers. He believes that English is the vehicle of today's communication among people. This makes him tries constantly to use English since his childhood. S16 also believes that Education system should prepare students well in terms of English language. He believes that current education system in Oman does not fulfil this dream.

S17 is a 17 year old male Omani student. He is very shy, and his English is very weak. He fears using English because of his level of communication. He believes that English is a difficult language to learn and that Omani schools do not help students acquire it. S17 lives in a remote village where exposure to English does not occur at all. Therefore, he says that for him to improve English he needs to be exposed a lot to English. He thinks that the chance of learning English in tertiary level in Oman is much higher than the chance in Omani schools. This is, according to him, because the medium of instruction in Omani schools is Arabic but in tertiary level is English.

S20 is an 18 year old male Omani student. He lives in a coastal area in Oman where he meets foreigners sometimes and uses English for communication. He is intelligent and motivated as his marks in previous semester were very good. He is also sociable and bold which makes him use English with his teachers and classmates. He believes that his college experience is much better than his school experience in terms of learning English. S20 likes learning English so he reads some books in English and also watches news and movies in English.

S21 is an 18 year old male Omani student. He belongs to a Bedouin tribe and lives in a desert where Internet networks are either weak or not available. His English is very weak and his attitude towards learning English is negative. He believes that taking care of his own camels and making money is more important than getting a degree and seeking a job after that. However, he is polite, sociable and complies with his teachers' instructions.

S12 is a 17 year old male Omani student whose level of English is outstanding. He came from an educated family as both of his parents are teachers. He is sociable and likes using English while communicating with teachers and students. However, he is not serious about his current studies, and he thinks what he currently learns is well below his level. S12 also believes that he learnt English from watching TV and reading more than learning it from schools. He believes that self-study served him more than schools in terms of learning English.

S22 is an 18 year old female Omani student. She belongs to a very educated family. She speaks very good English as she studied in an international bilingual private school for 12 years. She is very active and speaks in English all the time. She is also very confident and she likes helping others improve their English. She stressed that English in tertiary level should be taught the same way it is taught in the private schools in Oman where it is taught intensively, and technology is widely used.

S18 is an 18 year old male Omani student. His marks in previous semesters were bad and he is repeating this level which is level four because he failed it last semester. He said that he failed because he didn't pay attention and did not do his homework. This student lives in a remote place where English is not used at all. His English is very weak and his attitude towards learning is negative. He is not serious about his studies because he thinks that it is impossible to learn English and because he doesn't want to pursue his studies. He said that once he gets a job, he will leave the college.

S6 is an 18 year old female Omani student. She belongs to a remote place. Her English is poor. However, she is very active and tries to communicate a lot to improve her English. She is also very confident and she likes working with others as

she believes that socializing help learn languages. She is with the same opinion as most of the participants that English is not taught in a proper way as it should be.

S11 is a 17 year old male Omani student. He belongs to a Bedouin tribe and lives in a desert where Internet networks are either weak or not available. His English is very weak and his attitude towards learning English is negative. He believes that his English will never improve. His attitude towards learning English is very bad. He believes that he does not need to learn it as he would not get any benefit from it.

3.7 Ethical considerations: informed consent, permission and assurance of confidentiality

This section explains ethical considerations that have been taken into consideration during this study. It is worth mentioning that ethical approval from the Faculty of Humanities and Social Sciences has been awarded (see Alppendix 2). Permission from the college dean to conduct the study in the college has been awarded as well. The consent forms ensuring confidentiality and anonymity, and the student information sheet have been read and signed by participants. In addition, all the participants have been informed of the use of what they reveal. Also, the researcher has obtained ethical approval from the Education, Communication and Language Sciences School to conduct this research.

Diener and Crandall (1978, cited in Bryman, 2004) state that informed consent is a main pillar of ethics in social research. Burn (2000, p. 18) also emphasises that informed consent 'is the most fundamental ethical principle that is involved'. In addition to this, it is compulsory to provide research participants with consent forms before the start of the research as stressed by the Ethics committee in Education, Communication and Languages Science School at Newcastle University. In any consent form, there should be detailed information about the research so that prospective research participants can easily make their decision on whether to participate in the study or not (Bryman, 2004). Therefore, before conducting the research, ethical approval from the Faculty of Humanities and Social Sciences was awarded. Furthermore, ethical approval from the Education, Communication and Language Sciences School was awarded. Also, permission from the college dean to

conduct the study in their college was awarded. The consent forms (see Appendix 1) ensuring confidentiality and anonymity, and the student information sheet which includes all the information about the research were given to students to carefully read and sign. The consent form stated very clearly that:

- If you agree to be in this study, you will be recruited.
- Your participation in this study will take approximately five months.
- You are free to decide whether or not to participate.
- If you decide to participate, you are free to withdraw at any time without any negative consequences for you.
- All responses you give or other data collected will be kept confidential.
- The records of this study will be kept secure and private.
- All files containing any information you give are password protected.
- In any research report that may be published, no information will be included that will make it possible to identify you individually.
- There will be no way to connect your name to your responses at any time during or after the study.

In addition, all the participants were informed of the use of the information they disclosed. The aim of the research and nature of their participation was explained to them along with a clear explanation of the points mentioned above including their ability to withdraw at any time. All 22 students agreed to participate and all remained until the end of the project except for one who went to study abroad. Regarding confidentiality, all notes, transcripts, diaries and other forms of data were kept in a very secure place in the researcher's accommodation whether they were a hard or soft copy. A soft copy was also saved in the researcher's H drive that is allocated by the university and fully secured because no one can access it except this researcher, this procedure was important for risk management meaning that in the case of data loss, a university technician could retrieve it. It is also important to mention that from the first meeting all participants were given an anonymized name in order to make it impossible for anyone to identify their identities. The anonymized names were used throughout the research and are the names used in this thesis.

3.8 Gaining access and entry

As a staff member in the same college for almost eight years, working both as an English lecturer and then as assistant dean for student affairs, eased access and entry to *Future College* for this researcher. However, months before starting the field work, a letter was sent from his supervisor to the college dean requesting entry to conduct the research (see Appendix 3). The reply received was very supportive and welcoming. When the researcher first visited the college to conduct the research, he found the gatekeepers, including the college dean, assistant deans, head of English centre and his assistants very supportive. They assigned one technician to help the researcher set up a SOLE centre, they also allocated one room for the research as a SOLE centre after searching for a suitable vacant room. The researcher was also provided with an office to work in. Throughout the research period, the researcher was supported by all those he dealt with. He received all of this support because he explained the purpose of his research and he assured them all ethical issues and integrity, reliability and validity of the research.

3.9 Research methods

Multiple methods were used to collect data:
- Semi-structured interviews
- Focus group interviews
- Diaries
- Field notes

These methods were used to collect data and to profoundly understand the experiences of all research participants. These methods were used simultaneously from the beginning of the research in September 2017 until January 2018. All methods are explained and their use in this research is justified in the coming sections. Table 4 displays the methods that are used to collect data for each research question.

table 4. Research questions and data collection methods

Research Questions	Data Collection Methods	Time Frame of Study
What is the current state of literature in relation to the field of SOLEs and language learning?	Literature review	Throughout the study
How are SOLEs perceived and experienced by EFL learners?	• Focus group. • Semi-structured interviews. • Field notes. • Diaries.	Semi-structured interviews conducted at the end of cycle one and two. Focus groups conducted at the end of cycle one. Field notes conducted throughout the study. Diaries done by participants after each session.
How do SOLEs impact students and their learning?	• Focus group. • Semi-structured interviews. • Field notes. • Diaries.	Semi-structured interviews conducted at the end of cycle one and two. Focus groups conducted at the end of cycle one. Field notes conducted throughout the study. Diaries done by participants after each session.
What does a SOLE model look like in the context of Omani tertiary level education in the Future College?	• Focus group. • Semi-structured interviews. • Field notes. • Diaries.	Semi-structured interviews conducted at the end of cycle one and two. Focus groups conducted at the end of cycle one. Field notes conducted throughout the study. Diaries done by participants after each session.

In total, interviews, diaries, focus groups and field notes were used to answer the research questions because this researcher believes that these instruments help collect needed data and provide accurate implications of the use of SOLEs. This researcher also believes in what is suggested by Green (2007) that using more than one instrument provides richer and deeper data. Interviews and diaries were in Arabic, so participants encountered no difficulty in understanding the questions and in expressing themselves freely. All interviews were transcribed for analysis and in order to obtain participants' validation/member check. For reliability, samples of the translation from Arabic to English was checked by a specialist.

3.9.1 *Semi-structured interviews*

'Conversation is an unavoidable means of interaction among people. They interact, pose questions, and answer questions. Through conversations we get to know other people, get to learn about their experiences, feelings, and hopes and the world they live in' (Kvale, 1996, p. 5). Therefore, interviews are one of the most powerful tools researchers use in collecting data about their researched world because they are considered to be controlled conversations that aim at generating new knowledge, they have objectives and oblige both the interviewer and the interviewee to be fully conscious and focused to help generate reliable knowledge (Gillham, 2000; Kvale, 1996; Kvale 2007; Greene, 2007; Kelly, 2014).

This research used interviews because:

> *The qualitative interview is a key venue for exploring the ways in which subjects experience and understand their world. It provides a unique access to the lived world of the subject, who in their own words describe their activities, experience and opinions* (Kvale, 2007).

Interviews also allow researchers to delve deep into the researched context which helps them to gain a fuller clear image of that context (Gillham, 2000). Gillham (2000) also contends that among the many strengths of interviews is that they can easily convince participants to give more of their time compared to other forms of research methods like questionnaires. This is due to the nature of human beings who want to feel that they are listened to, their voice is valued and who also appreciate the facial expressions of the person they are talking to (ibid).

There are many types of interviews starting from unstructured to highly structured (Burgess, 1982). Unstructured ones are more open and give researchers room to dig deep (Goode and Hatt, 1952; Gibson, 1998). They also help both the interviewer and the interviewee to overcome anxiety and establish rapport (McLeod, 2014; Goode and Hatt, 1952). However, there are many disadvantages to unstructured interviews, for example, they are time consuming and difficult to replicate (McLeod, 2014). On the other hand, structured interviews aid researchers in terms of organising and remembering their questions (Atkins & Wallace, 2012). They are also quicker and easier to transcribe, to compare data among participants and can be easily replicated (McLeod, 2014). Further disadvantages of structured interviews are that they pressurize and constrain researchers and the researched ones which leads to

dissatisfaction (Goode and Hatt, 1952). Furthermore, they do not allow researchers to explore emerging topics during the interviews (Bechhofar, 1974).

As seen above, both structured and unstructured interviews have some limitations, hence the question arises as to how to benefit from their strengths and gain standardisation from structured interviews and depth from unstructured ones. The answer is to adopt semi-structured interviews which 'are generally organized around a set of predetermined open-ended questions, with other questions emerging from the dialogue between interviewer and interviewee/s' (Dicicco-Bloom and Rabtree, 2006, P. 315). Semi structured interviews are widely used in qualitative research because they allow researchers to prepare some of the questions before conducting interviews and some during the interview process (Carruthers, 1990; Dicicco-Bloom and Rabtree, 2006; Cohen and Crabtree, 2006). Therefore, this research used semi-structured interviews which are considered to be a major tool for any qualitative researcher (Burns, 2000). Semi-structured interviews allowed this researcher to ask pre-identified questions and also new ones that helped to clarify emerging thoughts.

The first semi-structured interviews (Appendix 4) were conducted in November 2017 at the end of cycle one in the researcher's temporary office and they were designed to focus on the participants' views, feelings, perceptions and experiences of SOLEs. Some questions were pre-identified before the interview sessions and others were raised during the interviews in order to delve deeper into emerging thoughts and to give the interviewees a chance to clarify and explain what they had already said (Drever, 1995). 'As a rule, you should place the more general questions first' (ibid, p. 21), therefore, the questions during the semi-structured interviews moved from general to specific. Moving from general to specific also helped the researcher to fully understand participants' views, emotions, beliefs and attitudes towards the experience which is very important in any PAR because through participants' views, improvement of the intervention can be informed. Understanding their views and attitudes is one way to involve participants in PAR and it helps consulting them of changes to the intervention. The main questions that were pre-identified were meant to lead to the researcher's chosen topics as suggested by Drever (1995), and then they were followed by probing questions that aimed at delving deeper to get a fuller image of the researched experience. The first question asked was very general 'Tell me about your SOLE experience in general?' It was 'open, inviting respondents to select what is in the forefront of their thinking' (ibid, p. 22). The following questions

were raised to understand some aspects related to any learning environment that include students' attitudes, behaviours, personalities, the role of the teacher and curricula and other topics. This was the first interview experience for all participants, therefore, the researcher had to make more effort to let the interviews flow smoothly. A rapport with all participants had to be established from the beginning of the academic semester. Also, prompts were given to participants by asking questions in other words if they did not understand them and by offering general prompts such as by saying 'any other reasons' as suggested by Drever (1995) in order to encourage participants to provide more information and to help 'jog their memory' (ibid, p. 23). That was done without any bias and without directing students to provide a particular answer. At the end of the interviews, again an open question was asked which was 'would you like to add anything to what you have already said?' to give participants a last chance to reflect on the whole experience. Conducting these semi-structured interviews helped both participants and this researcher to evaluate the intervention and discover its strengths and weaknesses. They also helped to provide opportunities to improve the intervention. This way participants were involved which is very important in PAR.

The second semi-structured interviews (Appendix 5) were conducted in January 2018 in the researcher's temporary office and were designed to focus on the changes made to SOLEs during cycle two. Again, some questions were pre-identified and others were raised during the interviews. At this time, the rapport between the interviewer and the interviewees had been established and was solid so that participants felt more comfortable to express their thoughts, perceptions and feelings, especially as this was their second interview and not the first as in the previous interviews. They were also more competent and knowledgeable to answer the questions because the questions were mainly about the changes made to SOLEs in which they themselves participated. These second interviews started with an open question as well which was 'What do you think of SOLEs after the changes we have made?' In order 'to allow participants to talk at some length' (ibid, p. 26) and also to feel comfortable for the rest of the interview. The following pre-identified questions focused on each specific change that was made to SOLEs which are the big question and the teacher's role. These questions aimed at gaining a fuller image of students' perceptions and views on these changes and their feelings towards the SOLEs in their new version. They also aimed to involve them in the evaluation of the final

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model of the intervention which is part of PAR. The participants expressed their feelings freely especially as the researcher used prompts and probes to encourage participants to express all of their ideas and to encourage them to clarify, confirm and explain their answers, respectively. At the end of the interview the researcher asked a very open question which was 'Would you like to add anything to what you have already said?' to allow students to express any thoughts that they might want to shed light on. As it is PAR, the second semi-structured interviews involved participants in evaluating changes, to which they had contributed with the researcher, made to the intervention.

3.9.2 *Focus groups*

'The focus group method is an interview with several people on a specific topic or issue' (Bryman, 2008, p. 473). This researcher decided to use focus group interviews due to their well-known strengths that include allowing the researcher to interview more people in an unstructured way to talk about their involvement and experience in certain issues, they also give the researcher more room to understand the participants' feelings towards the experience and why they feel that way, they also help researchers to gain a collective view from the whole group because participants probe and challenge each other's reasons and views (ibid). For the above qualities of focus groups, two focus groups were used in this research. One focus group was with male students and another with female students. The reason for separating males and females is that, due to the culture and shyness of both genders with regard to each other, the researcher knows that they will not express themselves freely if not separated. The researcher conducted only two focus groups because he felt that this was sufficient and achievable due to the many circumstances of the research and students' timetables, and also because 'more groups will increase the complexity of your (the researcher) analysis' (ibid, p. 477). The number of students in each focus group was eight in the female focus group and ten in the male focus group, in accordance with Morgan et al. (1998) that focus groups should be between six to ten participants. All important steps for conducting focus groups that include planning, recruiting, moderating, analysing and reporting were followed by this researcher in accordance with Morgan et al. (1998). This researcher planned where and when to conduct the focus group interviews and which questions to ask, he also

decided to recruit female students for the first focus group interview and male students for the second. The focus group interviews were moderated by the researcher taking part in the participant discussions. Later, analysing and reporting were conducted as will be presented in the findings chapter. It is worth mentioning that both focus groups were conducted in the resource centre where SOLE sessions were conducted by the end of cycle one and before making any changes to SOLEs. That was because the changes made were guided by data gathered using all methods including the focus group interviews.

Both focus groups concentrated on the lived experience of students in SOLE sessions. This researcher aimed at understanding students' collective opinions, emotions and attitudes towards the new learning environment. The discussion on both occasions was opened by asking a general question which was 'What do you think about SOLEs?' Then the discussion and conversation was moderated. The researcher was able to manage the focus group so that students spoke about as many areas as possible and were able to express themselves freely. Also, emerging interesting ideas were given significant attention by asking students to explain more and to clarify some comments. Participants were very enthusiastic and involved to the extent that they covered many topics including possible improvements, weaknesses and strengths of a SOLE. Not only that, students also spoke about the impact of SOLEs on them and their learning which included feeling autonomous, empowered, bold and many other areas that will be covered in the findings chapter. Conducting focus group interviews was part of the evaluation stage of PAR. Both participants and this researcher were able to evaluate the intervention through focus groups. Students' collective thoughts helped them give a robust reliable evaluation to the intervention and helped to suggest changes that should be made to it. Their collective thoughts also helped this researcher to check his own evaluation and produce a collective evaluation reached through both the researcher and participants' thoughts which is an important element of any PAR.

3.9.3 *Diaries*

Diaries have been neglected even in fields where they can be a major source of data gathering (Alaszewski, 2006). Diaries, especially those that are researcher-driven, have been used in qualitative research but have not been paid that much attention by

social science researchers (Bryman, 2008). Diaries are important because 'they can be the primary source of data or may be used as adjuncts to another source of data' (ibid, p. 517). Diaries also 'tell the truth… and a lot more beside the truth' (Pimlott, 2002, cited in Alaszewski, 2006, p. 30). The researcher used diaries throughout the research. After each session students were given a researcher-driven diary (Appendix 6) which allowed participants, to write their thoughts and emotions about the experience. Participants were asked to keep the diary with them and submit it to the researcher in the following session in order to give them enough time to express their feelings, perceptions and views. As mentioned earlier, those diaries were very supportive in terms of providing data and to other methods used in this research. Diaries in this research were used only as one tool among the other three because diaries can be misleading due to the possibility that they can be affected by the feelings of a particular person at the moment of writing them (Seldon, 1994, cited in Alaszewski, 2006). In this research diaries were used with other methods to produce a reliable conclusion; all methods were used together as triangulation. Diaries as part of this PAR formed a very important tool to evaluate the intervention by both this researcher and participants. Participants used diaries to express their thoughts, views and attitudes and to evaluate the intervention. Through diaries they felt that they were deeply involved in the continuous evaluation of their experience. Diaries were used together with other tools to support this researcher's own evaluation and to compare it to participants' evaluation.

3.9.4 *Researcher's field notes*

'If you do not record what happens, you might as well not be in the setting' (Gilbert, 2008, p. 273). Field notes are a very important data collection method and are considered to be vital proof of the researcher's activities while being in the field (Rossman & Rallis, 2003). Therefore, they were a main data collection method in this research. The researcher noted data promptly as advised by Bryman (2008) 'write down notes, however brief, as quickly as possible after seeing or hearing something interesting' (p. 417) and because writing field notes should not be delayed (Gilbert, 2008) due to 'the frailties of human memory' (Bryman, 2008, p. 417). Bryman (2008) emphasised that 'wandering around with a notebook and a pencil…runs the risk of making people self-conscious' (p. 417), such a concern is not valid in this research

because the teacher's role in this experience was just to ask a big question. Therefore, the researcher had sufficient time to observe and write down notes while students were working on the Internet searching for answers without feeling that he was taking notes. This researcher could write lots of notes of around three A4 size papers in each session including information about events, people and conversations which are the main pillars of any field notes as Gilbert (2008, p. 274) put it 'there is considerable consensus among methodologists on the contents of field notes. The several rules applying to content are based on the idea that field notes should provide a running description of events, people and conversation'. Bryman (2008, p. 417) placed emphasis on the same beliefs 'these should be fairly detailed summaries of events and behaviour and the researcher's initial reflection on them'. All field notes collected were organised chronologically so that improvements and changes that occurred throughout the research could be tracked. They contributed a lot to the evaluation stage of this PAR as they included a large amount of information about the intervention and students' reactions, emotions, behaviours and thoughts during the conduct of this research.

3.10 Research strategy and detailed explanation of the research conduct

The researcher adopted a qualitative approach strategy that aims at understanding how SOLEs are experienced and perceived by participants by 'seeing through the eyes of the people being studied' (Bryman, 2008, p. 279). The qualitative approach is widely used in social science because it helps the researcher to fully understand the researched world. This study adopted a qualitative approach for the above merits of the qualitative approach and because this researcher strongly believes that the qualitative approach is able to accurately answer the research questions of this study. Details of the conduct of this study are outlined below.

For more confirmation and as part of participatory action research, reconnaissance, which is the first step of any PAR, was conducted before the start of cycle one to fully understand the problem that guided and is behind this research. This problem is that there is a relatively high dismissal and withdrawal rate which is, according to students and staff, due to the poor learning environment, the teacher's talking time is high, the student talking time is low, there is no collaborative work, and there is almost no

technology used due to the shortage of time compared to the learning to be covered. All those reasons have led to creating passive learners whose attitude towards learning English is negative. The reconnaissance included research context, current practices, participants and concerns as suggested by Tripp (2005). It also included an interview with a very important member of staff who liaises with students with certain academic or non-academic problems that might lead to dismissal. This staff member also liaises with students when they are dismissed or decide to withdraw to give advice and to listen to their reasons. This interview confirmed the findings of the reasons behind the high dismissal and withdrawal rates that were reached by this researcher and his colleagues. It also confirmed that technology and improving EFL learning environments can help retain students at *Future College*. Appendix 7 presents extracts of the interview that were analysed and categorized under themes that helped the researcher to gain a fuller idea of the reasons behind the high withdrawal and dismissal rate and what could be done to resolve the issue.

After reconnaissance, cycle one started which includes the following steps of PAR:
- Planning of SOLE lessons.
- Implementing them.
- Describing and monitoring the implementation using the research methods.
- Evaluation of what happened.
- Suggestions for improvement that will be implemented in cycle two.

It is worth mentioning that reflection is not mentioned as an independent phase of participatory action research because it should occur in each single-phase due to its significance and effectiveness (Tripp, 2005). After cycle one, cycle two started as 'action research… is an ongoing, repetitive process in which what is achieved in each cycle provides the starting point for further improvement in the next' (Tripp, 2005, p. 452). Cycle two followed the same steps adopted in cycle one but with the suggested changes. Again, after cycle two, the researcher suggested the final SOLE model that is believed to work well and suit the culture and background of the adult Omani EFL learners.

At the beginning, this researcher set up a SOLE centre in *Future College* to enable him to implement the intervention which is a core element of any participatory action research. It was difficult to find a suitable room that could be transformed to a SOLE centre as all rooms were occupied. After a few days, it was decided that a room

attached to the main library would be used. However, when starting to arrange the environment, it was considered to be too small and that it would not serve the purpose of this research. Finally, permission to use the resource centre which is a big room with round tables, computers, a white board, a projector and one big glass wall was obtained. The glass wall enables people outside to see what is happening inside which is preferred in setting up any SOLE centre (Mitra et al. 2010). After allocation of the room, the process of setting up a SOLE centre started. Setting up a SOLE centre requires one computer per approximately four students, so in this case, six computers for the 22 participants were required in order to facilitate the collaborative work. It also requires one white board and large sheets of paper for students (Mitra, 2013a). Simply, a SOLE centre is a classroom with approximately five computers, four chairs or a u-shaped sofa in front of each computer, one white board and large sheets of paper. This room had everything needed except for large sheets of paper which this researcher provided. The college administration assigned one technician to help in setting up the SOLE centre; this researcher and the technician worked together and prepared everything for students in the SOLE centre which was used for the full period of the study which was five months between September 2017 and January 2018.

After that, the sessions were planned, all materials were prepared, and then cycle one was started by conducting two weekly sessions (one hour each) with the participants using SOLEs as a pedagogical approach. These were the planning and implementation stages of PAR. This researcher was knowledgeable in terms of conducting SOLE sessions having attended a module called 'The Future of Learning' which is taught by Mitra and focuses largely on SOLEs. In addition to that, instructions found in the SOLE toolkit (Mitra, 2013a) were followed as shown in Figure 9.

Figure 9. Steps of conducting a SOLE lesson

What is a SOLE? noun [sohl]

Self-Organised Learning Environment

SOLEs are created when educators encourage students to work as a community to answer their own vibrant questions using the Internet.

Rules of the Game

1) Students are given a big question or are challenged to think of their own

2) Students choose their own groups and can change groups at any time

3) Students can move around freely, speak to each other and share ideas

4) Students can explore in any direction that they choose: there may be no single right answer

5) Groups are expected to present what they have learned at the end of the session

The SOLE learning path is fuelled by big questions, self-discovery, sharing, and spontaneity. These parameters are needed to create a non-threatening environment in which children feel free to explore.

Source: extracted from SOLE toolkit. Retrieved from http://www.ted.com/pages/sole_toolkit.

The topic of each lesson was chosen from the same syllabus used for students in level four. This researcher generated a big question for each lesson that covered the whole topic. Big questions in the SOLE context refer to questions that do not have direct answers and involve students working collaboratively, arguing, searching, synthesizing and evaluating information found while searching on the Internet. Big questions used in a SOLE are unique as they are the ones that provoke research, debate and critical thinking. They are more concerned with the skills that lead to

finding the rigorous reliable information and not the right answer (Donald et al., 2013). Mitra et al. (2005) and Mitra (2013a) also emphasise that big questions should be above the level of learners and have no easy direct answers so they stimulate collaborative work that always leads to collective answers and results in deep critical conversations among students. Furthermore, 'a good big question will connect more than one subject area: What is an insect? For instance, does not touch as many different subjects as what would happen to the Earth if all insects disappeared?' (Mitra, 2013a, p. 16). Therefore, this researcher carefully went through current level four syllabus used in the English Language centre where the study took place. He generated questions that have the qualities of big questions explained above and made sure that those generated questions would serve the purpose of the study. Those big questions were presented to SOLEs specialist for approval. He has helped a lot in achieving the final big questions used in this study. Doing all those tasks is part of the planning stage of PAR which comes right after the reconnaissance stage. Some examples of big questions raised are the following:

- How does our gender affect our identity? This question was generated to cover unit one in the listening and speaking book.

- What would happen to the Earth if all primates were extinct? This question was generated to cover unit one in the reading and writing book.

- How would our life be without the discovery of DNA? This question was generated to cover unit two in the reading and writing book.

- What would happen if migration was banned? This question was generated to cover unit four in the listening and speaking book.

- How do you think natural hazards would affect our world in the next thirty years? This question was generated to cover unit four in the reading and writing book.

These are just examples of some of the big questions that were raised during the SOLE sessions in cycle one. After the planning stage which included planning SOLE sessions, the implementation stage of PAR started by conducting SOLE sessions, subsequently the involvement of participants in this study began and they remained involved until the end of cycle two. Each session started by giving students a big question and clarifying any unclear aspects of it for five minutes. Then students were asked to search for around forty minutes and at the end they were given approximately fifteen minutes to present their findings as suggested by Mitra (2013a)

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in the SOLE toolkit. During each session, the teacher left students unsupervised for some time as suggested by Mitra et al. (2005). As part of the evaluation stage of PAR, while present in the SOLE, this researcher took notes of everything happening including notes about participants, events and conversations which are crucial for any PAR research. Participants were also asked to reflect after each lesson on the learning experience in their diaries, semi-structured interviews were conducted with each participant one week before the end of cycle one and two focused group interviews were conducted at the end of cycle one. All these methods were used so that participants and the researcher could reflect immediately on the experience. They are also used, as mentioned above, for the evaluation stage of PAR in order to evaluate the intervention which is SOLEs and make any necessary changes for cycle two.

At the end, the researcher reflected and evaluated the whole experience. Participants' diaries, semi-structured interviews, field notes and focus group data throughout cycle one were also analysed as it was an ongoing process. The rich data that were collected helped this researcher to make decisions about changes to be made especially those suggested by participants and stressed a lot in students' diaries, interviews, focus interviews and this researcher's field notes and evaluation; it is very important in PAR to involve participants throughout the research. That was the evaluation stage of PAR that provided the starting point of cycle two of this study. Later, the necessary changes were made to the Self-Organised Learning Environments which included changes to the role of the teacher and using questions with specific answers instead of Big questions occasionally, this will be explained in more detail in the findings chapter. Cycle two was then conducted with the new changes that included using more specific questions with specific time limits in some classes and Big questions in others, and giving the teacher more roles. These changes will be highlighted in the findings chapter. Here are examples of specific questions that were raised in one session which was about writing a descriptive essay from the reading and writing book:

- What are the main components of an essay?
- What are the main sentences of an introduction? Explain.

The teacher gave students approximately fifteen minutes to search and then provide more explanation for five minutes. After that he informed participants that they would

write a descriptive essay about pyramids. He first asked the following question and asked them to search for information in the Internet for twenty minutes.

- What are pyramids and why are they among the wonders of the world?

At the end, the teacher asked them to work in their groups, to create an outline and then write a short descriptive essay about pyramids for the rest of the session. During their work, the teacher visited the groups to check their progress and to provide support. At the end of the session students were asked to stick their writing on the wall and read each other's work. This was the re-implementation stage of PAR which allowed the researcher to retry the intervention with the new improvements.

During cycle two, participants were also asked to reflect on their diaries after each session. This researcher continued evaluating the process, reflecting and writing down field notes. Also, at the end of cycle two, semi-structured interviews were conducted. Then, this researcher analysed all the data, reflected and evaluated the whole process and produced the new SOLE model that participants and this researcher think is suitable for Omani students and culture. It is worth mentioning that cycle one lasted for 10 weeks and cycle two lasted for 6 weeks. The reason for making the first cycle longer was to give students enough time to adjust to the new environment and pedagogy and also to allow both the researcher and participants enough time to delve deeper into the project before reflection and suggestions for some changes that were done in cycle two.

3.11 Data quality procedures

It is very important to ensure the quality of any study. Guba and Lincoln (1994, cited in Bryman, 2008) assert that in order for any qualitative study to be rigorous, it has to be both trustworthy and authentic. Rossman and Rallis (2003) also argue that researchers can seek quality for their research through trustworthiness of their collected data and through putting their data under scrutiny. Bryman (2008, p. 377) emphasises that 'trustworthiness is made up of four criteria' which are credibility, transferability, dependability and confirmability. In this section, the procedures that were undertaken to ensure the quality of this study are highlighted.

3.11.1 *Credibility*

Much attention was paid to the credibility of his study; this researcher tried to fulfil all requirements related to ethics, participants and confidentiality. Also, a significant amount of time was spent by the researcher in the field to gain more exposure to the participants and to delve deep in the studied field. This researcher spent five months interacting with participants, observing them, interviewing them and collecting different forms of data from them in order to gain a full image and a deep understanding of the researched world. More importantly, the two main factors that enhance credibility and recommended by Guba and Lincoln (1994, cited in Bryman, 2008) which are respondent validation and triangulation were covered.

Respondent validation refers to congruence between the researcher's interpretation and what participants really mean. This researcher conducted respondent validation many times throughout the research. He discussed his interpretation of diarie's data with some participants. He also checked with participants some of his field notes to make sure that his own interpretation of what he observed was in harmony with what made students say or behave that way. Moreover, during transcribing and interpretation he communicated with participants to ensure the credibility of his interpretation. Liaising with participants and spending lots of time with data helped to increase the accuracy and credibility of interpretations of data.

Torrance (2012, p. 111) contends that 'triangulation has its origins in attempts to validate research findings by generating and comparing different sorts of data'. Triangulation is considered to be another way to ensure credibility and has many shapes including methods and data as stated by Rossman and Rallis (2003) and these were used in this study. Triangulation of methods is using several tools to obtain data, in this particular study semi-structured interviews, field notes, diaries and focus groups were used together to gain data. Triangulation of data, which means gaining data from different participants throughout the research, was also achieved as this researcher gained a large amount of data from all participants which makes the data and interpretation of this study more credible and transparent.

3.11.2 *Transferability*

Transferability refers to giving details of one's study to make it easy for others to determine whether the findings can be used for their own contexts or not as well as providing enough information in order to assist in other researchers adopting and modifying their research (Houston, 1990). Findings generated by qualitative research tend to be specific for the context being studied (Bryman, 2008) and generalizing those findings to other contexts or to the same context but at a different time depends on empirical trials (Guba and Lincoln, 1985, cited in Bryman, 2008). Therefore, in order to help achieve transferability to other contexts, researchers should provide thick descriptions of the culture (Geertz, 1973). Those descriptions and details of everything the qualitative researcher has done and had found would help other interested people to make judgments as to whether those findings are transferable to another context or not. Therefore, this researcher provided detailed information about the context of the study, the participants, Omani culture, Omani students' English level in general, selection procedures, details of participatory action research conducted, data collection procedures, data analysis and other elements that should help others to make judgments of possible transferability of this research to their own contexts.

The reader of this thesis will hopefully understand the whole story of this research: every possible detail and decision is given during the progress of the research so that future researchers may adopt the study's precepts elsewhere and transfer the study to their own context. As such, this researcher defined the most important terminologies used in this study. Also, the context and culture of the study is explained, highlighting that students experience for the first time in their lives a context where the medium of instruction is English. This information is very important for others to be able to compare it with their own context. Also, the sampling process which is multi-stage sampling was explained in detail and clarified with a diagram in order for others to understand the process of selecting the final sample. The most important aspect is that the process of conducting the participatory action research in this study was explained in detail. This researcher mentioned clearly what was done starting from the reconnaissance to evaluation and reflection in cycle one, which are the stages of PAR. The changes done to cycle two and the procedures and details conducted in cycle two were also mentioned. Some examples of sessions conducted

were also provided in significant detail. Not only that, but also the process of data collection and analysis that led to the findings of this research were explained clearly. The thick description within this thesis helps other interested people to make accurate judgments as to whether the findings of this research are suitable for their contexts or not.

3.11.3 *Dependability*

Dependability refers to keeping all records of all procedures of any research ready for auditing by others, either during the research conduct or at the end (Bryman, 2008). In order to achieve dependability, qualitative researchers should be transparent in all aspects of the research and keep records of everything during their research.

This researcher was very transparent in order to gain dependability by describing the procedure of gaining access, setting up a SOLE centre, selecting participants, collecting data and analysing it, all this was described precisely and in detail. Rossman and Rills (2003) also argue that keeping records of everything the qualitative researcher does helps to gain dependability, 'this entails ensuring that complete records are kept of all phases of the research process- problem formulation, selection of research participants, field notes, interview transcript, data analysis decision, and so on- in an accessible manner' (Bryman, 2008, p. 378). This researcher maintained all the records used in this study which include the sampling process, transcripts of interviews, students' diaries, transcripts of focus groups, the researcher's field notes and others.

All researchers want to do research that is both trustworthy and authentic. This researcher tried to ensure that he established both trustworthiness, which includes credibility, transferability, dependability and confirmability, and authenticity. This was an objective throughout the research and records of everything were kept in different files. This researcher gave a great deal of time and effort to ensure transparency of this research and made all records ready for audit at any stage.

3.11.4 *Confirmability*

Confirmability means that the researcher should be neutral and not influenced by his own values or theoretical inclinations while conducting the research (Bryman, 2008). This researcher put all his effort into conducting the research in good faith and describing in this thesis all details of the research to confirm that no bias of any type, whether theoretical or personal, was involved in this study. However, confirmability should be established by auditors as argued by Guba and Lincoln (1994, cited in Bryman, 2008). To help the auditor establish confirmability of this research, all records were maintained and were open to any questions.

3.12 Data management

Data management is an essential part in any research especially during data collection, processing and analysis (Surkis & Read, 2015). It is important because without proper data management, researchers might fail to present the raw materials they used in their research when asked to do so (ibid). Due to the importance of data management, this researcher managed all the data items in a proper way throughout the whole research. All the data from all different sources which included semi-structured interviews, diaries, focus groups and the researcher's field notes were coded. As suggested by Surkis and Read (2015), this researcher coded the data with names for each file and folder that clearly describe what they contain, he also gave identifiers for all the research participants so that who said or did what is known and is mentioned in the data, and also sources of all data were coded.

To ensure that all raw materials, whether hard or soft, can be presented at any time needed, the hard copies were stored in the researcher's accommodation in a lockable safe place. Also, multiple copies of the soft data were stored in secure places including the H drive of Newcastle Upon Tyne University which is a very secure and confidential storage space as it can be retrieved in case it is lost. It is worth mentioning that the data managed include all the thirty interviews, focus groups, the diaries' data and the research field notes.

3.13 Data analysis

Thematic analysis was used for this study to analyse data stemming from diaries, semi-structured interviews, focus groups and the researcher's field notes. 'Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data' (Braun & Clarke, 2006, p. 79). The thematic analysis approach is very much used and acknowledged in qualitative research studies (Roulston, 2001), it is seen and considered to be an essential foundational analytic tool (Braun & Clarke, 2006). This researcher adopted thematic analysis because it is considered essential and effective due to its flexibility that leads to not only rich deep data analysis but also a rigorous one (ibid). Not only that but it is also 'a constructionist method, which examines the ways in which events, realities, meanings, experiences and so on are the effects of a range of discourses operating within society' (ibid, p. 81). Additionally, thematic analysis is also important for qualitative researchers because it helps to theorize participants' experience within the studied sociocultural context and not simply focus on their psychologies (ibid).

Thematic analysis can be either inductive or theoretical, inductive in the sense that themes generated are not guided by a theoretical framework and this type of analysis does not require much literature review beforehand. This approach in thematic analysis is somehow similar to grounded theory (ibid). On the other hand, theoretical analysis is 'driven by the researcher's theoretical or analytic interest in the area (ibid, p. 84). This research adopted the latter as the researcher thoroughly read the literature about SOLEs, learning environments and learners. Thematic analysis is a recursive ongoing process that requires the researcher to frequently and constantly move back and forward between their collected data and then follow the steps mentioned in Figure 10 below, these steps are not considered required rules but researchers can tailor them according to their research nature and questions (ibid).

figure 10. Phases of thematic analysis

Phase	Description of the process
1. Familiarizing yourself with your data:	Transcribing data (if necessary), reading and re-reading the data, noting down initial ideas.
2. Generating initial codes:	Coding interesting features of the data in a systematic fashion across the entire data set, collating data relevant to each code.
3. Searching for themes:	Collating codes into potential themes, gathering all data relevant to each potential theme.
4. Reviewing themes:	Checking if the themes work in relation to the coded extracts (Level 1) and the entire data set (Level 2), generating a thematic 'map' of the analysis.
5. Defining and naming themes:	Ongoing analysis to refine the specifics of each theme, and the overall story the analysis tells, generating clear definitions and names for each theme.
6. Producing the report:	The final opportunity for analysis. Selection of vivid, compelling extract examples, final analysis of selected extracts, relating back of the analysis to the research question and literature, producing a scholarly report of the analysis.

