

**INVESTIGATING ENGLISH TARGET AND LEARNING
NEEDS: A STUDY OF PETROLEUM ENGINEERING
STUDENTS AT HADRAMOUT UNIVERSITY OF
SCIENCES AND TECHNOLOGY**

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by

ATEF SALEH HABSHAN AL-TAMIMI

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LIST OF ABBREVIATIONS

AMTB	Attitude/Motivation Test Battery
CLT	Communicative Language Teaching
DPE	Department of Petroleum Engineering
EAP	English for Academic Purposes
EFL	English as a Foreign Language
ELT	English Language Teaching
EOP	English for Occupational Purposes
ESL	English as a Second Language
ESP	English for Specific Purposes
etc.	etcetera
FPE	Faculty of Petroleum and Engineering
GE	General English
GTM	Grammar Translation Method
HUST	Hadramout University of Sciences and Technology
LSPs	Learning Styles Preferences
NA	Needs Analysis
PSA	Present Situation Analysis
TBL	Task-based Learning
TSA	Target Situation Analysis
USM	Universiti Sains Malaysia
ZPD	Zone of Proximal Development

**MENKAKI KEPERLUAN SASARAN DAN PEMBELAJARAN
BAHASA INGGERIS: SUATU KAJIAN PELAJAR
KEJURUTERAAN PETROLEUM DI HADRAMOUT UNIVERSITY
OF SCIENCES AND TECHNOLOGY**

ABSTRAK

Penyelidikan ini bertujuan mengkaji sasaran dan keperluan pembelajaran bahasa Inggeris dalam kalangan pelajar kejuruteraan petroleum di Hadramout University of Sciences and Technology (HUST), Yemen. Berpandukan rangka kerja sasaran dan keperluan pembelajaran Hutchinson dan Waters (1987), kajian ini mengenal pasti keperluan dan kemahiran komunikasi bahasa Inggeris dalam kalangan pelajar, dalam konteks keperluan, kekurangan serta keinginan mereka. Untuk keperluan pembelajaran bahasa Inggeris, kajian ini merangkumi motivasi dan sikap pelajar terhadap pembelajaran bahasa Inggeris., gaya pembelajaran yang digemari (LSP), gaya pengajaran, kaedah dan teknik pengajaran, serta kursus bahasa Inggeris yang diminati. Pensintesisan rangka kerja konseptual, kaedah, pendekatan, cara yang digunakan dan idea, disesuaikan daripada beberapa teori, model dan kajian yang berkaitan dengan isu kajian keperluan analisis (NA) semasa.

Penyelidikan ini menggunakan reka bentuk kaedah penyegitigaan campuran (triangulation mixed method design). Teknik pengumpulan data kuantitatif dan kualitatif termasuk soal selidik, temu bual separa struktur, temu bual dan pemerhatian secara berkumpulan juga diaplikasikan. Sampel kajian terdiri daripada sepuluh (10) kumpulan. Untuk soal selidik NA, 81 orang pelajar kejuruteraan petroleum, 9 orang guru fakulti di Jabatan Kejuruteraan Petroleum (DPE), HUST, 38 orang graduan petroleum (yang bekerja di enam (6) buah syarikat minyak) dan 31 orang majikan

(penyelia di empat (4) buah syarikat minyak) telah dipilih. Seramai. 10 orang pelajar, seorang guru ESP, 9 orang guru fakulti di DPE, HUST, 6 orang graduan petroleum dan 5 orang majikan telah ditemu bual. Di samping itu, 24 orang pelajar kejuruteraan petroleum di HUST terlibat dalam temu bual berkumpulan. Data sokongan daripada pemerhatian dalam kelas bahasa Inggeris, pemerhatian kelas subjek dan pemerhatian lapangan turut dikumpul.

Penyegitigaan sumber dan kaedah membantu memperkaya serta mengesahkan data serta membangunkan suatu pangkalan data yang komprehensif tentang sasaran dan keperluan pembelajaran bahasa Inggeris. Secara amnya, keputusan menunjukkan bahawa pelajar kejuruteraan petroleum mempunyai kekurangan dari segi kemahiran komunikasi dan bahasa Inggeris khusus, yang amat diperlukan dalam usaha mencapai sasaran akademik dan pekerjaan mereka. Berhubung dengan keperluan pembelajaran, dapatan kajian membuktikan bahawa pelajar bermotivasi dan mempunyai sikap yang positif terhadap pendidikan dan status sosial bahasa Inggeris di Yemen. Didapati juga bahawa kursus bahasa Inggeris sedia ada serta gaya, kaedah dan teknik pengajaran yang digunakan tidak memenuhi keperluan dan minat pelajar. Usaha untuk mengadakan suatu program khas, yang mampu meningkatkan keberkesanan pelajar dalam penggunaan bahasa Inggeris dan kemahiran komunikasi, dan meningkatkan amalan di bilik darjah hendaklah ditekankan. Implikasi pedagogi terhadap pelajar, guru, penggubal bahan dan perancang silibus, syor untuk menerokai lebih banyak penyelidikan dan teori dan amalan terhadap bidang NA adalah dicadangkan.

