

# **Vocational Education in the Kingdom of Saudi Arabia**

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## **Abstract**

The education and training systems in many Muslim countries have remained traditional and resistant to innovation. The Kingdom of Saudi Arabia has attempted to innovate whilst preserving worthwhile traditions through introducing a system of administration which combines the modern and the traditional. The attempt has been only partly successful. This thesis attempts to throw some light on the main reasons for the technical/industrial education system in the Kingdom of Saudi Arabia remaining weak.

Chapter one looks into the historical background of education in the Arabian peninsula from the period before Islam until the emergence of Saudi Arabia. An attempt has been made to trace the main historical events which may have some significant effects on the status of the education and training system. Chapter two presents the contemporary education and training system in the country and highlights the effects of the weak relations and coordination between the various training establishments. Chapter three examines the Government's policies towards technical/industrial education through studying the five Development Plans (1970 to 1995), which explains the effects of separate planning for economy and education. Chapter four analyses the general concept of vocational education in the West as well as the Islamic notions. Some of the most important reasons for devaluation of the vocational education provision in the West and in the Islamic world have been discussed. Chapter five presents a historical sketch of the education and training system in England and extracts some lessons from its experience. Chapter six presents empirical evidence of weakness of technical/industrial education through the field work carried out in the industrial institutes in the Kingdom of Saudi Arabia. The overall summary of the thesis and the conclusions drawn from the present study are presented in chapter seven.

The traditional view of education was found to be the most important among the various reasons concluded for the weakness of the education and training system in the Kingdom of Saudi Arabia. It held back the education system in isolation from social and economic developments and deprived its graduates from effective participation in the development process of the country. The thesis recommended a comprehensive and constructive integration of the modern and traditional models in the Kingdom. To achieve this comprehensive and constructive integration, extensive and broad changes of attitudes and ways of thinking are required from the policy makers of the educational system in the Kingdom of Saudi Arabia.

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## List of Abbreviations

<b>A level</b>	Advanced Level of the GCE examination in England
<b>AH</b>	After (Hejrah) the Migration of the Prophet Mohammed from Makkah to Medina
<b>AS Level</b>	Advanced Supplementary Level of the GCE examination in England
<b>BG</b>	British Gas in England
<b>BT</b>	British Telecom in England
<b>BTEC</b>	Business and Technology Education Council in England
<b>CGLI</b>	City and Guilds of London Institute in England
<b>CPVE</b>	Certificate of Pre - Vocational Education in England
<b>CSB</b>	Civil Service Bureau in the Kingdom of Saudi Arabia
<b>CSE</b>	Certificate of Secondary Education in England
<b>DE</b>	Department of Employment in England
<b>DMLA</b>	Deputy Ministry of Labor Affairs in the Kingdom of Saudi Arabia
<b>EDC</b>	Education Development Centre in the Kingdom of Saudi Arabia
<b>FAS</b>	Funding Agency for Schools in England
<b>GCE</b>	General Certificate of Education in England
<b>GCSE</b>	General Certificate of Secondary Education in England
<b>GDP</b>	Gross Domestic Product
<b>GNVQ</b>	General National Vocational Qualifications in England
<b>GOTEVT</b>	General Organisation for Technical Education and Vocational Training in the Kingdom of Saudi Arabia
<b>IPA</b>	Institute for Public Administration in the Kingdom of Saudi Arabia
<b>IPPR</b>	Institute of Public Policy Research in England
<b>ITBs</b>	Industrial Training Boards in England
<b>JTS</b>	Job Training Scheme in England
<b>LEA</b>	London Education Authority in England
<b>MOP</b>	Ministry of Planning in the Kingdom of Saudi Arabia
<b>MSC</b>	Manpower Services Commission in England

<b>NACETT</b>	National Advisory Council for Education and Training Targets in England
<b>NVQ</b>	National Vocational Qualifications in England
<b>OTFs</b>	Occupational Training Families in England
<b>P.B.U.H</b>	Peace Be Upon Him
<b>PTT</b>	Post, Telegram and Telecommunication in the Kingdom of Saudi Arabia
<b>RSA</b>	Royal Society of the Arts in England
<b>SMC</b>	Secretariat of the Supreme Manpower Council in the Kingdom of Saudi Arabia
<b>TEC</b>	Training and Enterprise Council in England
<b>TVEI</b>	Technical and Vocational Education Initiative in England
<b>Y.M</b>	Yahya Murtada ( the Name of the Researcher )
<b>YOP</b>	Youth Opportunities Programme in England
<b>YTS</b>	Youth Training Scheme in England

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## Introduction

Vocational education provisions have historically been differently valued in different societies. This is because views have differed as to what is education and what is work. For example, most European societies, for centuries relied on the ancient Greek political and educational philosophy which stratified the ideal society into two classes: leaders and workers. By education, therefore, Plato meant only the education of leaders and he had nothing by way of education to offer to the workers. Plato contended, “ *The rulers should rule and the workers should work.... The carpenter should confine himself to making furniture and the shoe maker to making shoes. Each person should perform the job for which he is best suited.*” (In Holmes (1981) pp. 133-4).

Questions of education and work were originally philosophical and political and have become educational and economic issues only after industrialisation started. In other words, these questions reflected to some extent the dominant cultural characteristics of societies at a particular time. In the present time, with large scale technical progress the provision of vocational education has been subjected to many rapid changes throughout the last decades in industrialised countries as well as in many developing countries. As historical and cultural characteristics in countries like Germany, Japan, and the United States of America, have been more flexible, technical and vocational education have been more successful and resulted in fruitful consequences. However, in countries like England and Saudi Arabia, where cultural traditions have been more rigid, attempts to develop vocational education provision were not so successful.

The academic/vocational division of education was to some degree, accepted as a necessity or as a fact of life, during the past century. The industrial establishments in many Western countries were somehow contented with the quality of their unskilled or semi-skilled workers when the mass production methods became prevalent. However, in the past decades as the new technologies began to emerge in each and every sphere with immense implications on the social and economic domains this dualism of academic and vocational education came under vigorous attacks. Furthermore, the effects of the global telecommunication revolution and the globalisation of economy had altered the ways of thinking towards many aspects of the social life. The need for a well educated, well

trained workforce became pronounced, therefore the division between academic and vocational by itself did not appear to be the major problem as much as the deeper social and attitudinal divisions. In some societies vocational education and academic education were delivered in separate institutions but they tended to enjoy equal status. In some other societies, following Plato's philosophy, vocational education was under-valued on the ground that it was a narrow pathway and work related training which was not considered to be one of the aims of good general education. Instead it was considered the responsibility of the employers to train their required workforce.

In the Kingdom of Saudi Arabia historically, there was hardly any provision in schools for vocational education. A start was made after the Kingdom started to develop, in the fields of industrial, agriculture and commercial education. Technical education since then has been exposed to many changes and adjustments. Many of these changes were influenced by the 1970 oil boom, after which the country had witnessed large economic, social, and technological transformations. Because of huge investment of oil revenues into development, so intense, so rapid, and so sudden were these social, economic and technological changes that the education system in general and technical education in particular could not respond to them effectively. Consequently, the Saudi government had introduced rapid changes to the education and training system in the hope that it would be able to accommodate the new developments. However, the effects of these changes have remained insignificant. The rate of participation of school leavers in the provision of technical/industrial education and their attainment has remained very low. Similarly the proportion of Saudi graduates of technical/industrial education system in the world of work have remained at its lowest possible level. Furthermore, the relevance of technical/industrial education to the demands of the national manpower and national economy has remained spurious.

The Kingdom of Saudi Arabia has been operating according to two different ideals, that is, the modern and the traditional patterns of society. Most of the government's apparatuses are highly dependent on the modern systems of administration and economic development. Technical education is considered to be a modern system which was modelled from its inception on the Western concepts and ideals. The general education system, on

the other hand, had remained traditional in its orientations. In other words, curriculum design and development, teachers and methods of teaching, and assessment are traditional. In an attempt to modernise the general education system and to end the academic/vocational divide, the Saudi government tried in the 1970s, to integrate some of the technical aspects within the general academic education system. However, the attempt was not successful and was abolished. Several other attempts were made later on but all resulted in the same outcome. Finally in 1980, the Saudi government established a separate body called the General Organisation for Technical Education and Vocational Training (GOTEVT) to supervise technical education. This was done on the assumption that technical education would operate more effectively when it was separated from general academic education. But even this differentiation did not achieve what was expected of it. The problem was deeper than the institutional arrangements; it had roots in the cultural traditions of the country.