Source: extracted from (Braun & Clarke, 2006) retrieved from

http://www.tandfonline.com/doi/pdf/10.1191/1478088706qp063oa?needAccess=true

In this section, the researcher will provide details of the process of data analysis as it is important for any qualitative researcher and is stressed by Attride-Stirling (2001). There were four data items used in this research which include semi-structured interviews, focus groups, diaries and the researcher's field notes. It is very important to mention that there were two stages of analysis, one that took place during and after cycle one, and another during cycle two and at the end of the field work. The procedures and details of the first analysis will firstly be explained and later the second analysis process will be detailed. The first analysis process had to deal with all the four data items mentioned above. This analysis process was ongoing throughout the research conduct as advised by Patton (2002). The researcher's field notes and students' diaries were constantly analyzed and compared. Before conducting the semi-structured interviews and the focus group, the researcher analyzed his own field notes and students' diaries every week. Students reflected on their experience after every session and the researcher took field's notes during every session. These two data items provided very rich data that was analyzed immediately after each session. They were coded and initial themes started to be clear but not identified until the researcher finished conducting the semi-structured interviews, focus groups, his own field notes, and received all the diaries of cycle

one. The reason behind constantly comparing data provided by all the four research tools was in order to make the analysis robust and reliable.

In this stage and after conducting all the research tools, this researcher translated all the interviews, focus groups and new diaries from Arabic to English and he subsequently transcribed them all. Samples of the translation were given to a specialist to check their accuracy. Transcribing the data helped the researcher familiarize himself with the information obtained, this is a significant benefit that a researcher can gain from transcribing as emphasized by Riessman (1993. cited in Braun & Clarke, 2006). Transcribing has also helped this researcher gain a profound understanding of the whole set of data which undoubtedly helped in the later stages of analysis. After transcription of all data, the analysis was immediately started. As mentioned above a theoretical thematic analysis was adopted as it is believed to be 'driven by the researcher's theoretical or analytic interest in the area' (Braun & Clarke, 2006, p. 84). Additionally, the thematic analysis was conducted at a latent level and not a semantic one, this helps to conceptualize the data and not simply depend on the semantic meaning or content (ibid). After deciding which thematic analysis to adopt and at which level, and becoming familiar with the data, this researcher started moving back and forward, reading thoroughly, and then looking for repeated and interesting words and patterns. At this stage, all different data items were read, compared and codes developed for all interesting data. The coding was done manually and with the help of Microsoft word. After coding all the data set, the second stage, which was searching for themes, began. At this stage, all codes were sorted and relevant ones were categorized under themes. Many themes and sub-themes that were relevant to the research questions were produced, this is important because 'a theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within data set' (ibid, p. 82). The total number of initial themes that were identified by the researcher was sixteen which were: the advantages of SOLEs, the disadvantages of SOLEs/ problems, suggested changes, autonomy, social learning, students' personalities/ learning style, personal development, empowerment, motivation, learner career and attitude, the role of the teacher, the role of the curriculum/ the big questions, students' behaviours and attributes, interaction among the two genders/moving from one group to another, grouping and males and females. Subsequently, those sixteen themes were reviewed and some of them like

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students' personalities and learning styles, and students' behaviours and attributes were separated. Also, one of them called the disadvantages of SOLEs was omitted as the codes within it fit in other themes. Moreover, codes under the advantages of SOLEs, personal development, the role of curriculum and empowerment were organized to form sub-themes. After this review, the following themes were identified: the advantages of SOLEs, autonomy, social learning, learning style, students' personalities, personal development, empowerment, motivation, learners' careers and attitudes, the role of the teacher, the role of the curriculum/ the big questions, attributes, students' behaviours, interaction among the two genders/moving from one group to another, grouping, males and females and suggested changes. At this stage and as advised by Braun and Clarke (2006), the researcher started to think about the significance of each theme and about the relation between the different themes. Therefore, these identified themes were reviewed and it was found that some themes can be shifted to sub-themes under the main themes. At the end of this analysis, four main big themes were identified which are participants' positive opinions about the intervention, SOLEs' influence on students and their learning, The impacts of culture and areas for improvement.

The first theme, which is positive opinions about SOLEs, includes sub-themes which are positive feelings about cooperation, suitability of SOLEs for tertiary level, enjoyability in using the Internet, ability of SOLEs to assist in learning, positive association of freedom given in SOLEs, students' positive attitude towards the nature of and facilities provided in SOLEs and SOLEs meet different learning styles (see table 5). The second main theme, which is SOLEs' influence on students and their learning, includes sub-themes which are students' autonomy increases, SOLEs helped develop students' personalities, personal development improves, students are empowered and approach of SOLEs motivates students (see table 6). The third one which is areas of improvements includes two sub-themes which are teachers should have more roles and Big questions should not be the only questions asked (see table 7). The fourth one, which is the impacts of culture, includes two sub-themes which are absence of interaction among the two genders and difference in performance and seriousness between males and females.

table 5. Theme: Participants' positive opinions about the intervention (SOLEs)

Method \ Theme	Suitability of SOLEs for tertiary level	Positive feelings about cooperation	Enjoyability in using the Internet	Ability of SOLEs to assist in learning	Positive association of freedom given in SOLEs	Students' positive attitude towards the nature of and facilities provided in SOLEs	SOLEs meet different learning styles
Semi-structured interviews	S9. It is good for foundation year students to check their ability to interact, to check their ability to find answers and searching abilities.	S4. I like cooperation the most and having the chance to give my opinion. This helped us to collaborate and listen to others' opinions.	S1. Using the Internet in beneficial things. S9. I like using social media and the Internet.	S1. We learn new vocabulary that helps us in other classes. S8. In this environment, we learnt new vocab and more things. Our reading skills have improved as well.	S3. This environment is good and excellent because it gave us freedom. S7. The main thing in this environment is freedom.	S1. This environment has variety of things compared to normal classes. It is an entertaining environment. S1. It is an environment with variety of things.	S7. I like technology so I like that we use computers and the Internet. S9. In a group, I prefer learning most of the time.

Focus group one		S4. I like cooperation the most and having the chance to give my opinion. This helped us to collaborate and listen to others' opinions.	S7. Because there is the Internet, I feel it makes our job easy.			S7. A modern environment that is suitable for our era. S1. S4. S7. we wait for this session eagerly every week.	S1. 50% for me I like learning with fun.
Focus group two		S14. My opinion about the environment is that it is a good environment and I like working in groups with friends.	S12. I like searching through the Internet. S21. Using computers and searching the web like Google and YouTube.	S21. It widened our knowledge and mental abilities. S16. Speaking and searching skills.	S20. In other environments, we are restricted with many rules but this one is more flexible and less restricted.	S15. It is an entertaining and educational environment.	S12. I like learning by searching on the web and books and by given questions to answer.

Researcher's field notes			In this session, lots of participation and discussion took place but within groups only.				Students look happy and impressed with the new environment.	
Diaries		S4. The most important thing that I liked is the team work and cooperation among students.	S15. I like searching for information on the Internet.	S17. When I use the Internet, I learn new information. We will learn more information when we use the Internet in class and it is easy to understand and find answers.	S2. I liked that anyone could express their opinion. S8. I liked that I could choose whether to answer or not.	S20. It was a unique experience. It is different from all other experiences in my life. I am optimistic.	

table 6. Theme: SOLEs' influence on students and their learning

Theme / Method	Students' autonomy increases	SOLEs helped develop students' personalities	Personal development improves	Students are empowered	Approach of SOLEs motivates students
Semi-structured interviews	S2. Yes, because we do things that we like and the way we like.	S12. We became bolder.	S2. We first set a goal to fully understand the subject.	S1. The teacher gives students things that they are able to do.	S1. Therefore, students feel motivated.
Focus group one		S2. I became more daring and bolder.	S8, S2, S4. We share responsibilities.	S7. S4. S8. It is appreciated by the teacher.	S8. This one motivates us.
Focus group two	S20. here students have more room to use their skills.	S20. I am a shy person and this environment gave me the chance to get to know my classmates more.	S16. Speaking and searching skills.		S14. This environment increased my desire to learn.
Researcher's field notes	Some students said it is good that we search in any website, it is our choice.	Some students became responsible and serious.	Students were generally serious in searching and cooperating.	Students look focused which means they appreciate what they are doing.	Students seem motivated and they search hard.
Diaries		S9. This environment makes a person bolder and more self-confident.	S20. This environment helps me to gain new knowledge.		S4. I think this environment motivates students to study hard and to attain high marks.

table 7. Theme: areas for improvement

Method \ Theme	Teachers should have more roles	Big questions should not be the only questions asked
Semi-structured interviews	S1. When the teacher leaves us unsupervised, students leave the given important task and do things that are not important.	S1. It is difficult to find information related to some questions even with the use of the Internet.
Focus group one	S7. Students might need a little help.	S5. In some cases, we find it difficult to answer the big questions and to find information
Focus group two	S15. I hope that during this half an hour, the teacher spends five minutes with each student	S15. I have a negative point about the big question. It can lead to nervousness, students can feel worried.
Researcher's field notes	I left the class unsupervised for about five minutes and when I came back, I found some students had left the room.	The final outcome is not that convincing and good.
Diaries	S15. I disliked that there is no cooperation between the teacher and us.	S10. What I exactly disliked is that when we search for answers we cannot get a specific direct answer which leads to confusion.

table 8. Theme: Culture themes

Theme / Methods	Absence of interaction among the two genders	Difference in performance and seriousness between males and females
Semi-structured interviews	S1. It is part of our culture and it is a habit. (No interaction be-tween the two genders). S5. I do not think that we will move in this environment due to our culture	
Focus group one	S5. No, maybe primary schools only (interaction between the two genders).	
Focus group two	S14. As I said, I feel shy. They might ask me to leave their group.	
Researcher's field notes	Not a single student consults or moves to another group.	Female students are doing better.
Diaries	S1. We have not interacted with other groups in the class because of shyness.	

table 9. Research methods that inform all different sub-themes of the first theme

Themes / Methods	Suitability of SOLEs for tertiary level	Positive feelings about cooperation	Enjoyability in using the Internet	Ability of SOLEs to assist in learning	Positive association of freedom given in SOLEs	Students' positive attitude towards the nature of and facilities provided in SOLEs	SOLEs meet different learning styles
Semi-structured interviews	✔	✔	✔	✔	✔	✔	✔
Diaries		✔	✔	✔	✔	✔	
Researcher's field notes		✔			✔	✔	
Focus group 1		✔	✔			✔	✔
Focus group 2		✔	✔	✔	✔	✔	✔

table 10. Research methods that informs all different sub-themes and sub-themes of the sub-themes of the second theme

Themes / Methods	Students autonomy increases	SOLEs helped develop students' personalities	Approach of SOLEs motivates students	Personal development improves/ Students become better at building relations	Personal development improves / Students develop intellectual competence	Students are empowered /Students' develop ability to complete tasks	Students are empowered /Tasks and learning are meaningful for students
Semi-structured interviews	✔	✔	✔	✔	✔	✔	✔
Diaries		✔	✔		✔		
Researcher's field notes	✔	✔	✔		✔	✔	✔
Focus Group 1		✔	✔		✔	✔	
Focus group 2	✔	✔	✔		✔		

table 11. Research methods that inform all different sub-themes of the third theme

Themes / Methods	Teachers should have more roles	Big questions should not be the only questions asked
Semi-structured interviews	✔	✔
Diaries	✔	✔
Researcher's field notes	✔	✔
Focus group 1	✔	✔
Focus group 2	✔	✔

table 12. Research methods that inform all different sub-themes of the fourth theme

Methods \ Themes	Absence of interaction among the two genders	Difference in performance and seriousness between males and females
Semi-structured interviews	✔	
Diaries	✔	
Researcher's field notes	✔	✔
Focus group 1	✔	
Focus group 2	✔	

Data generated during cycle two was analyzed using thematic analysis as well. In cycle two the researcher used three tools which are field notes, semi-structured interviews and field notes. Focus groups were not done due to the end of term holiday. However, the data obtained through the three tools were rich and covered almost all the needed issues. Most data in cycle two focused on participants' views about the changes implemented. The findings indicate that participants liked the new role of the teacher, the new way of grouping, choosing randomly who to answer, asking more than one question, adding the competition element and they felt those changes impacted them positively in terms of personality and behaviour. More detailed explanation of cycle two findings are presented in the findings chapter.

3.14 Inter-rater reliability

Inter-rater reliability is a great tool to be used in the case of dealing with subjective judgement like when adopting content analysis (Bryman, 2008), content analysis is sometimes used interchangeably with thematic analysis that was employed in this study. Inter-rater reliability (Appendices 8-10) in this study was used to check the match between codes and themes and it was implemented three times by two raters, and in all exercises the two raters got the same answers.

3.15 Timescale/research planning

table 13. The research plan

Issued to be covered	Period of time
Read thoroughly to narrow the focus and then focus on the literature review for this researcher's EdD thesis. Later, synthesize the literature.	10/2016-4/2017 (7 months).
Develop methodology including the interview questions and continue literature review.	4/2017-8/2017 (5 months).
Return to home country to conduct the study Also, continue literature review.	9/2017-1/2018 (5 months).
Synthesize the data collected, analyze it and continue the literature review.	2/2018-6/2018 (5 months).
Highlight the practical implications, contributions and limitations. Write findings and discussion chapters. Continue literature review.	7/2018-11/2018 (5 months).
Write up full thesis and submit first draft	12/2018-4/2019 (5 months).
Write final draft after feedback obtained	5/2019-8/2019 (4 months).
Total time needed	36 Months

3.16 Chapter overview

This chapter has detailed all methodology considerations including the study design, sampling, procedures, quality of data and analysis of data. It has also provided detailed information on all the steps taken during the conduct of this research in both cycles so that other researchers can decide whether the findings of this study are transferrable to their own contexts or not. In addition, methods that inform all different themes are presented in tables to show which tools assists in generating each theme and to show the credibility of findings.

Chapter 4. Findings

4.1 Chapter overview

The findings of an exploration of an intervention, SOLEs, implemented in *Future College* that include participants' perceptions, emotions, attitudes, evaluation and reflection, and the researcher's reflections and evaluation, are reported in this chapter. These findings were obtained through four main methods that were used to collect data which are semi-structured interviews, focus groups, diaries and the researcher's field notes. Besides these methods, the researcher's reflection and evaluation of the whole process form a vital part that led to these findings. Participants were fully involved in the final evaluation of the whole process in cycles one and two by means of providing them with room for suggestions and the opportunity to express their views using different research tools. The findings chapter is divided into two parts: findings from cycle one and findings from cycle two.

This study aimed to answer the following research questions:

1. What is the current state of literature in relation to the field of SOLEs and Language learning?
2. How are SOLEs experienced and perceived by EFL learners?

3. How do SOLEs impact students and their learning?

4. What does a SOLE model look like in the context of Omani tertiary level education in *Future College*?

Findings from cycle one

This section elicits the findings from cycle one that are related to the second research question which asks **how SOLEs are experienced and perceived by EFL learners.** This research question guides the research's first objective which is **to explore Omani EFL students' experience of and orientation toward SOLEs**. These findings are separated into two themes: one is **participants' positive opinions about the intervention (SOLEs)** and the second is **areas for improvement**. These two themes clearly represent students' experiences and perceptions of SOLEs. The former represents positive perceptions about SOLEs and the latter deals with areas that need to be improved according to the participants and the researcher. The overall experience of participants in SOLEs is positive, they have provided many positive comments about several aspects of SOLEs. These positive comments and perceptions are shown in the following diagram which represents the seven sub-themes of the first main theme, these will be explored in the following seven sections. Each section discusses a particular aspect that participants and the researcher liked in SOLEs.

figure 11. Thematic map showing the first theme and sub-themes.
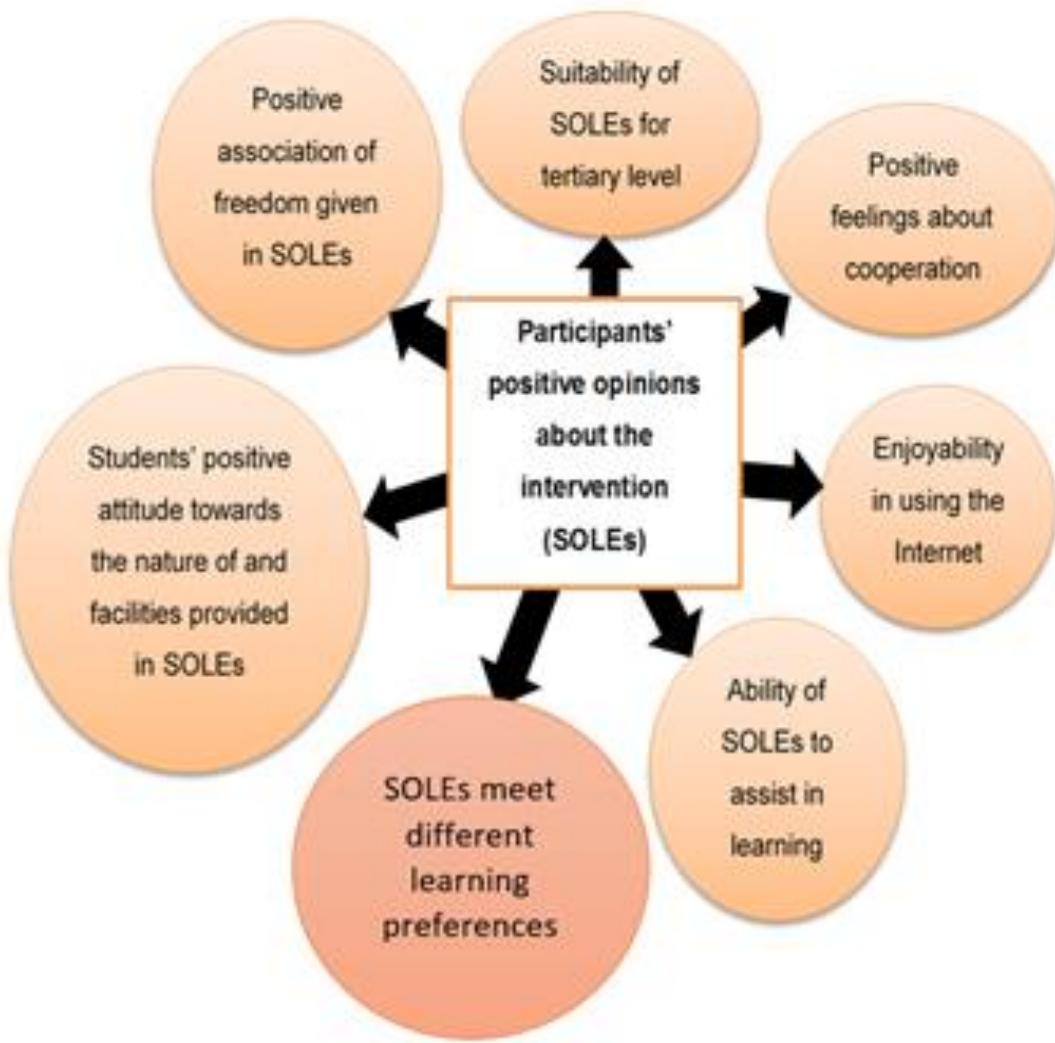
4.2 Participants' positive opinions about the intervention (SOLEs)

This is the researcher's first theme it will examine the research evidence from the participants and the researcher on the following sub-themes:

- Students' positive attitude towards SOLEs
- Suitability of SOLEs for tertiary level
- Positive feelings about cooperation
- Enjoyability in using the Internet
- Ability of SOLEs to assist in learning
- Positive association of freedom given in SOLEs
- SOLEs meet different learning preferences

The meaning and general idea of each theme will be detailed.

4.2.1 *Students' positive attitude towards the nature of and facilities provided in SOLEs*

The first sub-theme is **students' positive attitude towards the nature of and facilities provided in SOLEs**. There was almost complete consensus that the new environment is interesting, multi-faceted, meaningful and engenders team building. Participants liked the new environment and were appreciative to be part of the research which allowed them to trial it. This was apparent in their reflections in their diaries, during semi-structured interviews, focus groups and in the researcher's field notes. The findings show that students liked SOLEs for different reasons; some felt that SOLEs are associated with qualitatively different resources such as the set-up of the room being different, technology is part of the room and the furniture is different. Students mentioned this in three different sources of data: the semi-structured interviews, diaries and focus groups. Some examples of students' testimonies are provided below:

This environment has variety of things compared to normal classes. It is an environment with variety of things (S1, students' interviews).

I like the setup of this environment, it is different than the normal classes (S13, focus groups).

It has many things that help students learn like computers and learning means, more than in other environments. They are made available for students, students can use them freely (S20, students' interviews).

I have mentioned that this environment is interesting because it has more facilities … I have adjusted to the new environment because it includes many things that help us learn and cooperate (S16, students' diaries).

Another aspect of SOLEs that students liked is the nature of SOLEs, they characterized them as being fun and interesting. Students do not feel stressed in SOLE sessions, they feel that learning in SOLEs is fun and some participants commented that sessions are like games. The researcher also noted that students are happy with and impressed by SOLEs. Below are some testimonies from students that support this:

It is fun but serious (S14, students' interviews).

It is a social or fun environment as well (S20, students' interviews).

This session was full of fun (S16, students' diaries).

I also liked the pedagogy which makes students interested, active, not bored, not feeling sleepy and strive to learn (S4, students' diaries).

The lesson is like a game (S2, students' diaries).

The researcher also noted that students look happy with and impressed by this new environment.

It is also clear from the findings that the issue of atmosphere is very important to the students, three categories of data mentioned this. Students commented that they liked the atmosphere in SOLEs; they feel that SOLEs are different from all other learning environments to which they are accustomed and they also consider the SOLE to be a kind of change that breaks from their routine of learning which they experience in other environments. For certain participants, a SOLE is unique and this uniqueness is positive as it makes them love learning English, this is demonstrated in the transcripts highlighted below:

It is a kind of change. Different class atmosphere compared to other classes. It is an environment with different atmosphere. It helps improve our attitude (S9, students' interviews).

A very excellent one because it is different from other environments in the foundation program that we use (S12, students' interviews).

It was a unique experience. It is different than all other experiences in my life… different environment (S20, students' diaries).

This environment is different from other boring classes which we cannot move in and have the same routine (S1, students' diaries).

Students also liked SOLEs because, according to them, they are contemporary and suitable for their era. This concept was salient and consistently highlighted by students. They feel that having technology available to them is very important as technology is an inseparable part of their daily lives. Testimonies below show the extent to which students appreciate the availability of devices and technology in SOLEs:

It is one of the best learning environments meaning that it has more technology. Now, it is the digital era, the use of computers and technology (S16, students' interviews).

A modern environment that is suitable for our era (S7, focus groups).

This environment is new, easy and contemporary. It is suitable for the current generation (S7, students' diaries).

The advantages of this environment is that it is contemporary and it is suitable for our way of thinking (S5, students' diaries).

4.2.2 *Positive feelings about cooperation*

The second sub-theme of the first theme is **positive feelings about cooperation**. What is clear from the findings is that the cooperation was a much greater element of the experience than the researcher had initially anticipated. This theme is a prominent part in the findings as it was repeatedly mentioned by most of the students and in all research methods; they liked the cooperation in this new environment as they rarely work in groups in other classes. Eighteen participants explicitly detailed in

their reflections that they liked cooperation and team work within the SOLE. They emphasize that cooperation helps them to clarify things with each other, negotiate, infer, divide roles, have the opportunity to express their views, correct each other, feel responsible, plan as a team, discuss more, consult each other, work collaboratively, understand each other's personalities, achieve goals with friends and establish a rapport amongst participants. Extracts below highlight specific occasions where students express significant appreciation for the element of cooperation in SOLEs:

> *I like collaborating as a group* (S1, students' interviews).
>
> *I like that we work in groups* (S7, students' interviews).
>
> *The pros include: Encouraging team work. The session was good from all aspects like … cooperation among us. I liked cooperation among partners* (S5, students' diaries).
>
> *I also like cooperation among groups' members* (S8, focus groups).

Some students like cooperation in SOLEs because it helps them to clarify things with each other and also to correct each other. This element is a very useful finding of the research as it helped students enjoy the environment:

> *If I have wrong information, my partners can correct me* (S4, students' interviews).
>
> *Some students know but others do not so it is better to collaborate* (S12, students' interviews).
>
> *Working collaboratively helps gaining new knowledge from each other* (S2, focus groups).
>
> *It also helps correcting each other. In case I am wrong, my friend will correct me* (S8, focus groups).
>
> *This way my friends will correct me in case I commit any mistake* (S1, students' diaries).

Others liked cooperation as it helped them to divide roles which consequently reduced the burden on each individual. This also assisted them to learn to divide responsibilities and work hard in order not to disappoint their group members:

> *We divide roles* (S1, students' interviews).

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For example, if working alone, I feel more burden on me. In groups, the work is divided among members (S4, students' interviews).

For example, one student searches and another one writes down information found (S13, students' interviews).

Students also mentioned that participation and discussion is more in SOLEs compared to traditional learning environments. This aspect is very much appreciated by students as they rarely have the opportunity to discuss and participate in other classes. One strong feature of SOLEs is that the teachers' talking time is minimal and students' talking time is very high which is very important in language learning:

I participate more in this environment (S1, students' interviews).

I participate more here (S2, students' interviews).

We also work in groups, we discuss (S15, students' interviews).

In this session, lots of participation and discussion took place but within groups only (The researcher's field notes).

Discussion with friends is very good as well. The pros include that students work and discuss. I like that most students discuss in their groups about the given subject (S16, students' diaries).

I liked that there was enough time for discussions and exchange of opinions (S2, students' diaries).

Another important aspect of cooperation that is highlighted by students is that it engendered enthusiasm in terms of achieving goals together and understanding each other's' personalities which, as a result, helped to establish a rapport among students:

It gives students the chance to know the personalities of their classmates in a better way. I like achieve goals with friends, I like sharing success (S20, students' interviews).

Working as a team for the same goal (S5, students' diaries).
I prefer the cooperative one because in such environment everyone wants their classmates to learn. They all want to reach the same goal and they all want to pass together (S21, focus groups).

The understanding among them will increase (S20, students' interviews).

You helped us establish a rapport among us (S21, students' interviews).

4.2.3 *Suitability of SOLEs for tertiary level education*

The third sub-theme of the first theme is the **suitability of SOLEs for students'
level**. SOLEs worked very well in EFL tertiary level classes in *Future College* and this
is a main contribution that this study has achieved for the SOLE literature. The
researcher found that SOLEs can be used in tertiary level education and they can
improve the learning experience of students in universities. This reflection from the
researcher was supported by most of the participants who believe that SOLEs are
very successful as tertiary level EFL learning environments. Students believe that the
SOLE approach is not only very useful for tertiary level education but is also
important as it qualifies foundation year students well to join their specialization which
is either in engineering, business or IT the following year. The rationale behind their
belief is that SOLEs improve their English which is a core element to pass
specialization courses. Below are testimonies from different participants that show
their opinions on the use of SOLEs in tertiary level education:

*I think it is designed for level four students because they are about to join
specialisation year so they have to have experience in acquiring new skills and to
speak English fluently* (S1, students' interviews).

*This environment is good for foundation year students because when they move to
specialization departments, I mean we notice that some students in the foundation
year do not like English or their level is very low. Some students are introverted.
This environment helps students build confidence and believe in themselves so
they are fine when moving to specialization and other stages* (S10, students'
interviews).

For students in tertiary level…It is more suitable for tertiary level students (S13,
students' interviews).

However, one student maintained that it might be designed for younger learners in
order to train them to search for information using the Internet. This opinion is
mentioned by S2 only:

Maybe it is designed for younger learners, younger than us. It is designed to train them at early age how to deal with the Internet… it is may be designed for younger learners to train them how to use the Internet to find important information (students' interviews).

4.2.4 *Enjoyability in using the Internet*

The fourth sub-theme of the first theme is **enjoyability in using the Internet**. Most of the participants like this environment due to the availability of the Internet. This theme appeared in students' diaries, semi-structured interviews and focus groups. Sixteen students explicitly stated that they like the constant availability of the Internet; students believe that the Internet is beneficial because it provides a significant amount of information, it is a type of technology, it provides many sources of information, it helps students to maintain interest, it provides the exact information sought, it is also a change of routine, it saves time, it is fun and it is an unlimited massive source. Therefore, some of the participants think that the Internet is a good replacement for books. All these opinions are evidenced in the following testimonies taken from students' reflections:

S7 likes using the Internet a lot so she found this environment interesting, it is in accordance with her preference of looking for information:

I like technology so I like that we use computers and the Internet. I spend most of my time on computers and the Internet that way I felt that environment is great (students' interviews).

S8 also likes the Internet because it is a massive resource of information. She liked the fact that they are not restricted to a specific source but can use the Internet to search for information:

The good thing about this experience is that we relied on the Internet. There is no specific source of knowledge that we have to stick to. I like that there is no certain source but we have the Internet with lots of sources to search from any website (students' interviews).

Moreover, S10 also feels that the Internet helps to make the classes enjoyable and interesting for students:

We feel bored during other classes but this one is connected to the Internet. We search for answers via the Internet. Also, changing the way of searching via Internet (students' interviews).

In addition, S22 believes that the Internet helped her to improve some skills. This opinion is supported by many students who feel that the Internet helps to improve their reading, searching, learning fast and speaking skills. For this, they liked and appreciated the availability of the Internet:

We improve many things. Speaking, talking, sharing information and working on computers online. Learn fast, like it more. Working online (students' interviews)

Other students provided more reasons for their appreciation of the Internet in SOLEs such as expanding their knowledge, helping them to discover new information and helping to break their usual routine:

This environment is a change by itself to our routine especially by using computers and searching the web like google and YouTube. It widened our knowledge and mental abilities (S21, focus groups).

I like searching through Internet. We are free to check more than one website and to consider more than one answer (S12, focus groups).

The lesson was great and I loved the idea of … searching for information in the Internet. I like searching for information on the Internet. We benefited from searching (S15, students' diaries).

I like using computers to discover anything. I also liked searching on google. I love everything in this environment like searching for ideas. I used Google to extract specific and general ideas (S16, students' diaries).

I liked using the Internet. I benefited a lot especially from searching (S9, students' diaries).

However, a few students feel that use of the Internet incorporates some negatives and that books should not be ignored. S5, for example, believes that the Internet can provide unreliable information in some cases and, therefore, she believes that books should not be dismissed:

It is not as beneficial as books because there are cases where Internet is not accurate like Google Translate (S5, focus groups).

S2 also believes that the Internet might not help to improve students' intellectual abilities as it provides answers without making students think profoundly:

Internet gives the answer direct and help save time but it does not make students rely on their abilities. Internet gives you the answer fast but can never replace books (S2, focus groups).

Furthermore, S7 and S1 think that the Internet may distract students from their main task as they may focus on features which are irrelevant to the given task:

In Internet students might do other things like watching YouTube, watching images and articles. Students do not focus on one point but many (S7, focus groups).

Internet is also not focused like books and some people may deviate from the main task and do something else but with books students work with all their senses (S1, focus groups).

4.2.5 *Ability of SOLEs to assist in learning*

The fifth sub-theme of the first theme is the **ability of SOLEs to assist in learning**. There is unanimous agreement among nineteen participants who believe that SOLEs boost learning and help students to learn effectively. They affirm that they like the SOLE approach because it helps them to acquire skills, manage time, improve their English, learn new vocabularies, improve pronunciation, reading and speaking skills, manage their learning, infer accurate information, learn fast and many other benefits as detailed in the extracts below.

Many students maintained during the semi-structured interviews that SOLEs help them to learn new vocabularies as a result of reading many texts on the Internet. S1, for example, held that:

We learn new vocabulary that help us in other classes (S1, students' interviews).

Others mentioned that their searching skills have improved significantly, as confirmed by S3:

It has improved my searching skills in the Internet. It taught me things through clicking on different links to discover information (S3, students' interviews).

In addition, many students believe that SOLEs are very powerful at improving different English skills. S7, for instance, stated that:

Honestly, I have started searching for websites that help us in pronunciation, grammar and other things that we are weak at. It improved our English. We improved reading and pronunciation skills. We learnt the pronunciation of some words and letters. We learn new words and things that we did not know before (S7, students' interviews).

Some students claimed that SOLEs helped to improve their speaking and evaluation skills. S16 emphasized during focus group interviews that:

To improve students' skills. Speaking and searching skills. Also, choosing the right information accurately (S16, focus groups).

In general, students believe that SOLEs enrich their learning experience. They believe that SOLEs are very effective at improving many aspects of learning including language skills and social skills. S20 and S16 confirmed in their diaries that SOLEs had a significant positive impact on their learning journey:

This environment enriches my learning journey due to its difference compared to other environments, due to the exchange of experiences, talents and ideas among students. This experience benefits me in the following areas: increasing my self-esteem and making me believe in myself, increasing my interpersonal skills while working in groups, increasing my English skills like reading, speaking, writing etc. and also making me innovative (S20, students' diaries).

The effects of this environment on me include learning lots of things and using my brain very well to tackle many things. I learnt about how to improve writing an essay and a summary of any subject. I like that we learn different skills of English. The pros include that students learn different subjects. We learn more information in different ways (S16, students' diaries).

Students also stated clearly that SOLEs are effectual at enhancing the language learning experience. This analysis demonstrated issues of novelty and addressed whether students like the SOLE because it is novel or because of other reasons like it being successful at enhancing their learning. Findings show that students liked SOLEs even after weeks of the conduct of the research and mentioned that this type of environment is effective at making language learning easier as shown in the testimonies below which are drawn from different data sources:

> *I thought in the past that English language is so difficult that I cannot learn it but through this environment I have learnt that English language is so easy* (S21, students' interviews).

> *It (A SOLE) is beneficial. We benefited a lot in terms of searching, communicating* (S12, students' interviews).

> *I felt that I can learn more compared to other classes that include only tables and a teacher in front explaining things for us* (S15, students' interviews).

> *We benefit a lot from it* (S1, students' diaries).

4.2.6 *Positive association of freedom given in SOLEs*

The sixth sub-theme of the first theme is **positive association of freedom given in SOLEs**. Participants appreciate the freedom offered by this environment which they lack in other environments. Eleven participants explicitly stated in their reflection that the freedom provided SOLEs is good. In other classes, they feel restricted in terms of expressing themselves or completing tasks the way they would like; however, this is not the case in this environment. They do not feel restricted by teachers' instructions and limits which make them feel that learning is imposed on them; feelings of restriction by a particular method or approach are eliminated. All of these facts are reflected in the extracts below. Moreover, participants positively highlighted the freedom to choose how to answer questions asked, to select websites and to present the findings the way they like. However, some students did not like choosing where to sit, the freedom to answer or not and the absence of the teacher. Therefore, after evaluation of cycle one, these aspects were changed in cycle two.

S5 appreciated the freedom given in SOLEs:

When we go to this environment, we feel that we are free and not restricted by a certain system or anything (S5, students' interviews).

Students also appreciate the freedom given in SOLEs because it provides them with a large part of the class time to express their ideas, talk freely and it makes classes more flexible. This happens more in SOLEs compared to other classes as stated by S12 and S20:

Everyone feels free when giving their answers. In other classes teachers restrict us, the time is all for them, we have no time to talk and discuss. But in this environment, it is ok. It gives more freedom (S12, students' interviews).

In other environments, we are restricted with many rules but this one is more flexible and less restricted (S20, focus groups).

The researcher noted the impact of traditional environments on students that is due to the restrictions in other environments, students were unsure as to how much freedom they had in this environment:

One male student moved to another group after twenty minutes to ask for some information and quickly went back to his group. This male student asked for permission to join another group because they are not used to be free. He repeated or asked for permission several times to make sure he can leave his current group and join another one (researcher's field notes).

4.2.7 *SOLEs meet different learning preferences*

The seventh sub-theme of the first main theme is that SOLEs have met most students' learning styles or, to be more accurate, SOLEs have met at least one preferred learning style among many other styles. Fourteen participants mentioned that SOLEs meet their learning style preference. The researcher noticed that students appeared to be very happy to work in groups and participants have confirmed this finding. Also, some students prefer to study by using technology, hence they found SOLEs suitable for them and as such they meet their learning styles. One student also mentioned that he likes learning by writing and affirmed that this environment gave him the opportunity to write a lot.

Many students highlighted that they like working in groups which is the format in SOLEs but not in other traditional environments. The layout of classes in other environments consists of rows of chairs and tables where students work individually most of the time. S2 and S4, for example, say that they like working in groups:

Working with others (S2, students' interviews).

This environment meets my learning style because we work in groups (S4, students' interviews).

S3 also stated that:

I used in my old school to work in groups and I got used to that but when I joined the college there are no groups. I benefited from you (the researcher) that you again put us in groups. I like working in groups (students' interviews).

S13 prefers learning through technology and in groups so he believes that a SOLE is perfect for him:

I like so much working with computers and the Internet, this makes me work a lot (students' interviews).

S1 also mentioned that she likes learning to be fun which, according to her, is the case in SOLEs:

I like learning with fun, I mean I like lectures to be active with enthusiasm. I feel lazy in passive classes. SOLEs boosts enthusiasm (focus groups).

However, one student, S8, felt that SOLEs do not suit her learning style as she likes working alone:

I personally like working alone (S8, students' interviews).