INVESTIGATING ENGLISH TARGET AND LEARNING NEEDS: A STUDY OF PETROLEUM ENGINEERING STUDENTS AT HADRAMOUT UNIVERSITY OF SCIENCES AND TECHNOLOGY

ABSTRACT

The purpose of the current research is to investigate the English target and learning needs of petroleum engineering students at Hadramout University of Sciences and Technology (HUST), Yemen. Guided by Hutchinson and Waters's (1987) target and learning needs framework, students' English language and communication skills needs are identified in terms of necessities, lacks and wants. For the learners' English learning needs, the study includes their motivation and attitudes towards learning the English language, their learning styles preferences (LSPs), teaching styles, teaching methods and techniques and preferences of the English language course. To synthesise the conceptual framework, methods, approaches, ways and/or ideas are adopted from a number of theories, models and studies, which are related to the issues of interest in the current needs analysis (NA) study.

This research uses a triangulation mixed method design. Quantitative and qualitative data collection techniques including questionnaires, semi-structured interviews, focus group interviews and observation are employed. The sample consists of ten main groups. For the NA questionnaire, 81 petroleum engineering students, 9 faculty teachers at the Department of Petroleum Engineering (DPE) at HUST, 38 petroleum graduates (employees in six oil companies) and 31 employers (supervisors in four oil companies) are selected. 10 students, an ESP teacher and 9 faculty teachers from the DPE at HUST and 6 petroleum graduates and 5 employers are interviewed. In addition, 24 petroleum engineering students at HUST participated in the focus group

interviews. Supportive data from English class observation, subject classes observation and field observation are also collected.

Triangulation of sources and methods help to enrich and validate the data and establish a comprehensive database concerning learners' English target and learning needs. Generally, the results show that petroleum engineering students lack the specific English language and communication skills which are necessary for them to acquire in their target academic and occupational domains respectively. Regarding the learning needs, the findings provide evidence that the students are instrumentally motivated and have positive attitudes towards the educational and social status of English in Yemen. It is also found that the current English language course and the teaching styles, methods and techniques used do not meet the learners' needs and preferences. Calls to develop specific programmes, which result in improving the students' efficiency in using English language and communication skills, and improve classroom practice are emphasised. Pedagogical implications for students, teachers, material designers and syllabus planners, suggestions to open further avenues of research and theoretical and practical insights to the field of NA are proposed.

CHAPTER ONE

INTRODUCTION

1.0 Overview

It is widely agreed that English is of paramount importance for engineering students to enable them function successfully in their academic and occupational fields (Basturkmen, 1998, 2008; Pendergrass et al., 2001; Pritchard and Nasr, 2004; Joseba, 2005; Sidek et al., 2006; Hui, 2007; Venkatraman and Prema, 2007). Pritchard and Nasr (2004:426) assert that “English is of particular importance for engineering and science students because it is the principal international language of science and is looked upon as an effective means for enabling those students to become familiar with professional texts written in English”.

However, engineering students and graduates in the Arab World in general and in the Yemeni context in particular are found to have many problems in using the English language (Basturkmen, 1998, 2008; Ali, 2000; Pritchard and Nasr, 2004; Abu-Rizaizah, 2005; Higher Education Development Project, Ministry of Higher Education and Scientific Research, Yemen, 2006). Many scholars and researchers (e.g. Escorcia, 1985; Richards et al., 1985; Hutchinson and Waters, 1987; Nunan, 1988a; Kandil, 2002; Chen, 2005; Basturkmen, 1998, 2008) have long acknowledged the importance of identifying learners’ needs so as to prepare learners to use English well in their academic, professional, or workplace environments. Basturkmen (2008: 18) rightly argue that these learners have a diversity of needs and they do need to learn the English language “not for its own sake or for the sake of gaining a general education but to smooth the path to entry or greater linguistic efficiency in these

environments”. As learners are learning a language relevant to what they need, they are likely to be highly motivated to learn (Nunan, 1988a).

The current study is born to delve deeper into the nature of these English language needs for petroleum engineering students at a public university in Yemen i.e. Hadramout University of Sciences and Technology (HUST). Specifically, it attempts to identify petroleum engineering students’ *English target* and *learning* needs. To familiarise the reader with the concepts *target* and *learning needs*, as they are the main concern of this study, a brief overview of these terms seems expedient at this juncture.

The first concept i.e. *target needs*, refers to the needs as determined by the eventual target situation (Hutchinson and Waters, 1987). The term is divided by Hutchinson and Waters (1987) into three main constructs: necessities (the requirements of the target situation), lacks (what the learner knows compared with what he/she must know) and wants (perceptions of the “what” must be known). As both English language and communication skills are very essential in the engineering academic and job domains respectively, the researcher attempts to identify the target language and communication skills needs for petroleum engineering students at HUST. This would help understand the learners’ needs for learning the English language, which is considered vital for the success of their English learning programme (Ellis and Johnson, 1994).