This thesis will concentrate on exploring the main reasons which led technical/industrial education to fail and to remain ineffective. The researcher will concentrate on studying the Saudi system of technical education especially the industrial education. The importance of this study evolved from three general observations. First, despite the vast and rapid changes the government of Saudi Arabia had introduced to develop technical/industrial education, it remained low status provision. This can be observed clearly from the quality of its students and from their low rate of participation and attainment. Furthermore, most of the pre-vocational courses which were introduced in the general academic education system ended in failure. Second, many social and technological developments were taking place in the Kingdom in the last decades. The responses of the indigenous education and training system to those changes and their effects were not so visible. This indicated clearly the ineffectiveness and the weakness of the education and training system. Third, gathering information from various sources other than school and technical institutes was becoming easier and at the same time wider due to widespread modern technologies. Increasingly the education and training system in the country was becoming out dated and thus, isolated from real life and present develop-

ments. This was a clear indication of yet another weakness in the education and training system in the Kingdom of Saudi Arabia.

The important questions to be asked are : (a) how long can the Kingdom of Saudi Arabia continue to utilise the latest Western technologies and methods of administration without the full commitment of its educational system to and the effective participation of its youth in them? (b) to what extent can it modernise its technical/industrial educational system by utilising the latest Western technologies without adjusting them to the indigenous Islamic culture? The researcher will attempt to address these issues in this thesis. However, the main focus will be on the key research question, which is, why has the technical/industrial education in the Kingdom of Saudi Arabia remained weak?

To answer this question the researcher will conduct a literature survey which will be guided by the following questions:

1. What is the nature and scope of the education and training system in the Kingdom of Saudi Arabia?
2. What is the scope for improvement in the light of the planning strategies?
3. What is the concept of vocational education in the Western as well as the Islamic point of view?
4. To what extent do the Western concepts resemble those of Saudi Arabia?
5. What are the general reasons for the failure of vocational education in some developing countries, Saudi Arabia in particular?

In order to answer the main research question, the researcher will also conduct an empirical study in the Kingdom of Saudi Arabia. In the light of the time limit and the resource available, the researcher envisaged that probably the best methods to use in trying to find out why technical/industrial education was weak, are structured interviews with the principals and multiple choice questionnaires for the first and third year students of the industrial institutes.

The thesis will be divided into seven chapters. Chapter one will look into the historical background of education in the Arabian peninsula from the period before Islam until the emergence of the Kingdom of Saudi Arabia. Chapter two will study the nature, scope and status of the education and training system in the Kingdom of Saudi Arabia. Chapter

three will conduct an analytical study of the five Development Plans (1970 to 1995), and also present the results of a study conducted by the Institute of Public Administration (IPA) about the national workforce in the private sector. Chapter four will attempt to conceptualise the problem by examining the various concepts of vocational education both from the Western as well as Islamic points of view. Chapter five will concentrate on studying the different reasons for the weakness of vocational education in England. The chapter also will present an empirical study conducted in the field of training in British Gas and British Telecom. Chapter six will present the results and the analysis of the empirical study conducted in the Kingdom of Saudi Arabia. Chapter seven constitute the overall summary of the thesis and the conclusions reached. Due to the different terms used to describe this type of education, the researcher is going to use the terms 'vocational education' and 'technical education' interchangeably in this thesis. Both terms are taken to indicate those learning activities, including the acquisition of skills. However, the term 'vocational training' is going to be used to describe those training activities for specific skills.

The researcher believes that this study is an important but only a modest contribution to the study of education in Saudi Arabia. He, by no means, underestimates the magnitude of the Saudi educational problems. These problems are of a complex nature and reflect diverse purposes. Many other educational aspects need to be explored and researched, and many serious questions need to be answered such as: the relevance of various Saudi cultural traditions to the new technological changes. What are the implications of the various fast and slow reactions to economic and social changes for the main aims of the education system? The fundamental question that underlies this study remained: how can education socialise the younger generation of a society into the modern life without losing their commitment to their cultural heritage? These questions, the researcher intends to take up in his future research plans and to continue to explore further in the field of education.

# CHAPTER ONE

## Historical Background : The Kingdom of Saudi Arabia

This chapter will present a brief account of the nature of education in the Arabian peninsula before and after the emergence of the Kingdom of Saudi Arabia. Forms of education among Arabs before the emergence of Islam will be explored first. Then some reference will be made to the major changes in the field of education after the emergence of Islam. This period will be divided into four historical stages. The first stage will present the early beginnings of education in Medina in 622 until the beginning of Umayyad rule in 661, the second stage will present the major educational developments during the Umayyad and Abbasid Caliphates (661- 1258). The third stage will concentrate on the rise and fall of the Turkish rule from 1281 to 1923. The fourth stage will examine the major effects on the education system after the emergence of the Kingdom of Saudi Arabia in 1930s to the present. In each of these stages there were some significant events which affected education and its status in the Arabian peninsula.

### Education Among Arabs Before Islam

Geographically Arabs lived in the Arabian peninsula from the Qalzum sea (Red sea) in the west to the Basra in the east and from Yemen in the south to the border of Sham (Syria) in the north (Abduldaïm - 1984). Their land was mostly desert where the life was hard. The peninsula was divided into three major parts, south, north, and Centre. These divisions were not politically imposed on Arabs, but the way they lived and traveled had created these divisions.

Demographically Arabs were divided into two main sections: Arabs who Perished (*Baida*) and the Remaining Arabs (*Baqya*). The Remaining Arabs were also divided into two groups: Arab *Ariba* - *Qahtani* - (descended from Sam the son of Noah), and Arab *Mustariba* -*Adnani*- (descended from Ismail the son of Ibrahim). Al-Omeri (1985) among others would agree with this way of identifying Arabs of the peninsula. However, others would argue that all Arabs who lived in the peninsula were descended

from Sam the son of Noah. The argument was that Noah had three sons who spread after the deluge each in a different direction, whereas Ham settled in Africa, Yafith in Europe and Sam in the south of the peninsula i.e. Yemen (Masoad et al, 1990). On the other hand, there were non-Arab groups who lived in the area; Al Omeri (1985) had identified two races: the Jews who mainly lived in Medina and Khaibar, and migrants who were either slaves or small groups of people who lived in that area. The other minor division was the Bedouins and the Hadara (town dwellers). The social relations between those divisions and groups were very limited and only for certain purposes. Wars and disputes were the most prominent features of their relationships. The variations of education forms could also apply to the three major parts, south, north, and Centre. The first two, for instance, had had an educational history which was far better and more advanced than those in the Centre.

This could also apply to the different groups and divisions within each part. The different ways of life meant different norms, and thus, different purposes and forms of education. On one hand, the geographical location had its effects on the kind of education each group had adopted and used, and on the other the demographic context had affected the form of education each group adopted. People who lived in the desert, for instance, were mostly tribes, and the kind of education they required was informal and mainly emphasised loyalty to the tribe and its status among other Arab tribes. They had some kind of education which was mostly informal- they had to teach the child all kinds of knowledge and skills that were most needed by the tribe. For example, in the field of arts the individual should learn the art of speech, the history of wars, stories of other nations, and above all poetry. Poetry occupied the most important status among Arabs. Al-Alosi (1924) pointed out that *"It was such a great honor for a tribe to have a poet. That was a strong cause for other tribes to congratulate the tribe and to celebrate the new poet. A poet through poetry would protect, preserve, and immortalise the name of the tribe."* (Translated by Y.M, cited in Abduldaim, 1984, p - 134). An individual in a tribe should also learn about the stars and different seasons (Astronomy and Astrology). In the field of vocations he/she should learn wool shearing, hunting,

tent building and the making of war materials, beside other arts like medicine, directions and weather.

In cities the patterns of life and therefore the needs were different. People who lived in cities were mostly a mixture of both (tribes and non - tribes) where life was more stable and they tended to have more organised forms of education. Education was mostly political, agricultural and religious. Life in cities was considered to be more civilised and developed than the one in the desert. In Makkah, for instance, all Arab tribes would gather annually so that they would perform hajj and sell their goods. They would also discuss their disputes and problems, and then compete in poetry, racing, wrestling and so on. Those kinds of activities tended to make the city more educated and more civilised.

Although *Kuttab*s were known well before Islam, education in that period was informal rather than formal. The arts of reading and writing were not popular among the Arabs especially those of the Centre. Shalaby (1954) under the heading (Kuttab for the teaching of Reading and Writing) wrote:

“ This sort of Kuttab preceded the rise of Islam, but it was on a limited scale. It is recorded that Sufyan b. Umayyah and Abu Qais b. abd Manaf were the first Maccan natives to learn the art of reading and writing. Their teacher was the Christian Bisher ibn abd al-Malik who had learnt this art in Hira. And, the first man in Arabia to assume the teaching of reading and writing as a profession was a native of Wadi al-Qura who lived there and began to teach some of his fellow-citizens to read and write. Thus the number of people learnt this art increased, but slowly, and, when Islam came, there were only 17 persons from Quraish who were able to read and write.” (p - 16)

Although the number seventeen was contested, there was no doubt that illiteracy among Arabs was widespread. That might be because the art of reading and writing was not an important tool or profession in their daily life at that time.