4.3 Areas for improvement

The second part of this section provides the findings from cycle one that are related to the second research question which asks **how SOLEs are experienced and perceived by EFL learners**. This research question guides the first objective of the study which is **to explore Omani EFL students' experience of and orientation**

toward SOLEs. This part deals with areas for improvement and represents areas that need to be improved according to the participants and the researcher. The overall experience of participants in SOLEs is positive; they have commented positively about many aspects of SOLEs and these positive comments and perceptions were explored earlier. Here, the researcher presents areas that participants and the researcher found unsatisfactory and which need to undergo some improvements. The following diagram represents the two sub-themes of the second main theme which is explored in the following two sections.

figure 12. Thematic map showing the third theme and sub-themes.
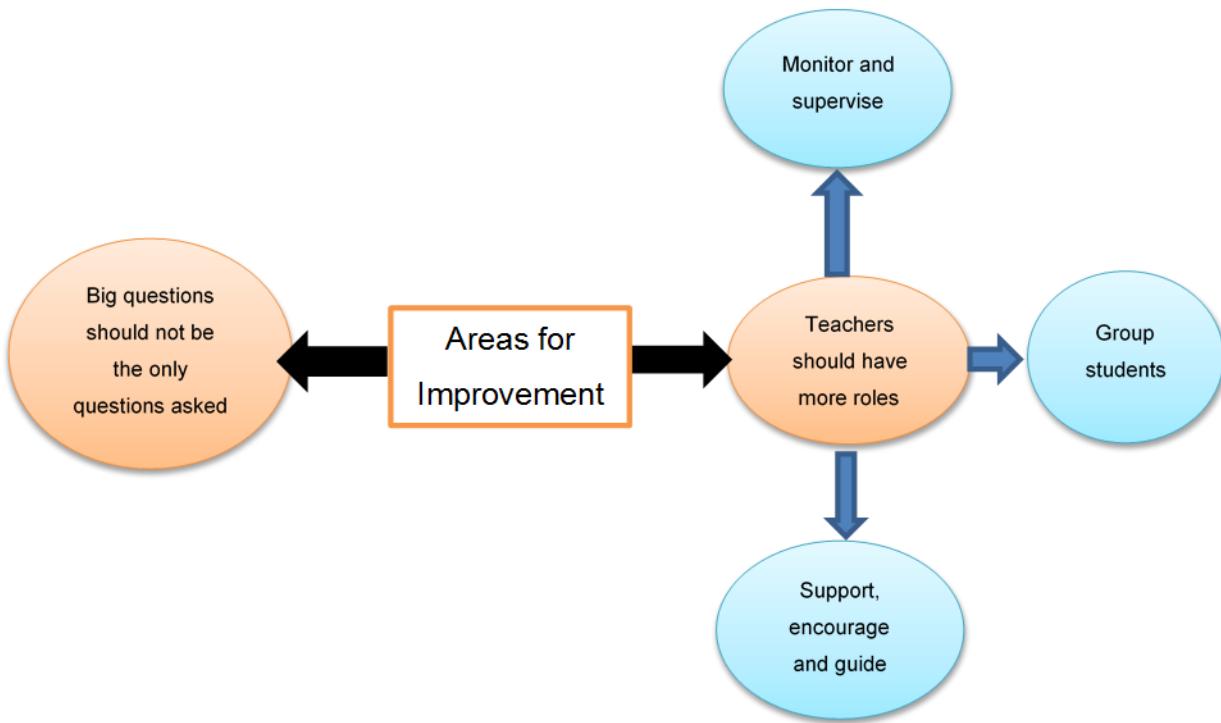
4.3.1 *Big questions should not be the only questions asked*

The first sub-theme of the second theme is that **big questions should not be the only questions asked.** Fifteen of the participants mentioned explicitly that the current role of big questions in SOLEs is insufficient and requires modification. The researcher reached the same conclusion after reflecting, evaluating and teaching many SOLE sessions. Participants believe that big questions sometimes have drawbacks, negative feedback included difficulties in finding relevant accurate information to some, some big questions are broad in scope hence provide surface knowledge. Other weaknesses are that they can also lead to cheating, that is some students may give answers without searching as big questions do not require right answers, they also cause routine in classrooms which consequently leads to feelings of boredom, big questions may be answered quickly, the time may be too long for one question, big questions are vague and meaningless, others believe that they are not beneficial, this can lead to apathy and students may not take the task seriously

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because they do not have to present accurate answers, there are many other drawbacks as reflected in the extracts below. Therefore, students believe that big questions should be divided into smaller ones with specific answers. It is worth highlighting that the researcher noticed that big questions can be used, but not all the time and not in all SOLE sessions. The researcher noticed that big questions can work, however frequent usage leads to repetition and routine and to the problems highlighted above. Therefore, this researcher, after the evaluation stage of cycle one, believes that big questions can be used occasionally, however, not in all sessions to avoid the above-mentioned problems that might occur.

Certain participants complain that they cannot find relevant in-depth information about some questions which consequently leads to disappointment:

It is difficult to find information related to some questions even with the use of the Internet. In one of the sessions, we could not find information that can help us answer the big question (S1, students' interviews).

In some cases, we face difficulties to answer the big questions and to find information (S5, students' diaries).

Some participants feel that dealing with one question only makes them feel bored and they feel that the time is too long to answer one question:

I mean that from the beginning of the lecture until the end, we deal with one question. This makes us feel bored. This does not provide motivation. Students will just play, use their phones, they will do nothing. I did not like having one question, it is boring (S4, students' interviews).

After almost half an hour of searching, students seem to feel bored and some of them started talking about other things (researcher's field notes).

The session was good and interesting but the length of time leads to feeling bored. We felt bored (S21, students' diaries).

In addition, some students believe that big questions are overly general and do not provide in-depth knowledge:

I think it gives surface knowledge but not deep one (S7, students' interviews).

I think questions are of no meaning. They do not focus on specific thing from the syllabus like listening skill for example. They seem not to be meaningful. The questions are not meaningful. They are general and open (S14, students' interviews).

I have a negative point about the big question. It can lead to nervousness, students can feel worried because there are many information or sometimes there is no direct answers (S15, focus groups).

The answers I got at the end were not convincing which means that students might not benefit a lot from searching for information (researcher's field notes).

What exactly I disliked is that when we search for answers we cannot get a specific direct answer which leads to confusion (S10, students' diaries).

However, in some occasions did some students think that the role of big questions is sufficient:

One question is better because students will focus on one question. They will spend their time searching for information related to this question (S13, students' interviews).

I feel that this question includes so many information about a certain topic which is good (S1, students' interviews).

I liked that there is no right or wrong answer because it allows students to choose an answer that is in harmony with their opinions (S8, students' diaries).

4.3.2 *Teachers in SOLEs should adopt more roles*

The second sub-theme of the second theme is teachers in SOLEs should adopt more roles. There was almost a complete consensus among participants that the current teachers' role in SOLEs is insufficient and that they need to do more. The researcher reached the same conclusion after reflecting, evaluating and teaching many SOLE sessions. Participants believe that teachers in SOLEs should monitor the class, encourage cooperation, remain in the classroom, clarify vague information to students at any time, encourage seriousness, visit all groups, control the class and manage it, reward students, explain new information, guide students in completing tasks, select which students should answer questions, in addition to the many other

roles as detailed below in the extracts from different data sets including the researcher's field notes.

Some students believe that a teacher in SOLEs should supervise, monitor and remain in the classroom. Teachers should monitor discipline in SOLE sessions. This researcher noticed some undesirable behaviour that occurs in SOLEs, especially when students are left unsupervised, this behaviour was also confirmed by participants themselves. Some students during SOLEs sessions do not search, some of them do not listen to each other's answers, some speak in Arabic, some play on their mobiles, others are not serious, some students play while others work, some students leave the class when left unsupervised, sometimes they talk about non-relevant topics, some participants do not know how to share, how to work in groups and some students become lazy and leave the classroom. These are some examples of undesirable behaviour among many as described by participants in the extracts below:

Students emphasized that when the teacher leaves them unsupervised, they lack commitment:

Teacher's role is not enough. When the teacher leaves us unsupervised, we do not take things seriously (S21, students' interviews).

Students are not serious. They speak in Arabic. Sometimes, they work and sometimes they do not. Some play with their phones. I feel there should be more discipline and seriousness (S5, students' interviews).

I disliked the vanity of some students. I disliked that lots of students made noise during the session. I disliked that students sometimes are careless during the session (S16, students' diaries).

Also, when the teacher leaves the class, some students leave the class as well:

Sometimes when the teacher leaves, students leave as well. Five to six students follow him and leave the class (S1, students' interviews).

I left the class unsupervised for about five minutes and when I came back, I found some students out. When they saw me, they returned and said we went to restrooms (researcher's field notes).

A number of participants speak in Arabic, play on their phones or talk off topic during SOLEs especially when left unsupervised:

Students will talk off topic because the teacher is not in the class (S13, students' interviews).

We become lazy to perform the given task, we start playing with our phones. The work stops. We speak in Arabic (S4, students' interviews).

Arabic, of course in Arabic (S21, focus groups).

Most students speak in Arabic and sometimes speak about other topics irrelevant to the session topic (researcher's field notes).

The use of Arabic language is many time double the use of English language. I disliked speaking in Arabic right after the teacher leaves the class (S5, students' diaries).

Some students believe that a teacher in SOLEs should support and encourage students. Students believe that teachers in SOLEs should constantly visit groups to provide support, guidance and encouragement. Many students stressed this idea as shown below:

In case any group does not know what they are supposed to do, the teacher should clarify for the group members. The teacher should remain in class and help students (S2, students' interviews).

I hope that the teacher comes to our groups, helps us. If we do not understand anything, he explains more for us until we understand (S9, students' interviews).

Teachers should train students. Students might need a small help, so in such environment, s/he has to rely on himself or classmates. May be after five minutes, he should go around the groups. He can also check whether students are still working on the given task or doing something else (S7, focus groups).

Students are stuck with articles at the beginning (researcher's field notes).

Some students ask for support from the teacher in all sessions. They seek support in searching and in some information related to questions (researcher's field notes).

I disliked that there is no cooperation between the teacher and us. The cons include the absence of cooperation from the teacher side (S15, students' diaries).

The cons of this environment include that the teacher does not look after students or class. I also disliked that the teacher does not help students during searching. …does not support students (S16, students' diaries).

A teacher in SOLEs should group students him/herself

Another role teachers should adopt is to group students. The current grouping in SOLEs is optional, it is totally the responsibility of students to choose where to sit and with whom. During the conduct of SOLE sessions, the researcher noticed many prominent problems, also confirmed by some participants, such as students not changing groups, which is they sit with people they already know. In addition, sometimes a large number of students form one group which leaves other groups with few students, and most importantly some groups do not have mixed ability students which affects interaction and participation. Therefore, in some cases the teacher should intervene in grouping students:

He should also change group members in every session (S2, students' interviews).

Most students, when grouping, sat with people they previously know. In most cases, they belong to the same village (researcher's field notes).

Five female students sat together and left three female students alone (researcher's field notes).

I disliked that students have not changed groups (S2, students' diaries).

figure 13. Thematic map showing the fourth theme and sub-themes.
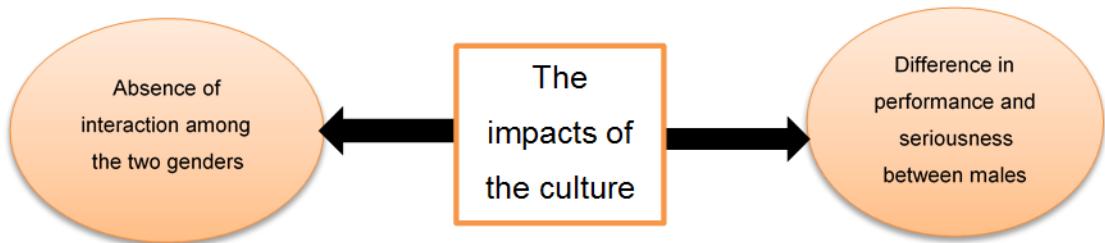
4.4 The impact of culture

This section presents two sub-themes of the third main theme which are **difference in performance and seriousness between males and females** and **absence of interaction between the two genders**. These two sub-themes are interesting emerging concepts that the researcher has noticed and focused upon using many research tools and reflection.

4.4.1 *Absence of interaction between the two genders*

The researcher has noticed that interaction between the two genders was absent. Analysis of the issue has identified many reasons and impediments that prevent male and female students interacting with each other. One prominent impediment according to participants and as noticed by the researcher is related to culture as detailed below in the extracts. This negatively affects students' work during the classes as they feel reluctant to provide answers, they do not change groups, even with the same gender, and they do not share ideas and thoughts. Fourteen students highlighted this problem.

Several participants mentioned on many occasions that culture is the impediment that prevents them from interacting with the opposite gender:

Sometimes, we feel shy. We have the answer written and we are ready but we hesitate because we are afraid that the other gender will laugh at us or make fun

of us. I do not think that we will move in this environment due to our culture (S5, students' interviews).

It is not because of religion. The main reason is our culture. They (boys and girls) are trained to be separated. When the coeducation started in Oman, there were some challenges in terms of mixing boys and girls. The same here, because this environment is new, it will take time to have both genders work in the same group (S20, students' interviews).

In our culture, we are not used to say to our classmates that I agree with your point of view (S7, focus groups).

It is not part of our culture to work in mixed groups. Because of our culture it is not allowed to talk to female students, I mean it is allowed but our culture prevents us from doing so (S20, focus groups).

The researcher also noticed some issues that emerged as a result of culture which included the absence of interaction between the two genders and maintaining a physical distance from the opposite gender's groups:

Five male students sat in one group and another five students sat in another table and left one table vacant because it was close to female students. It took time for them to decide to move to that vacant table (researcher's field notes).

There is no interaction between male and female students (researcher's field notes).

Students highlighted this issue in their diaries as well:

We have not interacted with other groups in the class because of shyness. I disliked that there is no cooperation among groups and there is no exchange of information among them. I disliked that there is no movement in groups (S1, students' diaries).

Because we have two hours a week, I suggest making one hour for female students and another hour for male students so that we feel more comfortable (S21, students' diaries).

4.4.2 *Difference in performance and seriousness between male and female students*

The second sub-theme of the fourth theme is the **difference in seriousness, hard work and achievement between male and female students**. The researcher noticed that female students demonstrate more commitment to tasks than male students and they work hard in their groups to identify the answer to questions.

Female students are doing better (the researcher's field notes).

In some groups, some students were still passive but in other groups all students were active especially the females' groups (the researcher's field notes).

Female students worked together to write the paragraph but males depended on one student (the researcher's field notes).

Female students use YouTube and online dictionaries to search and check pronunciation but males do not (the researcher's field notes).

This following section presents the findings that are related to the third research question which asks **how SOLEs impact students and their learning.** This research question guides the study's second objective which is **to investigate whether SOLE pedagogy is able to facilitate an effective English language learning environment for Omani students**. These findings are represented in one main theme with five sub-themes which are students' autonomy increases, SOLEs helped develop students' personalities, approach of SOLEs motivates students, personal development improves and students are empowered. The personal development sub-theme includes two sub sub-themes which are students become better at building relations and students develop intellectual competence. The empowerment sub-theme includes two sub sub-themes which are students' developmental ability to complete tasks, and tasks and learning are meaningful for students. These themes clearly represent the impact of SOLEs on students and their learning as shown in the following diagram. This diagram represents the main theme and the five sub-themes which are explored in the following five sections.

figure 14. Thematic map showing the fourth theme, sub-themes and sub-themes of some sub-themes.
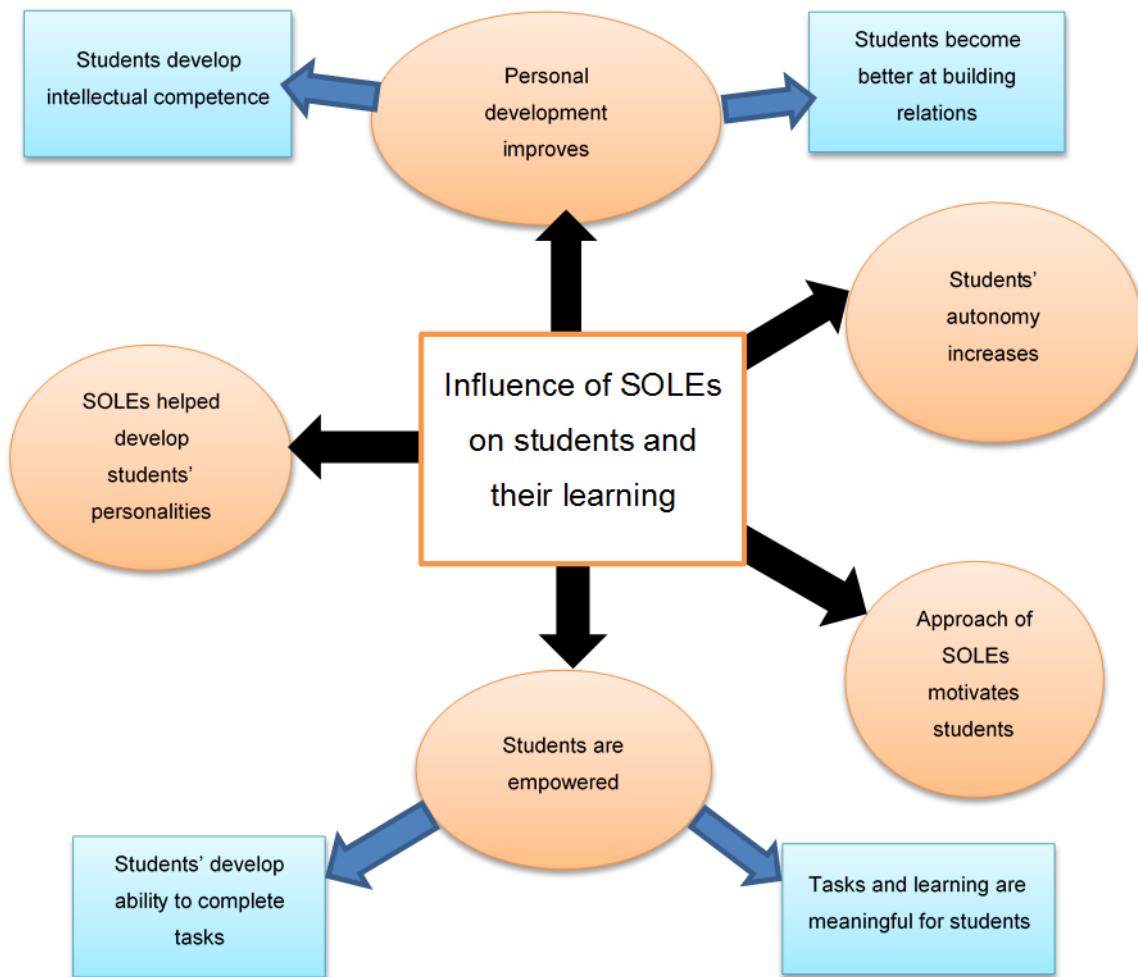
4.5 The influence of SOLEs on students and their perception of learning

It has been found that SOLEs affected students positively. The data analysis shows that students' autonomy increased, students' personalities improved, students felt empowered, motivated and also felt that they had developed some important skills as detailed in the sections below.

4.5.1 *Students' autonomy increases*

The first sub-theme of the main theme **the influence of SOLEs on students and their perception of learning** is **students' autonomy increases**. This sub-theme was highlighted in the researcher's reflection and was confirmed by the participants. It was observed by the researcher and confirmed by participants that students were happy for the room provided by this environment to choose what to do and how. This environment helped to create autonomous learners. Participants mentioned many tasks that they completed in according with their own decision making. They mentioned that they were also able to express their opinions freely without limitations. The researcher noticed that students demonstrated autonomy in many actions in the SOLE environment. They chose which website to surf, how to tackle each task, how to set goals, who to consult and many other autonomy-generated decisions. Testimonies that demonstrate and confirm autonomy are detailed below.

Students highlighted that this environment gives them the room to complete activities the way they like, that is it gives them more freedom to tackle tasks according to their preference:

We do things that we like and the way we like (S2, students' interviews).

This way of learning gave the freedom for students to say their opinions whatever they are (S4, students' interviews).

Here students have more room to use their skills. Here students have options. Here students can choose any way to reach the answer (S20, focus groups).

The researcher also noticed that SOLEs made students autonomous in their learning as they started doing tasks the way they like and according to their own decision making:

Some students said it is good that we search in any website, it is our choice (the researcher's field notes).

Students discussed how to search and do the task according to their preference (the researcher's field notes).

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4.5.2 *SOLEs help to develop students' personalities*

The second sub-theme of the main theme the **influence of SOLEs on students and their perception of learning** is **SOLEs help to develop students' personalities**. It was found by the researcher and confirmed by participants that SOLEs positively affected students' personalities in many ways; fourteen students highlighted on many occasions that this environment developed the confidence of a significant number of students. Students felt that they had more confidence due to many factors such as encouragement from the teacher, freedom provided, discussions and other factors. It also helped them to overcome fear, shyness and hesitation. Not only that, but it has also increased students' confidence and made them more committed to completing tasks. All these facts are presented in the extracts below.

Many students mentioned that they became bolder and more confident because of the nature of SOLEs. They highlighted that they were able to overcome the shyness from which they previously suffered.

Discussion with others and giving presentations help us be bolder (S1, students' interviews).

It has some qualities that helped us to be more confident and overcome shyness and similar things (S4, students' interviews).

I am a shy and nervous person. This environment helped me overcome this problem. I have not mingled with my classmate before, but this environment helped me to get to know them. I have get rid of shyness (S20, students' interviews).

I became more daring and bolder. I used to be introvert but now I speak and participate within groups (S2, students' interviews).

This is a great way of learning because it enables students to change especially shy ones who cannot communicate with students. This environment makes a person bolder and more self-confident (S9, students' diaries).

The researcher also noticed a change in students' personalities as they developed more self-confidence.

Students started becoming confident may be because it is unthreatening environment (the researcher's field notes).

Furthermore, some students felt that this environment helped them to develop responsibility for their learning and within their groups:

I feel that I am responsible to do and offer something (S5, students' interviews).

I became more responsible (S8, students' interviews).

I liked this environment because it makes students depend on themselves (S8, students' diaries).

The researcher also noticed the same:

Some students became responsible and serious.

It has become clear that there are leaders in all groups and there are also those who search well.

4.5.3 *Personal development improves*

The third sub-theme of the main theme the **influence of SOLEs on students and their perception of learning** is **personal development improves**. It was confirmed by both the researcher and students that this environment significantly helped to improve students' personal development. This sub-theme stood out very clearly as it was mentioned and reflected by both participants and the researcher on many occasions. SOLEs influenced participants in a way that made them able to build relations (social interpersonal skills) and develop intellectual competence. Those two areas are among the seven indicators of personal development (Chickering and Reisser, 1993) and are addressed in the following two sections as sub-themes of a sub-theme.

Students become better in building relations

SOLEs helped students to make new friends and improve social interpersonal skills, get to know other students more, understand each other's personalities, learn how to work in a team, express opinions in a way that does not injure others' feelings, maintain good relations and eliminate shyness which is a barrier to relationship building. It was confirmed by both the researcher and students that this environment helped to develop students' sociability. Sixteen students explicitly stated that SOLEs

helped them in terms of building new relations and making new friends. This sub-theme was clearly evident as students used, in most cases, the pronoun ''we'' when talking about factors related to the environment. They also worked collaboratively most of the time, encouraging each other as a team aiming at success. They respected each other within groups and the class as a whole. Participants came to know each other with the help of this environment, not only that, but they also understood each other's personalities and became better as team members. Their interpersonal skills improved which was reflected in the way they dealt with each other. All of these findings are presented in the extracts below.

> *I discovered so many things about my classmates and build new friendships* (S3, students' interviews).

> *Because of this environment my relationship with my classmates became better. I used to know them a little bit but now our relation is stronger* (S13, students' diaries).

> *This environment helped us to be close to each other's. It is not like other environments where we have no chance to get to know each other. It made our relations stronger* (S20, focus groups).

> *The most important thing in my view is that interpersonal skills of students have improved which help us understand each other's and which I feel is a must in any class. I have become more active in cooperation with my partners* (S1, students' diaries).

> *This cooperation strengthens our relationships and increased the rapport and respect among us* (S10, students' diaries).

> *Students socialized well and respected members within their groups* (the researcher's field notes).

Students develop intellectual competence

SOLEs also develop intellectual competence. Seventeen students confirmed that SOLEs helped to develop their intellectual competence; some participants started to develop confidence in their own ability which is a key intellectual skill that is important in any individual's life. They acquired the skill of inference which is a high order thinking skill. In addition, searching, presentation, analysis, planning, consultation and many other intellectual skills were enhanced. Students learnt how to work and

plan as a team, how to negotiate and how to convince others. All these points are presented in the extracts below.

It fosters our skills and talents. It helps students to be innovative. In this environment, students can innovate and improve themselves. We negotiate and evaluate our opinions until we get the right answer (S4, students' interviews).

It improves our intellectual potentials. When I search for something and cannot find answer, I go back to the question. I analyse it so I feel that I am thinking and my brain is working (S5, students' interviews).

It improves students' skills…choosing the right information accurately (S16, focus groups).

I think all students in my class have improved … negotiation, decision making, planning. The effects of this environment on me include learning lots of things and using my brain very well to tackle many things. Some skills that I have improved are analysis. I also acquired new experiences for example evaluating the best details for any subject (S16, students' diaries).

This time students provided acceptable answers and used some new vocabularies. Students seems to adjust to SOLEs a little bit (the researcher's field notes).

4.5.4 *Students are empowered*

The third sub-theme of the main theme the **influence of SOLEs on students and their perception of learning** is **students are empowered**. Students felt empowered when working in SOLEs, this is because they felt able to complete tasks in this environment and that their learning was valuable.

Students' develop ability to complete tasks

Students felt that they could tackle almost any task due to the availability of the Internet and cooperation amongst participants. As a sequence, students developed self-belief, they also believed that they could improve their English and hence they gained the confidence that is important in doing most tasks. This is reflected in the extracts below.

It made me feel that I am able to try and improve my English (S1, students' interviews).

All means that help students to get the answer are provided so there is no obstacles that prevent students from doing any task (S2, students' interviews).

I can find answers to all tasks because we have the Internet (S22, students' interviews).

The Internet is available and it includes everything. I type the given question in order to get the information I need. In case I cannot find the required information, I change the wording or only type the key words so 100% I will find relevant information (S5, focus groups).

Some students while discussing emphasise that the Internet will help them find the answer, they felt able to answer (the researcher's field notes).

Tasks and learning are meaningful for students

Students also felt empowered in a SOLE environment because what they learn is meaningful as explicitly confirmed by thirteen participants. They feel that their learning is meaningful which is important in terms of empowering students. They feel empowered as questions asked stimulate interest, they like the activities, they learn beneficial information and the content of their learning helps to improve their English. As a result, students believe in themselves, they also believe that they can improve their English as shown in the extracts below:

We have been learning beneficial things through searching information about valuable topics (S3, students' interviews).

It is meaningful and with value. I feel it is meaningful because it added so many things to my life. For example, I learnt how to search for information, how to pronounce words and how to divide words to say things clearly and successfully (S4, students' interviews).

At the end of the session lots of students said to me what we do is interesting and beneficial (the researcher's field notes).

4.5.5 *The approach in SOLEs motivates students*

The third sub-theme of the main theme the **influence of SOLEs on students and their perception learning** is **the approach of SOLEs motivates students**. SOLEs motivate students to learn and work hard. Thirteen students mentioned that they felt motivated due to the availability of the Internet, social media, the reinforcement they receive, the uniqueness of SOLEs, the fun within SOLEs and additional reasons as shown in the extracts below:

This environment has motivated me to learn via the Internet and social media. It has given us the motivation to be better in using programs (S3, students' interviews).

It Motivates students to like English language. This environment gives motivation for students to improve English skills, improve this language, and acquire new skills. It motivates us (S10, students' interviews).

This environment motivates us and changed the routine of our education (S8, focus groups).

This environment increased my desire to learn because we learn in groups (S14, focus groups).

I like searching so I felt motivated by this environment (S15, focus groups).

I think this environment motivates students to study hard and to attain high marks (S4, students' diaries).

Some students in all groups said ''let's work hard let's search in many websites''. This shows that they are very much motivated (the researcher's field notes).

4.6 Procedures of developing a new SOLEs toolkit

This section presents the findings from cycles one and two that are related to the fourth research question which deals with **what a SOLE model looks like in the context of Omani tertiary level education in *Future College*.** This research question guides the study's third objective which is **to theorize a model for effective and impactful SOLE adoption within an EFL learning context.**

Initially, participants liked SOLEs in general terms, especially at the beginning, however they subsequently felt that they should undergo some changes. Most students felt this way as shown in the examples below which are extracted from semi-structured interviews and students' diaries:

It is good for students but there are somethings in it have to be changed. There is imperfection a little bit as I mentioned before. There are strengths and weaknesses (S4, students' interviews).

It is a new experience. At the early days, we were optimistic. But with the passage of days, I felt that my enthusiasm to this environment started to reduce. That is because you have not added anything to the environment. I don't know. I feel that it is suitable but there are certain things we need to add to it. It is suitable but it has to undergo some changes (S5, students' interviews).

The session was just like the last one, there is no change. I disliked that it has become like a routine, no changes. The cons include that it is the same pedagogy, no change. The session was as usual, no change and boring somehow. It became a routine (S8, students' diaries).

It is a new lovely way of learning but it should be improved (S7, students' diaries).

Participants suggested some changes and improvements to make SOLEs more suitable and functional for Omani students. These suggestions are an important practical element that shows the importance of involvement of participants in decision making to improve the intervention and they also highlight the participatory aspect of PAR. The suggestions put forward related to big questions, teachers' roles, the provision of more activities, and the provision of answers. Some participants also requested competitions. Most of these suggestions were compatible with the researcher's own field notes and data analysis as presented in the big theme earlier which is "**areas for improvement**". Below are some testimonies that reflect participants' suggestions:

Students suggested some changes to be made to the teacher's role:

The teacher should monitor students (S4, students' interviews).

The teacher should do more roles (S5, students' interviews).

The teacher role should be more especially with discipline (S8, students' interviews).

The role of the teacher should be more by discussing with students (S12, students' interviews).

Changing groups' members from one session to another so students will not rely on students who do everything (S13, students' interviews).

I suggest you force us to translate new words and use them in sentences to store them. For the sake of students' progress, you should do this (S5, students' diaries).

Students also suggested replacing big questions by several specific questions:

In terms of the question, it is better to divided it into questions (S1, students' interviews).

When they finish one question, he (the teacher) should ask them to do the next question. I mean that from the beginning of the lecture until the end, we deal with one question. If you give students activities and other things, that will motivate them. I did not like having one question, it is boring (S4, students' interviews).

There should not be one question for the full hour. There should be many questions throughout the session, this will keep students busy (S7, students' interviews).

I do not like that it is the same routine, only one question every time (S8, students' interviews).

Also having two questions as I mentioned (S12, students' interviews).

I feel with one question we will not remain enthusiastic and active (focus groups).

The researcher evaluated cycle one in depth and consequently introduced some changes as driven by the research data analysis. The researcher changed the role of the teacher; the teacher's roles increased, students were not left unsupervised, the researcher visited all groups to support and encourage students, he grouped students, he chose who to answer questions and he worked as a participant as well. Some competitive activities, such as debates and presentations, were also introduced among the different groups in order to keep students active and maintain enthusiasm. The teacher also dealt with undesirable behavior, most of which

disappeared as the teacher did not leave students unsupervised. Also, big questions were used besides two or more questions with specific answers and a time limit. All these modifications were introduced and practiced in cycle two which lasted for six weeks. Participants were generally impressed with the changes made and more enthusiastic toward the new version of SOLEs. The following session shows students' views, emotions and attitudes towards the SOLEs after the changes were introduced.

4.7 Findings from cycle two

The findings from cycle two show that students were pleased and convinced that changes implemented to SOLEs were positive and helped to improve SOLEs. They affirm that SOLEs after the changes are more desirable than before and are ready for implementation. Below are some themes in terms of what they mentioned about SOLEs after changes.

4.7.1 *SOLEs in the second cycle are better than SOLEs in the first cycle*

Students believe that SOLEs after changes are more suitable than SOLEs in cycle one as shown in the testimonies below. They also believe that as Omanis, SOLEs are now more suitable and ready for implementation, they also find them more appealing and powerful.

The environment is better than before. I think now SOLEs can be implemented (S3, students' interviews).

It is better and more appealing. Not boring at all even if we study in such environment for six consecutive months, it will not be boring at all. I feel this environment is ready to be implemented, I liked it more than before in cycle one (S5, students' interviews).

The second cycle, I feel it is better. If it was implemented since the beginning, if you are still working on the same way as in cycle one, some students will be lazy and some will withdraw (S7, students' interviews).

You have listened to our suggestions to make changes to this environment. So, it is ready to be implemented for the coming generations (S10, students' interviews).

Students are more active in this session (cycle two), the time flew very fast we did not feel it (S7, students' diaries).

The researcher also noted:

The first session of cycle two went very well and it is apparent that students liked the changes.

Students expressed their happiness for the new version of the SOLEs.

4.7.2 *Teachers roles are better in cycle two*

Students also liked the teacher's new roles. According to them, teachers should guide, monitor, correct, and encourage students to speak in English, additionally, they felt that the teacher cared about students in cycle two but not in cycle one, therefore, this change affected them positively in terms of their learning.

The role of the teacher in the second cycle was better. Now the teacher sits with us, he knows who works, who reads and who does not. He knows our progress, he knows whether we are going on the right direction or not (S5, students' interviews).

The new role is better because it makes students feel that the teacher cares about what they are doing (S15, students' interviews).

I also like that the teacher supports us and discuss our ideas and give feedback ... I also like the new role of the teacher as he helped us (S16, students' diaries).

The interference from the teacher and his visits to all groups was really great as it made students feel responsible to carry out the given tasks (S5, students' diaries).

Students also feel that students' behaviour improved due to the new roles of teachers:

Their (students) behaviours have become very good because they are monitored (S3, students' interviews).

Now they talk in English because the teacher has warned them and because the teacher visits groups (S12, students' interviews).

The researcher also noticed an improvement in students' behaviour:

No side talks, they are searching seriously and preparing their presentations.

Students also believe that grouping by the teacher is better because it helps to prevent students only working with partners they know, it also prevents digression, it helps to create mixed-ability groups, prevents students talking in Arabic and promotes the making of new friends:

It is good that you (the teacher) have changed group members. That way there were mixed abilities groups, outstanding and weak students in the same groups. Now after you tell us where to sit, some of the new partners do not want to talk off topic, they want to concentrate on the session and want to search about it. We have benefited from them by joining them (S3, students' interviews).

I used to choose to sit with people I feel comfortable with but now when the teacher started choosing for me where to sit, I feel ok to sit with any one. I learnt how to deal with individuals, how to negotiate my opinion, how to impart my ideas to others (S5, students' interviews).

Before the change I used to stick to certain friends. After the change, I built more relations with other female students (S10, students' interviews).

The distributing of students in different groups was very well organised and very beneficial (S2, students' diaries).

I like that I sat with new members which help me get to know new people (S7, students' diaries).

I am really happy to work with new students that are willing to help in extracting more ideas from the Internet (S16, students' diaries).

Participants also provided positive feedback in terms of the teacher selecting which students answer during the sessions of cycle two. This was believed to develop confidence in shy students, to make all students work hard and concentrate more and, as a result, students learn better and more efficiently:

When they (shy students) are chosen by the teacher to answer, they will learn to overcome shyness. So, they get rid of shyness and start participating. This will also make students concentrated and ready because they might be chosen at any moment (S3, students' interviews).

The new way makes students ready for answers (S14, students' interviews).

It (the teacher picks up whom to answer) is better because this way a bigger chance is given for all students to answer. This way makes everyone ready because they know that they might be chosen by the teacher to say the answer (S15, students' interviews).

The researcher noticed that all students are focused because they know that they might be selected to answer questions:

Students are very concentrated and they are working really very hard.

4.7.3 *Using specific questions Beside Big ones is better*

Students believe that the use of approximately three questions in some classes is more effectual than using only Big questions in all sessions because this way they are kept busy throughout the class time. In addition, looking for a specific answer encourages them to work hard and read more in order to obtain the correct answer which, as a result, increased their commitment and learning.

Now it is better indeed, why? Because previously we had a lot of time so we talk off topic, play and laugh. Now it is different. We are able now to manage our time. The current questions are lovely. Giving us more than a question is better than giving one question for that time (S5, students' interviews).

This makes us more concerned to get the right answer. We have to read the whole subject. In the first cycle, we were not reading the whole subject, only the introduction, conclusion and some examples and then we present to the teacher. But in this second environment second stage, we read more, we read the information one by one (S7, students' interviews).

The change of questions, I felt now it is easier so I felt able to answer…This enforce us to search deeply in the Internet and social media to get the correct and model answer (S9, students' interviews).

Now we focus on the accuracy of our answer (S12, students' interviews).

The researcher also noticed some improvement as a result of the change of questions:

Students are always active throughout the session because of variety of questions that keep them busy.

No side talks, they are searching seriously and preparing their presentations.

The researcher also tried to delve deeper into the issue of culture and asked students in some classes to provide one answer as a whole class, however this was unsuccessful. They worked only in their groups and with the same gender as shown below in the researcher's field notes.

Despite informing students to provide one answer from the whole class, they worked within their groups and no interaction happened.

Variety of activities have been conducted in this session, some are within groups, one is a whole class task and one was a debate between the two genders. The latter two tasks did not go well due to the lack of interaction between the two genders.

In sum, students liked almost all aspects of SOLEs in cycle two. They appreciated that all of their comments and feedback on areas that should be improved were addressed and treated by this researcher. Participants commented positively on the following aspects: the teacher guiding and supporting them in cycle two, monitoring the class, grouping students and other roles adopted. Furthermore, they appreciated that there is not only a single big question in each session as in cycle one, but several questions that require specific answers were used in some sessions. All of these changes led to a positive final evaluation of SOLEs in cycle two from both the researcher and students. Consequently, students felt at the end of the research that SOLEs are ready for implementation in the Omani context.

4.8 Chapter overview

This chapter has presented the findings of this study that conducted an exploration of an intervention, SOLEs, implemented in *Future College* that included participants'

perceptions, emotions, attitudes, evaluation and reflection. The researcher's reflections and evaluations are reported in this chapter. Four research tools were used to collect data which are semi-structured interviews, focus groups, diaries and the researcher's field notes. As participatory action research, the researcher involved students widely in evaluating the intervention and improving it at a later stage. The researcher also evaluated and reflected constantly upon the process of conducting this research. The research findings show that students' general feelings and attitudes towards SOLEs are positive but they have suggested some changes and most of these are in accordance with the researcher's own evaluation. Therefore, the proposed changes were introduced in SOLEs in cycle two and were evaluated by both the researcher and students during and at the end of cycle two. The final analysis of data generated in cycle two revealed that SOLEs in their new version are more suitable for the Omani context and culture and are ready for implementation. These findings led to the creation of the SOLE model for Oman which will be introduced in the following chapter and this model is the product of this thesis. The following chapter is the discussion chapter which will discuss the above findings in detail and it will link them with the literature review of this study.

Chapter 5. Discussion

5.1 Overview

The findings of this research are presented and discussed in this chapter. The theoretical framework of this project is based on different but interrelated fields of research concerned with language learning and the SOLE approach which form the centre of this work. These fields include:

1. Research that investigates different aspects of EFL learning and teaching;

2. Research that examines and seeks to understand different aspects of learning environments;

3. Research that examines and seeks to understand different areas linked to learners; and

4. Research that narrates and examines SOLEs.

This chapter links participants' experience and perceptions towards SOLEs to the literature of the above areas with additional reference to the big ideas and theories used in this study such as social learning, theories and practices of EFL, theories of languages acquisition and the learner-centred approach. This chapter is divided into three principal sections which are: students' perceptions and experiences of SOLEs, the impact of SOLEs on students and their learning and the final SOLE model suggested for Omani EFL learners.

EFL learners' experience and perceptions towards SOLEs

Overview

Some studies on SOLEs have revealed that initial observation shows that children find SOLEs more interesting and engaging compared to traditional education (e.g. Mitra et al., 2016). It is worth mentioning that most studies on SOLEs have focused on the impact of the SOLE on students and their attainment, but not their attitudes towards SOLEs and not on understanding the detailed environment that fosters such claims (e.g. Mitra and Dangwal, 2010; Mitra, 2009; Mitra and Quiroga, 2012; Donal et al., 2013). Most of these studies have some limitations as highlighted in the literature review chapter. Furthermore, these studies and others' main focus is on students'

outputs and skills within SOLEs. Mitra (2014), for example, contended that students who are considered average in terms of achievement can produce excellent outputs in SOLE groups. Costa (2014) mentioned that studies on SOLEs claim that SOLEs prepare learners to access, find and evaluate appropriate information. There are no existing studies that examine and explore only students' perceptions and emotions towards SOLEs, this area is very important as students often find learning environments stressful, difficult and competitive (see e.g. Horwitz et al., 1986; Pappamihiel, 2002), hence there is a need to delve deep into students' views and emotions towards new environments to avoid such feelings as advised by Tanveer (2007) and Scrivener (1994).