The second concept is *learning needs*. It refers to what the learners need to do in order to learn (Hutchinson and Waters, 1987). It is used as a cover term which

includes those important factors in the learning process such as motivation, attitudes, learning styles, teaching methods and so on. Understanding learners' learning needs would contribute to inform the classroom instruction and design process with the required information to improve the teaching/learning situation (Hutchinson and Waters, 1987; Brindley, 1989; Dudley-Evans and St. John, 1998; Spratt, 1999; Brown, 2000; Hyland, 2006; Xiao, 2006; Basturkmen, 2008). In the present study, petroleum engineering students' learning needs are looked at by including their motivation, attitudes, learning styles preferences (LSPs hereafter), teaching styles, teaching methods and techniques and preferences of the English language course.

Given a brief overview of the main focus of this study, this chapter moves on to present a general background to the study, specifies the statement of the problem and the objectives of the current investigation. Then, the research questions, significance, scope and limitations are presented. Finally, the chapter ends by defining the main terms used in the present study.

1.1 Background to the Study

This section gives an account of the general background to the statement of the problem. It includes a brief overview of Yemen and the place of English in the Yemeni educational and social contexts. A synoptic overview of some of the important issues, problems and challenges in the teaching and learning of English in Yemen is presented next. This would help to provide readers who are not familiar with Yemen with a more nuanced reading of the macro context of the research presented. As the focus of the current investigation is the English target and learning needs of the petroleum engineering students at HUST, therefore, preliminary

information regarding HUST, its faculty of petroleum and engineering and the petroleum engineering department are presented. The section ends with a critical review of the current English language course offered to the petroleum engineering students.

1.1.1 Yemen in Brief

Yemen or the Republic of Yemen is an Arabic speaking country situated at the southern tip of the Arabian Peninsula. It consists of twenty one governorates (20 proper governorates and a municipality). Sana'a is the political capital and Aden is the economic capital of the country. Hadramout is considered to be the biggest governorate, in terms of the area of the land, among other Yemeni governorates. The Yemeni population is estimated at "23,822,783" (The World Fact Book, 2009). The majority of them are Arab and Muslims while only few numbers are non-Arab (including, Afro-Arab, South Asians, Europeans) and non-Muslims (e.g. Jewish, Christian, and Hindu) (ibid).

1.1.2 The Place of English in Yemen

1.1.2.1 English in the Yemeni Education System

English in the Yemeni education system has two beginnings: one in the south and another in the north. In the southern part of Yemen, English was introduced in the 19th century with the advent of the British invaders who occupied and controlled most of the southern territories for almost one and a half century (1839-1967). The first government school was opened in Aden in 1856 i.e. after 17 years of the occupation (Al-Aghbari, 2002). This school lasted only for two years and reopened

in 1866. As a result, English began to be used in Aden, the heart of the south, and soon after it became a compulsory subject in the schools (ibid).

In the northern part of Yemen, on the other hand, the teaching of English took place shortly after the revolution against the Imamate rule in 1963. This is because the doors of Yemen were opened to the world after being closed during the pre-independence days. It was felt that English was a necessary “window” to the world of science, technology as well as to development in all spheres of life. Therefore, it was decided to introduce English as a compulsory subject after the six-year-primary school stage of education.

After the reunification of both South and North Yemen in 1990 and because of the political and economic developments in the country, English language enjoys good reputation in the education system. Hillenbrand (1994: 5037) asserts that:

“Since unification, English is beginning to become the most important foreign language in Yemen. English is the lingua franca among the non-Arab groups (from the UK, German, the USA, Pakistan, the Philippines, Malaysia and other countries) working in Yemen. It must be noted here that with regard to the learning and teaching of English in the Yemeni schools and institutions of higher education, it is taught and learnt as a compulsory subject”.

Although Arabic is the medium of instruction in all schools in Yemen, English has been a compulsory subject for all students. The students start learning the English language as a school subject at the seventh level in their basic education. Several English textbooks have been used in the schools. The current one is the *Crescent English Course for Yemen*, which has been prepared by the Ministry of

Education (MOE) in collaboration with the British Council in Sana'a. The main objectives for teaching the English language in the Yemeni schools are as follows:

1. "To teach the students to read and write the foreign language so that they can carry out their own academic research in English.
2. To provide the students with skills which will enable them to communicate orally, and to some degree in writing, with the speakers of the foreign language and with the people of other nationalities who also speak this language.
3. To bring the students to some degree of understanding of people across national barriers by giving them an insight into the ways of life and the ways of thinking of the people who speak the language they are learning.
4. To increase the students' understanding of how language functions and to bring them, through the study of a language, to a greater awareness of the functioning of their own language.
5. To enable the students to study abroad where English is the medium of instruction" (Al-Ghraphy, 1999: 3).