During that period education was mostly vocational in the sense that preparing the young to perform a certain job required by his or her group. However, there was no educational institutions for this purpose, instead it was the vocation of either the family or the tribe. Nonetheless, vocations and trades were there in every city and within every tribe in the desert. Those vocations or trades were useful for two purposes: first, they were useful for commercial purposes like those in cities, and second, for personal

or daily life necessities as those in the desert. In cities, for instance, certain types of vocations and trades were used in order to make a living. Life in the city was more complicated and diverse and so were the needs and requirements. People who lived in the city normally wanted luxury commodities; the vocations within cities tended to fulfill this objective. Life in the desert on the other hand was simple. Each tribe knew what its needs and requirements were - mostly limited to mere necessities. Therefore, vocations and trades were not used for commercial purposes but for various needs such as, defense (against weather, enemies, and wild animals), and daily consumption.

Vocations and trades in the parts of Hijaz were not the same; it varied from one part to another. In Makkah, for instance, commerce and traveling were the main source of living. In Taif - a city near Makkah - industry and agriculture were the prominent features of the city. Those differences were mainly caused by the different social attitudes to certain occupations and to some extent by the geographical location. There were some occupations which were highly admired and valued among Arabs, while some other were disdained and devalued. They disdained goldsmiths and blacksmiths but they respected commerce and agriculture. Most of the degrading jobs were done by slaves or by immigrants (Al Omeri -1985).

Clearly the social and educational systems were led by a class system or tribalism which was considered as a necessity for survival. These distinctions had created the degrading status of some vocations especially those jobs which were the trades of migrants and slaves. In other words, the source of disdain of certain vocations was not due to the nature of the job but the status of the social class of who was performing it. That negative attitude combined by the restricted purpose of education did not help the early Arabs to be advanced and well informed. Furthermore, the various forms of education did not add up to form a national unified system of education. Instead the purposes of education were very limited and served immediate needs. That kind of education also served to strengthen the inward looking nature of each group. Although the Arabian peninsula was not colonised, Arabs in general were not united and could not construct a unified front to defend their land regardless of the strength or weakness of the education system each group was following. It was, however, the harsh climate

and the rough passages of their land which prevented any intruder (Al-Khateep, 1992). Furthermore, the lack of organised forms of education had deprived them from compiling a written culture.

In the other two parts, north and south, education also took different shapes. The Arabs of the north learnt much from the neighbouring empires (Persian and Roman). Nevertheless, it has been reported that the Arabs of the south were more advanced in reading and writing than other two groups (Abduldaim, 1984). Archeologists had found some remains of the Arab of the south which were a clear indication that they knew the arts of reading and writing more than those in the north. However, that alone could not stand as a strong argument that illiteracy and ignorance were not widespread among Arabs for two reasons: first, many historical events showed that Arabs did not use the art of writing in their daily life, instead they relied mostly on oral communications. They were famous for their strong memory and for the large amount of information and poetry they used to memorise. The second reason was that Arabs did not leave a considerable amount of written culture. Some of the Arabs who were traveling for commercial reasons had some knowledge of reading and writing but the majority was illiterate. Arabs had knowledge of various fields which were closely related to their way of life, like astronomy, astrology, geography, and medicine. These fields of knowledge were conveyed to the next generation through oral means.

In the following sections the emergence of Islam and its effects on these issues in the field of education in particular will be examined.

### **Education Among Arabs after the Emergence of Islam**

The different kinds of changes Islam had brought about were not limited to religious creed only, but there were comprehensive systems of social, political, economic and educational. For the first time in their history Arabs started to understand the universal meaning of togetherness and unity. This notion was not there before Islam as Qutb (1986) pointed out that *“Although the fundamental factors for unity were there; on the unity of land, unity of language, culture, history, and interests, Arabs were fragile and not united.”* (Translated by Y. M. p -15).

The education of Arabs in the peninsula was affected greatly after the emergence of Islam. There were also various historical events which affected its progress or stagnation. These historical events will be traced in four different stages:

1. The establishment of the first Islamic State in Medina.
2. The resultant effects of removing the capital outside the peninsula.
3. The rise and fall of the Ottoman Empire and the status of education in the peninsula during that period.
4. The emergence of the Kingdom of Saudi Arabia and the resultant effects on education.

**The first stage** began in Medina in 622 when the Prophet (p.b.u.h) arrived there. He was born in Makkah in 570. At the age of forty he received the first revelation from Allah. The first verse he received was *"Proclaim or "Read" in the name of thy Lord and Cherisher, who created. Created man, out of a leech-like clot. Proclaim! And thy Lord is Most Bountiful"* (Surah 96, Verse 1-3). Then he started calling upon the people of Makkah to stop worshipping many idols and come to worship the one and only God. At the beginning only few people accepted the call while the majority stuck to their traditions and refused the new message. With that small number he established what was to be known as the first school in Islam, in the house of al-Argam in Makkah. He would sit there and teach his followers the basic principle of monotheism. When the number of his followers had increased and some of the powerful people began to accept his call and gather around him, the Makkans plotted to kill him, and therefore, he migrated to Medina in 622. That year is to be the first of the Hijrah date.

In Medina he established the first mosque in Quba and continued to teach his companions openly and freely in the mosque. The purpose of that was to establish a strong faith and pure belief in the message of Islam. Two years later in 624 the second year of Hijrah the Makkans attacked him and the battle of Badr took place. The pagans were defeated and the Muslims were victorious. In order to capitalise on the battle outcomes, Shalaby (1954) pointed out *"several captives were set free on condition that they taught a certain number of the Muslims to read and write, and this service was*

*conducted as their ransom.*" (p - 17). This move had been considered as a landmark which emphasised the importance of education in Islam.

Reading and writing were essential characteristics of those who wanted to understand the message of Islam and comply with it. The purpose of education, for the first time in the Arabs' history, was clearly stated. The significance of that was in the great transformation of the way people used to live and think. More importantly Islam did not specify the purpose of education as purely spiritual and of course not purely material, but a combination of both "*But seek, with the (wealth) which Allah has bestowed on thee, the Home of the hereafter, nor forget thy portion in this world.*" (Surah 28, Verse 77). The Quran encourages people to think of the relevance of things around them: "*Behold! in the creation of the heavens and the earth and the alternation of Night and Day, there are indeed signs for men of understanding*" (Surah 3, Verse 190). Further, "*We created not the heavens, the earth, and all between them, merely in (idle) sport.*" (Surah 44, Verse 38). Through that Muslims resumed their normal lives but with collective and broad purpose. Since the message of Islam was not confined to the Arabs only but to all mankind, the purpose of education then was universal rather than local or national "*We sent thee not, but as a Mercy for all creatures.*" (Surah 21, Verse 107). And:

"O Mankind! We created you from a single (pair) of a male and female, and made you into nations and tribes, that you may know each other (not that ye may despise each other). Verily the most honoured of you in the sight of Allah is (he who is) the most righteous of you. And Allah has full Knowledge and is well acquainted (with all things)." (Surah 49, Verse 13).

Through that Islam had transformed the attitudes of people towards learning and thinking.

During his life in Medina the Prophet (p.b.u.h) began also to eradicate the negative attitudes toward trades and vocations, especially manual work which was disdained by Arabs. He made the first gesture by giving his only son to the wife of a blacksmith to breast-feed him. This move was revolutionary because Arabs used to send their children to chosen women to feed them. He emphasised the importance of work by telling his companions about the great value of a person who had a trade and gave the example of the Prophet Noah (p.b.u.h) who was a carpenter. He also set the example

by doing his own work by himself. The negative attitudes towards manual work began to disappear among Arabs but not totally. After the conquest of Makkah in 630 most of the Arabian peninsula had embraced Islam. In 632 the Prophet (p.b.u.h) died and was buried in Medina.

Although the message of Islam urged unity, immediately after the death of the prophet there was a split between his companions. The split was on the issue of who was capable and eligible to succeed him (*Khilafa*). One group was insisting that the leader must be one of the Prophet's relative i.e. Imam Ali who was the Prophet's cousin and the husband of his daughter Fatima. This group was known as Shiites. The other group insisted on a selected leader from the Muslim community. This group came to be known as Sunni. This split had its profound effects on dividing the Muslim community into two rival sections. It also led to fighting over power and governing at later stages of Muslim history.

In 632 Abu Bakr became the first Caliph. During the two years he ruled, learning became one of the main features of the Muslim community, and thus, many circles and corners of the mosque became busy with teaching the growing numbers of new Muslims about Islam. Muslims had spread Islam to many neighbouring regions and states. People started to accept Islam in thousands and in a very short period of time the number of Muslims became huge. With that increase of number many forms of knowledge had been introduced and the mosque was not the suitable place any more, therefore, Kuttabs were established outside the mosque. Shalaby (1954) listed the reasons for removing education outside the mosque as follows:

“ Since the rise of Islam the number of students had gradually been increasing, and consequently the number of circles increased too. It is believed that the numerous circles and the necessary disturbance caused by study, prevented worship from being conducted properly... Moreover, studies developed and new subjects such as discussion and debates came into being. These subjects could not be adequately conducted in the mosque where everyone should be reverent and quiet. Under these circumstances the removal from the mosque to Madrasah was natural.” (p - 55).