One major objective and part of this study is concerned with students' views and attitudes towards SOLEs, therefore, this section offers a discussion of participants' experience and perceptions towards SOLEs that is divided into two themes which are **participants' positive opinions about the intervention (SOLEs)** and **areas for improvement.** The former is about SOLEs affordances and the latter is about SOLEs impediments.

5.2 EFL learners and the affordances of SOLEs

This section is part of the answer to the second research question which concerns **how SOLEs are experienced and perceived by EFL learners**. This is linked to the first research objective that **explores Omani EFL students' experience of and orientation toward SOLEs**. This part includes a discussion of in-depth analysis and understanding of students' **positive** perceptions towards SOLEs. It lays out the positive opinions of students that reflect their appreciation of the SOLE environment. Among the positive feedback provided by participants is the suitability of the SOLE for their stage of education, the SOLE set up and nature, the significant role of cooperation in SOLEs, the SOLE environment meets different learning styles, SOLEs assist in learning English, SOLEs include use of the Internet and encourage freedom.

5.2.1 *SOLEs nature and facilities make them good EFL learning environments*

Learning environments with their many associated issues, such as student attainment and engagement, have been investigated for approximately forty years (Aldridge and Galos, 2018) due to their importance in education (Dumont et al., 2010, cited in Aldridge and Galos, 2018). Some studies (see e.g. Kariippanon et al., 2017) affirm that learning environments with comfortable chairs and use of the Internet are greater traditional environments as they improve students' wellbeing and feelings towards learning. Brooks (2011) emphasises that the environments in which learning happens has a significant effect on the learning process that occurs in formal learning institutions. He stresses that environments with round tables and an Internet connection are able to increase students' interest, attendance, understanding and intellectual abilities. Besides that, this type of environment helps to decrease failure rates in universities. Brooks (2011) concludes that environments equipped with technology are more effective than traditional ones.

EFL learners in this research confirm this finding in their appreciation and positive feelings towards SOLEs, a finding which is similar in some ways to the environments that Kariippanon et al. (2017) explored in their study. Students liked the set-up, including the furniture, which is different to that in conventional classrooms that consist of rows of chairs and desks. S13, for example, held that 'I like the setup of this environment, it is different to the normal classes'. S16 also liked SOLEs because they include many facilities that help them achieve tasks: 'I have mentioned that this environment is interesting because it has more facilities … I have adjusted to the new environment because it includes many things that help us learn and cooperate'. This researcher, who has taught in traditional classrooms, could feel and see the excitement that students felt when they first moved to the SOLEs Centre. This excitement in terms of the furniture and set up remained until the end of this research which confirms that the impressment of novelty has vanished. S12 describes the environment as an excellent learning environment: 'a very excellent one because it is different from other environments in the foundation program'. This excitement is justified as Fisher (2010) emphasized that classes of rows of chairs and tables do not suit today's classes, students in this study held a similar view that SOLE-like environments should be encouraged and adopted. This finding emphasizes that SOLEs are able to increase student interest in the learning environment.

Khalil and Aldridge (2019) found in their study that students enjoy learning environments that are cooperative more than those which are not. Kariippanon et al. (2017, p. 301) also contend that flexible learning spaces were found to be more enjoyable for students. These flexible learning spaces share many commonalities with SOLEs such as the type of furniture used and availability of the Internet. This enjoyment factor is among the findings of this study; students liked the nature of SOLEs which they characterized as being fun and interesting. The researcher also noted that students looked happy and impressed with the new environment. Mitra et al. (2016, p. 233) state that 'they (students) seem to enjoy doing such a task'. S1 stated clearly that other traditional classes are boring but SOLEs are not 'this environment is different from other boring classes in which we cannot move and have the same routine'. This Enjoyment element is present in several studies that deal with SOLEs, for example, in a study conducted by Donal et al. (2013), students reported that SOLEs are enjoyable. This study confirms this as it is mentioned and liked by many students; S14 held that 'it is fun but serious'. S20 and S16 also state that 'it is a social or fun environment as well' and 'this session was full of fun', respectively. This element in SOLEs enhanced student interest and enjoyment of learning in the classroom setting. In addition, it maintained student activity and focus during most of the class time and sometimes after classes. S4, for example, stated that 'I also liked the pedagogy which makes students interested, active, not bored, not feeling sleepy and strive to learn'. This finding is corroborated in a study by Mitra and Crawley (2014, p. 79) who emphasized that students 'enjoy the process enough to explore further on their own'. This researcher confirms that enjoyable learning environments can lead to more successful learning experience and SOLEs have the qualities of such environments. The availability of the Internet and working in groups are the main factors that make SOLEs interesting. This finding is in harmony with Kariippanon et al. (2017, p. 301) who claim that 'Flexible learning spaces were reported … more enjoyable, comfortable and inclusive and allowed greater interaction'. These flexible learning spaces share many similarities with SOLEs as highlighted earlier. The importance of enjoyment in learning environment was not anticipated prior to the conduct of this research, now this researcher believes that some form of enjoyment in the learning environment is an important criterion, not only to keep students engaged and focused, but also to improve students' feelings and attitudes towards learning environments in specific and learning journey in general, and SOLEs are able to fulfil this criterion.

Besides the organization of SOLEs and the enjoyment factor, EFL learners provided positive feedback in terms of SOLEs being contemporary and suitable for them as a generation and for their era due to the availability of technology. 'In recognition of the evolving learning needs of twenty-first century school students, changes to teaching practices and the incorporation of technology are increasingly accompanied by modifications to the built classroom environment' (Kariippanon et al., 2017, p. 301). Students in this research study are from a college where the classrooms are normally organized in traditional rows of chairs and tables. Hence, they were impressed by SOLEs and felt that this environment is contemporary and suitable for their era and for their generation. This researcher reflected on this element and explored it during the sessions and interviews with students. S7 stated clearly that 'this environment is new, easy and contemporary. It is suitable for the current generation'. Students believe that the availability of technology is very important as it is an inseparable part of their daily life, as S16 observed 'it is one of the best learning environments meaning that it has more technology. Now, it is the digital era, the use of computers and technology'. Twelve years ago, Attwell (2007, p. 1) described this generation as the 'net generation', nowadays, the use of technology has rapidly increased and it is the era of artificial intelligence, therefore, participants in and the researcher of this study do not see the point in not incorporating technology in all classes. This finding is echoed by Brändström (2011) and Sefton-Green (2004) who argue that technology is an inseparable element that plays a major role in young people's lives. Technology promotes an active role for students during classes (Dabbagh & Kitsantas, 2012), it also helps students to discover new knowledge (Attwell, 2007). S5 affirms that SOLEs are suitable for the way that students perform tasks 'the advantages of this environment is that it is contemporary and it is suitable for our way of thinking'. This research adds to the literature of SOLEs in that they are found to be contemporary and suitable for the current generation. It also adds to the literature of learning environments as findings reveal that the more learning environments suit the targeted group of students the more they are accepted and liked by these students.

5.2.2 *SOLEs boost cooperation*

Among the pioneers of cooperative learning are Johnson and Johnson (1987, p. x) who emphasize that they 'are for cooperation, not only because its sharing, helping,

communicating, and mutual-concern aspects are consistent with our values but also because the research supports its use in a large number of situations'. Before this, Vygotsky (1978) also emphasized that learners' knowledge is constructed collaboratively through interaction. Gislason (2009, cited in Kariippanon et al., 2017) argues that open learning environments boost social learning and interaction. Moreover, Khalil and Aldridge (2019) also found in their study that students derive more enjoyment from learning environments that are cooperative. This element of cooperation was very much appreciated by EFL learners in this research and was found to incorporate a much greater element of the experience than the researcher had anticipated. According to this researcher, cooperation was documented a lot in this study due to the lack of group work and social learning in the researched context. Eighteen participants mentioned explicitly in their reflections that they liked cooperation and team work within the SOLE. S1 and S8, for example, stated that 'I like collaborating as a group' and 'I also like cooperation among group members', respectively. Some students emphasize that cooperation helped them to clarify and correct information with each other which is in congruence with the Zone of Proximal Development suggested by Vygotsky (ibid), this means that a failure to complete tasks alone may be achieved when working with others. It also meets Aldridge's (2012, p. 266) proposal that students should be given the opportunity to 'negotiate ideas and understandings with peers'. S4, for example, held that 'if I have wrong information, my partners can correct me'. By this, she meant that in the case where she failed to find correct information, her group members would help her to achieve what was required. This strongly supports the view of Weisblat and McClellan (2017, p. 311) who emphasize that students in SOLEs 'put forward their best assets in the group process'. Likewise, S12 stated that 'some students know but others do not so it is better to collaborate'. He highlights here that cooperation is conducive to the enhancement of learning of all members of the group, an important feature that was noticed by this researcher on many occasions, that is, team work helps to improve individuals' level and learning. This finding is among the strengths of SOLEs as good learning environments 'should provide opportunities for students to collaborate with and learn from each other' (Aldridge et al., 2012, p. 267). S2 also confirms feedback from her classmates 'working collaboratively helps in gaining new knowledge from each other'. This finding is also in accordance with Kameda and Nakanishi (2003), social learning is more effective in arriving at solutions than individual trials. Due to the importance of cooperation and team work, Mitra et al. (2016, p. 232) affirm that

'communication and collaboration are therefore key features of a SOLE'. Cooperation in this research helped students to achieve certain educational goals such as clarification of ambiguity amongst group members, correcting each other and the sharing of knowledge. Therefore, cooperation helps EFL learners be exposed to English a lot which is essential for language learners as argued by Harmer (2001).

Derex et al. (2015) revealed that their study demonstrates that learners in social learning environments are able to identify new solutions by combining knowledge obtained from different sources. Weisblat and McClellan, (2017, p. 314) also assert that 'the SOLE process creates opportunity for the practice of collaboration, the operationalization of rapid shared synthesis of information'. The finding of this study also identified that students favour the collaborative achievement of goals, as S5 stated 'working as a team for the same goal'. Further, this is in accordance with Mitra and Crawley's (2014, p. 80) study, they assert that 'to reach educational objectives, children invariably worked in groups, interacting constantly with each other'. S5 stressed that they, as a group, work together and then combine their information to derive the final answer. The same idea is stressed by S21 'I prefer the cooperative environments because in such an environment everyone wants their classmates to learn. They all want to reach the same goal and they all want to pass together'. This finding supports that of Weisblat and McClellan, (2017, p. 310) in terms of SOLEs: 'the students negotiate their own way in this system…generating an enhanced community-based learning ecology through group cooperation'. Working together towards the same goal required students in this study to share findings from searching, this process is a significant strength of SOLEs and reflected in Rix and McElwee (2016, p. 41) who observed that students in their research 'started to establish a culture of knowledge sharing'. Another advantage of cooperation and team work towards the same goal is that it helped students to understand each other's personalities and establish a rapport. S20, for example, stated that 'the understanding among us increased' and S21 maintained that 'you helped us establish a rapport among us'. This is a significant achievement of this study as without rapport, cooperation may fail, Rix and McElwee (2016, p. 35) further support this point as they explained the important role of rapport in their study 'relationships within the class tended to make collaborative work very challenging and many of the students lacked the range of social skills required to resolve conflict or to communicate effectively'. This research confirms that cooperation was efficacious in

terms of knowledge sharing and in terms of working as a team towards the same goal, the objective of which in this study was to answer the teacher's question.

A great deal of research favours the type of environment that adopts a learner-centred approach (see e.g. Tynjälä et al., 2009; Uiboleht et al., 2018). Tynjälä et al. (2009) contend that learner-centred environments where students work collaboratively help them to improve their thinking skills. Teachers using the learner-centred approach help learners to construct knowledge, they do not simply impart factual knowledge to them as in the teacher-centred approach (Uiboleht et al., 2018), When pedagogues use a learner-centred approach, students gain deep knowledge (ibid). In addition, Mitra (2014, p. 556) asserts that in SOLEs 'communication is more intense inside each group'. Cooperation in this study transform classes into learner-centred ones. Students in this study highlighted that participation and discussion is more in SOLEs compared to traditional learning environments, moreover this aspect is very much appreciated by students as they rarely get the opportunity to discuss and participate in other classes. This is very important for EFL learners according to the communicative approach of English learning (Harmer, 2001). One strong feature of SOLEs is that the teachers' talking time is minimal and students' talking time is very high, a feature which is very important in language learning, therefore, it can be claimed that SOLEs are a learner-centred learning environment. S2, for example, supports this stating that 'I participate more here'. S16 also held that 'discussion with friends is very good. The pros include that students work and discuss. I like that most students discuss in their groups about the given subject'. The researcher found that among the reasons behind students' positive feedback on SOLEs is that this environment provides students with the opportunity to collaborate, discuss, participate and exchange opinions much more than in traditional classes. S2 explicitly states that 'I liked that there was enough time for discussion and exchange of opinions'. Students in a SOLE construct their own knowledge and do not simply receive it from their teachers, which is a vital factor in any learner-centred approach (Uiboleht et al., 2018) and is compatible with constructivism (Piaget, 1972). Another element within the cooperation sub-theme is that of dividing roles among group members; cooperation received positive feedback from some participants as it helped them to divide roles which consequently reduced the burden from each individual. S4, for example, said that 'if working alone, I feel more burden on me. In groups, the work is divided among members'. S13 also stated that 'one student

searches and another one writes down information found'. He highlights here the feature of the division and allocation of roles amongst participants, this is further supported by S1 who said that 'we divide roles'. This finding is found to be very important by this researcher as students felt responsible within their groups and therefore worked hard in order not to disappoint other members of the group. This finding is corroborated in a study by Mitra and Crawley (2014, p. 87) who found that 'in a group one child operates the computer, another takes notes, a third directs the other two…'.

This research confirms that cooperation in SOLEs is productive in most cases as students share knowledge, correct each other, divide roles, discuss more, establish rapport, reduce the burden of work from each other and learn to learn within a team. These are important factors in any learning which is deemed cooperative as Johnson and Johnson (1987, p. 12) emphasise 'cooperation is not having students sit side by side at the same table to talk with each other as they do their individual assignments…Cooperation is much more than being physically near other students, discussing material with other students, helping other students'. In cooperation students should feel that they all need to work together to achieve a goal, they should interact face-to-face, each member in the group needs to feel accountable in terms of helping the group achieve its objective and they should all be able to use interpersonal skills (ibid). In this research, most of these elements of productive cooperation were achieved; this means that cooperation in SOLEs meets the criteria set by its pioneers Johnson and Johnson (1987). However, despite the success of cooperation in the SOLE environment, some limitations did occur in this study and these are acknowledged in the areas for improvement section.

5.2.3 *SOLEs are suitable for college EFL learners*

'It is critical to investigate students' perceptions of their learning environments, especially in higher education, given the limited research in this sector' (Ovbiagbonhia et al., 2019, p. 2). The literature on learning environments lacks studies that question the suitability of certain learning environments for targeted groups. Therefore, this study tries to fill this gap by exploring whether SOLEs is suitable for tertiary-level EFL learners or not. SOLEs were originally set up supposedly to serve children 'usually aged 8-13' (Mitra et al., 2016, p. 230).

Participants involved in most of the studies on SOLEs were children (see e.g Mitra and Dangwal, 2010; Mitra, 2009; Mitra and Quiroga, 2012; Donal et al., 2013; Mitra et al., 2005). However, Rix and McElwee (2016) found that students in secondary school enjoyed learning though SOLEs. The evaluation and reflection by this researcher, and the reactions of this study's participants, demonstrate that SOLEs, as originally envisaged, can work well in a tertiary level foundation year where students are aged 17-18. The researcher found that SOLEs can be a very good EFL learning environment provided that specific changes that suit the context and culture are made. It was found by this researcher that SOLEs, with some modifications, can support traditional learning environments in a foundation level programme. This assertion is supported in earlier work by Weisblat and McClellan (2017, p. 310) 'since its 2015 launch in northeast Ohio, SOLE Cleveland has had a positive impact in formal environments'. Students also believe that the SOLE approach is not only appropriate for tertiary level education, but is also important as it prepares foundation year students well to join their specialization programme the following year. S1, for example, stated that 'it is designed for level four students because they are about to join specialisation year so they must acquire new skills and speak English fluently'. S10 justified the appropriateness of SOLEs for adults by stressing its effectiveness in building students' confidence:

> This environment is good for foundation year English learners because … I mean we notice that some students in the foundation year do not like English or their level is very low. Some students are introverted. This environment helps students build confidence and believe in themselves so they are fine when moving to specialization.

Participants of this research did not feel that this environment was originally designed for children, they adjusted quickly to SOLEs and on many occasions mentioned its superiority to the conventional classroom. Before the conduct of this research, the researcher was concerned in terms of whether or not SOLEs would work for adults. The results of this study diminish such concerns and assert that a SOLE can work for adults EFL learners provided that it is tailored to the needs of the specific context and culture of those adults. This particular element is a main contribution of this study as it is new knowledge added to the literature of SOLEs, highlighting that SOLEs can work for adults after being tailored to suit their particular context and culture. Modifications made to SOLEs to suit the Omani culture and context are discussed and explained in detail in the third section of this chapter.

5.2.4 *The Internet is helpful for EFL learners*

'The Internet that we use today was switched on in January 1983...for most of the first two decades, the real world remained blissfully unaware of the existence of the virtual one' (Naughton, 2015, P. 1). Previous studies (see e.g. Brändström, 2011; Harmer, 2007b; Young, 2003; Kabilan & Rajab, 2010; Muehleisen, 1997) have revealed that the Internet motivates students, makes learning fun, helps students to focus, engenders responsibility, facilitates information searching, enables the practice of English with people from different countries, reduces pressure and improves students' computer skills. In addition, in their use of technology, learners do not only seek information but also share knowledge, which means that they are active learners (Dabbagh & Kitsantas, 2012). This type of learning enhances self-motivation as stressed by McGloughlin and Lee (2010). It was also revealed that teachers' and students' attitudes towards the use of the Internet in English classes are positive (Brändström, 2011; Young, 2003). Therefore, researchers (see e.g. Warschauer, 2000; Muehleisen, 1997) urge English teachers to use the Internet as part of pedagogy because, as stressed by Brändström (2011) and Sefton-Green (2004), it is a main part of young people lives. However, Brändström (2011, p. 2) highlighted in his study some problems associated with the use of the Internet such as, 'students' cheating, unreliable information and technical problems'.. Johnson and Anderson (2011) also contend that using the Internet in classes can lead to academic dishonesty and cheating. Harmer (2007b, p. 190) also emphasises that 'it might be difficult to find the spot-on information that one is searching for, because it is a skill that must be acquired'. Therefore, Harmer (2007b) and Clark et al. (2009) suggest that learners need to be trained to be able to use technology to support their own learning.

Most of the participants in this research liked SOLEs due to the availability of the Internet, and this aspect is evidenced in students' diaries, semi-structured interviews and focus groups. Sixteen students mentioned explicitly that they like the availability of the Internet all the time. This finding, evidenced through different methods, reflects its validity and reliability. Participants in this study provided various reasons for the positive feedback on the availability of the Internet in SOLEs. S10, for example, believes that the Internet provides an element of enjoyment in the classes and helps to make them interesting 'we feel bored during other classes but this one is connected to the Internet'. S7 also stated 'I like technology so I like the fact that we

use computers and the Internet. I spend most of my time on computers and the Internet, this way I felt that the environment was great'. S15 and S16 expressed the same idea 'I like searching for information on the Internet' and 'I like using computers to discover anything', respectively. This finding is supported by many studies on SOLEs (see e.g. Mitra and Dangwal, 2010; Mitra, 2009; Mitra and Crawley 2014) who affirm that students enjoy learning within SOLEs. It is also corroborated in a study on the Internet by Brändström (2011) whose findings revealed that students found the Internet enjoyable and useful. This study confirms that 21st century classes should include use of the Internet because it comprises a significant component of 21st century students' lives, and as such, it also adds to the fun element of learning. Almost all participants in this study have devices that allow them access to the Internet anywhere and at any time, so allowing the Internet in classes makes the learning experience interesting. Through the conduct of SOLEs, the researcher noticed that students enjoyed dealing with the Internet; this has led to a significant acceptance of the new environment among students.

Ellis et al. (2014, p. 7) emphasize that students in SOLEs 'are often surprised at how much they can learn from the Internet'. Certain participants in this study provided positive feedback on Internet usage because it is a massive source of information that helped them to broaden their knowledge, S8, for example, stated that 'I like the fact that there is no certain source but we have the Internet with lots of sources to search from any website'. S21 also held that 'it (the Internet) widened our knowledge and mental abilities'. S16 and S9 expressed the same idea: 'I like using computers to discover anything' and 'I liked using the Internet. I benefited a lot especially from searching', respectively. This finding is in accordance with Mitra's (2015, p. 2) assertion that 'the Internet is a brain-a very big one' and Mitra et al. (2016, p. 232) who confirm that 'the Internet plays a fundamental role. Viewed as a spontaneously emerging global brain, its potential to transform learning is enormous'. Weisblat and McClellan (2017, p. 311) also contend that 'a SOLE transforms the culture of learning…connects him or her (the learner) to the Internet to provide the learner with access to massive amounts of information'. This finding also concurs with the findings from studies in the wider general field of the Internet and not only in SOLEs (see e.g. Brändström, 2011; Harmer, 2007a; Young, 2003; Kabilan & Rajab, 2010; Muehleisen, 1997) who emphasize that the Internet helps students to learn and acquire new knowledge and it helps EFL learners improve. In this respect, the

researcher confirms that SOLEs are a 'technological innovation', in accordance with Donal et al. (2013, p. 12). Furthermore, S22 believes that the Internet helped her to improve certain skills. This opinion is affirmed by many students who feel that the Internet helps to improve their reading, searching, learning fast and speaking skills. For this, they liked and appreciate the availability of the Internet. She held that 'we improve many things. Speaking, talking, sharing information and working on computers online. Learn fast, like it more'. The Internet also assists students to evaluate the information searched and to select reliable information only, which is a very important thinking skill, correspondingly Weisblat and McClellan (2017, p. 314) emphasize, students in SOLEs 'use technology to see worlds outside of the existing context and learn how to discriminate credible information'. Evaluation skills are a top higher thinking skills in Bloom's taxonomy (1956). Therefore, it is a significant attribute of SOLEs that students can achieve such high-ranking thinking skills. This finding supports Brooks' (2011) argument that environments equipped with technology are more functional than traditional ones.

However, very few students think that the Internet has limitations. S2, for example, believes that the Internet might not help to improve students' intellectual abilities as it provides answers without making students think profoundly 'The Internet provides the answer directly and helps save time, but it does not make students rely on their abilities'. This particular concern was studied by the researcher throughout the research and it was found that students improved many intellectual skills such as the evaluation of information and negotiation as will be discussed later. Furthermore, S7 and S1 think that the Internet could distract students from the main task as they might carry out activities which are irrelevant to the given task. S7 stated that 'On the Internet students might do other things like watch YouTube, watch images and articles. Students do not focus on one point but many' and S1 held that 'the Internet is also not focused like books'. This student believed that reliable information may not always be obtained from the Internet, this echoes Brändström's (2011) findings that the Internet can lead to unreliable information. It also confirms the advice by Harmer (2007b) and Clark et al. (2009) which is to train students to efficiently use the Internet. These concerns were addressed by the researcher in this study in cycle two by allocating more roles to the teacher so that deviation from tasks and use of unreliable information did not occur.

5.2.5 *SOLEs assist in learning English and other skills*

Research on learning environments proves that the nature of learning environments plays a vital role and has a powerful impact on students' performance and outcomes (see e.g. Umek, 2014, cited in Lee & Quek, 2017; Kariippanon et al., 2017; Blackmore et al., 2011). These studies argue that effectively designed learning environments affect students' development and engagement. Uiboleht et al. (2018) found that there is a relationship between a learner-centred learning environment and knowledge gained by students, they found that learner-centred environments lead to deep knowledge acquisition. Research also shows that learning environments should be created in a way that produces learners who are autonomous and independent (Schunk and Zimmerman, 2013). There is unanimous agreement among participants of this study where nineteen students believe that SOLEs as learning environments boost learning and help EFL learners. This finding is corroborated in a study by Ellis and Thompson (2014, p. 8) whose findings show that:

> *Most surprising was the fact that, after analysing the information presented by the students and comparing it with the material in the traditionally taught session, the students in the SOLE session had covered the majority of the traditional material that would have been delivered and also discovered a considerable amount of extra content that would not necessarily have been discussed as part of the traditional session.*

During the SOLE session and while searching on the Internet students discuss, write, read and sometimes listen to different items especially when using YouTube. Wray and Medwell (2013) argue that these four English skills are linked and should be taught holistically, and according to this research this can be achieved in SOLE sessions as students practise different English skills at the same time. S7, for instance, stated that:

> *Honestly, I have started searching for websites that help us in pronunciation, grammar and other things that we are weak at. It improved our English. We improved reading and pronunciation skills. We learnt the pronunciation of some words and letters. We learnt new words and things that we did not know before.*

This finding supports the advice given by Warschauer (2000) to use the Internet in English classes and is in accordance with Mitra and Dangwal (2010, p. 673) who affirmed that students in SOLEs 'learn to search the Internet for answers to their questions' and 'improve their English pronunciation on their own'. It is also echoed in a study by Mitra et al. (2016) who found that students could understand reading materials written for a higher level than that of those students. In this study, students

learnt searching skills, as S3 said 'it has improved my searching skills on the Internet. It has taught me things through clicking on different links to discover information'. Rix and McElwee (2016, p. 41) found the same result in their study 'Students also began to refine their Internet search skills, recognising that merely typing the question into Google wouldn't achieve anything'. EFL learners in this study also acknowledged that they have improved skills like reading, pronunciation and others. Many students during the semi-structured interviews reported that SOLEs helped them to learn new vocabulary as a result of reading many texts on the Internet. S1, for example, held that 'we learn new vocabulary that helps us in other classes' this result was obtained by other researchers such as Donal et al. (2013, p. 8) who stated that the teacher in their study 'found herself using vocabulary of a greater complexity as a result of students doing so in their SOLE discussions and panel presentations'. This researcher asserts that the availability of the Internet in learning environments helps students to acquire new vocabulary that they would not acquire in traditional classes. Another prominent strength of SOLEs is that it helps to improve speaking skills as students discuss and negotiate most of the time. S16 emphasized during the focus groups interviews that SOLEs are able 'to improve students' skills. Speaking'. S16 also said that 'speaking skills improve'. Likewise, S22 confirms this when she stated that 'we improve many things. Speaking'. In addition, some students believed that their whole learning improved, as S20 put it in his diary 'this environment enriches my learning journey due to its difference compared to other environments, due to the exchange of experiences, talents and ideas among students'. S4 also contended that 'this environment has affected my learning, it has made it easier'. The researcher noticed a change in students' learning in general, they became more confident, serious and bolder in using English. This finding is in accordance with what Rix and McElwee (2016, p. 48) who assert that 'some students even noted an improvement in their own learning behaviours during the project'. Students also improved in terms of comprehension and learning a significant amount of information at the same time. S16, for example, noted in his diary 'the effects of this environment on me include learning lots of things and using my brain very well to tackle many things… The pros include that students learn different subjects. We learn more information in different ways'. In his experiments, Mitra (2014, p. 556) argues that 'In a SOLE, children seem to create and maximise meaning out of the information content of what they are researching'. This discussion above confirms that SOLEs are able to assist in learning, not only different English skills, but also other skills like searching.

This researcher also wanted to ascertain whether students liked SOLEs due to the element of novelty or due to their effectiveness in enhancing their learning experience. The results show that students liked SOLEs, not only because of the element of novelty, but also because they are successful. The requirement that students attend two hours a week for a full academic semester helped the researcher to ensure that the novelty aspect would not influence students' reflections. This confirms that the novelty effect declined and also supports the claim by Blackmore et al. (2011) that the nature of learning environments impacts students' outcomes. S21 maintains that SOLEs made his journey in learning English easier, as he put it 'In the past I thought that the English language was so difficult that I could not learn it, but through this environment I have learnt that the English language is very easy'. Furthermore, S15 highlighted clearly that SOLEs are superior to traditional classes in terms of enhancing learning experience 'I felt that I could learn more compared to other classes that include only tables and a teacher in front explaining things for us'. These findings support the argument of Donald et al. (2013, p. 7) that SOLEs have 'significant potential for learning in pupils'. They are also in congruence with findings from many studies that claim to demonstrate that in SOLEs, students improve English language skills (see e.g Mitra and Dangwal, 2010; Mitra and Crawley, 2014). This discussion sheds light on the effectiveness of SOLEs as a learning environment that enhances the learning experience of EFL learners. This effectiveness of SOLEs as a learning environment is due to many factors within the researched context which include use of the Internet and group work, these will be discussed in more detail in other sections.

5.2.6 *SOLEs give freedom to EFL learners*

Den Brok et al. (2004) emphasize that besides delivering subject content, teachers are responsible for maintaining classroom discipline. They highlighted three types of control in any class which are strong, shared and loose. Strong means that teachers take full control of the tasks in the classroom, shared refers to when teachers and students share responsibility and loose when teachers leave it fully to students to decide what to do. The EFL literature emphasises that the type of control employed in the classroom affects students' achievement. For example, a study conducted by Kiany and Shayestefar (2011) which recruited 732 EFL students revealed that

student achievement was lowest when teacher control was strong and it was highest when the control was shared. Wei et al. (2015) reached a similar result in their study which recruited 823 EFL learners. These learners revealed that their teachers were too controlling and asked to be given a room where teachers still demonstrated their leadership of the class while providing more freedom to learners, simply, they sought moderation in the teachers' control over the classes.

A 'SOLE is about freedom and independence' (Rix and McElwee, 2016, p. 50). This is veracious because in a SOLE 'Children are allowed to change groups, talk to one another, talk to other groups and walk around looking at others' work' (Mitra et al., 2016, p. 232) and teachers 'are not expected to intervene in the learning process' (Mitra et al., 2016, p. 232). Many students in this study appreciated the freedom given by SOLEs, S5, for example, stated that 'when we go to this environment, we feel that we are free and not restricted by a certain system or anything'. This finding corresponds with that of Rix and McElwee (2016, p. 47) where students in their study 'clearly appreciated the freedom they were given'. The researcher of this study came to the conclusion that participants feel restricted and not free to express themselves or do tasks the way they like in other classes but this is not the case in the SOLE environment. In a SOLE, they do not feel restricted by a specific method or approach in completing activities, nor in approaching learning and tasks. Rix and McElwee (2016, pp. 47-48) argue that 'Clearly the value of SOLE, viewed through the eyes of students who perhaps find the traditional school system challenging and restricting, was the freedom that it afforded'. Some participants in this research provided positive feedback on the aspect of flexibility in a SOLE and that expression of ideas and freedom to talk was afforded them for the majority of the class time. This happens more in SOLEs compared to other classes as stated by S12 and S20, respectively 'everyone feels free when giving their answers. In other classes teachers restrict us, the time is all for them, we have no time to talk and discuss. But in this environment, it is ok. It gives more freedom' and 'in other environments we are restricted with many rules but this one is more flexible and less restricted'. This study confirms that students should be given space and freedom in order to construct their learning, negotiate their ideas and collaborate with their classmates. This is because restrictions in traditional environments may negatively affect some learning opportunities that could occur when some extent of freedom is given. The researcher noted the impact of traditional environments on students; due to the restrictions in

other environments, students were unsure as to how much freedom they could exercise in this environment, the researcher notes that 'one male student moved to another group after twenty minutes to ask for some information and quickly went back to his group. This male student asked for permission to join another group because they are not used to being free. He repeated or asked for permission several times to make sure he could leave his current group and join another one'.

However, linked to the above, students did not like certain aspects of freedom and the researcher highlighted some associated problems. Participant feedback was positive in terms of freedom to choose how to answer questions, website selection and presenting findings as they wished. However, feedback was negative with regard to freedom to choose where to sit, to answer or not and the absence of the teacher. They felt that they moved from an extremely restricted learning environment to an extremely unrestricted classroom. This finding is in congruence with that of Kiany and Shayestefar (2011) who found that shared control between teachers and students in English classes is effectual. This indicates that neither strong nor weak control is preferred by students. This result is logical in this researcher's view because when student behaviour is fully controlled, students may become passive and when a class is free of control, students may not take their studies seriously. Some problems occur because of this extreme freedom given to students in SOLEs, these problems will be addressed in the next themed section which is 'areas for improvement'. Therefore, after evaluation of cycle one, weakness identified were modified in cycle two.

5.2.7 *SOLEs meet different learning preferences*

As mentioned in the literature review chapter that some writers like Riener & Willingham (2010) do not believe that learning styles exist but other factors like abilities, interest, background knowledge and learning abilities cause the differences among students. Others do believe that learning styles do exist and they affect students learning. Coffield, Moseley, Hall, & Ecclestone (2004) reviewed many models of learning styles. However, almost all writers interested in this field believe that learners are different and they have different preferences that affects the way they learn. In their review, Coffield, Moseley, Hall, & Ecclestone (2004) high;ighted a model by Dunn and Dunn which confirms that any individual can learn if his/her

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preference is accommodated. It is also believed that students whose preferences were being fulfilled by their teachers could perform better than those whose preferences were not being fulfilled (ibid). Harmer (2007a) also emphasizes that English learners respond to different stimuli differently. For some learners, music stimulates them more than movement. For others, pictures stimulate them more than the written language (Harmer, 2007a). This is so because learners have the different 'personality traits of introvert/extrovert, sensing/intuition, thinking/feeling, and judging / perceiving' (Maleki, 2017, p. 1). Therefore, visual learners tend to remember pictures, auditory learners tend to remember what they hear. Kinaesthetic learners are inclined to be more active when dealing with tasks that involve movement and physical effort (ibid). This discussion is part of Gardner's multiple intelligences theory (Gardner, 1999) where he asserts that people learn in different ways as some of them are visual, others are musical, some are interpersonal and so on. Therefore, teachers should prepare a variety of tasks for different personalities and learning preferences because learners in any class are different in their personalities and learning characteristics (Maleki, 2017). This particular element, which is the suitability of SOLEs for students' learning preferences, has not been given enough attention in the SOLE literature. This study tries to fill this gap and shed light on this issue.

Fourteen participants in this study mentioned explicitly that SOLEs meet at least one of their learning style preference. The researcher noticed that students were very enthusiastic in terms of working in groups and participants confirmed this finding; many students emphasized that they like working in groups, hence SOLEs meet their preference. S2, for example, says that she likes 'Working with others' and S4 stated that 'this environment meets my learning style because we work in groups'. S3 expressed the same idea when she said that 'In my old school I used to work in groups and I got used to that but when I joined the college there were no groups. I benefited from you (the researcher) that you again put us in groups. I like working in groups'. Students in *Future College* where this study took place work individually most of the time as classes are not well-prepared for group work. They consist of rows of chairs and tables, they are small in size and crowded. Other students prefer learning through technology, S13, for example, stated that 'I really like working with computers and the Internet, this makes me work a lot'. Technology, as mentioned in the section pertaining to enjoyability in using the Internet, was found to be very important in this study not only because it provides a large amount of knowledge but it also meets some students' learning styles and, as a result, makes them enjoy

learning. Other students provided positive feedback on SOLE because sessions are deemed to be fun and meet the way they like to learn, S1, for example, held that 'I like learning with fun, I mean I like lectures to be active with enthusiasm. I feel lazy in passive classes. SOLEs boost enthusiasm'. In general, SOLEs were found to encourage students' learning as kinaesthetic learners can move in SOLEs, interpersonal students can work in groups, visual learners can watch videos or pictures and so on. However, intrapersonal students may find this environment challenging and not suitable for them, as S8 confirmed 'I personally like working alone'. Therefore, it is important to think about a 'combination of both individual and collaborative learning experience' (Slavin, 2010, cited in Aldridge and Galos, 2018, p. 356). This researcher emphasizes that teachers who tend to use SOLEs should learn about their students' personalities and learning style preference in order to think of different tasks that fulfil their students' preferences in learning.

Summary

In sum, this section has highlighted and discussed EFL learners' positive perceptions about SOLEs. These perceptions were explored and evaluated in depth by this researcher and found to form a main part of students' positive feelings towards SOLEs. They accepted the SOLE and felt very positive towards it because it is suitable for tertiary level it prepares students well for future studies and it helps them to improve their English. In addition, they liked the fact that SOLEs are contemporary, fun and include many facilities that help them in their learning. Moreover, they appreciate the cooperative nature of SOLES which increases the quality of their learning as they support each other to achieve goals, clarify and correct each other. Furthermore, they enjoyed using the Internet during SOLE sessions which helped them to acquire new knowledge and improve their English. Finally, positive feedback highlighted that SOLEs suit a large number of participants' learning styles and most importantly they believed that they learnt a lot during SOLE sessions.

5.3 Areas for improvement in SOLEs

This second part of this section provides the findings from cycle one that are related to the second research question which is **how SOLEs are experienced and perceived by EFL learners**. This research question guides the study's first objective

which is **to explore Omani EFL students' experience of and orientation toward SOLEs**. This part deals with areas for improvement represents those areas that need to be improved according to the participant feedback and observations by the researcher. The overall experience of participants in SOLEs is positive, they have provided many positive comments about many aspects of SOLEs. These positive comments and perceptions were explored earlier. Here, the researcher presents areas that participants and the researcher found unsatisfactory and which need to undergo improvement in order to suit the context and culture of the researched college. After the evaluation of cycle one by the teacher through identifying the limitations of SOLEs during teaching and through analysing students' testimonies, it was found that the current teacher's role suggested by Mitra et al. (2005) is not sufficient and that teachers adopting SOLEs, especially in the context of this study, have to adopt more roles. Another point is that big questions have some limitations and as such they should not be used in all sessions but can be used occasionally.

5.3.1 *Teachers in SOLEs should adopt more roles*

The EFL literature has provided in-depth discussion on the roles of English language teachers (see. e.g. Harmer, 2015; Nunan, 1988; Broughton et al., 2002). Harmer (2015) contended that English teachers should carry out many roles while teaching and that good English teachers can adopt different roles depending on the tasks being taught. He asserted that teachers sometimes act as controllers, sometimes as prompters, sometimes as feedback providers or assessors, sometimes as a resource and sometimes as language tutors. In addition, Nunan (1998) argued that English teachers should link the learning inside classrooms with the world outside so that English learners can easily communicate in different contexts. Furthermore, Gochitashvili (2012) emphasizes that teachers should choose appropriate materials in accordance with the students' level of English and culture, decide the role of the teacher and learners, prepare students well for tasks, provide feedback and evaluate these tasks. A study conducted by Renjie (2011) revealed that students prefer teachers who are facilitators and motivators. This finding is further explained in the argument by Reeve (2006) that teachers should be supporters and motivators because according to the self-determination theory students have inner resources responsible for motivation. In order for these resources to work well, they need to be

nurtured and fostered by teachers. According to the literature of education in general and of EFL in specific, teachers should perform many roles in order for the learning process to go smoothly and to be effective. However, the founder of the SOLE insists that the teacher's role remain at a minimal level, Mitra and Crawley (2014, p. 81) affirm that 'the teacher's role is minimal, to observe the children and stay out of their way'. Therefore, 'the role of the teacher has become one that is contested rather than the respected role of a previous age' (Dolan et al., 2013, p .15). 'Absence from adult intervention' is a main characteristic of a SOLE (ibid, p. 2). In a SOLE, instructors leave classes most of the duration of the sessions in order to leave students unsupervised. The role of the teacher is confined to facilitating a big challenging question and motivating students (Mitra et al., 2005). There was almost complete consensus among participants that the current teachers' role in SOLEs is not sufficient and they need to do more. The researcher reached the same conclusion after reflecting upon, evaluating and teaching many SOLEs sessions. This finding is congruent with the concern of Rix and McElwee (2016) that the admiring role of teachers in SOLEs might be negative especially if it implies that the answer itself is not important. It is also in congruence with the literature presented above on the role of English teachers. This section will present the roles that teachers in SOLEs should adopt according to the findings of this study which were obtained through different data sets including the researcher's field notes all of which ensure the validity of these findings.