In university education, English is used to teach science subjects whereas Arabic is used to teach art-based subjects, except English majors. For the former students, Rugh (2002) asserts that courses in medicine, science and engineering at Yemeni universities are taught in English because new developments in these fields are almost always published in English. Therefore, students majoring in these fields must study these subjects in English in order to keep abreast of current knowledge and any developments in their fields (ibid). However, regardless of their different fields of study, all Yemeni undergraduates are required to take a one-year English for

Specific Purposes (ESP hereafter) course at the first year of their university education. Some of the reasons for implementing ESP courses in the university curriculum are as follows: 1) there is a great demand for English in the world and Yemen in particular, 2) most of the specialised books in almost all science subjects were being published in English and 3) the general awareness of the paramount importance of ESP in the education circle have made it necessary to be selective in choosing appropriate materials to serve the students' specific academic and job purposes (Abdullah, 2005). This is an evident of the officials' awareness of the great importance of English in the Yemeni education and job domains.

However, in spite of the officials' awareness of the importance of implementing appropriate ESP courses, particularly for science students, Bin-Tayeh (1996), Al-Fadly (2004) and Abdullah (2005), who investigated the language needs of medical students in Sana'a University, HUST and Aden University respectively, found that the implemented ESP courses did not meet the learners' needs. For the engineering students, who represent the other side of the coin of science majors, the usefulness of the implemented ESP courses have not been investigated at any of the Yemeni universities. Therefore, the current study will start by reviewing the current English language course for petroleum engineering students at HUST and then, identifying the target and learning needs of the students. It is hoped that the data obtained could help understand the learners' needs so as to improve the current curriculum, if needed.

1.1.2.2 English in the Yemeni Society

It is generally agreed that English has become the first global language in the world today. Yemen, like many developing countries, recognises the significant role of the English language as it is being widely used in the fields of business, industry, education and various other professional fields in the country (Al-Fattah, 2003). Sahu (1999a) states that English is simply the source language opening the window or the international community in the 'global village' and, as such, the passport to progress in every field of human endeavour. Although English is not the official language in Yemen, it is considered to be one of the most important foreign languages. Interestingly enough, even “young generation are attracted towards English language learning, and English is becoming popular not only among males but equally among females, which is clearly seen in the increasing number of learners getting enrolled to the English program in Yemen” (Ali, 2007: 40).

There are many reasons which increased the status of English in the country. For example, English is required to communicate with non-Arab groups who work in the country (Hillenbrand, 1994). In addition, Yemenis, like others, need the language to go abroad, have access to many books and resources in the fields of science, technology, politics, education, commerce, industry, which are written in English (Al-Fattah, 2003). More importantly, according to Sharma (2004: 4), ability in English “can open new avenues of employment in companies and it can assist in promoting indigenous business”. This is because, the number of national and international companies, which require employees who are proficient in the English language, has drastically increased after the unification of the two parts of the country. Banks, for instance, have almost tripled in number having many branches in

almost every major and minor city. Oil, Gas and software companies are also increasing their presence. Applicants to these companies are required to demonstrate their proficiency in English as a condition of admission. The need of English has made some of the large companies carry out in-house language training courses (e.g. *Yemenia Airways, Hayel Saeed Anam* Group of companies and Canadian Nexen and Total oil companies). They focus on their immediate needs for English without wasting time and effort in teaching irrelevant elements of English language.

Seeing this, people have realised the necessity of having special English courses that will help the individuals to meet the changing needs of the society as reflected in the market of business, particularly, with the advent of multinational companies. Given this, it is hoped that the present study will be a response to these needs. In other words, by identifying the petroleum engineering students' target and learning needs, the basis for the required English language course will be established which would make the university curriculum outcomes get closer to the requirement of the employment market.

1.1.2.3 Issues, Problems and Challenges in the Teaching and Learning of English in Yemen: A Synoptic Overview

It is apparent from the discussion presented in the previous section that English language plays an important role in the Yemeni educational and social contexts. However, it has been reported that the majority of Yemeni EFL learners could not use the English language efficiently. One of the implications of the students' lacks of proficiency in English is that it "denies them the opportunity to access a bulk of information in a number of disciplines, especially in areas related to science and technology" (Sahu, 1999b: 4). Another important implication is that the

students' opportunities to find a job in companies, which require English language, have been minimised or even missed (Higher Education Development Project, Ministry of Higher Education and Scientific Research, Yemen, 2006). Reports from business leaders suggest that there is a kind of mismatching between what the labour market requires and what Yemeni universities produce as far as the qualifications of university graduates are concerned (ibid).

Yemeni learners' weaknesses in the English language could be attributed to many factors. One of these factors could be the lack of exposure to the target language [English] as produced by native English speakers (Rababah, 2003). In other words, as a foreign language, learning English has been confined to the classroom. Also, the English language teachers, who are native Arabic speakers, are the sole model for English language use (Sahu, 1999c). Stated differently, as Arabic is the main language in Yemen and English is not used in daily situations, the students could not practice the language outside the classroom (Sahu, 1999c; Ali, 2007). This produces students who are "Arabic-based bilinguals" (Sahu, 1999b: 4) and lacking communication skills. This stems from the fact that practice is very important to master any language as Halliday et al. (1984: 16), as cited in Rababah (2003: 187), point out:

"Oral mastery depends on practising and repeating the patterns produced by a native speaker of the foreign language. It is the most economical way of thoroughly learning a language.... When one has such a control of the essentials of a language, he can almost automatically produce the usual patterns of that language".