Learning the Quran and its teaching was the main purpose of education. After that a Muslim must learn a worldly vocation or trade to live on. This simple formula had

been understood by the Muslims, and thus, around each mosque (the focal point of the Muslim community) there were shops and workshops where Muslims used to send their children to learn a trade after a lesson of Quran. Therefore, the early Muslims did not find any difficulty in understanding other forms of knowledge. The basic factor was the strong faith which directed their selection and upon which they measured what was right or wrong, and consequently what was good or bad. Spreading education all over the Arabian peninsula during the period of the four Caliphates (Abu Bakr, Omar, Othman, and Ali) was carried out by groups of Muslims who used to travel to each tribe and region to teach its members about Islam. There was also another way of spreading the message, that was through members of some tribes who already learnt in Medina or Makkah and returned back to their group. This dynamic way of spreading education was supported by the centre of power which was in Medina. Nevertheless, at this stage education did not involve diversity and richness as that of the later stages.

**The second stage.** During the Umayyad Caliphate (661-750) and because of political opposition in the Arabian peninsula, the Muslims capital was removed from Medina to Damascus, and thus, the focus of educating the population of the Arabian peninsula had decreased. However, many forms of educational institutions during this period had appeared beside Kuttabs. For example, palace education where the sons of the Caliph would be educated by a tutor who normally would live in the palace and watch carefully his pupils, because they would become the future rulers. Another form of education involved the book stores which were established mainly for economic purposes but later used for teaching and debating all kinds of knowledge like religion, mathematics, medicine, etc. The spread of Islam to non-Arab counties had weakened the Arabic language, so the need to learn pure Arabic had to be in places that were not affected by the foreign tongue. The only place which had pure language still was the desert. Therefore, people began to send their sons there to learn; meanwhile the Bedouins found it a great opportunity to go and teach the language in the cities so that they could make some money (Shalaby, 1954). Beside all that the mosque as a place of learning was not common.

Vocational education, on the other hand, was not formal : it was still in the hands of the craftsmen and took the form of apprenticeship. It was totally dependent on the personal desire to select what trade he wanted to do for a living. In other words, the state did not have any sort of funding for or control over this type of education. As a result of mixing and interacting with other nations this field had developed and expanded to involve many new industries such as book binding, ship building, textile and war machinery. Nevertheless, throughout the Umayyad reign, education in the Arabian peninsula was mainly confined to the two holy cities of Makkah and Medina. Arabs who were living around them benefited more than those who were far away who had to choose either to travel on their own expense or stick to the early forms which were established at the beginning of Islam. This situation continued after the end of the Umayyad reign in 750.

The Abbasid Caliphate started (750 - 1258) in Baghdad. During that period education had reached its highest peak in the capital city and other big cities around it. All kinds of knowledge, arts and science had flourished. Places of learning had increased and developed too. In addition new institutions such as the houses of learned men, libraries and literature salons had sprung up. Many intellectual debates would be discussed in these sites in the presence of the Caliph himself (Shalaby - 1954). As Arabs came into contact with other civilisations and cultures different to their own, new activities of borrowing and translation of Greek and Persian philosophy took place. As a result many fields of knowledge such as philosophy, chemistry, physics ..etc. had emerged. In 1066 the first school was established as Shalaby (1954) pointed out *"The year 459 AH (1066-1067) should be remembered as marking an epoch in the history of Muslim education. It is the year in which schools began to flourish in the Islamic world."* (p - 15). Between (970-972) the city of Cairo and the Al-Azhar mosque were established by the Fatimids. Al-Azhar was a rich source of knowledge in many different fields, therefore, the number of pupils was enormous and it was increasing. As a response, Caliph had established Al-Nizamia in Baghdad which was equivalent to that in Cairo.

The effects of involvement of Muslims with other cultures and the translations of the Greek philosophies especially those of Aristotle and Plato had created new forms of thinking. Many Muslim scholars such as Al-Kindi (796 - 837), Al-Farabi (870 - 950), Avicenna (980 - 1046) and Averroës (1126 - 1198) had adopted the philosophy of Aristotle and Plato. They were convinced that the Islamic faith could be interpreted in the light of reason only. This argument had initiated many intellectual debates and worries among Muslims, and sometimes conflicts. As a result several Muslim scholars started to establish new methods of deducing the religious point of view towards the new circumstances. They dedicated their lives to study the religion and the new situation and find a common ground on which they would accept or reject the foreign culture. As a result of these researches several school of thoughts had emerged. For example, the mystical 'Sufis' schools which promoted the total detachment from the materialistic world, and the theological practical school which emphasised the importance of both. Of many schools of thoughts only four orthodox schools of the latter came to be well established and known until the present time in the Sunni world, that is, Hanafi, Maliki, Shafie, and Hanbali. This movement of studying the religion and deducing the laws was called new interpretation of religion (*ijtihad*). The methods used by those four schools and their compilations had formed a new science called jurisprudence (*Fiqh*), and the founder of the school was called leader (*Imam*). As a matter of authentication each Imam expressed his opinion towards a certain case and consolidated his argument by referring to verses from the Holy Quran and from the saying of the Prophet (p.b.u.h). These different interpretations were healthy signs of Muslim thinking, furthermore, the different inferences were seen by other scholars as not more than different opinions. Consequently they treated each other with respect and their relationships were friendly.

The problem started decades later when the followers of each school strictly stuck to their Imam's interpretations and methods of deductions and treated them with holiness. Furthermore, each group began to shun and ridicule the followers of other schools. The problem even got worse when in the second half of Abbasid reign the door of new interpretations (*ijtihad*) was to be closed for ever and the work of the Imams to be

considered as the completed laws of Islam. The followers of a certain school began to summarise the work of the Imam since it was very large and extensive. These summaries and contractions carried too many symbols which needed to be explained. That made the job of the teachers and their students very difficult and tedious because they would spend a long time trying to explain and understand these symbols and contractions. As a response, some of those teachers took the responsibility of explaining these summaries by writing scholiums on the side of the main text. Students then would be asked to memorise all the summaries and all the scholiums relating to them (Al-Ashgar 1989). As a result students became more passive than active and more traditional than progressive, and thus, learning became more towards repetition than invention and acquiring knowledge became more dependent on memory than understanding. This situation of fruitless and repetitive discussions had shifted the Muslim nation from their basic message and weakened their stance as a progressive community.

This situation suited the rulers, and therefore, insisted on appointing the followers of a certain school in key positions like those of judicial system and fatwa. Those followers were mostly traditionalists who hated change and always looked back to the past with pride. To keep such people in key positions would secure the position of the rulers as the guardian of the faith, and thus, it was forbidden to oppose them because the consequence would be the hellfire after death. The rulers on the other hand would suppress other groups and deprived them from any financial or political supports, which forced many people to change their school of thought to follow that of the government (Al-Ashgar 1989).

This culture of traditionalism and stagnation occurred for five reasons summarised by Al-Ashgar (1989) as:

1. magnifying the role and status of Imams (leaders)- and promoting imitation;
2. too many repetitive writings and books were published- hindering positive and critical thinking;
3. the weakness of the Islamic State - causing loss of confidence;

4. the appointment of those who followed the same school as that of the ruler in key positions - causing other groups to be oppressed, and thus, great potentials were lost;

5. the claim that each interpreter was correct - allowing many unqualified people to have a say.

The consequences of this culture were devastating in all aspects of life, political, economic, social and educational. Politically it gave the rulers absolute power without accountability. Economically it restricted the wealth in the hands of the few and preached that poverty meant closeness to God. Socially it fueled hatred and animosity between members of the Muslims community and transformed the society from an active and progressive one to being passive and traditional. The Muslim society was not receptive any more and tended to view any new changes with suspicion and hostility. Educationally it restricted the purpose of learning to mere memorisation and repetition of what others had thought and said and considered forward thinking as sinful deeds.

Contrary to the basic message of Islam which promoted justice, equality, unity, and forward thinking, the emerging culture had suppressed these qualities. The status which was given to the Muslim scholars and the treatment of their opinions as a divine message combined with personal greed of some of the rulers had caused this culture to evolve and to influence many parts of the Muslim world. The Islamic state due to this static stance became weak and defenseless.

In 1258 the Mongol attacked Baghdad and inflicted great destruction to its libraries and all places of learning. Since that date Baghdad did not regain its educational or political place as before (Shalaby 1954; Saqib 1977, 1981; Tibawi 1979). After the defeat Muslims preferred to go back to the fundamental foundations of Islam and not to trust anything else as Tibawi (1979) pointed out that:

“ At the height of its power and glory Islam accepted and adapted much of the culture of the peoples it came in contact with. In the ages of its decline confidence was lost and the guardians of its tradition feared and resisted all foreign intrusion.” (p - 45).

A new stage had began somewhere else: that is the emergence of the Ottoman state in 1281. Nonetheless, political change did not positively affect the situation, for Muslims

remained traditional and resigned to imitation, because it was easier and was trouble free.