It is believed by the researcher and participants that a teacher in SOLEs should supervise, monitor and remain in the class. Any group of people working together need rules including those who work in education (Merrett and Jones, 1994). Demirkasimoğlu et al. (2012) argue that rules are also crucial in schools because they manage the complicated social interactions and relationships among external authorities, school management, teachers, pupils and also parents. Rules in educational institutions help to create a healthy classroom atmosphere which is essential for learning to take place (Buluc, 2006). Rules also 'give structure to social interaction and help to reduce uncertainty, confusion and ambiguity' (Tattum, 1986, cited in Merrett and Jones, 1994, p. 346). Barbetta et al. (2005) argue that teachers should investigate reasons behind both the desirable and undesirable behaviour of learners and work on these reasons to foster desirable and prevent undesirable behaviour. LeeFon et al. (2013) also argue that teachers should explore their

behaviour and appreciate their students because this has a positive impact on them. Demonstrating respect and appreciation to students will inspire them to show the same for all people around them (Psunder, 2005).

Teachers should monitor discipline in SOLEs sessions. The researcher has noticed some undesirable behaviour that occurs in SOLEs, especially when students are left unsupervised and this behaviour was confirmed by participants themselves. This researcher believes that undesirable behaviour occurs in SOLEs because there are very few rules in this environment, accordingly, Mitra and Crawley (2014, p. 81) state that 'there are very few rules' in SOLEs. Rules are vital to any group of people working together (Merrett and Jones, 1994) hence this researcher believes that they should not be ignored in SOLEs. Demirkasimoğlu et al. (2012) emphasize that an important role of schools is to train individuals to follow rules as this is crucial to all stages of life. Likewise, Mtsweni (2008) argues that enforcing rules in schools teaches learners the importance of order in life in general, the importance of following rules throughout their lives and the importance of self-control. Due to the lack of rules in SOLEs, some students leave the class when the teacher leaves them unsupervised. S1, for example, asserts that 'sometimes when the teacher leaves, students leave as well. Five to six students follow him and leave the class'. The researcher also noted in his notes that 'I left the class unsupervised for about five minutes and when I came back, I found some students had left. When they saw me, they returned and said that they had gone to the restroom'. Some students emphasized that when the teacher leaves them unsupervised, they lack commitment to complete tasks. Some of them do not listen to each other's answers, some speak in Arabic, some play with their mobiles and some digress from the selected topic. This is evidenced in S21 who stated that 'when the teacher leaves us unsupervised, we do not take things seriously'. Similarly, S5, 'students are not serious. They speak in Arabic. Sometimes, they work and sometimes they do not. Some play with their phones. I feel there should be more discipline and seriousness'. Rules are very important in order to engender commitment to learning, as Woolfolk (1998, cited in Buluc, 2006) affirms, rules make pupils aware of what is expected from them in terms of achievement and they also prevent undesirable behaviour in classrooms. These rules prepare students to confront life which is full of rules (Wayson, 1985, cited in Buluc, 2006). In addition, sometimes the noise level in SOLEs is very high as exemplified by S16 who held that 'I disliked that lots of students made noise during

the session. I disliked that students sometimes are careless during the session'. Mitra and Crawley (2014, p. 87) acknowledge that 'the noise level in a SOLE can range from very high (chaotic) to very soft (ordered). Nothing needs to be done about this'. This researcher believes that with adults the noise issue needs to be addressed. Teachers should intervene in order to reduce the level of noise which is irrelevant to the given tasks and bring students back on track, this is emphasized by Den Brok et al. (2004) who suggest that besides delivering subject content, teachers are responsible for maintaining classroom discipline. In this first cycle this researcher felt worried about the noise and about deviating from the main topic and therefore, after an in-depth evaluation, decided to modify the roles he played during the teaching of SOLE sessions. The issue was highlighted by the SOLE sessions in a study by Donal et al. (2013, p. 5), where the teacher conducting the session 'reported feeling deeply worried at the level of noise' as well. Another prominent problem is that students speak in Arabic most of the time, especially when left unsupervised. S13 highlights this aspect 'students will talk off topic because the teacher is not in the class' and further, S4 'we become lazy in performing the given task, we start playing on our phones. The work stops. We speak in Arabic'. Likewise, S5 held that 'the use of the Arabic language is often double the use of the English language. I disliked speaking in Arabic right after the teacher left the class'. This fact is confirmed by the researcher in his notes 'Most students speak in Arabic and sometimes speak about other topics irrelevant to the session topic'. This problem may not have occurred in previous SOLE studies as many of these studies were conducted in the UK where students speak English. In other contexts, like India and other non-English speaking contexts, the use of the mother tongue during SOLEs was not addressed. The behaviour can be linked to the culture and background of students in this study as they are used to being monitored and supervised from childhood, that is, the significant freedom accorded to them in the SOLE sessions is new to them. This discussion places emphasis on the importance of rules as they determine the rights and obligations of all people involved in the learning process. They also help to create a healthy classroom atmosphere without which learning will not take place (Buluc, 2006). Therefore, this research emphasizes that teachers in SOLEs should manage and control the class to maximize learning. It also emphasizes that all stakeholders involved in education should be consulted in the formulation of rules (Buluc, 2006; Merrett and Jones, 1994).

It is also believed by the researcher and many students that a teacher in SOLEs should support and encourage students. This finding is in accordance with the studies on the roles of teachers in English classes mentioned above that emphasize the important role of teacher guidance, support and motivation (see. e.g. Harmer, 2015; Nunan, 1988; Broughton et al., 2002). Participants believe that instructors in SOLEs should constantly visit groups to provide support, guidance and encouragement. S2, for example, stated that 'In case any group does not know what they are supposed to do, the teacher should clarify this for the group members. The teacher should remain in class and help students'. S9 also held that 'I hope that the teacher comes to our groups, helps us. If we do not understand anything, he should explain more for us until we understand'. Even though Mitra (2015, p. 2) asserted that 'a teacher in a SOLE is just a friend, a moral support, fumbling in the dark with their cohort', this researcher, after an in-depth evaluation, believes that the teacher should adopt more roles, s/he should support students during tasks, guide them, participate with them and keep them on track. Rix and McElwee (2016, p. 41) found that 'by the third SOLE session …The skills that they (students) possessed appeared to be limiting how much they could progress alone'. Their finding shows the importance of teacher support and guidance for students. Students complain that when they need the teacher, he is not available for help and support. S7 put it clearly that:

> *Students might need a little help, so in such an environment, s/he has to rely on himself or classmates. Maybe after five minutes, he (the teacher) should go around the groups. He can also check whether students are still working on the given task or doing something else.*

The researcher noticed in cycle one that students were sometimes stuck and therefore could not progress 'Students are stuck with articles at the beginning'. Even though students knew that the teacher's role is only to ask the big question and to encourage them, still they sought support from him as he noted 'some students ask for support from the teacher in all sessions. They seek support in searching and in some information related to questions'. Mitra and Dangwal (2010, p. 686) themselves emphasize that 'while it is found that these children do not need adult supervision, this does not mean that they could not benefit from friendly mentors or mediators'. Rix and McElwee (2016, p. 45) contend that 'providing emotional support and encouragement was therefore vital'. In their experience, they asked mediators who were older students to perform this task, however, the question arises as to who can

carry out this role if mediators cannot be recruited. According to this research it is the teacher who should encourage and emotionally support his/her students and it is an important role that this researcher believes teachers should not ignore. The absence of such support can lead to 'misunderstanding and increased student frustration' (Rix and McElwee, 2016, p. 46); this shows that teachers' support in carrying out different tasks cannot be neglected. Deci et al. (1981, cited in Reeve, 2006) contend that students who are taught by supportive teachers benefit significantly in terms of achieving targeted outcomes. Ellis and Thompson (2014, p. 9) also found in their study that they had to teach some topics traditionally after SOLE sessions and this might be because of the current roles of teachers in SOLEs where 'the lecturer simply poses the question and then facilitates the review stage of the session'. The absence of interaction between the teacher and students in SOLEs is also among the aspects which received negative feedback in this research, as S15 wrote in his diary 'I disliked that there is no cooperation between the teacher and us. The cons include the absence of cooperation from the teacher's side'. Likewise, S16 noted that 'The cons of this environment include that the teacher does not look after students or the class. I also disliked that the teacher does not help students during searching. …does not support students'. The importance of teacher-student interaction identified in this study is corroborated in a study by Uiboleht et al. (2018) who conclude that interaction between teachers and students is very important. This section places emphasis on the importance of the teacher's support for students. Teachers in SOLEs should not only facilitate big questions and support students throughout the session, as Reeve (2006) maintains, the teacher's role is not merely to structure the learning process, but also to motivate students to develop desirable skills, improve interpersonal skills and nurture their hobbies.

The researcher and participants also believe that a teacher in SOLEs should group students her/himself on some occasions. Harmer (2001, p. 117) argues that group work 'dramatically increases the amount of talking for individual students', 'because there are more than two people in the group, personal relationships are usually less problematic', 'it encourages broader skills of cooperation and negotiation', and 'it promotes learner autonomy by allowing students to make their own decisions in the group'. However, for group work to be fruitful, this researcher argues that there should be a kind of order. The group work cannot be random as in current SOLEs. The current grouping in SOLEs is optional, it is totally left to students,

they can choose where to sit and with whom. Mitra and Crawley (2014, p. 87) assert that 'the facts that groups are organized by themselves and are changeable are very important to children'. During the conduct of SOLE sessions, the researcher noticed many prominent problems which are also confirmed by some participants. The researcher noticed that some students sit with people they already know in all sessions 'most students, when grouping, sat with people they already know. In most cases, they belong to the same village'. In addition, sometimes a large number of students sit in one group and leave other groups with only a few students, as the researcher noted in his notes 'five female students sat together and left three female students alone'. Most importantly some groups do not have mixed ability students which affects interaction and participation, therefore, some students, like S2, asked that 'He (the teacher) should also change group members in every session. This issue is strongly linked with students' culture as they prefer to sit with people they know especially those who belong to their village or old school'. Therefore, this researcher intervened in cycle two and grouped students on some occasions and changed the groups that students were in. The aim was to create a balance among groups in terms of ability and also to avoid students always sitting with the same classmates.

5.3.2 *Big questions should not be the only questions asked*

There is no value for educational institutions without a curriculum (Alvior, 2014). George (2009) explained the main elements of any curriculum that are objectives, assessment, learning needs and evaluation. Objectives pave the teachers' and learners' way towards the desired target. Assessment informs what has been learnt. Learning needs drawn from the objectives and assessment types informs teachers of what to teach and how to support students. Finally, evaluation of the whole curriculum must be carried out after first cycle implementation. A curriculum is crucial for authorities because it acts as proof that students achieve the standards set by the state (Browder et al., 2007). It is central for both teachers and students, it clarifies for teachers the overall picture of goals to be achieved for all different levels and it works as a map for students that shows them what is required from them to earn the desired certificate or degree (Glenn, no date). Devising a curriculum for any institution is a long, daunting task because constant changes and improvements are

always needed due to ongoing evaluation and feedback (Macalister and Nation, 2011). To date, there has been no specific curriculum developed for SOLEs, it is simply advised to generate big questions from existing curricula in institutions that want to use SOLEs. Big questions in the SOLE context refer to questions that do not have direct answers and involve students working collaboratively, debating, searching, synthesizing and evaluating information found while searching on the Internet. Big questions used in a SOLE are unique as they are the ones that provoke research, debate and critical thinking (Donald et al., 2013). Mitra et al. (2005) and Mitra (2013a) also emphasize that big questions should be above the level of learners and have no easy direct answers so that they stimulate collaborative work that always leads to collective answers and results in deep critical conversations among students.

This study is the first study to explore the nature of big questions and report their weaknesses. This study has concluded that big questions should not be the only questions asked in a SOLE. Fifteen of the participants mentioned explicitly that the current role of big questions in SOLEs is insufficient and needs to undergo some changes. The researcher reached the same conclusion after reflection, evaluation and teaching many SOLE sessions. Therefore, some students believe that big questions should be divided into smaller ones with specific answers. Also, the researcher noticed that big questions can work but frequent usage leads to repetition and routine and some problems that are addressed below. Therefore, this researcher, after the evaluation stage of cycle one, believes that big questions can be used occasionally but not in all sessions to avoid the above-mentioned problems that might occur if following the same method of conducting SOLE sessions. Instead, in some classes two or three questions with specific answers can be used to replace big questions. This researcher, in cycle two, used both big questions and other types of questions with specific answers in some sessions and found that this way helped overcome some of the drawbacks of big questions. The researcher also implemented these changes because he believes that a successful English curriculum is one in which 'educational experiences are designed for the convenience of learners' Bista (2011, p. 2).

Big questions are more concerned with the skills that lead to finding rigorous reliable information and not the right answer (Donald et al., 2013). However, some students believe that big questions are general and do not provide in-depth knowledge. S7 for

example, stated 'I think it provides surface knowledge but not deep information'. S14 stressed strongly 'I think questions are of no meaning. They do not focus on specific things from the syllabus like listening skills, for example. They seem not to be meaningful. The questions are not meaningful. They are general and open'. This student was disappointed as he felt that big questions do not necessarily lead to learning as Mitra and Dangwal (2010, p. 685) observed 'not everybody learns something about everything. Some individuals may benefit; others may not'. Therefore, this researcher believes that it is the teacher's job to ensure that learning opportunities are equal for all students. He/she should prepare tasks and questions that ensure that every individual in the class learns.

Some students during cycle one also complained that they could not find relevant information about some questions which consequently lead to disappointment. S1 highlighted this issue maintaining that 'it is difficult to find information related to some questions even with the use of the Internet. In one of the sessions, we could not find information to help us answer the big question'. Likewise, S5 stated that 'in some cases, we face difficulties in answering the big questions and in finding information'. It was found by this researcher that students sometimes struggle to find relevant information or they get confused as the Internet contains a large amount of information about the same topic studied. In such cases this researcher noticed that students scan general information and present them to the teacher. This finding is compatible with Rix and McElwee (2016, p. 42) who claimed that 'students were also increasingly moving away from explicitly answering the key questions, instead providing a general response on the issue of population'. For this reason, this researcher believes that in some sessions dividing big questions into two or three questions helps to overcome this problem. Asking more than one question also helps to solve the problem where students try to find one relevant answer and then stop working, correspondingly, Rix and McElwee (2016, p. 44) found in their study that 'it seems as though students were looking for one clear answer to each question, rather than putting together evidence to help them construct arguments and enable them to see a big picture from which they can draw reasonable conclusions of their own'. Johnson and Anderson (2011) also emphasize that the Internet can lead to academic dishonesty and students may cheat. In his study, Brändström (2011, p. 10) observed that one of the drawbacks of the Internet is that students might cheat by 'copy paste

online materials' meaning that they might scan articles quickly and get any information without in-depth reading and evaluation of information they find.

Furthermore, some students responded that they feel bored dealing with a single question. This is in some respects linked to the previous problem as students sometimes look for a direct clear answer very fast and then do nothing for the rest of the class time. This is evidenced in the response by S4:

> *I mean that from the beginning of the lecture until the end, we deal with one question. This makes us feel bored. This does not provide motivation. Students will just play, use their phones, they will do nothing. I did not like having one question, it is boring.*

The researcher also noted that 'After almost half an hour of searching, students seem to feel bored and some of them started talking about other things'. S21 also wrote in his diary that 'the session was good and interesting but the length of time leads to us feeling bored. We felt bored'. This happens according to this researcher due to the repetition caused by conducting SOLE sessions in the same way every time. This can lead to students' lack of interest in SOLEs in a similar way to how they felt about the traditional learning environment. Rix and McElwee (2016, p. 41) found that 'by the third SOLE session we observed that the learning seemed to have plateaued'. Therefore, it is important to incorporate some form of change from one session to another like asking one big question in some classes and more questions in others. Further, introducing debates, competitions and other activities that lead to enjoyability will help to address the issue of repetition and boredom, this was actioned by this researcher in cycle two and the results were promising, this is highlighted in the last section of this chapter.

Other students like S15 felt worried and nervous because there are no direct answers to big questions 'I have a negative point about the big question. It can lead to nervousness, students may feel worried because there is so much information or sometimes there is no direct answer'. S10 also stated 'what exactly I disliked is that when we search for answers we cannot get a specific direct answer which leads to confusion'. Harmer (2007b, p. 190) emphasizes that 'it might be difficult to find the exact information that one is searching for, because it is a skill that must be acquired'. This impact of big questions on students' psychological state cannot be ignored, therefore, this researcher made some changes to SOLEs in cycle two that led to improved responses towards SOLEs. These changes include using more types

of questions such as big ones and other questions with specific answers. One of the main reasons that made this researcher introduce this change is noted in his notes: 'the answers I got at the end were not convincing which means that students might not benefit a lot from searching for information'. The quality of answers to some big questions was not convincing which is corroborated in a study by Brändström (2011, p. 2) who highlighted that some problems associated with the use of the Internet include students' obtaining unreliable information. Therefore, this researcher decided to make this change in cycle two. This decision can be linked to the concern raised by Rix and McElwee (2016, p. 33) that:

> *even where students are successful in using the Internet to find answers to big questions, there is a debate about the relevance of this if SOLEs are not part of a more holistic approach where the right questions are asked, information prioritized and the wider learning experience structured and organized by a knowledgeable facilitator.*

This decision was also made to avoid issues identified by Ellis et al. (2014, p.9) 'there have been times when areas have been revisited where students did not understand the concept'. Introducing questions with specific answers in cycle two helped students to digest the taught topics, this is addressed in the last section of this chapter.

Having said that, there are some merits to big questions. This researcher noticed that in some cases big questions can work well, but if they are the only questions used in all sessions aforementioned, problems start to occur. Among the merits of big questions is that they help students to access a great deal of information related to the studied topic; S1 confirmed 'I feel that this question includes so much information about a certain topic which is good'. This finding is corroborated in a study by Rix and McElwee (2016) where they found that during SOLE sessions students learnt information that would have been taught after almost eight weeks. Likewise, Donal et al. (2013, p. 5) stated that the teacher who tried out SOLEs in their study 'reported feeling greatly surprised at what the children came up with'. Another strength of big questions is that they prepare students well for a very important skill in today's world which is searching, as Halle and Dymond (2010) suggest a curriculum should not be taught to help students pass exams but should be taught in a meaningful way by linking it to the skills needed in real life activities. This researcher confirms that big questions work very well sometimes but not always so they need to be monitored, hence, it is advisable not to rely on them in all sessions.

Summary

In sum, this section has highlighted and discussed areas for improvement that the researcher and students believe that SOLEs should undergo. These areas were evaluated and explored in depth by this researcher and found to form a main part of students' concerns towards SOLEs. It is found in this research that the role of teachers in SOLEs should not be minimal, as advised Mitra and Crawley (2014). Teachers should monitor, support and intervene in grouping when needed. Such roles were found to help run SOLEs smoothly and help students benefit more during sessions. They also help to overcome some problems related to behaviour which is important to maintain an atmosphere conducive to learning in the classroom. This section also shed light on big questions used in SOLEs; the findings revealed that big questions might lead to some problems if used in all sessions, these issues include repetition and consequently a lack of interest from the student perspective. They also lead to disappointment and confusion as they do not have direct answers, therefore, in some classes other types of questions should be used. However, the merits of big questions should not be underrated and for this it is advised not to ignore them fully and to use them with discretion.

5.4 The influence of SOLEs on EFL learners and their perception of learning

Overview

This part presents a discussion of the findings that are related to the third research question which is **how SOLEs impact students and their learning**. This research question guides the second objective of the research which is **to investigate whether SOLE pedagogy is able to facilitate an effective English language learning environment for Omani students**. These findings are represented in one main theme which is **the influence of SOLEs on students and their perception of learning**. This theme includes five sub-themes which are: personal development improves, SOLEs help to develop students' personalities, students' autonomy increases, the approach of SOLEs motivates students and students are empowered.

The personal development sub-theme includes two sub sub-themes which are students become better at building relations and students develop intellectual competence. The empowerment sub-theme includes two sub sub-themes which are

students develop the ability to complete tasks and, tasks and learning are meaningful for students. This research emphasises the positive impact that SOLEs had on students as highlighted in the themes earlier. This section includes discussions of in-depth analyses and an understanding of the impact of SOLEs on students as presented in the five sections below.

5.4.1 *Students' autonomy increases*

The first sub-theme of the main theme **the influence of SOLEs on students and their perception of learning** is **students' autonomy increases**. This sub-theme was highlighted in the researcher's reflection and was confirmed by the participants. Bakhurst (2011) defines autonomy as the learner's ability to choose what to do and think. Research also shows that learning environments should be created in a way that produce learners who are autonomous and independent (Schunk and Zimmerman, 2013). This researcher found that SOLEs help students to choose what to do and how, this finding was confirmed by some students, such as S2 who stated that 'we do things that we like and the way we like'. Students in this research made choices in how to answer questions, how to divide roles, how to present their outcomes and how to learn. This environment helped to create autonomous learners which is very important, as Thanasoulas (2000) asserts, autonomous learners should take greater responsibility for their learning. Participants mentioned that they have more opportunities in SOLEs to make decisions. S20, for example, held that 'here students have more room to use their skills. Here students have options. Here students can choose any way to obtain the answer'. Giving students the opportunity to carry out some tasks according to their preferences is very important as emphasized in EFL literature, Little (1990), for instance, asserts that learners should be able to make decisions in terms of their own learning and to be able to take independent action that is congruent with their preferences, learning style and strategies. Some students in this study felt for the first time in their lives that they could control their own learning and make decisions during classes. 'Transferring some level of responsibility for learning to students…was in fact exceedingly motivating' (Rix and McElwee, 2016, p. 49). It was also emphasised that students felt that they could express their opinions freely without limitations. This is highlighted by S4 who said that 'this way of learning gives students the freedom to state their

opinions whatever they are'. This reflected positively on their attitude and emotional state towards learning English as evaluated and confirmed by this researcher. This is in congruence with the assertion by Little (1990, p. 81) that autonomy is linked to 'learner's psychological relation to the process and content of learning'. Their positive feelings and attitudes helped them to accept SOLEs and encouraged them to learn and this confirms that autonomy is very important for language learners because it leads to good achievement (Diaz-Rico, 2008).

The researcher noticed that EFL learners were autonomous in many tasks they performed. They chose which website to surf, how to tackle each task, how to set goals, who to consult and many other decisions. The researcher noted all of these facts in his notes 'some students said it is good that we search any website, it is our choice' and 'students discussed how to search and perform the task according to their preference'. This freedom given to students to choose which strategy to adopt is important, Harmer (2015) asserts that language learners can become autonomous learners when they are able to make decisions on their learning strategies. One way to help language learners become autonomous is to provide them with technology (Benson, 2001) and SOLEs provide computers connected to the Internet all the time which, according to this research, significantly assisted in helping to create autonomous learners. Computers formed a main factor that led to autonomy as it is a tool that provides students with a significant amount of freedom. It is their choice which website they surf and which articles and information they research. It is also their choice whether to use PowerPoint or another method to present their findings, all are accepted in SOLEs. Accordingly, Weisblat and McClellan (2017, p. 310) 'the SOLE pedagogy integrates technology as support for the learner as a leader of his or her own learning experience'. Studies on autonomy agree on the importance of fostering English learners' autonomy and this is supported by the European Language Portfolio among the objectives of it is "to promote learner autonomy" (Council of Europe, 2004, p. 3). Benson (2001) in his book 'Teaching and Researching Autonomy in Language Learning' provides techniques to create autonomous learners. He believes that language learners' autonomy can be fostered if they are given independent interaction with learning materials and technology, if the importance of their behavioural changes is stressed and if they are supported by teachers in fostering their autonomy. SOLEs were found to support EFL learners in all these ways and, as a result, enhance student autonomy. Interaction with learning

materials and technology is high in SOLEs and students' behavioural changes linked to their improvement in terms of personality and knowledge is acknowledged in this environment. Donal et al. (2013, p.12) asserts that a SOLE 'is an enquiry-based approach where greater student autonomy is anticipated'.

5.4.2 *SOLEs helped to develop students' personalities*

Each student is a unique individual with a distinct personality (Quinn, 2006). Some authors like Burkitt (2008, p. 4) argue that personality is 'something to be created with other people in joint activities and through shared ideas'. Others like Rogers as mentioned in Hall et al. (1998) argues that one's consciousness forms her/his personality, while Gallagher (2000) emphasizes the importance of considering both the conscious and non-conscious aspects of the self that contribute to making any individual unique. It is also argued that one's personality is shaped through life experience by means of learning (LeDoux, 2003). LeDoux (2002) also emphasises that both nature and nurture are important in fostering one's self and that language and emotions play a vital role in shaping people's personalities. The second sub-theme of the main theme **SOLEs' influence on students and their learning** is **SOLEs helps to develop students' personalities.** It was found by the researcher and confirmed by participants that SOLEs have positively affected EFL learners' personalities in many ways. This environment has made a large number of participants bolder and more confident as highlighted on many occasions by fourteen students. These students accredited this boldness to many factors like the availability of the Internet, encouragement from the teacher, freedom given to students, discussion and other factors. It has also helped them to overcome fear, shyness and hesitation. These findings are corroborated in a study on the use of the Internet in English classes by Young (2003, p. 477) which revealed that 'a computer mediated communication environment could lower students' psychological barriers to enable them to express their opinions freely and to communicate actively'. Correspondingly, S1 stated that 'discussion with others and giving presentations help us to be bolder. Unlike traditional learning environments, SOLEs provided students with the opportunity to give presentations and express their opinion which consequently made them bolder'. S4 also contended that 'It has some qualities that helped us to be more confident and overcome shyness'. It is argued that SOLEs help students to gain

confidence (Mitra, 2009). Many students in this study felt shy, especially the female participants, and this is due to the presence of the opposite gender which is related to the culture of the country. They are not used to mixing with the opposite gender, except with relatives, hence this is a new co-education experience for all of them. However, it was expressed by some students in many cases that they could overcome this shyness. Like S4, S20 stated that 'I am a shy and nervous person. This environment helped me to overcome this problem. I have not mingled with my classmate before, but this environment has helped me to get to know them. I have got rid of shyness'. One prominent strength of SOLEs that enables students to overcome shyness and become bolder is the group work. In other classes, they work individually and do not have the opportunity to socialize, but in SOLEs 'communication and collaboration are therefore key features of a SOLE' (Mitra et al., 2016, p. 232). S2 confirms this when she stated that 'I became more daring and bolder. I used to be introverted but now I speak and participate within groups'. S9 who is a very shy girl could improve in terms of being more sociable and stated that 'this is a great way of learning because it enables students to change, especially shy ones who cannot communicate with students. This environment makes a person bolder and more self-confident'. In general, the researcher noticed a change in students' personalities as they became bolder and more confident and noted that 'students started to become confident'.

Students' seriousness was also positively affected by SOLES. Student feedback revealed that, for several participants, this environment helped them to become responsible for their learning and take responsibility within their groups. S5, for example, stated that 'I feel that I am responsible for doing and offering something'. Likewise, S8 stated 'I became more responsible'. This researcher noticed that team work improved many aspects in students' personalities which include adopting responsibility and taking tasks seriously. Students in their groups feel the responsibility that they have to help the group and to offer something as S5 stated above and as S8 affirmed 'I liked this environment because it makes students depend on themselves'. This researcher also noticed the improvements as stated on his notes 'some students became responsible and serious' and 'It has become clear that there are leaders in all groups and there are also those who search well'. Rix and McElwee (2016, p. 49) confirm this finding when they stressed that 'clearly the value of SOLE…the level of responsibility it gave (students) which…encouraged

them to consider their identity as learners'. This finding is also corroborated in a study on personal learning environments which share some commonalities with SOLEs that students in such environments become more responsible and independent (Attwell, 2007). Burkitt (2008, p. 4) argues that personality 'is something to be created with other people in joint activities and through shared ideas'. This research confirms this argument because the team work nature of SOLEs helped students to become bolder and more confident as explained in the previous paragraph and it helped them to take responsibility and to approach tasks seriously. Positive desirable attributes, which positively affect students' personalities, can be achieved through healthy interaction that supports basic needs (Cameron & Caza, 2004) and aims at finding 'actions that lead to healthy, engaging, meaningful, and thriving schools where students flourish, learn, and are happy (Hoy & Tarter, 2011, p. 429).

EFL literature confirms that EFL learners' personalities play a central role in learning English (see e.g. Harmer, 2007a; Maleki, 2017; Kao and Craigie, 2014; Chen and Hung, 2012). This research is the first to study this aspect in depth and to confirm that SOLEs can contribute strongly to improving students' personalities and consequently in making them flourish.

5.4.3 *Personal development improves*

The third sub-theme of the main theme **the influence of SOLEs on students and their perception of learning** is that **personal development improves**. According to Treff and Earnest (2016), personal development means becoming mature. It was confirmed by both the researcher and students that this environment helped to improve students' personal development dramatically. This sub-theme stood out very clearly as it was mentioned and reflected by both participants and the researcher on many occasions. SOLEs influenced participants in a way that enabled them to build relations (social interpersonal skills) and be competent intellectually. These two areas are among the seven indicators of personal development (Chickering and Reisser, 1993). Hence, the students' ability to build relations and be competent intellectually means that students have developed. This aspect is discussed in the following two sections as sub-themes of a sub-theme.

EFL learners become better at building relations

In order for a person to develop, s/he needs to become involved in dialogues with oneself and other people (Taylor et al., 2000). Likewise, Chickering and Reisser (1993) identify seven indicators for personal development including the ability to build relations with others. It is argued that giving students' the opportunity to work in groups and develop relations among students impact students' personal development (ibid). This researcher argues that SOLEs have helped students to make new friends and improve social interpersonal skills. Sixteen students mentioned explicitly that SOLEs helped them in building new relations and making new friends. This sub sub-theme stood out very clearly as students used in most cases the pronoun ''we'' when talking about anything related to the environment. They also worked collaboratively most of the time, encouraged each other as a team aiming at success, and respected each other within groups and the class as a whole. S20 confirmed that 'this environment helped us to be close to each other unlike other environments where we have no chance to get to know each other. It made our relations stronger'. The researcher also noted in his field notes that 'students socialized well and respected members within their groups'. This social interaction helped students in this project to get to know each other more as S3, for example, stated that 'I discovered so many things about my classmates and made new friendships'. This finding is in harmony with the study by Arendale (2014b, cited in Aredale and Hane, 2014) in which he conducted a meta-analysis study on approaches involving group work and found that a change in students' behaviour is always revealed including making new friends.

Developing interpersonal relationships also led to understanding each other's personalities, as S1 noted in her diary 'the most important thing in my view is that the interpersonal skills of students have improved which helped us understand each other and which I feel is a must in any class. I have become more active in cooperation with my partners'. This researcher noticed that developing relationships and understanding different aspect of each other's personalities helped students learn how to work in a team, express opinions in a way that does not injure others' feelings, to maintain relations and eliminate shyness which is a barrier to building relations. It was confirmed by both the researcher and students that this environment assisted in developing the socialization skills of students. This is exemplified by S13 who stated that 'because of this environment my relationship with my classmates became stronger. I used to know them a little bit but now our relationship is stronger'.

Students also established a rapport amongst themselves, as S10 clarified 'this cooperation strengthens our relationships and increased the rapport and respect among us'. Their interpersonal skills improved which was reflected in the way they dealt with each other. This finding is reflected in most of Mitra's works on SOLEs (see e.g. Mitra et al., 2016) where they mentioned clearly that SOLEs prepare students to socialize and collaborate. According to Chickering and Reisser (1993), learning environments have a vital role and influence on students' personal development and this research argues that a SOLE as an EFL learning environment has the qualities to improve students' personal development. This is one merit of SOLEs because personal development is as important as cognitive development (Iulia, 2015).

EFL learners develop intellectual competence

SOLEs have also enhanced participants' intellectual competence; seventeen students confirmed that this was the case in this study. Some students started to develop self-belief which is a key intellectual skill and one that is important in any individual's life. They acquired the skill of evaluation which is a high order thinking skill, they also improved searching, presentation, analysis, planning, consultation and many other intellectual skills. Students learnt how to work and plan as a team, how to negotiate and how to convince others. S4, confirming this researcher's understanding, stated that 'it fosters our skills and talents. It helps students to be innovative. In this environment, students can innovate and improve themselves. We negotiate and evaluate our opinions until we get the right answer'. S5 also held that 'it improves our intellectual potential. When I search for something and cannot find an answer, I go back to the question. I analyse it so I feel that I am thinking and my brain is working'. The result is in congruence with the findings of Young (2003, p. 49) who observed that 'a computer-mediated communication environment…could also enhance their (language learners) critical thinking, problem-solving and communication skills'. This result is also corroborated in a study by Rix and McElwee (2016, p. 49) whose findings state that 'when categorised by McElwee using Bloom's Taxonomy (1956), all students' presentations showed evidence of reaching at least the analysis level. Some went beyond that to the highest order of thinking, evaluation'. Likewise, S16 maintained that:

I think all students in my class have improved … negotiation, decision making, planning. The effects of this environment on me include learning lots of things and using my brain very well to tackle many things. Some skills that I have improved

are analysis. I also acquired new experiences, for example, evaluating the best details for any subject.

This research confirms that EFL learners in SOLEs can intellectually perform well and reach higher thinking skills based on Bloom's taxonomy (1956). The whole experience of SOLE reflected positively on students' intellectual abilities and they gradually improved, this researcher noted that 'this time students provided acceptable answers and used some new vocabulary'. Therefore, this research emphasizes that SOLEs have the qualities to foster lifelong skills that are important for the 21st century including digital skills and creative thinking (Lemke, 2003, cited in Fandiño, 2013).

5.4.4 *Students are empowered*

According to Frymier et al. (1996), empowerment is linked to motivation and consists of three main pillars which are meaningfulness, competence and impact. By meaningfulness they mean that students should find materials interesting and valuable, competence conveys that students should feel capable and able to perform the given tasks, and impact signifies that students should feel that their input is important and has an influence on the task. Students in this study were empowered when working in SOLEs; this is because they felt able to do the required tasks and because they felt that their learning was valuable, these two areas are explored and discussed in the two sections below. There are many factors that help to empower learners such as the teacher-student relationship, teachers' expertise and teachers' encouragement to students (Diaz et al., 2016), learning environments and clarity of communication by instructors (Frymier et al., 1996; Schrodt et al., 2006), collaborative learning (Novak, 2002), ability to foster skills (Zimmerman, 1990) and the relevance of learned materials or content for learners (Brunton & Jeffrey, 2014).

EFL learners develop their ability to complete tasks

Students in this research felt that they could tackle almost any task due to the availability of the Internet and to cooperation. This is exemplified by S5 who stated that 'the Internet is available and it includes everything. I type the given question in order to get the information I need. In case I cannot find the required information, I change the wording or only type the key words so 100% I will find relevant information'. Like other students in this research, S5 improved her searching skills as

well as other skills which is a key element in empowering students, as Zimmerman (1990) emphasises, learners' ability to foster skills impacts their empowerment positively. According to Frymier et al. (1996), learning environments are among the factors that affect student empowerment. As evaluated by the researcher and revealed by students, the SOLE as an environment was found in this research to be functional at empowering students because it includes the means, such as the Internet and group work as mentioned earlier, that help students to perform tasks easily. Empowering English learners is very important because it leads to better performance (Mok, 1997). S2 held that 'all means that help students to get the answer are provided so there are no obstacles that prevent students from doing any task'. This fact is confirmed by Weisblat and McClellan (2017, p. 312) when they emphasised that students in SOLEs are able to 'quickly conquer new materials'. This researcher found that students were confident that they could tackle the learning materials due to the availability of the Internet, as he noted during the research 'some students, while discussing their findings from searching online, emphasise that the Internet will help them find the answer, they felt able to answer'. Pioneers in language learners like Warschauer et al. (1996) assert that technology positively impact English learners. Besides the Internet, cooperation among students in SOLEs was found to empower them as it helped them to do tasks as a team. Therefore, group work gave them confidence and the feeling that they were able to perform the given tasks. This is in congruence with Novak (2002) who found that collaborative learning serves as a factor to enhance empowerment as it eliminates frustration and disempowerment. Many studies on SOLEs confirm that students were able to do the given tasks (see e.g. Mitra, 2009; Mitra and Quiroga, 2012; Mitra and Crawley, 2014; Donal et al., 2013). Also, Mitra and Dangwal (2010) found that in a SOLE students are able to understand topics that are usually learnt at a future stage. The strength of this study's findings is that many tools were used to answer the research questions. This study also used participatory action research as a design which helped this researcher to explore the issue of empowerment in more depth and to obtain an insight into the psychological and emotional factors which influence students in terms of their learning. All these factors helped getting to obtain this result with confidence, hence it is believed to be valid and robust. As a result of empowering students in this study, they believed in themselves, they also believed that they could improve their English and they gained the confidence that is important in doing any task. Frymier et al. (1996) argue that empowered students learn more than their peers and feel more

enthusiastic in terms of accomplishing educational objectives as they feel in control of their own learning environment, they also appreciate and understand the value of class activities, this is stressed by S1 in this study as she stated that 'it made me feel that I have the power to try and improve my English'.

Tasks and learning are meaningful for students

Students also felt empowered in the SOLE because learning is meaningful, this is explicitly confirmed by thirteen participants. They feel that they learn meaningful information which is important to empower students, an aspect which is emphasized by Frymier et al. (1996). They feel that way because, according to the findings in this research, questions meet their interest, they carry out activities that they like, the content of learning is beneficial and it can help to improve their English. S4, for example, stated that 'it is meaningful and with value. I feel it is meaningful because it added so many things to my life. For example, I learnt how to search for information, how to pronounce words and how to divide words to say things clearly and successfully'. The researcher found that most students found what they learn is meaningful and relevant which is important, this is in accordance with Brunton and Jeffrey (2014) who stressed that among the factors that affect empowerment is the relevance of learned materials or content for learners. Houser and Frymier (2009) argue that empowered learners are always motivated as they understand the meaning of the given tasks. The researcher noted in his field notes that 'at the end of the session many students reported that what they do is interesting and beneficial'. S3 stressed this as well when she said that 'we have been learning beneficial things through searching information about valuable topics'. This is an important finding of this research, that is, participants always find interesting content on the Internet that helps them feel that their learning is meaningful. This result is reached through more than one research tool which makes it valid and thus it is new knowledge that contributes to the literature of SOLEs.