The above-mentioned obstacles for learning the English language in Yemen "can lead ultimately to the learner losing interest in English language learning and

consequently getting less motivated to learn in the real sense of learning” (Al-Quyadi, 2000: 52). In such a case a large number of learners might learn English just to pass the exams (ibid). Kharma and Hajjaj (1989:2) rightly argue that

“apart from the motivation provided by the novelty of learning a new language, by the teacher’s techniques, and by the materials used, there is very little motivation for learning the language, compared to that for acquiring a first language. The attitude to English as a foreign language is, furthermore, that it is a ‘school subject’ rather than a means of communication”.

Similarly, Al-Fattah (2003: 5) states that “unfortunately, English in Yemen and in many Arab countries is taught like other subjects in the school curriculum because the *motivation* for learning the target language in this context is not high”. From a different angle, Sahu (1999c) argued that the bulk of the Yemeni learners’ deficiency in English could be the result of not providing them with the right kind of motivation to learn English.

Besides problems in their motivation, learners’ *attitudes* towards the English language might be another factor that hindered Yemeni EFL learners from learning the language. In fact, learners’ positive attitudes towards the use of English in the educational and social context are very important in developing their language competence. However, Sahu noted that “due to the problems of *attitude* towards English, most of them [Yemeni EFL learners] end their study acquiring a smattering of some form of a pidgin English which is inadequate to stand them in good stead in a range of communicative situations involving the use of English” (ibid).

Other problems could be related to the methods and approaches used in teaching English in Yemen. Al-Fattah (2003: 5) observed that “the techniques and

methods used in teaching the mother tongue [Arabic] are the same in teaching the foreign language". In addition, it is found that the Grammar Translation Method (GTM), which has no roots in any theory of learning, language or psychology (Richards and Rogers, 1986), is still in use in the Yemeni English classrooms (Attamimi, 2003). This method of teaching does not enable the students to acquire language skills, which are actually required in real life situations, as its main focus is only on grammatical structures and grammar rules and being teacher-centred (ibid). As teachers are the only talkers inside the classroom and the students are passive-information receivers, this spoon feeding of teaching is a long way from the requirements of the 21st century (Higher Education Development Project, Ministry of Higher Education and Scientific Research, Yemen, 2006). To solve this problem, Al-Quyadi (2000) suggested that English language teachers in Yemen should use effective teaching methods and techniques which would satisfy their students' needs.

Implementing effective teaching approaches such as the communicative and learner-centred approaches in Yemeni English language classrooms have been hindered by some obstacles (Al-Quyadi, 2000; Al-Fattah, 2003; Attamimi, 2003). The large and crowded number of students per class in Yemeni schools, institutions and universities could be one of these obstacles (Al-Fattah, 2003; Attamimi, 2003). Another problem could be related to the culture and nature of Yemeni students, as Yemenis and Arab learners in general have inherent culture with a long tradition of unconditional obedience to the authority (Al-Quyadi, 2000). In other words, Yemeni learners have been characterised as dependent learners who look to the teacher as a source of structure and guidance and prefer an authority figure to tell them what to do. Such a learning style is not unique to Yemeni and Arab learners as many Asian

learners, such as Malaysians, are found to be dependent learners and “the teachers are seen not as a facilitator but as a fount of knowledge” (Fauziah Ahmad et al, 2005: 90). In these contexts and with similar types of learners “a complete departure from the traditional teacher-centred and text-book driven teaching, to that of a learner-centred teaching to create independent learners do not seem encouraging” (ibid: 92). Despite being dependent learners, Yemeni learners, like all learners, do have different preferences i.e. styles in the way they process, perceive, take and understand information. According to Nunan (1989), accommodating learners’ needs and preferences is vital in designing a learner-centred curriculum. In addition, Alfonseca et al. (2006) point out that an awareness of students' learning styles will enable teachers to adapt appropriate techniques and methods that suit the students' preferences. Therefore, identifying petroleum engineering students’ preferred learning and teaching styles could be a step in the right direction.

Another possible reason for the Yemeni students’ low proficiency in the English language could be related to the inappropriateness of the implemented English language *syllabi* at schools (Sahu, 1999a; Al-Fattah, 2003; Sharma, 2004) and universities (Bin-Tayeh, 1996; Al-Fadly, 2004; Abdullah, 2005; Al-Haddad and Munir Shuib, 2005; Farae, 2005). Sahu (1999a: 3) argues that:

In this context, the basic question that arises is: If after years of learning English at the preparatory, secondary and post secondary levels, an average Yemeni learner fails to perform the day to day communicative chores in English in his/her personal, professional and social spheres with an optimal degree of competence and confidence, then, obviously, something vital is grossly lacking in the EFL (English as a foreign language) *curriculum* that needs to be identified, and if necessary, suitably remedied.