**The third stage** was that of the Turkish rule (1281-1932). During the Turkish rule Muslims continued their traditional stance and even became more attached to it than before and more nostalgic. Furthermore, the Turkish state did not allow the door of new interpretations to be reopened and continued on the same line of its predecessor, the Abbasid state. In addition it was involved in many wars and disputes so that little or nothing had been left for education. Therefore, illiteracy began to spread all over the Arab and Muslim countries which were under the Turkish control. During the four centuries of the Turkish rule, education was weak and slow in major cities and capitals like Makkah, Medina, Cairo and Damascus. In Hijaz especially Makkah and Medina Kuttabs and mosques education was largely dependent on personal donations and endowment from Muslims of other countries like Turkey, India and Egypt. Tibawi (1979) pointed out that:

“Of the Arab provinces Iraq in the east never recovered the primacy in learning after the Mongol invasion. In the west the splendour of Arab civilization in Spain was no more, and in north Africa the surviving educational institutions were relatively small in number and poor substitutes for those of Cordova and Granada. In the heart of the Arab world, Hijaz, Egypt and Syria, the mosque and other seats of learning either escaped unscathed or were less affected by the cataclysm. To these centres in Macca, Medina, Jerusalem, Damascus and Cairo, scholars from both ends of the Arab world resorted for future study and meditation. Turkish rule had little influence on educational institutions in these centres except perhaps in the form of endowments and donations.” (p - 46).

The vocational education and training system came under state funding and control, and therefore, many training schools had been established in the big cities of the Ottoman Empire. Apart from the weakness of Turkish education it was also limited to few people - mainly the children of those officials in government offices. Al-Rawy (1987) highlighted the effects of the Turkish education system as negative and that:

“It was slow quantitatively, and thus, illiteracy and ignorance were widespread among the population of the Arab countries. As far as quality was concerned, standards were weak and had no relation to the indigenous population since it used the Turkish language as its medium of instruction.” (Translated by Y.M. p - 29).

Towards the end of the Ottoman reign there were three types of education in Hijaz region as Al-Shamikh (1982) put it:

“ The first was traditional education held in the two holy mosques and other mosques. The second was modern public education which used the Turkish language as medium of instruction. The final was private which was traditional in its core with some additional modern applications, therefore, its curriculum was in the middle between the mosque and primary and maturity Turkish education. The people of Hijaz did not like the Turkish education , and thus, did not send their children to its schools.” (Translated by Y.M. p - 133).

The Ottoman education at the beginning of the nineteenth century consisted of Kuttabs and religious schools. Several reforms had been introduced at the end of the nineteenth century which resulted in dividing the education stream into three stages. Primary and maturity each lasted for three years. The preparatory stage was divided into two types; the first was five years, the first three years for maturity; the second was seven years, the first three for maturity. In addition there were industrial, agricultural and teacher education schools. Nonetheless, the people did not feel that the Turkish education was the right route for their children to pursue because they feared the military enrolment which was dominant at that time, and thus the number of pupils was small. Furthermore, education was expensive and out of reach for the majority. This had created a negative feeling among people towards education. Snouck (1931) described the situation in Makkah:

“ If one of the rich or merchants had a number of sons, he would be delighted to see one of them go through the scholars' route, but he would train his sons to follow him in his trade. As for those who were less fortunate in the society, they would train their sons in their vocations. They would also send some of them to their colleagues in other vocations to help and learn, but not to schools. Despite the social status of the learned men, they would not care to educate their sons because education was very expensive and very low in making profits.” (Translated by Y.M, cited in Al-Shamikh, 1982, p - 124).

The result of that attitude towards education was not only the spread of illiteracy and ignorance which were the main features of the society but also a negative attitudes towards those who possess knowledge. As Al-Khateeb put it “ *The educated people became the target of cynicism and satire, and thus, the percentage of the native pupils*

*attending in the two holy mosques did not exceed 5%; the rest were foreigners and from neighbouring countries.”* (Translated by Y.M, cited In Al-Shamikh, 1982, p - 125).

The small number of educational institutions during the Turkish rule had affected not only the Arabian peninsula but all of the Arab world. In the Arabian peninsula illiteracy and ignorance occurred for mainly three reasons:

The fear of military enrolment. The Turkish government had established military education to meet its requirements from military personal. That system of education was the dominant form which enjoyed great financial supports. Furthermore, its methods and strategies were modelled according to the French system ( Al-Rawy - 1987; Al-Ashgar 1989; Saqib 1977). Since the Turkish government was involved in so many wars and disputes both in Europe and Asia, people feared that if they sent their children to Turkish schools they would be enrolled in the army, and therefore, they preferred to send them instead to one of the few private schools which used to concentrate mostly on religious education. The limited number of private schools were mainly relying on charity and endowments. Moreover, they provided education only to a very small number of students, and thus, it was only those who lived near these schools and could afford their expenses who would be able to enroll their children in them. The rest of the population were poor and left without proper education.

The second reason was the distance of the capital from the Arabian peninsula which meant remote funding and development of education. Therefore, the number of public schools available was very small and not enough to meet the population needs. Furthermore, the many wars and disputes had their added burdens on the budget that prevented the government from establishing more schools in the area. Political and theological opposition to the Turkish stance was growing in the Arabian peninsula. That had antagonised the government and encouraged it to spend less on education and to apply more political pressure on the region. That situation contributed greatly to the isolation of the population of the peninsula not only from education but also from the outside world. People of the Arabian peninsula had retained the inward looking and isolated nature which were there before the emergence of Islam. The negative attitudes

towards manual work had also been strengthened and combined with a strong feeling of tribalism.

The third reason of widespread ignorance and illiteracy in the Arabian peninsula was the emergence of the Turkish nationalism in 1900s. The Turkish government imposed the Turkish language as the official language and as a medium of instruction in its schools (Āl-Asheikh - 1990). This policy of Turkish nationalism had antagonised the people of Hijaz who wanted to preserve the Arabic language because it was not only their mother tongue but also the language of the Quran, and losing it meant losing their religion. This policy had prompted many people to boycott the Turkish education totally. That reaction was not from Arabs alone but other Muslim nations had the same feeling - including some Turks- who viewed this as a threat to their religion. Education among Arabs and Muslim at large remained traditional and stuck to unchanging dogmas. That was not to say that Muslims had totally submitted to this situation of traditionalism, on the contrary some of them rejected this stance and introduced alternative models of modernisations (Saqib 1981). As a matter of fact this feeling existed immediately after their defeat by the Mongols.

Many Muslim thinkers rejected that situation and called for a return to the fundamentals. This going back to the fundamental sources in order to develop in accordance with Islam had been called 'fundamentalism' with varying meanings in the East and in the West. The Westerners used the word in its pejorative sense, the meaning which was closely related to the Christian concept of 'fundamentalism' which reflected a culture of rejecting changes and sticking to the old traditions. The Islamic meaning of fundamentalism was that of dynamic and forward thinking process in accordance with the basic message of Islam (Howaydi 1991). However, the response to this situation was on two phases as Saqib (1977) pointed out " *the phase of apprehensive - defensive modernisation, and the phase of experimental - disintegrative modernisation: the first manifesting itself before and the second after the achievement of national independence of the Muslim countries.*" (p - 295). This movement took place in the second half of the nineteenth century and called for total departure from traditions and imitation to go back to the main sources, that is , the Quran and the

Prophet traditions. The movement was represented by prominent figures like Jamal Adin Al Afghani (1838 - 1898), Muhammad Abduh (1849 - 1905), and Rashid Rida (1865 - 1935) (Roy 1992; Saqib 1977, 1981). Nevertheless, the results were mostly superficial borrowing which only helped in changing the peripheral appearance of the Muslim community without any deep commitments. The total departure from the four orthodox jurisprudence schools not only entailed an omission of efforts of ten centuries of literature but also had alienated the Muslim community who rejected the new change. That rejection was represented in their detachment from reality which made their involvement mostly superficial. This situation in the Arabian peninsula was no exception. The Turkish rule came to its final stage by the end of the first world war in 1918 when Germany and Turkey were defeated. In 1923 Ataturk announced the Republic of Turkey.

**The fourth historical stage** which had significant effects on education in the Arabian peninsula was the emergence of the Saudi government in 1923. Saudi Arabia now is a large country which occupies an area of 2,240,000 square Kilometer and has a population of 12 million. Its natural resources are Oil, Gas, Minerals and water. Its climate is mostly hot and dry in the centre and in the north, humid in the west and east, and moderate in the south, temperature can reach 45 - 50° C in summer and below 5° C in winter. The following is a brief history of the Saudi Royal Family.