5.4.5 *Approach of SOLEs motivates students*

Motivation in the EFL literature is viewed as a core and essential element that can facilitate learning in general and new language learning in specific (Gardner, 2010; Markus and Nurius, 1986). Moskovsky et al. (2013) also assert that in the language learning field there is a lack of consensus among scholars on almost all issues

except for the importance of motivation. Gardner (2010) defines motivation as the love, desire and positive attitude towards acquiring and learning a new language. SOLEs have been found to motivate EFL learners to learn English and work hard in this study; thirteen students mentioned that they felt motivated for various reasons. Several students felt motivated due to the availability of the Internet and social media, as S3 stated 'this environment has motivated me to learn via the Internet and social media. It has given us the motivation to use programs'. Likewise, S15 stated that 'I like searching so I felt motivated by this environment'. This study stresses that learning environments that meet students' expectations and, most importantly, meet the requirements of their era help to motivate them. Students felt that this environment belonged to them, it is contemporary and suitable for their era. This researcher noticed the impact of SOLEs on students' motivation in many sessions, he noted that 'Some students in all groups said 'let's work hard, let's search many websites'. This indicates a high level of motivation. Additionally, improvement in their use and level of English proved to be motivating factors, as evidenced by S10 'SOLEs motivate students to like English language. This environment provides motivation for students to improve their English skills, improve this language, and acquire new skills. It motivates us'. In the same way, S4 said that 'I think this environment motivates students to study hard and to attain high marks'. Watt (2008) argues that there are non-cognitive factors that affect students' motivation including the learning environment. This research confirms that SOLEs as learning environments function well in terms of motivating students. This finding is corroborated by the work of Ellis et al. (2014, p. 9) who found that students 'are being motivated in this process by the freedom to learn which SOLEs offer'. Therefore, students 'exhibited greater motivation' (ibid, p. 10). Teachers who trialled SOLEs in their study also expressed that 'the SOLE method appeared to energise the students' (ibid, p. 10). S8 who felt motivated due to the nature of SOLEs which breaks students' routines stated that 'this environment motivates us and changes the routine of our education'. Many students in this study felt motivated due to the element of fun in SOLEs that is different from all of the routine classes to which they are accustomed. Others felt motivated by the group work which is a main pillar of SOLEs, as S14 stated that 'this environment increased my desire to learn because we learn in groups'. This researcher found that group work leads to confidence and this confidence leads to motivation. Several studies have revealed that students' motivation decreases as they mature (Murphy and Alexander, 2000; Lepper et al.,

2005; Watt, 2008). Therefore, the ability of SOLEs to motivate adults in this study is a significant success for this approach, it helps to retain motivation and re-motivate older students. This study confirmed the motivational element of SOLEs that was revealed by the previous literature on this learning environment these previous studies revealed that initial observation shows that children find SOLEs more interesting and engaging compared to traditional education (Mitra et al., 2005; Mitra et al., 2016). Rix and McElwee (2016, p. 40) also found that 'initial enthusiasm…showed a move away from the passivity and apathy'. Furthermore, Weisblat and McClellan (2017, p. 313) argue that 'SOLE…generating…intrinsic motivation for learning by using the student as the driver'. The validity of the results of this study is ensured as many tools were used, because the researcher explored the change in students' motivation during the period of a complete academic semester and also from different aspects. Moreover, these results highlight the factors that are present in SOLEs and which act as motivational drivers.

Summary

In sum, this section has presented and discussed the findings that are related to the third research question which is **how SOLEs impact students and their learning**. This research question guides the second objective of the research which is **to investigate whether SOLE pedagogy is able to facilitate an effective English language learning environment for Omani students**. It was found that SOLEs impact students positively in many ways. For example, personal development improves, SOLEs help to develop students' personalities, student autonomy increases, the approach of SOLEs motivates students and students are empowered. These findings were evaluated and explored in depth by this researcher and were discussed in this section. The discussion highlighted particular important elements in SOLEs that most affected students like the availability of the Internet, group work and the nature of SOLEs in general. It was also highlighted that student autonomy in SOLEs is high because of the freedom given to students to choose what to do. Students were also found to be bolder, more confident, more committed to tasks, relationship-building and intellectual competence were enhanced due to cooperative work and the opportunity to present their findings. In addition, the Internet and cooperation helped students to feel that the content they learn is meaningful and that they are able to perform any given tasks. This assisted in creating empowered

learners in this study. Finally, this section discussed the theme of motivation and highlighted that SOLEs are motivating learning environments.

5.5 Final SOLE model

This section presents the SOLE model suggested by this study to suit Omani students. This model answers the fourth research question which asks **what a SOLE model looks like in the context of Omani tertiary level education in *Future College*.** This research question guides the third objective of the research which is **to theorize a model for effective and impactful SOLE adoption within an EFL learning context.** This final model is the product of this thesis that this researcher produced for Omani students, teachers and researchers. It is also for teachers and researchers in other contexts similar to that of this study in order for them to check if it is suitable for their own pedagogical environments.

In this section, the researcher details the steps taken to produce this model during this project. To begin, after approximately one month of implementing SOLEs, it was found that participants liked SOLEs in general but felt that they required some changes. S4, for example, held that 'It is good for students but there are some things in it that have to be changed. There is imperfection, a little bit, as I mentioned before. There are strengths and weaknesses'. S8 also held that:

> *The session was just like the last one, there is no change. I disliked that it has become like a routine, no changes. The cons include that it is the same pedagogy, no change. The session was as usual, no change and boring somehow. It became a routine.*

S7 also noted in her diary that 'it is a lovely new way of learning but it should be improved'.

Participants not only stated that SOLEs require improvement to suit the Omani context, but also suggested some changes. These suggestions are a concrete important element that demonstrate the involvement of participants in the decision making for improvement of the intervention and they also highlight the participatory aspect of PAR. Suggestions made related to big questions, the teacher's role, providing more and varied activities. Most of these suggestions were found to be

compatible with the researcher's own field notes and data analysis as presented in the theme 'areas for improvement' in the findings chapter. S12, for example, suggested that the teacher's role should be changed 'the role of the teacher should be more, he should discuss things with students'. Further to this, S4 stated that 'the teacher should monitor students'. Others suggested that big questions should be changed, S1, for example, observed that 'in terms of the question, it is better to divide it into questions'. S7 also held that 'there should not be one question for the full hour. There should be many questions throughout the session, this will keep students busy'.

The researcher evaluated cycle one in depth. As a result of this evaluation, and as driven by the research data analysis, some changes were introduced. The researcher changed the roles of the teacher so that these increased: students were not left unsupervised, all groups were visited to support and encourage students, the teacher sometimes intervened in grouping students, sometimes students were selected by the teacher to provide answers and the teacher worked as a participant as well. Some competitions, such as debates and presentations, were introduced among groups as well in order to maintain student activity and enthusiasm. The teacher also dealt with undesirable behaviour, most which disappeared as the teacher did not leave students unsupervised. Also, the researcher introduced some questions that do not share characteristics with big questions, the researcher in some classes used two or more questions with specific answers and a time limit. All of these changes were introduced and practised in cycle two which lasted for six weeks. During and at the end of cycle two, the researcher collected data in three different forms which are field notes, diaries and semi-structured interviews. It was found after in-depth analysis and before producing the final SOLE model for Omani students that participants were generally impressed about the changes introduced and more enthusiastic in terms of the new version of SOLEs. S3, for example, said that 'the environment is better than before. I think now SOLEs can be implemented'. S10 also held that 'you have listened to our suggestions to make changes to this environment. So, it is ready to be implemented for the coming generations'. Students also liked the teacher's new roles, they believe it is more desirable compared to cycle one. According to them, teachers should guide, monitor, correct and encourage students to speak in English. They felt that the teacher cared about students in cycle two but not in cycle one, therefore, this affected them positively in terms of their learning. S15

illustrates this point 'the new role is better because it makes students feel that the teacher cares about what they are doing'. Likewise, S16 stated that 'I also like that the teacher supports us and discusses our ideas and gives feedback ... I also like the new role of the teacher as he helped us'. Participants also feel that student behaviour improved due to the new roles of teachers, as reflected by S3 'their (students) behaviour has become very good because they are monitored'. In general, it was found that teachers' interventions were appreciated and successful in boosting learning and in managing the class. These new roles are compatible with the literature on teachers' roles (see e.g. Harmer, 2015; Nunan, 1988; Broughton et al., 2002; Nunan,1998; Gochitashvili, 2012; Renjie, 2011; Reeve, 2006) and reject teachers' suggested roles in SOLEs which are very minimal (see e.g. Mitra et al. 2005; Mitra and Crawley, 2014).

It was also found that asking different question types is more desirable than asking only one. Students believe that asking more than a single question keeps them busy throughout the class time. They also expressed that looking for a specific answer encourages them to work hard and read more in order to find the right answer which, as a result, increased their commitment to the task and learning. S5, for example, stated that:

> Now it is better indeed, why? Because previously we had a lot of time so we talked off topic, played and laughed. Now it is different. We are now able to manage our time. The current questions are lovely. Giving us more than one question is better than giving one question for that time.

S9 also held that 'the change of questions, I feel now it is easier so I feel able to answer…This enforces us to search deeply on the Internet and social media to get the correct and model answer'. The researcher also noticed some improvement caused by the change of questions 'Students are always active throughout the session because there are a variety of questions that keep them busy'.

The researcher also tried to delve deeper into the issue of culture and asked students in some classes to provide one answer as a whole class but it did not work. They worked only in their groups and with the same gender as shown below in the researcher's field notes: 'despite asking students to provide one answer from the whole class, they worked within their groups and no interaction happened' and 'a variety of activities have been conducted in this session, some are within groups, one

was a whole class task and one was a debate between the two genders. The latter two tasks did not go well due to the lack of interaction between the two genders'.

In sum, the new version of SOLEs was found to be suitable for implementation in *Future College* and thus the SOLE model was created as presented below in Figure 15. Participants appreciated that all their comments and feedback on areas that should be improved were addressed and treated by this researcher. The teacher's role and questions used in cycle two were found to be effective by both the researcher and students. Students liked that the teacher in cycle two guided them, supported them, monitored the class, grouped them and adopted other roles. Furthermore, they appreciated that big questions were not the only questions used in all sessions as in cycle one, but several questions that required specific answers were employed in some sessions. All of these changes led to a good final evaluation of SOLEs in cycle two from both the researcher and students. Consequently, students felt at the end of the research that SOLEs are ready for implementation in the Omani context.

figure 15. SOLEs Toolkit for Omani Context

Let's reinvent the way Omani students learn.

Contents

English teachers in Oman can spark curiosity, motivate and improve the level of their students' English by asking them to work collaboratively to explore knowledge available on the internet driven by a question or more raised by the teachers. Learning opportunities are very high in SOLEs.

1. INTRODUCTION

What is a SOLE in Omani context?

Omani SOLE model is a simple pedagogic approach that uses technology and is student-centered. Its main objective is to provide a lifetime learning experience through creating autonomous learners and to provide the same learning opportunities for all students. In Omani SOLE model a teacher either asks one big question or more than one narrow question with a specific answer in each session. Students organize themselves and sometimes with the help of the teacher in groups of four to search for answers to the teacher's questions using the internet.

Welcome

Welcome to the Self-Organized Learning Environments (SOLE) toolkit designed specifically for Oman, however similar context can benefit from it. Omani model of SOLEs is designed to help English teachers run effective rich sessions and to help students practice English in an easy unthreatening collaborative learning environment.

Learning in Omani SOLEs is:

Collaborative

Curious

Motivational

Learner-centered

Rich

Social

Friendly

Engaging
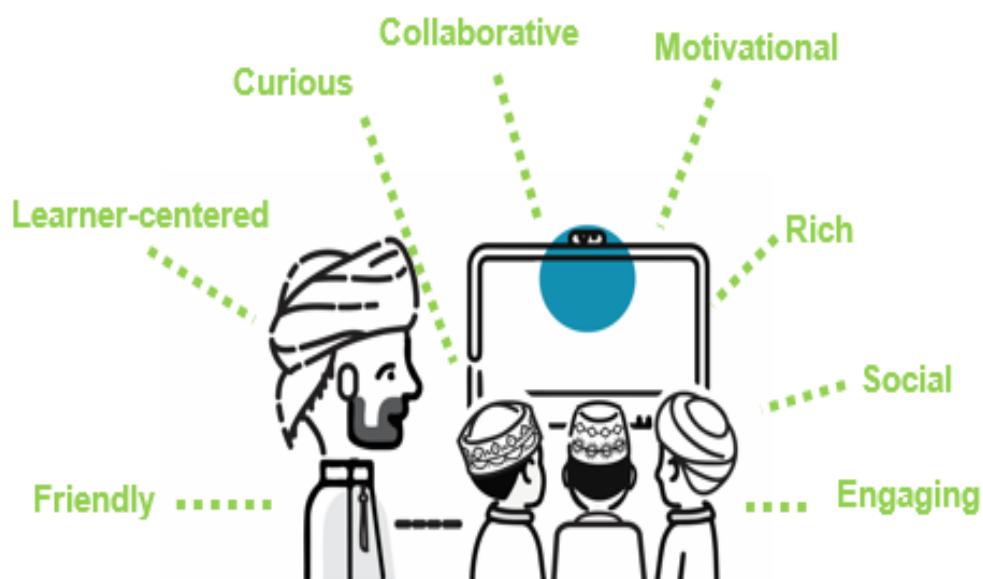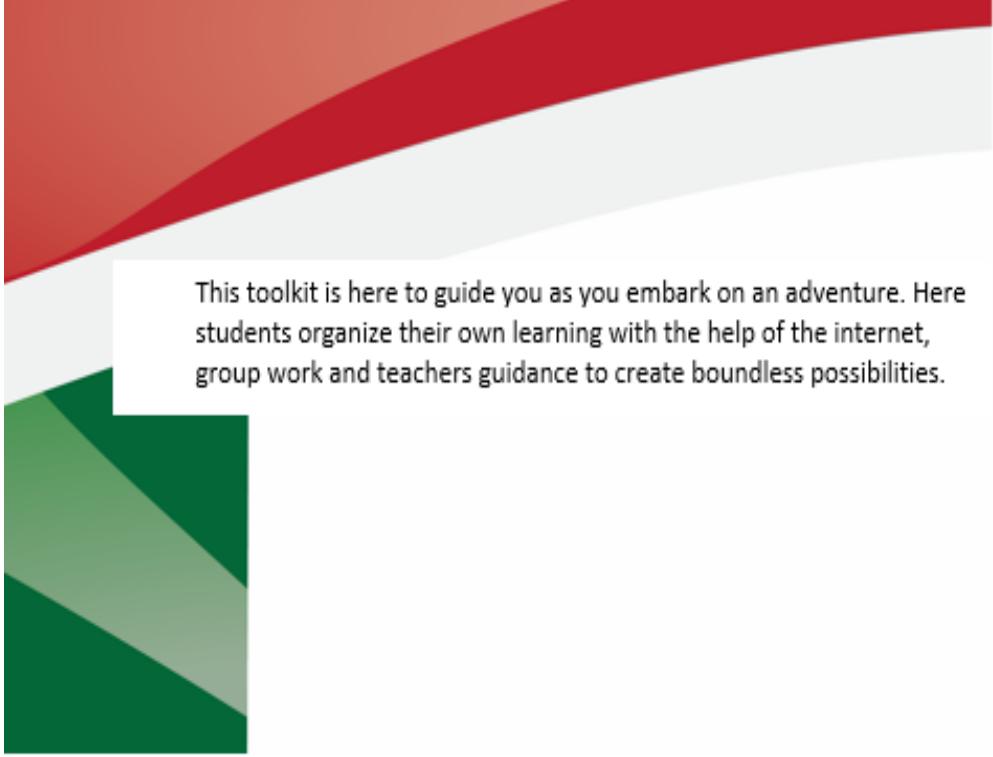
This toolkit is here to guide you as you embark on an adventure. Here students organize their own learning with the help of the internet, group work and teachers guidance to create boundless possibilities.

Omani SOLEs are created when educators encourage students to work as a community to answer questions using the internet.

Rules of SOLEs
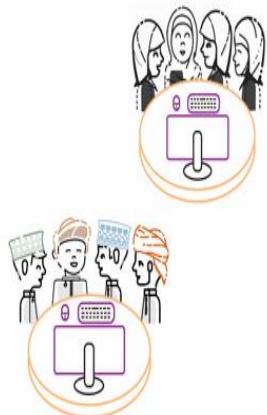
1) Students group themselves but teachers can intervene when needed.

2) The teacher asks a Big question for the whole class time or more questions divided throughout the class time.

3) Students are allowed to move around, share ideas and consult anyone in the class.

4) Students work as a team in their groups and with others in the class if they wish to look for answers using the internet.
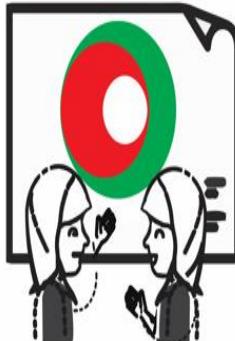
5) Groups are expected to present what they have learned at the end of the session.

Why set up a SOLE for Omani EFL learners?

A SOLE:

- Is suitable for tertiary level.

- Meets different learning styles.

- Is collaborative.

- Gives room of freedom for students.

- Utilizes the internet which is unlimited source of knowledge.

- Enhances English learning.

- Positively impacts students' attitudes towards English learning.

Teachers in a SOLE will:

- Understand their students' interests more.

- Provide a learner-centered atmosphere.

- Encourage discovery and research culture in their classes.

- Give power to their students.

- Create autonomous learners.

Students will:

- Be empowered to take ownership of their learning experience.

- Improve reading comprehension, behavior, language, creativity and problem-solving abilities.

- Strengthen interpersonal and presentation skills.

- Improve evaluation, negotiation and searching skills.

- Become motivated.

- Become autonomous.

- Become bolder, confident and responsible.

- Become competent intellectually.

2. Organize

How to set up a SOLE?

- Classes should be equipped with a round table for approximately every four students.

- Each table should be provided with a computer connected to the internet.

- It is good to provide each table with big sheets of papers for students to take notes.

- Classes should include whiteboards to write questions on and present final outcomes.

- Overhead projectors are helpful but not necessary.

How to run your SOLE sessions?

Teachers should tailor their class time according to the number of questions asked.

When asking one Big question:

When asking two or more questions:

Note:

When the teacher asks two or more questions, s/he can change the timing.

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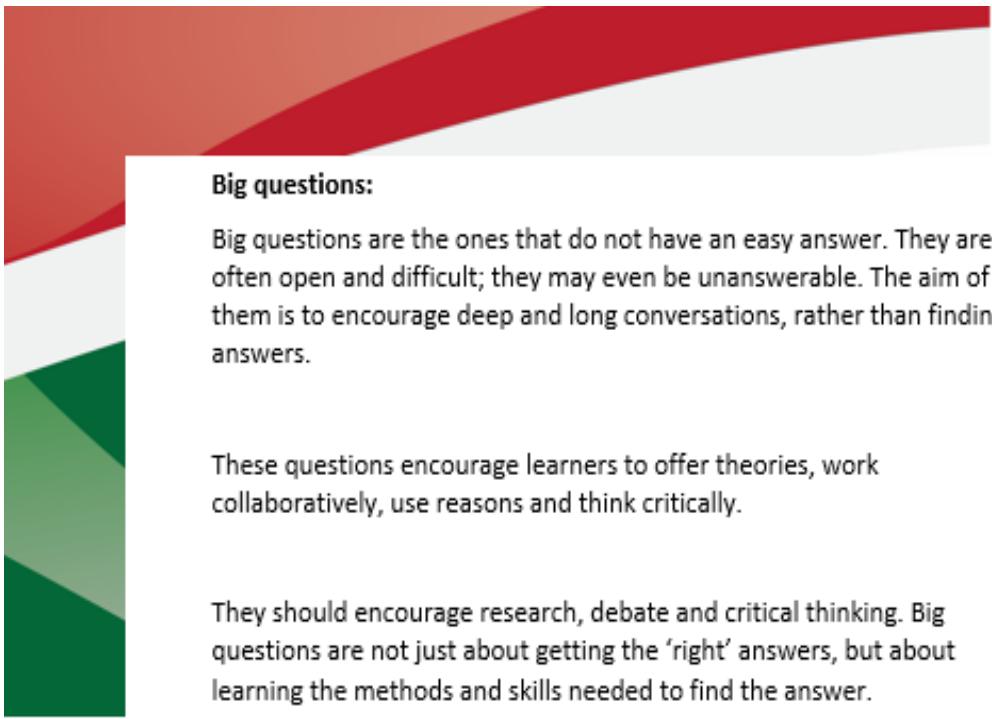
Big questions:

Big questions are the ones that do not have an easy answer. They are often open and difficult; they may even be unanswerable. The aim of them is to encourage deep and long conversations, rather than finding answers.

These questions encourage learners to offer theories, work collaboratively, use reasons and think critically.

They should encourage research, debate and critical thinking. Big questions are not just about getting the 'right' answers, but about learning the methods and skills needed to find the answer.

A few examples of Big question:

- How does our gender affect our identity?
- Is life on earth sustainable?
- What would happen to the Earth if all primates were extinct?
- Will robots be conscious one day?
- How would our life be without the discovery of DNA?
- Why do people slip when it is wet?
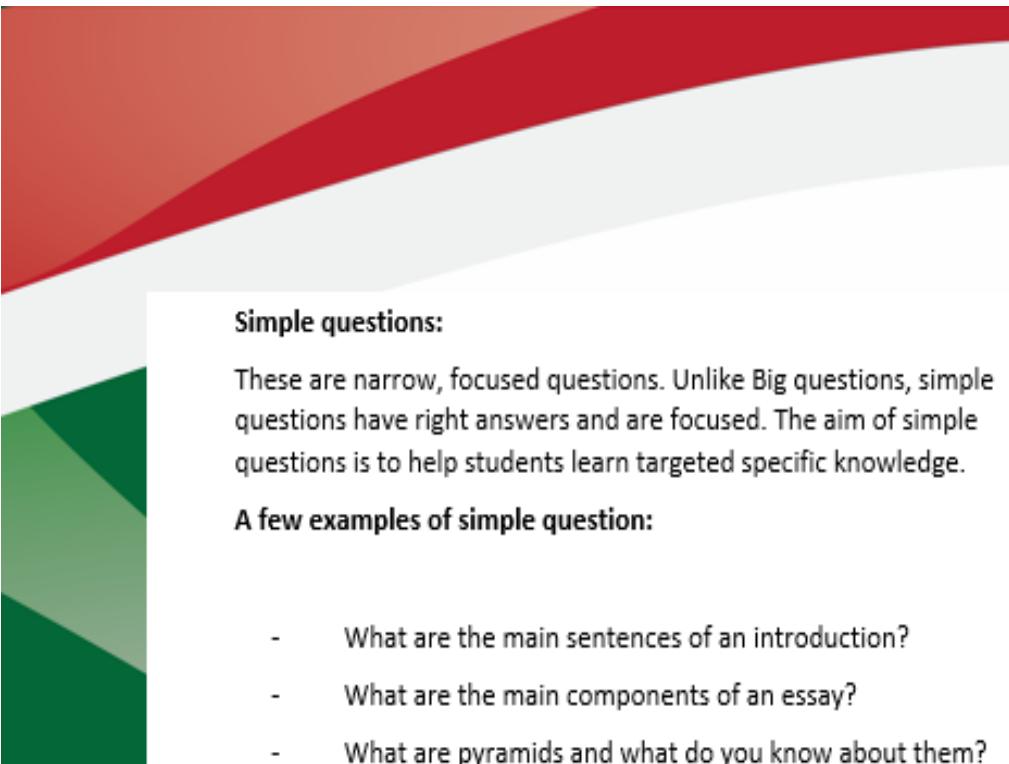
Simple questions:

These are narrow, focused questions. Unlike Big questions, simple questions have right answers and are focused. The aim of simple questions is to help students learn targeted specific knowledge.

A few examples of simple question:

- What are the main sentences of an introduction?
- What are the main components of an essay?
- What are pyramids and what do you know about them?
- When do we use present perfect?
- What do you know about World War II?
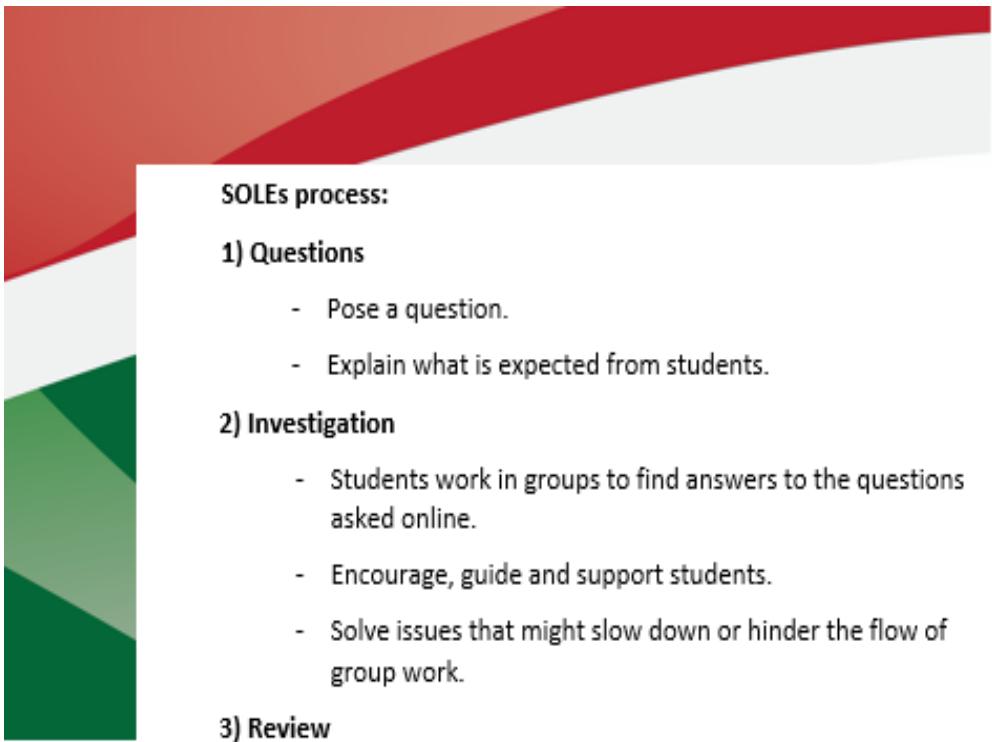
SOLEs process:

1) Questions

- Pose a question.
- Explain what is expected from students.

2) Investigation

- Students work in groups to find answers to the questions asked online.
- Encourage, guide and support students.
- Solve issues that might slow down or hinder the flow of group work.

3) Review

- Invite students to present their collective findings.
- Encourage debates and discussion about groups' findings.
- Engage students in their own review: What would they do differently, both individually and collectively? What do they think they and others did really well?

Teachers' Roles in SOLEs:

Facilitate, Support and encourage
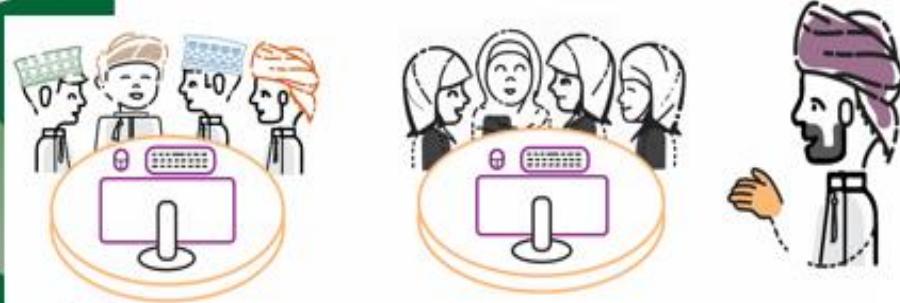
Monitor, control and manage
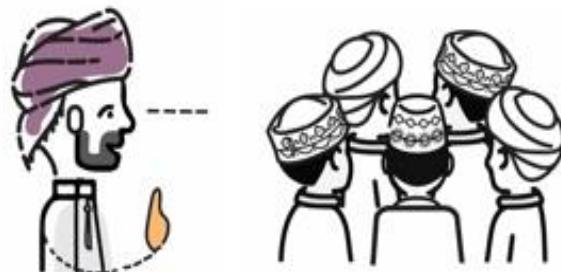
Group students when necessary
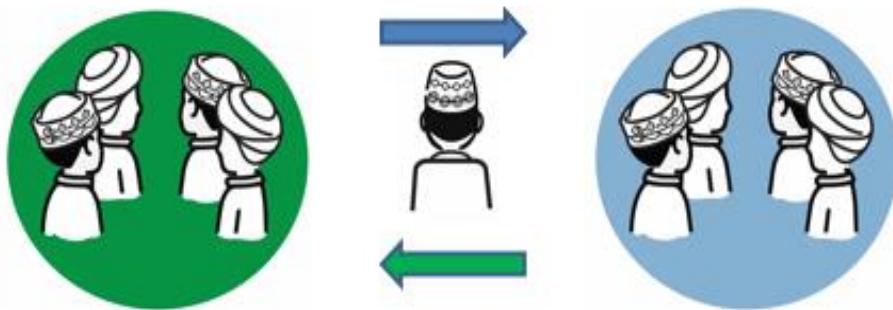
Teachers are in charge of everything in their classes so they can do other roles beside the above when they feel it is important to do so.

5.6 Chapter overview

This chapter has discussed the findings of this study in which an exploration of an intervention, SOLEs, was conducted. SOLEs were presented to *Future College* to explore participants' perceptions, emotions, attitudes, evaluation and reflection and the researcher's reflections and evaluations of the whole experience. Four research tools were used to collect data which are semi-structured interviews, focus groups, diaries and the researcher's field notes. As participatory action research, constant reflection and analysis were conducted. This chapter has discussed the main findings which are students' positive attitudes towards SOLEs, areas that were deemed necessary to modify in order to improve SOLES and the impact of SOLEs on students. Finally, a SOLE model for Oman was introduced. Regarding the first point, it was identified that students liked SOLEs due to the availability of the Internet, group work and freedom. Areas for improvement that include the teacher's role and big questions were also discussed in this chapter, and finally the impact of SOLEs on students that includes making students autonomous, bolder, motivated, empowered and more social and responsible were discussed as well. All of these areas were compared to the SOLEs literature and wider research fields. The study thus contributes significantly to the field, some of these areas are new knowledge and others are either confirmations or rejections of the previous findings of other studies.

Chapter 6. Conclusion

6.1 Overview

This thesis aimed to present a solution to an existing problem in the researcher's own context. The thesis problem concerns students' attitudes towards the current EFL learning environment which has been mainly negative and this consequently forms one factor among several others that has led to relatively high dismissal and withdrawal rates over a lengthy period of time. These environments might be described as traditional rows of chairs and tables where group work rarely happens. Within these learning environments, a teacher's talking time is high, students' talking time is low, there is no collaborative work, and there is almost no technology used due to the shortage of time compared to the extent of learning to be covered. In all, the pedagogic environment could be said to be passive, uninvolved and uncommunicative. All these factors have led to creating passive, unquestioning and compliant learners whose attitude towards learning English is negative within this specific cultural and national context. Therefore, this researcher offered SOLEs as an intervention and then explored students' experiences in learning English using Self-Organized Learning Environments. SOLEs were chosen due to their supposed qualities emphasized by some studies (see e.g. Mitra and Dangwal, 2010; Mitra, 2009; Mitra and Crawley 2014; Mitra and Quiroga, 2012; Donal et al., 2013). These studies demonstrate that in SOLEs, students gain confidence, become capable, learn information ahead of their age, enjoy activities and others. However, this approach was adopted as an exploratory approach with a very distinct questioning and sceptical slant – whilst not an interventionist study with the aim of measuring differences and outcomes, this study aimed to employ some of the main tenets of SOLEs with the aim of creating a baseline of exploration for further studies, with a variety of research designs.

The SOLE approach was implemented during the foundation year because most dismissals and withdrawals occur during this year and due to the importance of this pedagogical stage as it is the year in which students learn English intensively and prepare for their future specialization the following year. Three objectives guided this research: (1) to explore Omani EFL students' experience of and orientation toward

SOLEs; (2) to investigate whether SOLE pedagogy is able to facilitate an effective English language learning environment for Omani students; (3) to theorize a model for effective and impactful SOLE adoption within an EFL learning context.

This problem was addressed using participatory action research (PAR) because it helps researchers in both generating new knowledge and improving existing practices and situations (Swinglehurst et al., 2008). Furthermore, action research allows researchers to act while researching by the use of interventions, which in this study were SOLEs. Another advantage of utilizing action research is that it is both participatory and collaborative (Tripp, 2005), which means that the thinking, reflection, decisions and planning are all collective. In this study, the results of analyses were achieved after the analysis of collective views, reflections and evaluations by both this researcher and participants. Action research is also an ongoing process that allows the researcher to constantly improve the intervention (Tripp, 2005). In this research, the following were done: two cycles were conducted, in the first one the intervention was implemented as it was, and in cycle two it was implemented with some crucial changes informed by the findings from cycle one. This process led to creating a new SOLE model that is believed to be suitable contextually and culturally for Omani students. Therefore, the main argument of this thesis is that a SOLE can be an efficacious EFL learning environment provided that it is tailored according to the culture, students' levels and other emerging factors in the context where it is being used.

6.2 Students' experience and perceptions towards SOLEs

In general, this study revealed that students' overall experience and perceptions towards SOLEs as they are currently theorised and understood, is positive. Participants in this study have emphasized and appreciated the many merits of the SOLE approach as follows. For example, they believe that SOLEs can be implemented in tertiary level settings because a SOLE is able to prepare students well for future studies through improving their English, attitudes and personalities. Another merit highlighted by participants is that a SOLE is contemporary, enjoyable and includes facilities that help to boost learning. This research confirms that, for an environment to be accepted by students like the ones in this study, it has to be enjoyable and equipped with technology and appropriate furniture that encourage

group work. Furthermore, teamwork which is one pillar of SOLEs was admired by most of the participants because, according to them, cooperation increases the quality of their learning as they support each other to reach goals, clarify and correct each other. Another significant finding is that the availability of the Internet can improve students' attitudes towards these learning environments, a significant reason for this is that use of the Internet is an inseparable part of their lives, it helps to improve their English and boost their learning. Another factor that led to the participant acceptance of SOLEs is that they suit some students' learning styles. In a SOLE, learners who like visual stimulation can watch films or look at photos, learners who prefer moving and experiential activity can avail themselves of physical activity in the form of movement in the classroom, interpersonal students can work in groups, auditory learners may wish to listen to videos or other auditory material and so on.

That being said, both the researcher and students were in agreement in terms of certain limitations and drawbacks arising within the SOLE context. One prominent issue is that the teacher's role in a SOLE requires modification to suit Omani students and this role should not be minimal as advised by Mitra et al. (2005) and Mitra and Crawley (2014). Teachers implementing SOLEs in Oman should adopt more roles in areas such as monitoring, supporting learners and intervening in the grouping of students when needed. This research confirms that the adoption of such roles improves the quality of learning and helps to overcome emerging behavioural and pedagogical problems. This research also emphasizes that besides big questions, questions with specific correct answers should be asked in some classes. The rationale behind this suggestion is that to ask only one type of question can lead to repetition and consequently to student dislike and rejection of such environments, an issue which this research tries to resolve. This study revealed that asking big questions can lead to a lack of interest from the student perspective, to disappointment and confusion as they do not have direct answers.

6.3 SOLEs' influence on Students and their Perception of Learning

This study is the first to explore the impact of SOLEs on students from the perspective of the students' activities within a participatory action research setting. The findings of this research revealed that a SOLE has the potential to create autonomous learners due to the freedom they are afforded in decision making, that

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is, students are free to choose how to approach given tasks and how to learn. Learners in this research revealed that they were able to carry out activities according to their preferences and decisions and felt that they were in control of their studies. Findings also revealed that a SOLE is able to foster students' personalities by making them bolder, confident, serious, interpersonal and competent learners due to the freedom, availability of the Internet and group work. In addition, a SOLE was found to be successful at creating empowered learners. The Internet and cooperation assisted students in feeling that the content they learnt was meaningful and that they had the ability to complete given tasks. These according to the literature are among the factors that help to create empowered learners (Frymier et al., 1996). Finally, the findings revealed that a SOLE is a motivating approach that can lead to feelings of engagement in students.

6.4 The contribution of this thesis

One of the most complex problems that this study has exposed is trying to solve the role of language learning environments as purposeful ways forward to enhance students' learning parallel with their learning trajectory and necessary associated achievements. This study intended to learn more about how language learning environments act as an affordance or barrier to students' learning and to ascertain whether SOLEs can fill that conceptual gap where difficulties currently occur. It also aimed at solving an existing problem in the researcher's own context that is the students' lack of interest in EFL learning environments which leads to high dismissal and withdrawal rates every academic semester. Therefore, this study introduced SOLEs as a new EFL learning environment. SOLEs were introduced as a solution and an intervention to the researched context in order to solve the above-mentioned problem. This study is the first to shed light on the reasons that lead to high dismissal and withdrawal rates in the researcher's own context and to investigate a suggested intervention and solution.

This study is also the first to investigate the use of SOLEs in tertiary EFL learning environments and explore different aspects of SOLEs in depth. It has also suggested changes to the current SOLE approach to make it more suitable and effective for Omani students. The study has shed light on the usage of SOLEs and their significance in an Omani tertiary educational establishment, especially as not a single

SOLE study has previously been conducted in the Omani context. Moreover, the findings contribute to the literature of SOLEs and of learners' attitudes towards English language learning environments. It is worth noting that this is the first study to question SOLE principles and to conduct two cycles of intervention to improve them.

This study has also uncovered and explored new areas that have not been investigated in relation to and within SOLEs. It has examined whether SOLEs are suitable for Omani tertiary level EFL learners, it has also investigated factors that make SOLEs unique, fruitful and desirable and students' emotions towards this model. It has also explored the impact of SOLEs on students that include areas such as motivation, empowerment, autonomy, personality and others. The study does not only contribute to the literature of EFL learning theories and approaches and to the literature of SOLEs, but it also adds new original knowledge to other areas linked to learning environments, curricula, teachers' roles and others.

Furthermore, this study is the first study to suggest a new SOLE model for a particular context which, in this case, is Oman. This model was suggested after a deep research on SOLEs original model which was refined throughout the research. The researcher started the experiment using the original model and then improve it using the research results which were reached through four research methods. In this new model, the teacher's role differs from the original SOLE model suggested by Mitra et al. (2005). This thesis confirms that teacher's roles should not be sacrificed and should not be marginalized. Teachers in this model are expected to guide students, support them, monitor the class, group students when needed and adopt other roles. Furthermore, in this model big questions are not the only questions used in all sessions; several questions that have specific answers are used in some sessions. Using more than a question in some classes keeps students active and on their toes. This model was explored in cycle two and was evaluated by both the researcher and students, consequently, students felt at the end of the research that SOLEs are ready for implementation in the Omani context and that this new model is more suitable than the original one.