Moreover, with regard to the university curricula in Yemen, it has been reported that there are no systematic processes for the review of curricula, nor for the involvement of the outside world - industry in particular - in developing curricula to ensure that what students learn is appropriate and relevant (Higher Education Development Project, Ministry of Higher Education and Scientific Research, Yemen, 2006). It is also argued that many programmes have not been modified for many years - certainly they are not developed systematically -, the students are not taught appropriately, and what they learn may not be up-to-date and relevant (ibid). Therefore, Sharma (2004) asserts that it is of vital importance to implement English language syllabi, which geared to the needs of the learners in the Yemeni context. He suggests that the kind of English Yemeni EFL learners need is “English for use, not for linguistic knowledge, which means more practice and less theory” (ibid: 5).

All in all, the researcher concurs with Sahu (1999a) in that “the problem is indeed multifold and far more complex than what appears on the surface”. Sahu (1999a) advised the Yemeni EFL learners to wake up to the urgency of acquiring the desired linguistic competence in English, which remains the language of opportunity and of upward social mobility so as to be able to lead their country to the forefront of advancement in technology, trade, tourism and teaching and to open the closed doors for more jobs opportunities. However, the researcher believes that advising the students to wake up is not enough without giving them the hand to do so by firstly investigating their needs, which is the prime aim of the current research.

1.1.2.3.1 Socio-cultural Aspects and English Language Learning in Yemen

Yemen is mono-religious and mono-ethnic (Al-Quyadi, 2000). The majority of the people represent a stronghold of Muslim-Arab values, attitudes and behaviours. Arabic language for Yemenis is not only a language for communication but an expression of one's 'identity'. As Suleiman (1994:3) stated, "the Arabic Language, for Arabs is not a means of communication and conveying messages between interlocutors, but a most eloquent symbol of group identity".

However, complex changes in social, political, economic and civic life throughout the global world have tremendously influenced the Yemenis' way of life as they require to meet the demands of this era of globalization. Like others, they require new competencies and literacies. New literacies, according to Koo and Soo (2007: 73), include "adequate language proficiency in at least a world language, for example the English language, the ability to access, understand, analyze and critique information, the capacity to produce knowledge from various sources including the Internet, the capacity to think critically, to work independently and to communicate well in different situations".

As far as English language is concerned, the spread of English played a key role in the expansion of the cultural, economic and political influence of British and American or the "Center" (Kachru, 1986) in less developed countries, like Yemen, or the "Periphery" (ibid), especially in government and education (Phillipson, 1992). Phillipson (1990: 128) asserts that "ELT was seen as a means towards political and economic goals, a means of securing ties of all kinds with the Third World Countries". Dua (1994: 10) posits that the USA looks at the promotion of English as

“one of its objectives of cultural policy”. English, therefore, is seen as a fundamental component of American and British foreign policy (Al-Issa, 2006a).

Seeing language and knowledge as socially constructed (Vygotsky, 1978), therefore, learning a language is dependent on the community of people who share particular beliefs and values (Revathi Ramiah et al., 2007). In Yemen, the population is mostly made up of people who live in the south and those in the north part of the country. These diverse contexts reveal that there is no “one” Yemeni learner rather there are two types of learners with varying needs and cultures. Culturally, learners in Hadramout Governorate, in which the present study took place, represent those in the south of Yemen. This region of the country was occupied by the British for 129 years (1839-1967). Therefore, issues related to colonialism might affect learners’ attitudes towards the West and their culture.

Despite being mono-ethnic, they are culturally diverse. As seen, diverse socio-cultural factors are found that might have an impact on Yemeni EFL learners’ learning process. Some are inherent while others are imported to meet the demands of the 21st century, the age of globalisation and information. With this in mind, the researcher in the current study looked at some of these factors by identifying petroleum engineering students’ attitudes and orientations towards the English language and the culture of the English speaking world, on the one hand, and understanding their LSPs, on the other hand. The former issues are related to those inherent attitudes and feelings. For the learners’ LSPs, the information would reveal their conception of learning and hence could be retrieved when intended to apply, for instance, a multimodal approach such as visual literacy, technoliteracy,

multiliteracies and so on (Kress, 2000) to help learners cope with the enormous changes in literacy practices and functions.

1.1.3 Hadramout University for Science and Technology (HUST): A Brief Overview

HUST is one of the most popular universities in Yemen. It was established in 1996 to fulfil several goals and objectives. Among them are:

- To equip the university students with up-to-date required knowledge for their different specialisations and offer distinctive learning programmes.
- To develop programmes and scientific centres that respond proactively to the needs of the community and its developmental plans.
- To gather theoretical knowledge and applied sciences to increase the graduates' level especially in the computer sciences, electronic technologies, oil manufacturing, and so forth.
- To widen and increase linkages with other universities and to strengthen mutual research projects and transfer of technology mechanisms with eminent universities.