The history of the Saudi royal family goes back to the eighteenth century and passed through three stages. The first stage began in 1744 by Muhammad Bin Saud who was the ruler of Diriyah in the centre of the peninsula. He and Sheikh Muhammad Bin Abdul Wahhab - religious reformer- formed a joint alliance. Al-Farsy (1990) pointed out that:

“ Imam Muhammad Bin Abdul Wahhab was showing a keen interest in religion and dismayed by contemporary deviations from Islamic teachings, the Sheikh started preaching [the] ... revival of Islam... He ripped away the heresies and abuses which had grown up around Islam and he preached the faith in its original simplicity... For that he was prosecuted and forced to leave his town. He took refuge at Al-Dir'iyah, at the home of Al-Saud... Perceiving the value of Imam Muhammad Bin Abdul Wahhab, Bin Saud concluded an agreement with him that together they would bring the Arabs of the peninsula back to the true faith of

Islamic religion. They confirmed this agreement with an Oath in 1744.” (pp. 12-13)

This alliance entailed a gradual expansion on the land of the Arabian peninsula. However, when ibn Saud captured the holy city of Makkah in 1803 the Turkish government was antagonised, and thus, sent an army led by Muhammad Ali Pasha - the Viceroy of Egypt - who recaptured Makkah and defeated Ib.n Saud in 1814. In 1818 the first stage of the Saudi rule was ended. (Al-Farsy 1990).

The second stage of the Saudi rule began in 1824 by Turki Bin Saud in Riyadh. Turki was assassinated in 1834 and his son Faisal took over. Al-Farsy (1990) pointed out that “ *he refused to acknowledge the Viceroy of Egypt. Muhammad Ali was not prepared to see his earlier victories so quickly reversed, and in 1838, Egyptian forces defeated Faisal, retaking the Najd.*” (p - 14). On Faisals’ death disagreement emerged between his sons which weakened their grip on power, and therefore, in 1891 the second stage was ended when Ib n Al Rashid captured Riyadh.

The third stage began when Abdulaziz retook the city of Riyadh in 1902. He started to expand his power and control over the Arabian peninsula gradually. But he needed a strong army to fulfill the original goal, and thus, he:

“ once more confronted the perennial problem of the Bedouins and their practice of raiding and moving from place to place at will... he conceived a brilliant two - stage plan. First, he sent preachers to various tribes, teaching them the essence of Islam and encourage them to engage in agricultural labor. Secondly, he settled the Bedouins in agricultural settlements established according to the Wahhabi teachings, in Najd. The first of these projects was a success, and was followed by many others (sixty) so that by 1916 the tribes constituted a formidable political - military force which enabled Ibin Saud further to consolidate his rule over Najd and Al - Hasa (in the East). These settlers, known as the *Ikhwan* (brethren) became such a powerful force that Ibin Saud assumed personal command of them.” (p - 18)

In 1924 he captured the region of Hijaz, and in 1932 he announced the whole Arabian peninsula to be the Kingdom of Saudi Arabia. Explaining the main philosophy, the King stressed in a speech in 1929 that:

“...We are not proclaiming a new creed or dogma. Muhammad ibn Abdul Wahhab did not come with anything new. Our creed is the creed of those good people who preceded us and which came in the Book of God (the Quran) as well as that of his Messenger (the prophet Muhammad, prayer and peace be upon him). And we respect the four

Imams. We hold no preference between Mlike and Shafie, Ahamd and Abu-Hanifa; in our view they are all to be respected by us. This is the creed which Sheikh al - Islam Muhammad ibn Abdul Wahhab is calling for, and it is our creed. It is a creed built on the oneness of Almighty God, totally for His sake, and it is divorced from any ills or false innovation. The Unitarian creed is the creed or dogma which we are calling for, and it is the one which will save us from calamity and catastrophe.” (cited in Al-Farsy, 1990, pp. 20-21)

Although the King’s speech emphasised his detachment from any particular school of thought, it was true to say that Saudi Arabia was advocating the Hanbali school of thought. Recently a similar declaration that ‘Saudi Arabia is not follower of a certain school of thought’ was repeated by King Fahad in 1989 in Makkah.

Through this the government of Saudi Arabia was able to preserve the traditional stance of its people as well as introducing modernity. Al-Farsy (1990) pointed out that, “*There exist two separate spheres of legal validity in Saudi Arabia: The judicial system based on the Sharia (Islamic Law) and the administrative, commercial, labour, and military institutions based on Western norms, each capable of coping with current needs and in its own sphere of influence.*” The education system is still part of the first sphere. This dualism had helped in preserving the social traditions and customs, but it did not eradicate the negative social attitudes towards technical education and vocational training.

At the beginning of its reign the Saudi Government inherited only four public schools from the Shareef of Makkah (Al-Asheikh - 1990). The task to expand this number was not easy in the time of scarce resources and difficulties of communication and in the midst of traditional views. However, the government started with those groups which were more receptive than others. Traditional education in the two holy mosques and the private schools remained until the government of Saudi Arabia established the Directorate of Education in 1924. The main aim of the Directorate was to promote education and to develop its process. The attitudes of the people of Hijaz towards education had changed with this new initiative: there were civilian jobs for those who held a school certificate. Furthermore, education was free and for all. Education under the supervision of this Directorate had developed greatly and many rules and regulations were established during that period as stated in the *Educational Statistics* (1985-1986) :

“The article 23 of the Basic Instructions which were issued in 1925 provided the first nucleus of the educational policy and a definition of ‘educational affairs’. It also provided that while strictly observing the teachings of religion ‘educational affairs’ should cover the spreading of learning, knowledge and trades; opening of schools; and protecting the institutes of learning all over the Hijaz Kingdom.” (P - 8).

This establishment was serving only a small part of the Kingdom (i.e. Hijaz). The need for a comprehensive national system of education became obvious. However, the task to spread education to all parts of the Kingdom was not an easy one. Āl-Asheikh (1990) described the stiffness of the traditional background and the difficulties faced at that time:

“We did not have enough teachers so we contracted teachers from abroad; we did not have books and schools libraries so we viewed them as shortages that could be fulfilled sooner or later. But it was extremely difficult and frustrating to reason with those who had a strict opinion towards modern education. However, we sometimes used motivation and discussion while some other times we had to use threats to convince them. Finally by God’s will we were able to expand and spread education to each part of the Kingdom.” (Translated by Y.M. p - 139).

It was not until 1953 that the Saudi government was able to replace the Directorate of Education by the Ministry of Education to serve the whole country. Through all these developments the Saudi government had maintained the balance between Islamic values and modernity. In Saudi Arabia, Islam represents the general framework of the educational policy on which acceptance or rejection of any ideology will be based. This can be clearly observed in the following general objectives of education stated in the *Educational Policy (1980)* of Saudi Arabia:

1. Promoting the spirit of loyalty to Islamic law by denouncing any system or theory that conflicts with this law and by honest action and behaviour in conformity with the general provisions of his law.
2. Supplying the individual with the necessary ideas, feelings and powers which will enable him to carry the message of Islam.
3. Preaching the book of God (Quran) and the law of His Prophet (p.b.u.h) by safeguarding them, abiding by their teachings and acting in compliance with their commands.
4. Enforcing Quranic morality in the Muslim and emphasising moral restraints for the use of knowledge (I was sent to complete moral values).
5. Planting the zeal of work in the hearts of students, commending work in all its forms, urging individuals to excel in their work and to emphasise the role of work in the construction of the nation. This is done by :

a - Forming scientific skills and attending to applied sciences in schools to give the student the chance to practice handicraft activities, participate in production and acquire experience in laboratories, construction work and farms.

b - Studying the scientific principles of various activities so that the level of mechanical production will attain progress and invention. (P - 10).

These were some of the general objectives of education in the Kingdom of Saudi Arabia. The Policy, however, specifies the objectives of each stage of the compulsory education as well as the objectives of other educational institutions in the country. The Saudi government also recognised the importance of establishing a new technical education and vocational training system. Therefore, many industrial, commercial, and agricultural schools were established before 1932 and after (Al-Khateep 1992). The Islamic norms and attitudes towards this kind of education were revitalised. In other words, the value of manual work was emphasised according to the ideal norms of Islam. People were encouraged to participate in this vital field. The number and quality of those who participated, however, was not satisfactory, and therefore, the government had to put more effort and money to develop and expand this provision. There are now four principal educational authorities in the Kingdom. The Ministry of Education was established in 1953; the Presidency of Girls Education established in 1960; the Ministry of Higher Education established in 1975; and the General Organisation for Technical Education and Vocational Training which was established in 1980. Education in Saudi Arabia is free at all stages including university and compulsory from the age of 6 to 18. Its main structure consists of three stages: Primary stage meant for the age group 6-12, Intermediate stage meant for the 12-15 age group and secondary stage meant for the age group 15-18. These stages were preceded by Kindergarten which was an optional stage meant for the 4-6 age group. See figure (1) at the end of chapter two.