6.5 Implications

The study appears to support the argument for a change in traditional learning environments in general and in this specific college setting in the Gulf Region. The importance of this study cannot be overstated – the existing educational environment and the need for students to be more involved and active in their learning so that they can respond to the very significant educational changes that are about to impact on all regions in the Gulf, are urgent and indeed, critical. Any approach that enables and promotes students' learning to be more thoughtful and demands different approaches to thinking, is therefore welcomed. This argument supports the cooperative learning that is found in this study to impact students' personalities and learning positively. It promotes student commitment to tasks, makes students responsible, empowered, motivated, social, competent and autonomous. Besides cooperative learning, the Internet is an effective tool that can positively affect students' personalities and learning. It also helps to change students' attitudes towards learning environments as they feel that those equipped with the Internet are contemporary and more fitting to their era. This study also supports the argument that teachers' roles should be respected and should not be sacrificed. Teachers should play different roles according to the context in which they work, the task they are taking on, the type of students they are dealing with and other factors. They can be controllers, friends, facilitators, participants, assessors, feedback providers, guides or sometimes a source of knowledge, all this depends on the situation they are dealing with. In sum, learning environments should be contemporary, cooperative and equipped with technology where teachers adopt a principal role in facilitating learning within these learning environments.

6.6 Improvements for future phases of this research

This study was conducted due to a practical necessity. It tried to improve students' perceptions and attitudes towards learning environments, therefore, a new learning environment was used as an intervention. It was then explored using a participatory action research design that included four tools which are semi-structured interviews, focus groups, diaries and the researcher's field notes. Twenty- two participants were recruited from the same level of English in *Future College*. This researcher believes

that recruiting more groups from different levels could help to attain more wide-ranging data that would support different kinds of analysis that would therefore contribute to the baseline that this study has developed. However, that being said, this researcher used four types of research methods that helped to ensure valid and reliable findings. He also recruited one group due to the qualitative nature of this research which makes it difficult for one researcher to deal with a huge number of participants. Another improvement that can be made to this research is to conduct more than two cycles of participatory action research which could obtain further results, however due to the time limit, it was not possible to carry out more than two cycles in this study. For future improvement to this research, this researcher plans to conduct wider research in the same and different contexts with the help of colleagues in the EFL field in order to confirm the findings of this study and be able to implement SOLEs in different parts of Oman. The generalizability of the results of this study is applicable to the population of this study's sample only which is the Language Centre students in the Future College only. The characteristics of this particular and unique research setting, the nature of *Future College*, the type and background of students and even the school system from where students in this research graduated, limit the transferability to other contexts. Therefore, those who wish to draw a comparison of this study with their own contexts should consider all these points above in order to be able to decide whether the results of this study are transferable to their own contexts or not. Recommendations

This research tries to improve students' negative perceptions towards learning environments which was among the reasons found in *Future College* that lead to high dismissal and withdrawal rates. This study confirms that the sample students liked the SOLE final model and feel that it is an functional and interesting EFL learning environment. This is one step forward in terms of changing learners' negative attitudes towards existing learning environments and as a consequence it can help to retain students. However, this claim that SOLEs can retain students' needs to be investigated through more research. Therefore, this researcher recommends that future research into SOLEs might usefully focus on the investigation of SOLEs in relation to students' retention in this study context and in other contexts. Such studies can help to solve the main problem that guided this research which is students' high dismissal and withdrawal rates. This study forms the basis of SOLE studies in Oman as it introduced a new environment and improved it to suit Oman contextually and culturally and it also made students' attitudes towards

the new learning environment positive. Now, other research can start by implementing the new final model of SOLEs and ascertain its correlation with student retention. Another recommendation for future research into SOLEs is to focus on the investigation of SOLEs in relation to student achievement in language learning courses in *Future College* and possibly other contexts. It is very important, according to this researcher, that SOLEs, after gaining acceptance in the researched contexts, should be studied in relation to student attainment and achievement. Future studies should explore and explain the impact of the new model of SOLEs on EFL learners' achievements in terms of improving their English level and their attainments in different types of assessments.

This researcher also recommends that policy makers in *Future College* and similar contexts consider the results of research like this current one in order for them to be able to improve current situations in their institutions. *Future College* in particular can benefit from this research which is believed by the researcher to be effective in solving an existing problem. Teachers also should take action and start to avail not only from the new model of SOLEs but also from utilising different facilities that can both improve students' attitudes towards their classes and boost their learning and motivation. These facilities include technology which is a massive source of knowledge that this researcher believes should not be neglected and should be used in all classes to varying degrees according to need. This means that computers with Internet access should be available in classes so that teachers and students can use them if necessary.

6.7 Chapter overview

This chapter has summarised the important milestones of this thesis. It has presented a brief discussion of the findings that include students' perceptions towards SOLEs and the impact of SOLEs on students. In addition, this chapter has shed light on the contribution of this study, the implications for teachers, policy makers and other stakeholders involved in educational systems. It has also detailed the limitations of this study which require the conducting of more than two cycles and with a bigger sample from different levels. Besides these points, this chapter has provided recommendations for future research which would examine the relation between SOLEs and student retention and attainment.

References

Abeysekera, L. & Dawson, P. (2015) 'Motivation and cognitive load in the flipped classroom: definition, rationale and a call for research', *Higher Education Research & Development*, *34*(1), pp.1-14.

Alaszewski, A. (2006) *Using diaries for social research*. London: Sage Publications.

Alastrué, R.P. & Auría, C.P.L. (2010) 'A Longitudinal Attitude Survey on English Oral Skills: Clasroom, Curriculum, Learning and Pedagogy Implications', *Studium: Revista de Humanidades*, (16), pp. 309-326.

Aldridge, J. M., Fraser, B. J., Bell, L. M., & Dorman, J. (2012) 'Using a new learning environment questionaire for reflection in teacher action research', *Journal of Science Teacher Education*, 23, pp. 259–290.

Aldridge, J.M. & Galos, S. (2018) 'Development and validation of an instrument to assess primary school students' perceptions of the learning environment', *Learning Environments Research*, 21(3), pp. 349-368.

Al-Issa, A. (2005) 'The role of English language culture in the Omani language education system: An ideological perspective', *Language, Culture and Curriculum*, *18*(3), pp. 258-270.

Al-Issa, A.S. (2006) 'The cultural and economic politics of English language teaching in Sultanate of Oman', *Asian EFL Journal*, 8(1), pp. 194-218.

Al-Jadidi, H.S.S. (2009) *Teaching English as a Foreign Language in Oman: An exploration of English Language Teaching pedagogy in tertiary education.* Thesis (PHD). Victoria University.

Al-Jardani, K.S.S. (2012) 'English language curriculum evaluation in Oman', *International Journal of English Linguistics*, 2(5), pp. 40.

Al-Mahrooqi, R. (2012) 'English Communication Skills: How Are They Taught at Schools and Universities in Oman?', *English Language Teaching*, 5(4), pp. 124.

Al-Mahrooqi, R. (2012) 'A student perspective on low English proficiency in Oman', *International Education Studies*, 5(6), pp. 263.

Al-Mahrooqi, R., & Denman, C. (2018) *English Education in Oman Current Scenarios and Future Trajectories*. Springer, 15, pp. 1-313.

Al-Mahrooqi, R., Denman, C. J., & Ateeq, B. A. (2015) 'Adaptation and first-year university students in the Sultanate of Oman', *Issues in English Education in the Arab World*, pp. 60–82.

Alvior, M. G. (2014) *The Meaning and Importance of Curriculum Development. In SimplyEducate.Me*. Available at http: //simplyeducate.me/2014/12/13/the-meaning-and-importance-of-curriculum-development/. [Accessed on 26/01/2017].

Ansarian, L. & Teoh, M.L. (2018) *Problem-based Language Learning and Teaching: An Innovative Approach to Learn a New Language*. Berlin: Springer.

Arendale, D.R. & Hane, A.R. (2014) 'Holistic growth of college peer study group participants: prompting academic and personal development', *Research & Teaching in Developmental Education*, 31(1), pp. 7-29.

Arora, P. (2010) 'Hope-in-the-Wall? A digital promise for free learning', *British Journal of Educational Technology*, 41(5), pp. 689 – 702.

Arora, P., & Mitra, S. (2010) 'Afterthoughts', *British Journal of Educational Technology*, 41(5), pp. 703-705.

Atkins & Wallace (2012) *Qualitative Research in Education*. City Road, London: SAGE Publication Ltd.

Attride-Stirling, J. (2001) 'Thematic networks: an analytic tool for qualitative research', *Qualitative Research*, 1(3), pp. 385-405.

Attwell, G. (2007) 'Personal Learning Environments-the future of eLearning?', *Elearning papers*, 2(1), pp. 1-8.

Baeten, M., Dochy, F., Struyven, K., Parmentier, E., & Vanderbruggen, A. (2016) 'Student-centred learning environments: An investigation into student teachers' instructional preferences and approaches to learning', *Learning Environments Research,* 19, pp. 43–62.

Bakhurst, D. (2011) *The formation of reason*. London: John Wiley & Sons.

Barbetta, P.M., Norona, K.L. & Bicard, D.F. (2005) 'Classroom behavior management: A dozen common mistakes and what to do instead', *Preventing School Failure: Alternative Education for Children and Youth*, 49(3), pp. 11-19.

Bax, S. (2003) 'CALL - Past, present and future', *System,* 31(1), pp. 13-28.

Bechhofer, F. (1974) *Current approaches to empirical research: some central ideas*. London: Routledge and Kegan Paul.

Benson, P., (2001) *Teaching and researching: Autonomy in language learning*. Harlow, England: Longman.

Benson, P. & Voller, P. (1997) *Autonomy and Independence in Language Learning*. London: Longman.

Bergmann, J. & Sams, A. (2012) *Flip your classroom: Reach every student in every class every day*. Virginia: International society for technology in education.

Berrett, D. (2012) 'How 'flipping' the classroom can improve the traditional lecture', *The chronicle of higher education*, *12*(19), pp.1-3.

Bista, K. (2011) 'How to create a learning-centered ESL program', *English for Specific Purposes World*, 31(10), pp. 1–13.

Blackmore, J., Bateman, D., Loughlin, J., O'Mara, J., & Aranda, G. (2011) *Research into the connection between built learning spaces and student outcomes*. Victoria: Department of Education and Early Childhood Development.

Bloom, B. S. (1956) *Taxonomy of educational objectives, book 1: Cognitive domain*. New York: David McKay Co Inc.

Bloomer, M. & Hodkinson, P. (2000) 'Learning Careers: continuity and change in young people's dispositions to learning', *British Educational Research Journal*, 26(5), pp. 583-597.

Bouck, E. C. (2004) 'State of curriculum for secondary students with mild mental retardation', *Education and Training in Developmental Disabilities*, 39, pp. 169–176.

Brandon, A. F., & All, A. C. (2010) 'Constructivism theory analysis and application to curricula', *Nursing Education Perspectives*, 31(2), pp. 89-92.

Brändström, C. (2011) '*Using the Internet in Education-Strengths and Weaknesses: A Qualitative Study of Teachers' Opinions on the Use of the Internet in Planning and Instruction*'. Available at: http: //www.diva portal.org/smash/record.jsf?pid=diva2%3A438827&dswid=-822 [Accessed on 12/03/2019].

Braun, V. & Clarke, V. (2006) 'Using thematic analysis in psychology', *Qualitative Research in Psychology*, 3(2), pp. 77-101.

Brooks, D.C. (2011) 'Space matters: The impact of formal learning environments on student learning', *British Journal of Educational Technology*, 42(5), pp. 719-726.

Broughton, G., Brumfit, C., Pincas, A. & Wilde, R.D. (2002) *Teaching English as a foreign language*. London: Routledge.

Browder, D. M., Wakeman, S. Y., Flowers, C., Rickelman, R. J., Pugalee, D., & Karvonen, M. (2007) 'Creating access to the general curriculum with links to grade-

level content for students with significant cognitive disabilities: An explication of the concept', *Journal of Special Education*, 41, pp. 2–16.

Brunning, R. H., Schraw, G. J. & Ronning, R. R. (1995) *Cognitive psychology and instruction*, 2nd edition. Englewood Cliffs, NJ: Prentice Hall.

Brunton, M. & Jeffrey, L. (2014) 'Identifying factors that influence the learner empowerment of international students', *International Journal of Intercultural Relations*, 43, pp. 321-334.

Bryman, A. (2004) *Social research methods*. 2nd ED. New York: Oxford University press.

Bryman, A. (2008) *Social research methods*. 3rd ED. New York: Oxford University press.

Burkitt, I. (2008) *Social selves: Theories of self and society*. London: Sage.

Buluc, B., (2006) 'An analysis of classroom rules in secondary schools in Turkey', *Educational Research Quarterly*, 29(3), pp. 30-51.

Burgress, R. (1982) *Field Research: a Sourcebook and Field Manual*. New Fetter Lane, London: Unwin Hyman Ltd.

Burns, R.B. (2000) *Introduction to research methods*. London: Sage Publications.

Cameron, K. S., & Caza, A. (2004) 'Contributions to the discipline of positive organizational scholarship', *American Behavioral Scientist*, 47, pp. 731–739.

Carayannis, E.G., Pirzadeh, A. & Popescu, D. (2011) *Institutional learning and knowledge transfer across epistemic communities: new tools of global governance*. Heidelberg: Springer Science & Business Media.

Carr, W. (2007) 'Educational research as a practical science', *International Journal of Research & Method in Education*, 30(3), pp. 271-286.

Carruthers, J. (1990) 'A Rationale for the Use of Semi-structured Interviews', *Journal of Educational Administration*, 28, pp. 63-68.

Celina, H., Kharrufa, A., Preston, A., Comber, R. & Olivier, P. (2016) 'SOLE meets MOOC: Designing Infrastructure for Online Self-organised Learning with a Social Mission'*, Designing Interactive Systems*, Brisbane 4-8 June. ACM New York, pp. 484-496.

Cetinkaya, Y. B. (2005) *Turkish college students' willingness to communicate in English as a foreign Language.* Thesis (PhD). Ohio State University.

Chatty, D. A. & Peterson, J. E. (no date) *Culture of Oman.* Available at: https://www.everyculture.com/No-Sa/Oman.html#ixzz5T32KoUYt [Accessed on 05/10/2018].

Chen, M., & Hung, L. (2012) 'Personality Type, Perseptual Style Preferences, and Strategies for Learning English as a Foreign Language', *Social Behavior and Personality*, 40(9), pp. 1501-1510.

Chen Hsieh, J.S., Wu, W.C.V. & Marek, M.W. (2017) 'Using the flipped classroom to enhance EFL learning', *Computer Assisted Language Learning*, *30*(1-2), pp.1-21.

Chickering, A., & Reiser, L. (1993) *Education and identity* (2nd Ed.). San Francisco, CA: Jossey-Bass.

Clark, W. Logan, K Luckin, R. Mee, A. Oliver, M. (2009) 'Beyond Web 2.0: Mapping the technology landscapes of young learners', *Journal of Computer Assisted Learning*, 25 (1), pp. 56–69.

Coffield, F., Moseley, D., Hall, E., & Ecclestone, K. (2004). *Learning styles and pedagogy in post16 learning A systematic and critical review*. Retrieved from Learning and Skills Research Council: http://www.leerbeleving.nl/wp-content/uploads/2011/09/learning-styles.pdf

Cohen, D. & Crabtree, B. (2006) *Qualitative Research Guidelines Project.* Available at http://www.qualres.org/HomeSemi-3629.htm1 [Accessed 03/07/2017].

Colin, P. (2006) 'Education for the future: An international perspective', *Educational Research for Policy and Practice*, 5, pp. 165–174.

Costa, M.J. (2014) 'Self-organized learning environments and the future of student-centered education', *Biochemistry and Molecular Biology Education*, 42(2), pp.160-161.

Council of Europe. (2004) *European Language Portfolio (ELP): principles and guidelines.* Strasbourg, France: Council of Europe, Language Policy Division.

Cross, J. (2007) *Informal learning: Rediscovering the natural pathways that inspire innovation and performance.* San Francisco: Pfeiffer.

Crouch, M. & McKenzie, H. (2006) 'The logic of small samples in interview-based qualitative research', *Social science information*, 45(4), pp. 483-499.

Cuconato, M., du Bois-Reymond, M. & Lunabba, H. (2015) 'Between gate-keeping and support: teachers' perception of their role in transition', *International Journal of Qualitative Studies in Education*, 28(3), pp. 311-328.

Dabbagh, N. & Kitsantas, A. (2012) 'Personal Learning Environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning', *The Internet and higher education*, 15(1), pp. 3-8.

Davis, G. A. (2004) *The relationship between learning style and personality type of extension community development program professionals at the Ohio State University.* thesis (Master). Ohio University, USA.

Demirkasimoğlu, N., Aydın, İ., Erdoğan, Ç. & Akın, U. (2012) 'Organisational rules in schools: teachers' opinions about functions of rules, rule-following and breaking behaviours in relation to their locus of control', *Educational Studies*, 38(2), pp. 235-247.

Den Brok, P., Bergen, T., Stahl, R., & Brekelmans, M. (2004) 'Students' perceptions of teacher control behaviors', *Learning and Instruction*, 14, pp. 425–443.

Derex, M., Feron, R., Godelle, B. & Raymond, M. (2015) 'Social learning and the replication process: an experimental investigation', *Proceedings of the Royal Society B: Biological Sciences, 282(1808).* The Royal Society Publications.

Desai, V.M. (2010) 'Rule violations and organizational search: A review and extension', *International Journal of Management Reviews*, 12, pp. 184–200.

Deveney, B. (2005) 'An investigation into aspects of Thai culture and its impact on Thai students in an international school in Thailand', *Journal of Research in International Education*, *4*(2), pp. 153-171.

Diaz-Rico, L.T. (2008) *Strategies for Teaching English Learner* (2nd Ed). United State: Pearson Education Inc.

Diaz, A., Cochran, K. & Karlin, N. (2016) 'The Influence of Teacher Power on English Language Learners' Self-Perceptions of Learner Empowerment', *College teaching, 64(4), pp. 158-167*.

Dicicco-Bloom, B. & Crabtree, B. F. (2006) 'The Qualitative Research Interview', *Medical Education*, 40(4), pp. 314-321.

Dörnyei, Z. (2005) *The Psychology of the Language Learner: Individual Differences in Second Language Acquisition*. Mahwah, NJ: Lawrence Erlbaum.

Donal, P., Leat, D., Mazzoli Smith, L., Mitra, S., Todd, L. & Wall, K. (2013) 'Self-organised learning environments (SOLEs) in an English school: an example of transformative pedagogy?', *Online Education Research Journal*, 3(11), pp. 1-19. Available at http://dro.dur.ac.uk/27314/ [Accessed on 08/01/2017]

Drever, E. (1995) *Using Semi-Structured Interviews in Small-Scale Research. A Teacher's Guide*. Glasgow: SCRE.

Dwyer, S.C. & Buckle, J.L. (2009) 'The space between: On being an insider-outsider in qualitative research', *International journal of qualitative methods*, 8(1), pp. 54-63.

Dymond, S.K., Rosenstein, A., Renzaglia, A., Zanton, J.J., Slagor, M.T. & Kim, R., (2015) 'The High School Curriculum: Perceptions of Special Education and Secondary Education Preservice Teachers', *Action in Teacher Education*, 37(3), pp. 284-298.

Elliot, J. (1991) *Action Research for Educational Change*. Philadelphia: Open University Press.

Ellis, C., Dyer, A. & Thompson, D. (2014) 'Riding tandem: an organic and collaborative approach to research in vocational education and training', *Research in Learning Technology*, *22*, pp. 1-12.

Ertmer, P. A., & Glazewski, K. D. (2005) 'Scaffolding teachers' efforts to implement Problem-Based learning', *International Journal of Learning*, 12, pp. 319-328.

Fandiño, Y.J. (2013) '21st Century Skills and the English Foreign Language Classroom: A Call for More Awareness in Colombia', *GIST Education and Learning Research Journal*, 7, pp. 190-208.

Ferrance, E. (2000) *Action research*. Brown University: Northeast and Island Regional Education Laboratory.

Fischer, F., Kollar, I., Mandl, H. & Haake, J.M. eds. (2007) *Scripting computer-supported collaborative learning: Cognitive, computational and educational perspectives*. Berlin: Springer Science & Business Media.

Fisher, K. D. (2010) *Technology-enabled active learning environments*: *An appraisal*. Paris: OECD.

Fisher, K. (2016) *The translational design of schools: An evidence-based approach to aligning pedagogy and learning environments*. Rotterdam: Sense Publishers.

Flutter, J. (2006) 'This place could help you learn: Student participation in creating better school environments', *Educational Review*, 58, pp. 183–193.

Fraser, B. J. (1998) 'The birth of a new journal: Editor's introduction', *Learning Environments Research, 1,* pp. 1–5.

Frost, R., & Holden, G. (2008) 'Student voice and future schools: Building partnerships for student participation', *Improving Schools, 11*(1), pp. 83–95.

Frymier, A. B., Shulman G. M., & Houser M.L. (1996) 'The Development of a Learner Empowerment Measure 1', *Communication Education*, 45 (3), pp. 181–99.

Gallagher, S. (2000) 'Philosophical conceptions of the self: Implications for cognitive science', *Trends in Cognitive Science*, 4, pp. 14-21.

Gardner, R. C. (2010) *Motivation and Second Language Acquisition: The Socio-Educational Model*. New York: Peter Lang.

Gardner, H. (1999) *Multiple intelligences for the 21st century*. New York, NY: Basic.

Geertz, C. (1973) *Thick Description: Toward an Interpretive Theory of Culture*. New York: Basic Books.

George, J.W. (2009) 'Classical curriculum design', *Arts and Humanities in Higher Education*, 8(2), pp. 160-179.

Ghubash, H. (2014) *Oman-The Islamic Democratic Tradition*. London: Routledge.

Gibson,C. (1998) 'Semi-structured and unstructured interviewing: a comparison of methodologies in research with patients following discharge from an acute psychiatric hospital', *Journal of Psychiatric and Mental Health Nursing*, 5, pp. 469-477.

Gilbert, N. (2008) *Researching social life*. 3rd ED. London: Sage.

Gillham, B. (2000) *The Research Interview*. York Road, London: Continuum.

Glenn, S. (no date) *Importance of Curriculum to Teaching*. Available at http://classroom.synonym.com/importance-curriculum-teaching-6189570.html [Accessed on 27/01/2017].

Gochitashvili, K. (2012) 'The role of teacher in the multimedia-based foreign language classes', *Application of Information and Communication Technologies,* Tbilisi State University, Georgia 17-19 October*.* IEEE, pp. 1-3.

Goode, W. & Hatt, P. (1952) *Methods in Social Research*. London: Mcgraw-hill Book Company.

Greene, J.C. (2007) *Mixed Methods in Social Inquiry*. San Francisco: Jossey-Bass.

Grossman, H. (2004) *Classroom behavior management for diverse and inclusive schools*. Lanham, MD: Rowman & Littlefield.

Guilloteaux, M. J., & Dörnyei, Z. (2008) 'Motivating language learners: A classroom-oriented investigation of the effects of motivational strategies on student motivation', *TESOL Quarterly*, 42, 55–77.

Hale, C.A. (2013) 'Institutional learning: Transcending two distinct approaches by integrating core values into inquiry', *International Journal of Multiple Research Approaches*, 7(3), pp. 365-373.

Hall, R. (2009) 'Towards a fusion of formal and informal learning environments: The impact of the read/write web', *Electronic Journal of e-Learning*, 7 (1), pp. 29–40.

Hall, C. S., Lindzey. G. & Campbell, J. B. (1998) *Theories of personality*. New York: John Wiley & Sons.

Halle, J. W., & Dymond, S. K. (2010) 'Inclusive education: A necessary prerequisite to accessing the general curriculum?', *Research and Practice for Persons with Severe Disabilities*, 33, pp. 196–198.

Hammersley, M., (2003) 'Can and should educational research be educative?', *Oxford Review of Education*, 29(1), pp. 3-25.

Hanson, J. (2013) 'Educational developers as researchers: the contribution of insider research to enhancing understanding of role, identity and practice', *Innovations in Education and Teaching International*, *50*(4), pp. 388-398.

Harmer, J. (2001) *The practice of English language teaching*. 3rd Ed. Harlow: Pearson Longman.

Harmer, J. (2007a) *The practice of English language teaching*. 4th Ed. Harlow: Pearson Longman.

Harmer, J., (2015) *The practice of English language teaching*. 5th Ed. Pearson Education Ltd.UK.

Harmer, J. (2007b) *How to Teach English*. Harlow: Pearson Education Ltd.UK.

Haruehansawasin, S. & Kiattikomol, P. (2018) 'Scaffolding in problem-based learning for low-achieving learners', *The Journal of Educational Research*, *111*(3), pp.363-370.

Hausfather, S. (2001) 'Where's the content? The role of content in constructivist teacher education', *Educational Horizons,* 80 (1), pp. 15–19.

Heckman, J. J., & Kautz, T. (2012) 'Hard evidence on soft skills', *Labour Economics*, 19(A), pp. 451-464.

Henderson, A., Cooke, M., Creedy, D.K. & Walker, R. (2012) 'Nursing students' perceptions of learning in practice environments: a review', *Nurse Education Today*, 32(3), pp. 299-302.

Herrera, H., Brown, D. & Portlock, J. (2014) 'Foundation degree learning: an educational journey of personal development', *Journal of Further and Higher Education*, 39(6), pp. 839–861.

Heyes, C. (2016) 'Who knows? Metacognitive social learning strategies', *Trends in cognitive sciences,* 20(3), pp. 204-213.

Higgins, E.T., Klein, R. & Strauman, T. (1985) 'Self-Concept Discrepancy Theory: A Psychological Model for Distinguishing among Different Aspects of Depression and Anxiety', *Social Cognition*, 3 (1), pp. 51–76.

Higgins, S., Hall, E., Wall, K., Woolner, P., & McCaughey, C. (2005) *The impact of school environments: A literature review*. Newcastle: The Centre for Learning and Teaching: School of Education, Communication and Language Science, University of Newcastle.

Hmelo-Silver, C. E. (2004) 'Problem-based learning: What and how do students learn?' *Educational Psychology Review*, 16, pp. 235-266.

Hong, C.E. & Lawrence, S. (2011) 'Action research in teacher education: Classroom inquiry, reflection, and data-driven decision making', *Journal of Inquiry and Action in Education*, 4(2), pp. 1-17.

Hoover, W. A. (1996) 'The practice implications of constructivism', *SEDL Letter*, 9(3), pp. 1-2.

Horwitz, E. K., Horwitz, M. B., & Cope, J. A. (1986) 'Foreign language classroom anxiety', *The Modern Language Journal*, 70 (2), pp. 125-132.

Houser, M. L., & Frymier , A. B. (2009) 'The role of student characteristics and teacher behaviors in students' learner empowerment', *Communication Education*, 58, pp. 35 –53.

Houston, W. (1990) *Handbook of Research on Teacher Education*. New York: Teachers College Press.

Hoy, W. K., & Tarter, C. J. (2011) 'Positive psychology and educational administration: An optimistic research agenda', *Educational Administration Quarterly*, 47, pp. 427–445.

Huang, Y.N. & Hong, Z.R. (2016) 'The effects of a flipped English classroom intervention on students' information and communication technology and English reading comprehension', *Educational Technology Research and Development*, *64*(2), pp.175-193.

Hung, H.T. (2015) 'Flipping the classroom for English language learners to foster active learning', *Computer Assisted Language Learning*, *28*(1), pp.81-96.

Jiang, W., (2000) 'The relationship between culture and language', *ELT journal*, *54*(4), pp. 328-334.

Jones, J. L., Flohr, B. R., & Martin, M. S. (2015) 'Theories holding promise for supporting the constructivist behaviors of inquiry', *School Libraries Worldwide*, 21(2), pp. 115-126.

Johnson, D. & Johnson, R. (1987) *Learning Together & Alone*. New Jersey: Prentice-Hall, Inc.

Johnson, M.P. & Anderson, D.L. (2011) *Using the Internet to improve student learning and achievement*, available at: https://www.nmu.edu/sites/DrupalEducation/files/UserFiles/Files/Pre-Drupal/SiteSections/Students/GradPapers/Projects/Johnson_Matt_MP.pdf [Accessed on 26/03/2019]. Northern Michigan University.

Kabilan, M. K., & Rajab, B. M. (2010) 'The utilisation of the Internet by palestinian english language teachers focusing on uses, practices and barriers and overall contribution to professional development', *International Journal of Education and Development using Information and Communication Technology*, 6(3), pp.56-72.

Kanuha, V. K. (2000) '"Being" native versus "going native": Conducting social work research as an Insider', *Social Work*, 45(5), pp. 439-447.

Kameda, T. & Nakanishi, D. (2003) 'Does social/cultural learning increase human adaptability?: Rogers's question revisited', *Evolution and Human Behavior*, 24(4), pp. 242-260.

Kao, P., & Craigie, P. (2014) 'Effects of English usage on facebook and personality traits on achievement of students learning English as a foreign language', *Social Behavior and Personality*, 42(1), pp. 17-24.

Kariippanon, K.E., Cliff, D.P., Lancaster, S.L., Okely, A.D. & Parrish, A.M. (2017) 'Perceived interplay between flexible learning spaces and teaching, learning and student wellbeing', *Learning Environments Research*, 21, pp. 301-320.

Kelly, R. (2014) 'Qualitative research interviews', *Journal of Social and Personal Relationships*, 31(4), pp. 482-488.

Kern, R. & Warschauer,M. (2000) *Theory and practice of network-based language teaching: Concepts and Practice*. New York: Cambridge University Press.

Khalil, N. & Aldridge, J. (2019) 'Assessing students' perceptions of their learning environment in science classes in the United Arab Emirates', *Learning Environments Research*, 22(3), pp.1-22.

Kiany, G.R. & Shayestefar, P. (2011) 'High school students' perceptions of EFL teacher control orientations and their English academic achievement', *British Journal of Educational Psychology*, 81(3), pp. 491-508.

Kohonen, V. (1992) 'Experiential language learning: second language learning as cooperative learner education', *Collaborative Language Learning and Teaching*, Cambridge University Press, Cambridge.

Krahenbuhl, K.S. (2016) 'Student-centered Education and Constructivism: Challenges, Concerns, and Clarity for Teachers', *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 89(3), pp. 97-105.

Kvale, S. (1996) *interviews – An Introduction to Qualitative Research Interviewing.* Thousand Oaks, California: Sage Publications, Inc.

Kvale, S. (2007) *Doing Interviews*. Thousand Oaks, California: Sage Publications, Inc.

Landen, R.G. (2015) *Oman since 1856*. New Jersey, USA: Princeton University Press.

LeDoux, J. (2002). *Synaptic Self: How Our Brains Become Who We Are*. New York: Penguin Viking.

LeDoux, J. (2003) 'The Self', *Annals of the New York Academy of Sciences*, 1001(1), pp. 295-304.

Lee, P.M.J. & Quek, C.L. (2017) 'Preschool teachers' perceptions of school learning environment and job satisfaction', *Learning Environments Research*, 21 (3), pp. 369-386.

LeeFon, R., Jacobs, L., Le Roux, A. & De Wet, C. (2013) 'Action towards hope: Addressing learner behaviour in a classroom', *Koers*, 78(3), pp. 1-8.

Lepper, M.R., Corpus, J.H. & Iyengar, S.S. (2005) 'Intrinsic and extrinsic motivational orientations in the classroom: age differences and academic correlates', *Journal of educational psychology*, 97(2), pp. 184.

Lesha, J. (2014) 'Action research in education', *European Scientific Journal*, ESJ, 10(13), pp. 379-386.

Leung, C.L. & Lee, F.W. (2006) 'The co-production of student school rule-breaking behaviour', *Research in Education*, 74, pp. 47-58.

Levy, M. (1997) *Computer-Assisted Language Learning: Context and Conceptualizations*. Oxford: Oxford University Press.

Lim, C.T.D. & Fraser, B.J. (2018) 'Learning environments research in English classrooms', *Learning Environments Research*, 21 (3), pp. 433-449.

Lin, L.F. (2018) 'Integrating the problem-based learning approach into a web-based English reading course', *Journal of Educational Computing Research*, *56*(1), pp.105-133.

Little, D. (1990) 'Autonomy in language learning', *Teaching Modern Languages*, pp. 81-87.

Little, D. (2003) *Learner autonomy and second/foreign language learning. Guide to Good Practice*. Available at: https://www.llas.ac.uk/resources/gpg/1409 [Accessed on 6/4/2017].

Iulia, H.R. (2015) 'The Importance of the Personal Development Activities in School', *Procedia - Social and Behavioral Sciences*, 209, pp. 558-564.

Macalister,J. & Nation, I. S. P. (2011) *Case studies in language curriculum design*. New York: Routledge.

Mäkelä, T., Helfenstein, S., Lerkkanen, M.K. & Poikkeus, A.M. (2018) 'Student participation in learning environment improvement: analysis of a co-design project in a Finnish upper secondary school', *Learning Environments Research*, 21(1), pp.19-41.

Maksimović, J., (2012) 'Researcher-practitioner's role in action research', *Andragoška spoznanja: The Andragogic Perspectives*, (2), pp. 54-64.

Maleki, M. (2017) 'The Relationship between EFL Learners' Personality Type and their Cognitive Burnout on L2 Reading Comprehension', *Modern Journal of Language Teaching Methods*, 7(1), pp. 236-246.

Markus, H., & P. Nurius. (1986) 'Possible Selves', *American Psychologist*, 41 (9), pp. 954-969.

Marsick, V.J., & Watkins, K. (1990) *Informal and Incidental Learning in the Workplace*. London, UK: Routledge.

McGloughlin, C., & Lee, M.J.W. (2010) 'Personalised and self regulated learning in the Web 2.0 era: International exemplars of innovative pedagogy using social software', *Australasian Journal of Educational Technology*, 26 (1), pp. 28–43.

McGuire, D. & Gubbins, C. (2010) 'The slow death of formal learning: A polemic', *Human Resource Development Review*, 9(3), pp. 249-265.

McLeod, S. A. (2014) *Carl Rogers*. Available at: www.simplypsychology.org/carl-rogers.html [Accessed 25/12/2016].

McLeod, S. A. (2014) *The Interview Method*. Available at:
www.simplypsychology.org/interviews.html
[Accessed 03/07/2017].

Medeiros, E. (2019) 18 April. Available at:
https://mobile.twitter.com/mrserinmedeiros/status/1118767613058793473 [Accessed on 30/04/2019].

Medwell, J., Wray, D., Moore, G. & Griffiths, V. (2017) *Primary English: knowledge and understanding*. 4th Ed. Exeter: Learning Matters Ltd.

Merrett, F. & Jones, L. (1994) 'Rules, sanctions and rewards in primary schools', *Educational Studies*, 20(3), pp. 345-356.

Mills, G.E. (2003) *Action research: A Guide for the teacher researcher*, 2nd ED. Upper Saddle River NJ: Prentice Hall.

Mitra S. (2006) *The hole in the wall: Self-organising systems in education*. New Delhi and New York: Tata-McGraw-Hill.

Mitra, S. (2009) 'Remote Presence: Technologies for 'Beaming' Teachers Where They Cannot Go', *Journal of Emerging Technologies in Web Intelligence*, 1(1), pp. 55-59.

Mitra, S. (2013a) *SOLE: How to bring Self-Organised Learning Environments to your Community*. TED, Available at http://www.ted.com/pages/sole_toolkit [Accessed 16 February 2017].

Mitra, S. (2013b) *Technology - Cloud schools form with 'granny' army: news*. The Times Educational Supplement, 5052, Jul 12, p.8.

Mitra,S. (2013c) *Should students be allowed to use the Internet in exams?* [online] 17 June 2013 Available at: http://www.theguardian.com/teacher-network/teacher-blog/2013/jun/17/ipads-exams-teaching-test-schools [Accessed 15/11/2015].

Mitra, S. (2014a) *Children can teach each other, believes Sugata Mitra - if you give them the Internet, a big screen and a helpful granny on Skype*. Spectator,325, May 10, p.22.

Mitra, S. (2014b) 'The future of schooling: Children and learning at the edge of chaos', *PROSPECTS*, 44(4), pp. 547-558.

Mitra, S. (2015) 'Knowing stuff? No, thanks. That's so last century', *The Times Educational Supplement*, (5173). Available at http://search.proquest.com/docview/1739142500?accountid=12753 [Accessed on 16/10/2016].

Mitra, S. (2018) 'Initiating change' [PowerPoint presentation], *TED x Newcastle*.

Mitra, S. & Crawley, E. (2014) 'Effectiveness of self-organised learning by children: Gateshead experiments', *Journal of Education and Human Development*, 3(3), pp. 79-88.

Mitra, S., Dangwal, R., Chatterjee, S. & Jha, S. (2005) 'A model of how children acquire computing skills from hole-in-the-wall computers in public places', *Information Technologies and International Development Journal*, 2 (4), pp. 41–60.

Mitra, S. & Dangwal, R. (2010) 'Limits to self-organising systems of learning—the Kalikuppam experiment', *British Journal of Educational Technology*, 41(5), pp. 672-688.

Mitra, S., Dangwal, R. & Thadani, L. (2008) 'Effects of remoteness on the quality of education: A case study from North Indian schools', *Australasian Journal of Educational Technology*, 24(2).

Mitra, S., Kulkarni, S. & Stanfield, J., (2016) *Learning at the Edge of Chaos: Self-Organising Systems in Education*. In The Palgrave International Handbook of Alternative Education, Lees, H. E. & Noddings, N. (Eds) (pp. 227-239). Palgrave Macmillan UK.

Mitra, S., Leat, D., Dolan, P. & Crawley, E. (2010) *The Self Organised Learning Environment (SOLE) School Support Pack.* Available at http://repository.alt.ac.uk/2208/ [Accessed on 16/10/2016].

Mitra, S. & Quiroga, M. (2012) 'Children and the Internet–A preliminary study in Uruguay', *International Journal of Humanities and Social Science*, 2(15), pp. 123-129.

Mitra, S. & Rana, V. (2001) 'Children and the Internet: Experiments with minimally invasive education in India', *British Journal of Educational Technology*, 32(2), pp. 221-232.

Mitra, S. & Quiroga, M. (2012) 'Children and the Internet–A preliminary study in Uruguay', *International Journal of Humanities and Social Science*, 2(15), pp. 123-129.

Mok, A. (1997) 'Student empowerment in an English language enrichment programme: an action research project in Hong Kong', *Educational Action Research*, 5(2), pp. 305-320.

Morgan, D., Krueger, R., & King, J. (1998) *Focus group kit.* Thousand Oaks, Calif.: SAGE Publications.

Moskovsky, C., Alrabai, F., Paolini, S. & Ratcheva, S. (2013) 'The effects of teachers' motivational strategies on learners' motivation: A controlled investigation of second language acquisition', *Language Learning*, 63(1), pp. 34-62.

Mtsweni, J. (2008) *The role of educators in the management of school discipline in the Nkangala region of Mpumalanga*. Dissertation (Med). University of South Africa.

Muchlis, M. (2015) 'The Implementation of Technology Approaches to Develop Learners' Autonomy in Learning English', *Al-Ta lim Journal*, 22(3), pp. 276-285.