The main campus of HUST is situated in Mukalla, the capital of Hadramout Governorate. HUST consists of the following faculties: Faculty of Medicine, Faculty of Nursing, Faculty of Petroleum and Engineering, Faculty of Environmental Sciences, Faculty of Business Administration, Al-Mukalla Faculty of Education, Faculty of Arts, Faculty of Sciences, Seiyun Faculty of Education, The Girls' Faculty of Education, Al-Mahra Faculty of Education, Soqotra Faculty of Education and Faculty of Applied Sciences.

The total number of students at HUST in the academic year 2006-2007 is 9750 students (7379 males and 2371 females). Like all Yemeni universities, the admission to HUST is based on many conditions. Among them are: first, students must pass in the General Secondary School Examination (GSSE) with a required grade for each faculty and second, they are subjected to placement examinations, oral and written, organised by the selected faculty. However, there are some faculties which accept students based only on their final score on the GSSE.

1.1.3.1 The Faculty of Petroleum and Engineering at HUST

The Faculty of Petroleum and Engineering (FPE hereafter) was established in 1996 as a unit attached to HUST. FPE is one of the biggest faculties of the University. It comprises six areas of specialisation or majors: Chemical Engineering, Petroleum Engineering, Architectural and Environmental Planning, Computer Engineering, Electronic Engineering and Communications and, Civil Engineering. The Faculty follows the "semester system", in which students have to study a number of subjects related to their specialisation.

The Department of Petroleum Engineering (DPE hereafter) was one of the first-established departments at FPE. It was established in response to the urgent needs of the society. That is, the existence of many oil companies in Hadramout Governorate- the main centre of oil production in Yemen- motivates the government to establish such a department to meet the society's needs.

In the FPE, there are 1096 students (897 males and 199 females) who constitute 11.2 % of the total number of the students in HUST in the academic year

2006-2007. As far as the DPE is concerned, there are 191 male students and no females in the department. As noted, the percentage of the students in the FPE is small (11.2 %) and there is a few or no female students in all the departments (a total of 199 females in the FPE and no females in the DPE).

These two problems are quite common among the Yemeni universities. For example, the universities are dominated by social science and arts students as only about 13 % of students at present study science, engineering and technology (Higher Education Development Project, Ministry of Higher Education and Scientific Research, Yemen, 2006). This low enrolment rate from the engineering and science students may be because a high rate of unemployment among graduates is from these fields (ibid). It is assumed that universities in Yemen have failed to equip these graduates with the desired skills which the workplace exactly requires (ibid). Another problem concerns the scarcity number of female students in the university education, in general, and in the fields of science, engineering and technology in particular. It is found that only about 26 % of the university population are girls, and their representation is strong in the fields of education, social sciences, humanities and medical sciences (ibid). The main problem impeding greater equity in higher education is not particularly a higher education issue but a more general one concerning the Yemeni society and its values and traditions (ibid).

1.1.3.2 The English Language Curriculum for Petroleum Engineering Students at HUST

Like all the faculties in HUST, English is taught to first year petroleum students as a faculty requirement for one year. It attempts to qualify these students with the required knowledge they need in their academic and occupational lives.

Specifically, the course aims to “develop and improve student’s communication competence in the four language skills” (Al-Fadly, 2004: 18). Despite taking the course, they still faced a lot of difficulties in using English. Obviously, there are many factors that may cause the students’ low proficiency in English. Yet, much more insight and beneficial data might be obtained by concentrating on the appropriateness of the English language syllabus.

It is widely agreed that teaching materials should reflect the needs and expectations of the audience- students and sponsors. By evaluating the teaching materials, the teacher or the material writer will get feedback that will help him/her in recasting or changing the contents of the course in order to effectively meet the learners’ needs. Since one of the aims of the present study is to reduce the gap between what is taught and what is required, it is imperative to critically review the current English language course offered to petroleum engineering students at HUST. The purpose of this review is to highlight the strengths as well as the weaknesses of the course so that discrepancy, if any, could be overcome. While reviewing the course, the researcher adapted Hutchinson and Waters’s (1987) evaluation checklist. It should be noted that the focus of this review will be the methodology and the contents of the course, as it is a pedagogic device, which is of concern in this study.

Generally speaking, before 2004, the English language syllabus in almost all the faculties in HUST was designed by ESP teachers (Al-Fadly, 2004). For instance, in the FPE the curriculum was just a collection of different topics related to the engineering specialisation. Designing the English language course for engineering students and other majors presented a lot of difficulties to the teachers. This is

because their background knowledge, which is education, is different from that of the students. This problem has been highlighted by many researchers. For example, Pritchard and Nasr (2004) comment that as these teachers do not have as much technical background as their students do, therefore, they “lack confidence in their own knowledge and expertise” (ibid: 426). Moreover, the English courses designed by these teachers are not based on the students’ needs and interests (ibid). The importance of having relevant background knowledge and expertise is clearly pointed out by Nunan (1987: 7):

If teachers are to be the ones responsible for developing the curriculum, they need the time, the skills and the support to do so. Support may include curriculum models and guidelines and may include support from individuals acting in a curriculum advisory position. The provision of such support cannot be removed and must not be seen in isolation from the curriculum.