To sum up, education in the Arabian peninsula was greatly affected by the message of Islam, in the sense of unity of purpose and focus. That had transformed the Arabs from a disunited group to one nation with a universal message and collective thinking. Education was a prerequisite to all these qualities; in its absence Arabs of the peninsula had lost their unity and strength. The long period of imitation, the survival of the strong

force of traditionalism, and the various political upheavals turned the Muslim nation and the Arabs in particular into non - productive, and non - creative nations. The widespread ignorance and illiteracy became the prominent features of the Muslim societies. This had made the reintroduction of education in Saudi Arabia to be an enormous task. However, the existence of education and training system in a country is not enough, but its quality and capability of providing a comprehensive ideology is more important.

Eradicating illiteracy and ignorance was by itself a large job carried out by the Saudi government. Furthermore, the task was even harder when it came to eradicating traditional views which still persist until today. The reasons for weakness of the educational system in Saudi Arabia are deeper than mere physical necessities, like schools, teachers or equipment. The reasons are embedded in those social traditions which are neither Islamic nor modern. In the following chapter a closer look at the nature and status of the training system in the country will be carried out.

## **CHAPTER TWO**

### **The training systems in the Kingdom of Saudi Arabia**

In the previous chapter the history of the education system in the Kingdom of Saudi Arabia was presented. The chapter showed that the Saudi government maintained the use of two different models, that is, the traditional and the modern. There were some positive as well as negative effects of this dualism. On the one hand, it helped in keeping the Kingdom in contact with the technological advancement and development in the world and it also helped the Kingdom to preserve its worthwhile culture and traditions. On the other hand, some provisions, like the education system, which stayed traditional had been affected negatively by this dualism in the sense that it could not cope with the new developments in the country. The result was the absence of the educational system from the effective participation in the social activities, and thus, its inability to prepare the youth for their role in the development process.

The problem of education in most of the Muslim countries and in Saudi Arabia goes beyond participation and responsiveness. Its history can be traced back to the early days of Islamic state when - after the death of the Prophet- the infighting between the Muslims broke out and the gradual isolation of the scholars and intellectuals from all spheres of political and economic life began to take effect. As a result most of the efforts of the Muslims scholars and intellectuals were concentrated on the spiritual aspects of life rather than the practical modes. As AbuSulayman (1993) pointed out:

“ This conceptual crisis (of the nation) is not a crisis of belief, values, or principles, but rather a long - standing crisis of thought and methodology brought on by a change in the Ummah's (nation) political foundations and the resultant distancing of the intellectual leadership from any sort of societal responsibility. This single development ended all intellectual and scientific growth, and rendered the Ummah incapable of keeping up with change, development and challenges.” (p - 35)

This alienation of scholars and intellectuals contributed greatly to the creation of a complex methodology of the religious and worship matters but it ignored - or forced to - many aspects of social, political and economic life of the Muslims. The effects of this split can be observed in the contemporary Muslim countries all over the world.

Furthermore, Muslim governments who are committed to development and modernity like Saudi Arabia can not come across a complete Islamic system of economy and administration that can fulfill the present needs. The division between theoretical and practical was one of the features of the Muslims thought from the early days of Islam. This partition entailed that different values should be attached to each field. As AbuSulayman (1993) highlighted that :

“ Even the major principles of Islam which had guided the Muslim mind and the Ummah in its thought and deeds in the early generations were divided into two sets. The first, and far most important, consisted of those principles related to the preservation and interpretation of the textual sources of Islam. The second set, deemed secondary in status and relegated to insignificance and neglect, were those principles related to rules and approaches essential to analysis of social conditions and circumstances and variables of life in society.” (p - 33)

The resultant effect of this rift was the development and advancement of one field on the expense of the other. Therefore :

“ no social sciences, in the proper sense, ever developed from Islamic principles and approaches. This explains why no Islamic economic, educational, political, communications, or administrative sciences were ever developed. Instead, these subjects were mentioned by classical scholars of Islam, if ever, only in passing or as casual aside or observation. Thus matters like establishing cadres within Muslim society, organize it, and framing policies for its development were never anything more than ad hoc and wholly arbitrary, concocted in reaction to fluctuating circumstances.” (p - 33)

Like many Muslim countries, the Saudi government responded to this drawback by resorting to the Western models in those fields. However, despite the introduction of Western models in administration, military, and economy, the education system remained traditional and resistant to change. The effects of this dual system can be observed in the different kinds of training available for young Saudis at present.

There are two types of training available in the Kingdom of Saudi Arabia: private and public. The private training: is that training which is funded and provided by the private sector. Most of the private sectors are utilising modern technologies and styles of administration in their daily activities. These different forms and models are mostly designed on Western examples. In the field of recruitment, the private sector prefers the cheap and experienced foreign labour over the expensive and less experienced

national labour. However, whenever they recruited Saudis, they enrolled them in training courses in order to prepare them for their jobs. They hold training courses ranging from one to twelve months. It is worth noting at this stage that the percentage of the Saudi manpower in the private sector is still very low compared to the non-Saudis. The private sector is represented by the Chamber of Commerce, Banks, Hotels, and Industry. To avoid duplication in their training courses, some of these private sectors have established a cooperative relationship with the General Organisation for Technical Education and Vocational Training (GOTEVT), that is to say, if the Organisation is providing the same course, then trainees will be sent to it. In return the Organisation will send its last year trainees to the field to do practical jobs in these firms. This, however, does not entail any kind of commitment from the private sector side to recruit them after graduation.

The public training: is that type of training which is provided and funded by the government of Saudi Arabia either directly or indirectly. There are two types of public training: specific and general. The specific: is that kind of training which is provided by various governmental Ministries each according to its requirement, like the Ministry of Post, Telegraph and Telecommunication, Ministry of Health, Ministry of Education, Presidency of Girls Education, Ministry of Agriculture, Ministry of Labour and Social Affairs, and Ministry of Defense. This type of training is funded by the government of Saudi Arabia indirectly, that is to say, each Ministry should allocate part of its general budget for this purpose.

Most of these Ministries are following a modern system of administration. Their recruits can be divided into three levels : administrative, professional, and technical. The General Secondary Education Certificate or higher will be required for the administrative level; the holders of university degrees in engineering, medicine, or physics will be accepted into the professional level; in the technical level only an Intermediate (lower secondary) or Secondary Certificate is required. Normally the latter do not join the work until they pass through a training course extending to three years in some cases. These courses were designed specifically to meet the Ministry's requirements. Ministries had to provide training for their recruits because there are

no other establishment which provide or prepare the youngsters for the world of work. There is , however, some dualism and overlapping in the training courses between the different Ministries and the training provided by the GOTEVT. The cause of this discrepancy is the lack of cooperation and coordination between the government establishments all over the Kingdom. Furthermore, the training courses provided by these Ministries are mostly weak and very limited because of the lack of consistency of funding since the large portion of its budget is always allocated for its prime projects, and thus, very little is left for training.

The other type of the public training which is funded and provided by the government of Saudi Arabia is the general kind of training. This kind of training is funded directly by the government and it is provided by different training institutions like the Institute for Public Administration (IPA) and the General Organisation for Technical Education and Vocational Training. IPA provides training in the field of administration for the government employees to upgrade their abilities to work in its modern Ministries. GOTEVT on the other hand, provides technical education and vocational training. In the field of technical education it provides training in four fields industrial, commercial, agricultural, and technical supervision with prime aim of supplying the market with qualified and skilled workers. For the first two the Organisation also provides higher training in the Junior Colleges of Technology (Ministry of Education 1986; GOTEVT - 1989, 1993). In the field of vocational training it provides training in its thirty training centres all over the Kingdom to all ages in various field of industrial and commercial trades (GOTEVT - 1989, 1993).

Technical education was the subject of many changes and adjustments in the past few decades under the assumption that it was the backbone of the manpower development process in the country. The focus of this chapter will be on this kind of education.

The *Educational Policy (1980)* stated clearly the aims and purposes of this type of education as follows:

1. The objective of technical education is to supply the Kingdom in all fields and at all levels with qualified workers who possess solid faith, sound character and ability to perform the duties entrusted to them.

2. Concerned educational authorities look after technical and vocational education in all its forms and provide it with technical and financial support.

3. A special plan is set up to determine the Kingdom's needs for technical labour force at various levels and forms in order to attain self-sufficiency within a period to be defined in the light of existing resources. All other resources that can operate in this field will be utilized.

4. Technical and vocational education curricula and plans are set up to achieve this purpose with special emphasis on flexibility and diversification to meet all needs and developments in the fields of knowledge and labour, and to acquire other skills, experience and experiments.

5. Concerned Government authorities shall establish necessary institutions to meet the Kingdom's needs for workers in farming, business, industry and other fields.