Muehleisen, V. (1997) 'Projects using the Internet in college English classes', *The Internet TESL Journal*, 3(6), pp.05-17.

Muirhead, B. (2006) 'Creating concept maps: integrating constructivism principles into online classes', *International Journal of Instructional Technology & Distance Learning*, 3(1), pp. 17-30.

Muller, D. & Funnell, P. (1993) 'Learner Perceptions of Quality and the Learner Career', *Quality Assurance in Education*, 1(1), pp. 29-33.

Mulya, R.A., Aryuliva, A, & Ardi, H. (2013) 'The effect of problem-based learning strategy toward students' speaking ability at the first grade of SMAN 1 ENAM LINGKUNG', *Journal of English language teaching*, 2(1), pp.314-323.

Murphy, P.K. & Alexander, P.A. (2000) 'A motivated exploration of motivation terminology', *Contemporary educational psychology*, 25(1), pp. 3-53.

Namdar, B. & Shen, J. (2018) 'Knowledge organization through multiple representations in a computer-supported collaborative learning environment. *Interactive Learning Environments'*, *26*(5), pp.638-653.

Naughton, J. (2015) 'The Internet Is Not the Answer review – how the digital dream turned sour', *The Guardian.* Available at: https: //www.theguardian.com/books/2015/feb/01/Internet-is-not-the-answer-review-andrew-keen [Accessed on 14/03/2019].

Ning, H. (2013) 'The Impact of Cooperative Learning on English as a Foreign Language Tertiary Learners' Social Skills', *Social Behavior and Personality*, 41(4), pp. 557-567.

Novak, J.D. (2002) 'Meaningful learning: The essential factor for conceptual change in limited or inappropriate propositional hierarchies leading to empowerment of learners', *Science Education*, 86(4), pp. 548-571.

Nunan, D. (2000), 'Autonomy in language learning'. *ASOCOPI 2000 conference*, Cartengena, Columbia.

Nunan, D. (1988) *The learner-centred curriculum: A study in second language teaching*. Cambridge: Cambridge University Press.

Nwokolo, C. (2012) 'Effective Communication: Language Teacher as a Pathfinder', *International Journal of Social Science and Humanity*, 2(4), pp.354.

Ovbiagbonhia, A.R., Kollöffel, B. & den Brok, P. (2019) 'Educating for innovation: students' perceptions of the learning environment and of their own innovation competence', *Learning Environments Research*, pp.1-21.

Omaninfo.om (2016) *Oman customs and traditions are distinct in the region*. Available at: https://omaninfo.om/english/module.php?module=topics-showtopic&CatID=4&ID=1942 [Accessed on 04/10/2018].

Pappamihiel, N.E. (2002) 'English as a second language students and English language anxiety: Issues in the mainstream classroom', *Research in the Teaching of English*, pp. 327-355.

Park, Y. & Choi, W., (2016) 'The effects of formal learning and informal learning on job performance: the mediating role of the value of learning at work', *Asia Pacific Education Review*, 17(2), pp. 279-287.

Patton, M. Q. (2002) *Qualitative research and evaluation methods* (3rd Ed.). Thousand Oaks, CA: Sage Publishers.

Peterson, J. E. & Crystal, J. A. (2018) *Oman.* Available at: https://www.britannica.com/place/Oman/Cultural-life [Accessed on 05/10/2018].

Piaget, J. (1972) 'Physical world of the child', *Physics Today*, 25(6), pp. 23-27.

Pierce, R. & Fox, J. (2012) 'Vodcasts and active-learning exercises in a "flipped classroom" model of a renal pharmacotherapy module', *American journal of pharmaceutical education*, *76*(10), pp1-5.

Popov, V., Noroozi, O., Barrett, J.B., Biemans, H.J., Teasley, S.D., Slof, B. and Mulder, M. (2014) 'Perceptions and experiences of, and outcomes for, university students in culturally diversified dyads in a computer-supported collaborative learning environment', *Computers in Human Behavior*, *32*, pp.186-200.

Postholm, M.B. & Skrøvset, S. (2013) 'The researcher reflecting on her own role during action research', *Educational Action Research*, 21(4), pp. 506-518.

Psunder, M. (2005) 'How effective is school discipline in preparing students to become responsible citizens? Slovenian teachers and students views', *Teaching and Teacher Education*, 21, pp. 273-286.

Punch, K.F. (2013) *Introduction to social research: Quantitative and qualitative approaches.* Bevery Hills, CA: sage pubilications.

Purcell, K., Heaps, A., Buchanan, J. & Friedrich, L. (2013) 'How teachers are using technology at home and in their classrooms', *Washington, DC: Pew Research Center's Internet & American Life Project*, available at: https://www.pewInternet.org/wp-content/uploads/sites/9/media/Files/Reports/2013/PIP_TeachersandTechnologywithmethodology_PDF.pdf [Accessed on 26/03/2019].

Quinn, N. (2006) 'The self', *Anthropological theory*, 6(3), pp. 362-384.

Reeve, J. (2006) 'Teachers as facilitators: What autonomy-supportive teachers do and why their students benefit', *The Elementary School Journal*, 106(3), pp. 225-236.

Renjie, S. (2011), 'A study on learners' views of teacher's role in the English teaching and learning', *e-Education, Entertainment and e-Management,* Bali 27- 29 December. IEEE, pp. 175-177.

Reis, R.C.D., Isotani, S., Rodriguez, C.L., Lyra, K.T., Jaques, P.A. & Bittencourt, I.I. (2018) 'Affective states in computer-supported collaborative learning: Studying the past to drive the future', *Computers & Education*, *120*, pp.29-50.

Riding, R. J. (1997) 'On the nature of cognitive style', *Educational Psychology*, 17, pp. 29-49.

Richardson, V. (2003) 'Constructivist pedagogy', *Teachers College Record*, 105, pp. 1623–1640.

Riener, C., & Willingham, D. (2010). The myth of learning styles. *Change: The magazine of higher learning*, 42(5), 32-35.

Rix, S. & McElwee, S. (2016) 'What happens if students are asked to learn Geography content, specifically Population, through SOLE?', *Other Education*, *5*(1), pp. 30-54.

Rossman, G.B. & Rallis, S.F. (2003) *Learning in the field: An introduction to qualitative research.*2nd ED. Thousand Oaks, CA. Sage.

Roulston, K. (2001) 'Data analysis and 'theorizing as ideology', *Qualitative Research*, 1(3), pp. 279-301.

Rowold, J., & Kauffeld, S. (2009) 'Effects of career-related continuous learning on competencies', *Personnel Review*, 38(1), pp. 90–101.

Rubie-Davies, C.M. (2010) 'Teacher expectations and perceptions of student attributes: Is there a relationship?', *British Journal of Educational Psychology*, 80(1), pp. 121-135.

Sampson, K.L. (1999) 'Instilling Passion for Language: Strategies and Techniques', *Dialog on Language Instruction*, *13*, pp. 73-78.

Sanprasert, N. (2010) 'The application of a course management system to enhance autonomy in learning English as a foreign language', *System*, 38(1), pp. 109-123.

Schaffer, R. (1996) *Social development.* Oxford: Blackwell.

Schrader, D. (2015) 'Constructivism and learning in the age of social media: Changing minds and learning communities', *New directions in teaching and learning*, 144, pp. 23–35.

Schrodt, P., & Finn, A. N. (2011) 'Students' perceived understanding: An alternative measure and its associations with perceived teacher confirmation, verbal aggressiveness, and credibility', *Communication Education*, 60, pp. 231 – 254.

Schrodt P., Turman, P. D., & Soliz, J. (2006) 'Perceived understanding as a mediator of perceived teacher confirmation and students' ratings of instruction', *Communication Education*, 55, pp. 370 – 388.

Schunk, D. H., & Zimmerman, B. J. (2013) 'Self-regulation and learning', *Handbook of psychology: Educational psychology*, 7, pp. 45–68.

Scrivener, J. (1994) *Learning teaching*. Oxford: Heinemann.

Sefton-Green, J. (2004) *Literature review in informal learning with technology outside school*. Available at: https://telearn.archives-ouvertes.fr/hal-00190222/ [Accessed on 11/03/2019].

Simmons, C., Graham, A., & Thomas, N. (2015) 'Imagining an ideal school for wellbeing: Locating student voice', *Journal of Educational Change*, 16, pp. 129–144.

Simons, K., (2016) *How can computers and the Internet help me as a classroom literacy teacher*. Available at:https://www.education.pitt.edu/EducationalResources/Teachers/LEADERS/FrequentlyAskedQuestionsFAQ/UsingComputersandtheInternetforTeaching.aspx [Accessed on 14/03/2019].

Smith, J., Satchwell, C., Edwards, R., Miller, K., Fowler, Z., Gaechter, J., Knowles, J., Phillipson, C. & Young, R. (2008) 'Literacy practices in the learning careers of childcare students', *Journal of Vocational Education & Training*, 60(4), pp. 363-375.

Snodin, N.S. (2013) 'The effects of blended learning with a CMS on the development of autonomous learning: A case study of different degrees of autonomy achieved by individual learners', *Computers & Education*, 61, pp. 209-216.

StartSole (2019) 02 May. Available at: https://twitter.com/startsole/status/1123670171002925057?s=12 [Accessed on 02/05/2019].

Steele, W. (2011) 'Strategy-making for sustainability: An institutional learning approach to transformative planning practice', *Planning Theory & Practice*, 12(2), pp. 205-221.

Sullivan, A.M., Johnson, B., Owens, L. & Conway, R. (2014) 'Punish them or engage them? Teachers' views of unproductive student behaviours in the classroom', *Australian Journal of Teacher Education*, 39(6), pp. 43.

Surkis, A. & Read, K. (2015) 'Research data management', *Journal of the Medical Library Association: JMLA*, 103(3), p. 154.

Swinglehurst, D., Russell, J. & Greenhalgh, T. (2008) 'Peer observation of teaching in the online environment: an action research approach', *Journal of Computer Assisted Learning*, 24(5), pp. 383-393.

Tanveer, M. (2007) *Investigation of the factors that cause language anxiety for ESL/EFL learners in learning speaking skills and the influence it casts on communication in the target language*. Dissertation (MA). Faculty of Education, University of Glasgow.

Taylor, J. (2011) 'The intimate insider: negotiating the ethics of friendship when doing insider research', *Qualitative research*, 11(1), pp. 3-22.

Taylor, F. (2009) 'Authentic Internet in the EFL class', *Modern English Teacher*, 18(1), pp. 5-9.

Taylor, K., Marienau, C., & Fiddler, M. (2000) *Developing adult learners: Strategies for teachers and trainers*. 1st Ed, San Francisco, CA: Jossey-Bass.

Tchounikine, P., Rummel, N., & McLaren, B. M. (2010) 'Computer supported collaborative learning and intelligent tutoring systems', *In Advances in intelligent tutoring systems*. Studies in Computational Intelligence. Berlin, Heidelberg: Springer Berlin Heidelberg, pp. 447–463.

Tellegan, A., Lykken. D.T., Bouchard, T.J., JR., Wilcox, K.J., Segal, N.L. & Rich, S. (1988) 'Personality similarity in twins reared apart and together', *Journal of Personality and Social Psychology*, 54, pp. 1031-1039.

Thanasoulas, D. (2000) 'What is learner autonomy and how can it be fostered', *The Internet TESL Journal*, 6(11), pp. 37-48.

Torrance, H. (2012) 'Triangulation, Respondent Validation, and Democratic Participation in Mixed Methods', *Journal of Mixed Methods Research*, 6(111), pp. 111-123.

Treff, M. & Earnest, S. (2016) 'Intentionally Developmental Teaching: Applying Process Tools for Adult Learner Development', *Adult Learning*, 27(1), pp. 16-22.

Tripp, D. (2005) 'Action research: a methodological introduction', *Educacao e pesquisa*, 31(3), pp. 443-466.

Tsang, H. W. C., & Tsui, E. (2017) 'Conceptual design and empirical study of a personal learning environment and network (PLE&N) to support peer-based social and lifelong learning' *VINE Journal of Information and Knowledge Management Systems*, 47, (2), pp. 228–249.

Tsui, E. & Dragicevic, N. (2018) 'Use of scenario development and personal learning environment and networks (PLE&N) to support curriculum co-creation', *Management & Marketing*, *13*(2), pp.848-858.

Tynjala, P., Pirhonen, M., Vartainen, T., & Helle, L. (2009) 'Educating IT project managers through project based learning: A working-life perspective', *Communications of the Association for Information Systems*, 24, pp. 270–288.

Uiboleht, K., Karm, M. & Postareff, L. (2018) 'The interplay between teachers' approaches to teaching, students' approaches to learning and learning outcomes: a qualitative multi-case study', *Learning Environments Research*, 21 (3), pp. 321-347.

Valli, L. & Buese, D. (2007) 'The changing roles of teachers in an era of high-stakes accountability', *American Educational Research Journal*, 44(3), pp. 519-558.

Van Harmelen, M. (2006) 'Personal Learning Environments', *ICALT*, 6, pp. 815-819.

Vygotsky, L. S. (1978) *Mind in society: The development of higher psychological processes*. Cambridge. Dissertation (MA). Harvard University Press.

Wallace, R.M. (2004) 'A framework for understanding teaching with the Internet', *American educational research journal*, *41*(2), pp.447-488.

Wang, M., Shen, R., Novak, D. & Pan, X. (2009) 'The impact of mobile learning on students' learning behaviours and performance: Report from a large blended classroom', *British Journal of Educational Technology*, 40(4), pp. 673-695.

Warschauer, M. (2000) 'On-line learning in second language classrooms: An ethnographic study', *Network-based language teaching: Concepts and practice*, pp.41-58.

Warschauer, M. (2000) 'The death of cyberspace and the rebirth of CALL', *English Teachers Journal*, 53, p. 61-67.

Warschauer, M. (2001) 'Millennialism and media: Language, literacy, and technology in the 21st century', *AILA Review*, 14, pp. 49-59.

Warschauer, M., Shetzer, H. & Meloni, C.F. (2000) *Internet for English teaching*. Alexandria: Tesol.

Warschauer, M., Turbee, L. & Roberts, B. (1996) 'Computer learning networks and student empowerment', *System*, 24(1), pp. 1-14.

Wray, D. & Medwell, J. (2013) *Literacy and language in the primary years*. London: Routledge.

Watt, H.M. (2008) 'A latent growth curve modeling approach using an accelerated longitudinal design: The ontogeny of boys' and girls' talent perceptions and intrinsic values through adolescence', *Educational Research and Evaluation*, 14(4), pp. 287-304.

Wei, M., Zhou, Y., Barber, C. & den Brok, P. (2015) 'Chinese students' perceptions of teacher–student interpersonal behavior and implications', *System*, 55, pp. 134-144.

Weisblat, G.Z. & McClellan, J. (2017) 'The Disruptive Innovation of Self-Organized Learning Environments', *Childhood Education*, 93(4), pp. 309–315.

Whiteside, A. & Fitzgerald, S. (2009) 'Designing learning spaces for active learning', *Implications*, 7, pp. 1-6.

Wilkinson, J.C. (1987) *The Imamate Tradition of Oman, Cambridge Middle East Library*. Cambridge: Cambridge University Press.

Wilson, J. & Wilson, N. (1998) 'The subject-matter of educational research', *British educational research journal*, 24 (3), pp. 355-363.

Woods, D.R., Duncan-Hewitt, W.C., Hall, F.L., Eyles, C.H. and Hrymak, A.N. (1996) 'Tutored versus tutorless groups in problem-based learning', *American Journal of Pharmaceutical Education*, 60(3), pp.231-238.

Wyatt, M. (2013) 'Motivating teachers in the developing world: Insights from research with English language teachers in Oman', *International Review of Education*, 59(2), pp. 217-242.

Xiao, L., Merkel, C.B., Nash, H., Ganoe, C., Rosson, M.B., Carroll, J.M., Shon, E., Lee, R. & Farooq, U., (2005) 'Students as teachers and teachers as facilitators', *System Sciences*, Hawaii 03-06 January. IEEE, pp. 4-14.

Xu, X., Chan, F.M. & Yilin, S. (2018) 'Personal learning environment: an experience with ESP teacher training', *Interactive Learning Environments*, 26 (8), pp.1-16.

Yang, Y.F. (2013) 'Exploring students' language awareness through intercultural communication in computer-supported collaborative learning', *Journal of Educational Technology & Society*, 16(2), pp.325-342.

Young, S.S.C. (2003) 'Integrating ICT into second language education in a vocational high school', *Journal of Computer Assisted Learning*, 19(4), pp.447-461.

Zhou, G. & Niu, X. (2015) 'Approaches to language teaching and learning', *Journal of Language Teaching and Research*, 6(4), pp. 798-802.

Zimmerman M.A. (1990) 'Toward a theory of learned hopefulness: A structural model analysis of participation and empowerment', *Journal of Research in Personality*, 24 (1990), pp. 71–86.

Zitter, I., De Bruijn, E., Simons, P.R.J., & Ten Cate, T.J. (2011) 'Adding a design perspective to study learning environments in higher professional education', *Higher Education*, 61(4), pp. 371–386.

Appendices

Appendix 1: Newcastle University School of Education, Communication & Language Sciences Research Ethics and Data Protection Monitoring Form

1. Research in Education and Communication often involves working with diverse populations and groups of people, including children, young people, adults, and often, individuals who may be vulnerable. As Students and Researchers in Social Science and Humanities, we should endeavour to protect these populations and maintain the integrity of our research, of our research communities, our partners, and all of those with whom we have professional relationships. In order to do this, we should be maintaining our own competence and standards of ethics by continually reflecting on and evaluating our research not just for its disciplinary excellence but also for its ethical rigour and transparency. As such, we should be doing this with constant reference to our internal and external research activities that should be conducted to the highest ethical standards. Furthermore, the University has a duty of care not only to the participants, but also to the researchers and the university, specifically in relation to:

- The safety and wellbeing of students/staff undertaking research
- The protection of the University's good name
- Adherence to any professional body or learned society guidelines/codes of practice.

2. Research involving humans by all academic and related Staff and Students in ECLS is subject to the standards set out in the Departmental Code of Practice on Research Ethics in the Research Handbook. The School of Education, Communication & Language Sciences Ethics Committee will assess the research against the British Educational Research Association's *Revised Ethical Guidelines for Educational Research* (2011). It will also adhere to the guidelines set out in relevant codes of professional practice, including the Royal College of Speech & Language Therapists, the British Psychological Society, and the National College for Teaching & Leadership. ALL research (including empirical, non-empirical, practitioner inquiry etc.) MUST apply and be approved by the ECLS Ethics Committee.

3. However, it is important to expand on the statement above, particularly in relation to Practitioner Inquiry (PI), a relatively common form of research in Social Sciences & Humanities, but one whose philosophy may lead to some confusion for students undertaking PI. A standard definition that is frequently used is that PI, as defined by Menter et al (2011), is a 'finding out' or an investigation with a rationale and approach that can be explained or defended for example through publication or viva or similar. The findings can then be shared so it becomes more than reflection or personal enquiry. It can be undertaken within the practitioner's own practice/ context or in collaboration with others. Within collaborative enquiry the group shares a common research question that can then be 'investigated' through different lenses to enhance knowledge creation and sharing within the group and beyond. As such, evaluation

and reflective teaching are fundamental elements of practitioner enquiry if it is to have impact on the practitioner's practice and ultimately pupil experience.

So there are several points here that are critical to why we would require ethical approval for PI: first, the approach or the research is often shared with others, through discussion, dissemination or publication. This means of course that it is in the public domain and as such, must be covered by ethics. Second, PI often raises other ethical issues due to the potential social or relational implications of the study for pupils, for families, and/or communities concerned. Third, the re-use of any personal data (gained through discussion, reflection for example) requires ethical approval due to its potentially sensitive or possibly revelatory nature or if individuals can be identified from it. In short, although it is often viewed in standard ethical terms as a less clear area, there are very real and extremely important and valid reasons why PI requires ethical approval.

4. It is a requirement that prior to the commencement of all research this form be completed and submitted to ECLS Ethics Committee. The Committee will be responsible for issuing certification that the research meets ethical standards and will if necessary require changes to the research methodology or reporting strategy.

The application should contain:
a. This completed (and signed) application form;
b. Completed **appendix A**:
a. A summary of the research proposal. This should be no longer than one A4 page that details:
   i.   objectives of the study,
   ii. description of the target cohort / sample,
   iii. methods and procedure of data collection,
   iv. data management, and
   v.   reporting strategies;
b. Outline of the interview schedule / survey / questionnaire / or other data collection tools (if applicable depending on the methodology you plan to employ);
c. Completed **appendix B**: the participant information sheet (if applicable), and
d. Completed **appendix C**: the consent form (if applicable).

Templates for the summary of the research proposal, the participant information sheet and the consent form are provided as **appendices A-C. Please include all the relevant documents above within one combined document**
<u>Notes</u>
1.	There will be a monthly deadline for all Ethics applications. The deadline will be the 28th of each month, starting from April 2017.
2.	Applications received by the 28th of the month will be processed within a 2-week turnaround time i.e. approval letters sent out by the middle of the next month assuming no queries.
3.	Incomplete or poor quality applications (spelling, grammatical, formatting errors) will be returned without consideration. If there are queries and amendments are required, researchers will have 1 week to respond to these and the application will return to the same reviewer. Amendments should always be made using 'track changes'.
4. Applications received after the deadline will go into the batch for the next month.
5. No research should be conducted until ethical approval is obtained.

6. Ethics applications cannot be retrospective.
7. For non-empirical work, forms are still required, but the only sections to be completed are the general details, stating that the research is non-empirical. These projects will then be registered as non-empirical on the database and a confirmation letter sent to the applicant.

- **Please send all documents to: vic.christie@newcastle.ac.uk**

Application for Ethics Approval

Name of applicant	Malik Al Zakwani
Email address	m.alzakwani2@ncl.ac.uk
Category [please circle]	PGT student
If "Other" please specify	
Programme [students only – choose from list]	Doctorate in education
If "Other" please specify	
Name of supervisor [students only]	Prof Caroline Walker-Gleaves
Title of research project	Enhancing Omani EFL learning environments: A Participatory Action Research Study into the Application and development of an appropriate SOLE Pedagogy
Date of start of research [must be a future date]	September 2017
Is the research funded?	No
Name of funder	
Name of Co-Is if applicable [staff only]	
Is this application subject to external ethical review? [choose from list]	
If "yes" please specify who	

FOR OFFICE USE ONLY

REVIEWER RESPONSE

Approve? Yes/no Reviewer Comments Reviewer signature Date	

1) a. Does the proposed research project involve data from human participants (including secondary data)? *If 'no' please provide brief details in Section 10 of this form.*		yes
b. Is the research project *only* concerned with the analyses of secondary data (e.g. pre-existing data or information records)? If yes then please continue with Q6-10		No
2) Will you provide your informants – prior to their participation – with a participant information sheet containing information about the following: a. The purpose of your research?		yes
b. The voluntary nature of their participation?		yes
c. Their right to withdraw from the study at any time?		yes
d. What their participation entails?		yes
e. How anonymity is achieved?		yes
f. How confidentiality is secured?		yes
g. Whom to contact in case of questions or concerns? *Please attach a copy of the information sheet (template available at **appendix B**) or provide details of alternative approach in Section 10 of this form.*		yes
3) Will you ask your informants to sign an informed consent form? *Please attach a copy of the consent form (template available at **appendix C**) or provide details of alternative approach in Section 10 of this form.*		yes
4) a. Does your research involve covert surveillance?		No
b. If yes, will you seek signed consent post hoc?		
5) a. Will your data collection involve the use of recording devices?		Yes

b. If yes, will you seek signed consent?	Yes
6) Will your research report be available to informants and the general public without restrictions placed by sponsoring authorities?	Yes
7) How will you guarantee confidentiality and anonymity? *Please comment below.* Participants' names will be anonymised and numbers will be used instead.	
8) What are the implications of your research for your informants? *Please comment below.* No negative implications will be there for informants, only positive ones.	
9) Are there any other ethical issues arising from your research? *Please comment below.* No	
10) Please provide any additional information relevant to your application I just would like to mention that ethical approval from HASS faculty has been awarded.	

Declaration
- I have read ECLS' Code of Practice on Research Ethics and believe that my research complies fully with its precepts.
- I will not deviate from the methodology or reporting strategy without further permission from ECLS' Ethics Committee.
- I am aware that it is my responsibility to seek and gain ethics approval from the organization in which data collection takes place (e.g., school) prior to commencing data collection.

Applicant signature* Malik	Date 11/05/2017
Proposal discussed and agreed by supervisor *[students only]* Supervisor signature*	Date

*To enable electronic submission of applications, electronic (scanned) signatures will be accepted. Please note that typed signatures cannot be accepted

Summary of the research proposal

i. objectives of the study

1. To explore Omani EFL students' experiences of, and orientations toward SOLEs.
2. To investigate whether SOLE pedagogy is able to facilitate an effective English language learning environment for Omani students.
3. To theorise a model for SOLE adoption within an EFL learning context

ii. description of the target cohort / sample

The research sample will be recruited from English foundation year (year one) male and female students aged 17-18 in English Language Centre at the Higher College of Technology in the Sultanate of Oman. The sample will be randomly recruited using multistage cluster sampling. At the beginning, the researcher will randomly choose one group from the four available groups in the foundation program which are level one group, level two group, level three group and level four group using simple random sampling (SRS). Then, he will randomly choose 20 participants from the selected group using SRS.

iii. methods and procedure of data collection

Multiple methods would be used to collect data such as:

*   Semi-structured interviews.
*   Diaries.
*   Focus group interviews.
*   Observation/field notes.

In total, the researcher will use interviews, diaries, focus groups and notes to answer the research questions as it is believed by the researcher that these instruments will work best in collecting data and in giving the accurate implications of the use of SOLEs. Participants will be asked to reflect after each lesson on the learning experience on their diaries, semi-structured interviews will be conducted with each participant every three weeks that will last for approximately 30 minutes and two focused group interviews will be conducted at the middle and end of the academic semester. Observation will be ongoing from the beginning of the project till end.

iv. data management
All data will be saved and stored in safe places. Data stems from different methods will be saved in hard desk, H drive of Newcastle University and in one drive. Saving data in more than one file ensure that the researcher will not encounter the risk of losing it. In all these files data will be approachable by the researcher only.
v. reporting strategies

Data will be reported to supervisor via safe channels and during face to face meetings.

vi.   outline of observation/interview schedule

Observation will take place throughout the project that is from September until December 2017 while interviews will be conducted every two weeks as shown below:

Interview number	date
1	18/10/2017
2	09/11/2017
3	01/12/2017
4	22/12/2017

Newcastle University
School of Education, Communication & Language Sciences

Participant Information Sheet
Title:

You are invited to take part in a research study of Enhancing Omani EFL learning environments: A Participatory Action Research Study into the Application and development of an appropriate SOLE Pedagogy.
Please read this form carefully and ask any questions you may have before agreeing to be in the study.
The study is conducted by Malik Al Zakwani.
as part of their research studies at Newcastle University. This research project is supervised by Prof Caroline Walker-Gleaves.
from the School of Education, Communication & Language Sciences at Newcastle University.
The purpose of this study is to research a SOLE as an English as a foreign language environment.
If you agree to be in this study, you will be recruited.
Your participation in this study will take approximately four months.
You are free to decide whether or not to participate. If you decide to participate, you are free to withdraw at any time without any negative consequences for you.
All responses you give or other data collected will be kept confidential. The records of this study will be kept secure and private. All files containing any information you give are password protected. In any research report that may be published, no information will be included that will make it possible to identify you individually. There will be no way to connect your name to your responses at any time during or after the study.
If you have any questions, requests or concerns regarding this research, please contact me via email at m.alzakwani2@ncl.ac.uk or by telephone at 0096895346887.
This study has been reviewed and approved by the School of Education, Communication & Language Sciences Ethics Committee at Newcastle University (date of approval:).

Faithfully yours
Malik

Newcastle University
School of Education, Communication & Language Sciences

Declaration of Informed Consent

- I agree to participate in this study, the purpose of which is to explore Omani EFL students' experiences of, and orientations toward SOLEs., to investigate whether SOLE pedagogy is able to facilitate an effective English language learning environment for Omani students and to theorise a model for SOLE adoption within an EFL learning context.
- I have read the participant information sheet and understand the information provided.
- I have been informed that I may decline to answer any questions or withdraw from the study without penalty of any kind.
- I have been informed that data collection will involve the use of recording devices.
- I have been informed that all of my responses will be kept confidential and secure, and that I will not be identified in any report or other publication resulting from this research.
- I have been informed that the investigator will answer any questions regarding the study and its procedures. The investigator's email is ------------- and they can be contacted via email or by telephone on -------------.
- I will be provided with a copy of this form for my records.

Any concerns about this study should be addressed to the School of Education, Communication & Language Sciences Ethics Committee, Newcastle University via email to vic.christie@newcastle.ac.uk

_____

Date   Participant Name (please print)   Participant Signature

I certify that I have presented the above information to the participant and secured his or her consent.

_____

Date   Signature of Investigator

Appendix 2: Ethical approval

Malik Al Zakwani (PGR) ⌄

Action Items

Dear Malik

Please accept my apologies for the delay in responding to your ethics application, we're severely short staffed at the moment. I'm pleased to inform you that your application was successful and you have ethical approval for your project. Please insert a copy of this email into your project appendices for audit purposes.

Good luck with your project.
Best wishes

Appendix 3: Letter to College gatekeepers

May 15th, 2017

Professor Caroline Walker-Gleaves
School of Education, Communication and Language Sciences
Newcastle University

To: --------------------------------------

This letter evaluates and supports the quality of doctoral work of Malik Al Zakwani. The title of his thesis is 'An Examination of the experience of using SOLE methodology on the learning environment of Omani EFL learners'. I am his doctoral supervisor and I can testify to the originality, significance and contribution to the field of Malik's work. In addition, and very importantly, I can testify to the effort and industry and quality of Malik's work. He is extremely motivated and assiduous both in responding to feedback and in designing and actualizing original doctoral scholarship. He has to date, spent, productively, several thousand hours on various aspects of his research and I am sure that his fieldwork, analysis and thesis writing will continue in the same vein. In particular, the study takes a qualitative approach that is a very novel model for understanding the fostering and maintenance of the language learning environment.

Mr Al Zakwani will shortly be undertaking fieldwork ----------------------.

Faithfully yours

Caroline Walker-Gleaves

Professor Caroline Walker-Gleaves

Appendix 4: Interview Schedule 1

Students' first experience of SOLEs

Study Title: Enhancing Omani EFL learning environments: A Participatory Action Research Study into the Application and Development of an appropriate SOLE Pedagogy

Pseudonym:

Tel:

Email:

Date and time of meeting:

Location:

Tell me about your SOLE experience in general?

Can you define SOLE for me?

What do you think a SOLE is for, or designed to do?

What do you think about SOLE in general?

What do you like about it?

What do you dislike about it?

Has the experience of SOLE influenced you as a person? How?

Has SOLE helped you be competent intellectually, physically and interpersonally? Explain.

Has SOLE helped you establish your own identity? Explain.

Has SOLE helped you determine goals during sessions? Explain.

Has SOLE given you a room to organize your own learning? How?

Has SOLE's experience affected your attitude towards learning? How?

Is the support you get from the teacher during SOLE sessions enough or not enough? Explain.

Is asking a big question during SOLE enough to make learning happen? Explain.

Have you felt differently motivated to learn during SOLE? How?

Do you think that SOLE is able to foster desirable attributes and behaviours of students? How?

Appendix 5: Interview Schedule 2

Interview Schedule 2: Students' perception about SOLEs after changes

Study Title: Enhancing Omani EFL learning environments: A Participatory Action Research Study into the Application and Development of an appropriate SOLE Pedagogy Pseudonym:

Tel:

Email:

Date and time of meeting:

Location:

What do you think about SOLEs new version?

What do you think about teacher's new roles?

What do you think about questions asked?

Do you think the new version is ready for implementation?

Appendix 6: Diary

Reflect on today's session in general

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Reflect on things you liked about today's session

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Reflect on Reflect on things you disliked about today's session

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Reflect on the effects of the new experience on you and your learning

Reflect in details on the pros and cons of the new environment (SOLE) in general

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Appendix 7: Extracts from an interview with a staff

Number of dismissals and withdrawals

Regarding students who got dismissed or withdraw because of frequent failure in the college every semester. Almost numbers are different from semester to another. Talking about last semester only, Around 159 students have been dismissed due to failure and attendance. Around 146 students have been dismissed because of failure and 13 students because of attendance. (St)

Males and females rates

As known that males are dismissed much more frequently. For example, in that semester, 121 male students have been dismissed because of failure and 11 male students because of attendance. On the other hand, two female students have been dismissed because of attendance and 25 because of failure. (St)

Reasons of failure

As known when students move from a certain different environment to a new one, pupils during their whole study in schools used to learn all subject in Arabic. It is the medium of instruction. Enrolment of students in higher education is a radical change in the way they learn, the way they are taught, suddenly, from Arabic language to English language. Since they join higher education, everything changes for them. They start a new program in English. As we all know that their environment is totally in Arabic and this tells us that English is the main barrier for students that causes their failure. Also, for males, there are other reasons beside English which are friends and their accommodation atmosphere. Also, the difficulty to adjust to the new environment. Also, not using technology is a reason. As known, moving to a new organisation, English should be practiced daily and all the time. We notice in our colleges of technologies that students after passing exams or a certain level they start forgetting English because they speak in Arabic throughout the day with friends, family members and brothers.

Regarding counselling students, actually before their withdrawal or dismissal, students visit … department. After sitting with students, it became clear that the main reasons or the biggest reason is English language. Students hope at the beginning of their journey can overcome this difficulty but after being in the college for sometimes, the problem gets bigger because they fail to adjust. Also, the system of teaching English is conventional. For example, teachers explain and

students listen only. Students are not given the chance to work in groups or similar ways. In addition, the foundation program is long so if any student fails in one semester, it will be longer. This leads to disappointment, it will be instil in their minds that English is difficult and needs lots of efforts. Of course, if students are given a chance to interact and search, for sure there will be positive productivity. What is going on today is that the lecturer talks all the time. (St)

Previous studies

Honestly, unfortunately we have received nothing about a certain study that was conducted or published regarding this issue. We have not received any study from any researcher that analyse this dilemma. Numbers increase from one semester to another especially after the new technological program which should encourage students to be ready at all times. Regarding solutions or new strategies through studies, there has been not a single study for such purpose. (St)

Current environment

Of course, the current used and implemented environment is the conventional one. In this environment students attend as listeners only. Teachers spoon feed information to students, students are not given that good chance to participate and search. There is no E-learning. Students face difficulty because they only listen, they just receive information. This causes difficulties for students, it is true that students when given information they will store it immediately but after sometime like three or four days, students will forget it. It is different when students work in groups with their partners or with new technological applications, students will comprehend what they are doing.

The current class environment is normal, it is only that students receive information from the subject's teacher, writing it on the exercise notebook. Students started getting bored with such program because it is not appealing in teaching students English. Teaching students English in such environments after spending twelve years at schools learning in Arabic will not help improve their English. It is the same way of teaching at schools but instead of Arabic, it is English here. This undoubtedly is difficult for students. The current environment does not help students. It is a conventional environment in terms of attendance and spoon feeding that is practiced by teachers. Sometimes teachers used terminologies that are not understood by students. (St)

Students' requests

After sitting with students and following up their cases, I felt that students feel unconfident to update themselves with new things in English. Students, for example, like to use social media and modern technology. For example, if they encounter any new word or problem during any lecture, students are allowed to use any technological program to overcome that problem. This will help retain the knowledge. Also, writing words electronically and repeating them, improve their writing skills and also reading skills. When students are listeners all the time of their study, they will not improve such skills. (St)

College willingness to accept new environments

If there is a new program or new study that tackle this problem, why not. All stakeholders aim at development and improving students' skills. Providing tools and electronics if needed is not a problem, all what we need is a detailed study that tackles advantages and disadvantages. This study should suggest solution for what we are suffering from today and what students suffer from in general. Actually, people in charge encourage such studies.

We encourage to improve learning environments. Our vision is to produce a well-educated generation that can contribute to the job market. Learning English in foundation year is the foundation for students. All the world is just like one village now so we should improve our learning environments and equip them with technology. This will contribute in improving education and students' skills as well before joining specialization departments or the job market. (St)

Effectiveness of new environments

Being part of … department, I can tell that when class environments are appealing, this will increase the passion to search, to know and to improve one self. This will make students love to attend classes, to study and to read. It is not like the current environments. Using social media and some websites are essential like translation websites. When students feel that all those made available for them, their passion to study, to attend and to explore will increase. Using social media or new technological tools will give students a bigger room to practice, to inquire and follow up. (St)

Appendix 8 : Inter-reliability exercise one

Please match the extracts below with the most appropriate theme

1. Positive association of freedom given in SOLEs (FR)
2. Students' positive attitude towards the nature of and facilities provided in SOLEs (PA)
3. Suitability of SOLEs for tertiary level (SL)
4. Enjoyability in using the Internet (EI)
5. Positive feelings about cooperation (PC)
6. SOLEs meet different learning styles (LS)
7. Ability of SOLEs to assist in learning (AB)

''It is good for foundation year students to check their ability to interact, to check their ability to find answers and searching abilities''. SL

''I like cooperation the most and having the chance to give my opinion. This helped us to collaborate and listen to others' opinions''. PC

''I like using social media and the Internet''. EI

''My opinion about the environment is that it is a good environment and I like working in groups with friends''. PC

''In this session lots of participation and discussion took place but within groups only''. PC

''In this environment, we learnt new vocab and more things. Our reading skills have improved as well''. AB

''The main thing in this environment is freedom''. FR

''This environment has a variety of things compared to normal classes. It is an entertaining environment''. PA

''We wait for this session eagerly every week''. PA

''I like learning by searching on the web and books, and by being given questions to answer''. LS

Appendix 9: Inter-reliability exercise two

Please match the extracts below with the most appropriate theme

1. Personal development improves (PD)
2. Students' autonomy increases (A)
3. Students are empowered (E)
4. Approach of SOLEs motivates students (M)
5. SOLEs helped develop students' personalities (SP)

''We became bolder''. <u>SP</u>

''We first set a goal to fully understand the subject''. <u>PD</u>

''Yes, here students have more room to use their skills''. <u>A</u>

''The teacher gives students things that they are able to do''. <u>E</u>

''Therefore, students feel motivated''. <u>M</u>

''I in general yes, some girls are serious. I became selfless and like to help others''. <u>SP</u>

Appendix 10: Inter-reliability exercise three

Please match the extracts below with the most appropriate theme:

1. Culture (C)
2. Students' behaviours (SB)
3. Grouping (G)
4. The role of the teacher (RT)
5. The role of the the big questions (RC)

''When the teacher leaves us unsupervised, students leave the given important task and do things that are not important''. <u>RT</u>

''It is difficult to find information related to some questions even with the use of the Internet''. <u>RC</u>

''Students give their answers and then play with their mobiles. They will not listen to others''. <u>SB</u>

''Most students, when grouping, sat with people they previously know. In most cases, they belong to the same village''. <u>G</u>

''It is part of our culture and it is a habit''. <u>C</u>