However, since 2004, the English language department at the Faculty of Education has revamped the syllabus by replacing the materials designed by the ESP teachers with ready published materials. This syllabus is offered to all first year students in HUST regardless of their different majors. As such, instead of developing new English courses to meet the needs of the students, only one course has been adopted and implemented to all the students including petroleum students.

The new syllabus was written by Al-Khuali (2003) for Jordanian post-secondary school students and published by Dar Al-Falah. It consists of two books entitled “English Skills One” and “English Skills Two”. While the former is taught in the first semester, the latter is implemented in the second semester. Each book consists of fourteen units. Each unit contains one passage divided into three parts. Two of these parts are for reading comprehension while the third for listening

comprehension. Each passage is followed by exercises on reading, listening, vocabulary, grammar, punctuation, spelling, pronunciation and writing.

In *English Skills One* and *English Skills Two*, workbook and teacher's guide are not provided. The following are the headings of the fourteen units in the former course: 1) The Migration of Birds, 2) The Use of Compass, 3) Solids, Liquids and Gas, 4) Language and Community, 5) Weight and Mass, 6) Speech Organs, 7) Manager-Employee Relations, 8) The Universal Declaration of Human Rights, 9) Industries from Forests, 10) Public and Private Sectors, 11) Mr. Phileas Fogg, 12) What is Linguistics?, 13) Advertising and Marketing, and 14) Man and Science. On the other hand, the titles of the passages of the fourteen units in *English Skills Two* are: 1) Efficient Studying, 2) How Nature Breaks Rocks, 3) Temperatures and Thermometers, 4) What is Language?, 5) Moonlight, 6) Bees and Colour, 7) Physical Fitness, 8) Urban Explosion, 9) Graphs and Graphing, 10) Industrial and Human Relations, 11) What is Technology?, 12) No More Smoking, 13) The Scientific Method, and 14) Sudden Changes on Earth.

Moreover, in these textbooks, the following observations can be easily noticed:

- 1) Grammatical/ structural descriptions are dominant, except for few activities that are functional and/or situational.
- 2) Language points covered in *English Skills One* are: negation, interrogative, prepositions, present perfect continuous tense, relative omission, adjective derivation, so... neither...nor, either... or, conditionals, simple, continuous and perfect continuous aspects of the verb, auxiliary verbs, noun clauses,

subject-verb agreement, word replacement (only /none but), noun derivation, question-tags, verb derivation, wh-words, passive and active voice, wh-questions, conditional sentences, direct and indirect speech, relative pronouns and active-passive. On the other hand, language points found in *English Skills Two* are: noun derivation; irregular verbs; non-progressive verbs, past progressive, past perfect, prepositions, ditransitive verbs, used to (past habit), participles (past and present participles), polite requests (would you mind), phrasal verbs, adjectives, gerund or infinitive, too or enough, pluralization, subject verb agreement, auxiliaries (should, ought to, have to, must, used to), self-forms (emphatically or reflexively), verbs and tenses, adjective clauses, co-ordinate and subordinate conjunctions, uses of already and yet in affirmative sentences, reported speech, noun clauses, adjective derivation, prepositions, affirmative-negative (already, yet), and conjunctions.

- 3) More emphasis is put on reading skills, which in some cases is integrated into controlled and guided writing only. Listening and speaking receive the least focus.
- 4) Organisation of each unit is by a set of pattern of components, i.e. reading, listening, vocabulary, grammar, punctuation, spelling, pronunciation and writing.
- 5) The subject matter in the materials is not related to the students' specialisation i.e. petroleum engineering.
- 6) Most of the exercises are independent from each other. Each exercise is isolated from the one that precedes or follows. Linkage between units and within a unit is hardly seen.
- 7) Most, if not all, of the exercises are to be done individually.

8) Roles of teachers or students are not specified.

From the above-given rapid review, it is noted that many of the titles of the passages, which appear in the two books, are so far from the petroleum engineering specialisation. In *English Skills One*, for example, one could find: *The Migration of the Birds, Language and Community, What is Linguistics* and so forth. In the *English Skills Two*, *What is Language, Moonlight and, Bees and Colour*, for instance, could be seen. Implementing such topics, instead of related ones, to the petroleum students may be a learning obstacle as they seem to be far enough from equipping the students with what they “have to be able to do at the end of their language course” (Robinson, 1991: 7). This is because engineering students do need the English language in reading their specialist literature, academic journals, English drawings, instructions and computer software, attending conferences/lectures/technical or business negotiation in English, communicating with foreign engineers in design and at work-site, going abroad for visits and receiving foreign visitors and so on (Chen, 2005).

In addition, these textbooks lacked real engineering activities, which could create class interactions and language use. Such a course was described by the English language teachers at HUST as more related to General English (GE hereafter). Teaching petroleum engineering students GE would mismatch the awareness of what these students exactly need (Hutchinson and Waters, 1987). The researcher concurs with Kitkauskienė (2006: 89) in that it is not enough for ESP learners, like the petroleum students, to acquire GE as they should study “specialised programmes which are designed to develop the communicative use of English in a specialised field of science, work or technology”. Such purposeful courses should be