6. Concerned educational authorities shall adopt all means of encouraging students to enrol in technical and vocational training. The State shall open opportunities for graduates to work with companies, institutions, factories and installations. The concerned Ministries shall adopt the necessary measures to provide work for graduates and organize their status. (pp. 29 - 30)

At the beginning technical education was under the supervision of the Ministry of Education, and vocational training under the supervision of the Ministry of Labour and Social Affairs. In the process of development and modernisation, the government of Saudi Arabia in 1980 established a separate body to be responsible for those two fields of training, that is, GOTEVT. Since its inception, technical education and vocational training were modeled on Western ideals. Many cooperation and development treaties were signed between the government of Saudi Arabia and some industrialised countries in the West like, Germany, France, Italy and the USA. Many Saudis were sent abroad mainly to those countries to be trained and educated in this field. It was with this notion of modernity in mind that the GOTEVT was established. However, most of the developments that took place under this Organisation were quantitative rather than qualitative. In other words, there was large expansion in the number of institutes and training centres, and thus, large number of applicants. Unfortunately neither the graduates number was as large as the applicants nor the small number of graduates was able to find desirable acceptance in the market place.

The GOTEVT (1989) stated the general objectives of technical education as follows:

“ 1. Prepare the individual for performing the required activities in the industrial, commercial and agricultural fields as well as the services that help to develop national economy through working in public establishments, ministries, private sector companies, or free work.

2. Provide the individual with the Islamic and general culture that helps to form a high moral standard, strong belief, and the ability of thinking and mutual understanding as well as adaptation to the different conditions.

3. Offer a broad scientific base for technical manpower to increase individual response to rapid technological progress.

4. Allow every person the opportunity to learn a trade or to continue training according to his mental and physical abilities. This is known as "open training" scale.

5. Develop technicians skills and upgrade their vocational knowledge continuously.

6. Emphasise the dignity of manual and vocational work and their role in the development of society.

7. Stop the internal migration to big cities by spreading vocational training centres throughout the Kingdom." (pp. 34-35)

In the following sections a brief description of higher and secondary technical education, and vocational training provisions provided by the GOTEVT will be presented.

### **First, The Higher and Secondary Technical education**

The General Organisation for Technical Education and Vocational Training provides higher technical education in its Junior Colleges of Technology for both industrial and commercial studies at present. In the past this type of education was offered in two separate establishments, that is, in the two Higher Institutes for Financial and Commercial Studies which were established in 1975 in Riyadh, and 1977 in Jeddah -for commercial and general secondary schools graduates - and in the Higher Institute which was established in 1972 in Riyadh, for industrial and general secondary (science section) graduates. In 1982 the Junior Colleges of Technology were established in Riyadh. In 1993 the Higher Institutes for Financial and Commercial Studies was merged with the Junior Colleges of Technology to be under one establishment (Ministry of Planning 1994).

The aim of this type of education is to prepare highly skilled technical manpower to meet the growing demands of this type of expertise, and also to create new opportunities for higher technical education in the Kingdom ( GOTEVT - 1993). The duration of study in the higher technical education is two years, and it is based on the credit system in which the students should complete an amount of 90 credits spread over four semesters. At the end of every semester there is a theoretical examination in

addition there is a practical examination at the end of each year. The study in these colleges consists of lectures, lab work, and workshop training. There are six colleges of this kind all over the Kingdom. They offer courses in field of specialisation such as, mechanical technology, electrical technology, electronic technology, oil and minerals technology, auto/engine technology, computer accounting, and office management (GOTEVT - 1989, 1990, 1992, and 1993). In both commercial and industrial higher education the number of applicants is increasing year by year, however, the percentage of attainment is not as large. Between 1983 to 1992 the total number of applicants to these institutes and colleges was 19,193 students while the graduates number for the same period was only 4,423 i.e. 23% (See Figure (1), and Chart (1) at the end of this chapter).

### **Secondary Industrial Education**

The aim of industrial education was to prepare the required manpower to perform different industrial jobs in the fields of mechanical engineering, electricity, industrial electronics, radio and television, and petrochemicals. Industrial education was established long before the establishment of the GOTEVT. It passed through many stages of development and changes. The first school of this type was established in the city of Jeddah by King Abdulaziz in 1949 under the name 'The Industrial School'. The duration of study was three years for graduates of primary schools age 12 to 14 (GOTEVT - 1989). As a result of the poor performance of its students, the duration of study was extended to five years. In 1962 'The Industrial School' was changed to 'Intermediate Industrial School' for the same age group. Between 1949 and 1973 nine intermediate industrial schools were established in different parts of the Kingdom. Few years later these school were upgraded to a secondary level. There are now eight technical industrial secondary institutes all over the Kingdom. They admit students who hold Intermediate Education Certificate (age 16 +). The duration of study is three years after which a Diploma of Industrial Secondary Institute is given. During this period trainees can choose from a variety of specialisations in these institutes which cover most of the technical sections, such as Mechanics, Electricity, Auto Mechanics, and

Electronics. Upon completion students are allowed to continue their industrial studies in the Higher Colleges of Technology which will award them B.Sc.

Statistics showed that the performance of industrial education is not impressive in respect to the number of graduates. Comparing the total number of industrial education applicants during the period 1969 to 1992 to the number of graduates in the same period showed that there was a large number of dropouts. Applicants who joined industrial education was 80,370 students only 17,995 of them graduated i.e. 24.4%. (see figure (1) and Chart (2) at the end of this chapter).

### **Secondary Commercial Education**

Commercial education in Saudi Arabia aims at preparing and qualifying manpower to perform office and commercial jobs and organise related production and distribution, business, finance and commercial work for both the public and private sectors. It started with four intermediate commercial schools in 1960 for primary school graduates (age 12-14) (Ministry of Educational - 1986; GOTEVT - 1993). Later on these Institutes were upgraded to the secondary level and their number was increased. During the period 1972 to 1979 fifteen commercial secondary institutes were established, this number remained the same to present.

These institutes offer a variety of subjects such as; accounting and book-keeping; administration and secretarial work; commercial correspondence and typing; banking transactions; purchasing and warehousing; sale and purchase transactions; and collection and cash affairs, and computers. It admits students who hold Intermediate Education Certificate or equivalent (age 16 +). The duration of study is three years after the General Intermediate Education Certificate/ Modern Intermediate Education Certificate, or equivalent age (15-18). Secondary commercial education offers training in morning and evening sessions. The morning session was conducted for regular students and in the evening session for employed persons and others who want to enhance their qualification and experience. Those who successfully complete the study are awarded the Secondary Commercial Education Certificate.

Statistics indicated that the performance of commercial education in respect of students / graduates ratios was as weak as industrial education. A comparison of the total number of applicants joined the secondary commercial schools in the period 1981 to 1992 was 83,336 students, while the number of graduates was only 19,732 students i.e. 23.7% (see figure (1) and Chart (3) at the end of this chapter).

### **Secondary Agriculture Education**

Agricultural education aims at preparing trained manpower to meet agricultural needs and to develop this field specially in the rural area. It is worth noting that the Kingdom of Saudi Arabia was not an agricultural country. Nevertheless in 1955 efforts were made to establish the first agricultural school in Al Kharj city. At that time the Ministry of Agriculture was assigned to be the main responsible body to supervise this school. In 1957 it was transferred to the Ministry of Education. Unfortunately this school was abolished later because of the small number of applicants. In 1960 the Ministry of Education established five Intermediate Agricultural Schools in different parts of the Kingdom. These schools were in Hafof; Mjmaa; Buraidah; Baljorashy and Jazan. Those schools were also closed because of the small number of applicants and for the weak performance of their graduates. In 1977 the Model Technical Agricultural Institute was established in Buraidah and in 1992 another institute was established in Wadi Adwassir.

The duration of study in these institutes is three years after the General Intermediate Education Certificate or Modern Intermediate Education Certificate (age 15 - 18). Those who successfully complete the study are awarded the Agricultural Secondary Education Diploma (GOTEVT - 1993). The Agricultural Institutes provide training in three fields: first, Agriculture production (plant production, plant protection, water, irrigation and drainage, crops, Bee farming, plant production), second Animal production (animal production, pisciculture, milk production, poultry, meat production, animal health, animal breeding), third, Agricultural machines (agricultural industries, horti-culture, agricultural mechanization, agricultural guidance, and architectural drawing) (GOTEVT - 1989, 1993).

This type of education did not attract many young people to join. The total number of its applicants was 3,878 students in the period 1981 to 1992, only 790 of them graduated i.e. 20% (see figure (1) and Chart (4) at the end of this chapter).

### **Secondary Technical Supervisors Institutes**

The need for more houses and roads became urgent in 1970s. Due to the oil boom many expatriates from all over the world came to Saudi on a contractual basis to implement certain developmental projects : these numbers had to be accommodated and fed. Therefore, the concentration of government planning on infrastructure became necessary. As a result the Secondary Technical Supervisors Institute became the prime supplier of required manpower. The aim was to supply the market with national qualified workers in the field of survey, construction, and environment (GOTEVT - 1989, 1993). The first institute of this kind was established in 1964 in Riyadh, another was established in Abha in 1977 and finally a third one in Tabuk in 1983. These Institutes were called Technical Assistants Institutes, and the duration of study then was two years.

After the establishment of the GOTEVT the duration of study was extended in 1985 to three years for General Intermediate Certificate holders (age 16+) after which the graduates would be awarded the Secondary Technical Supervisors Institute Certificate. There are at present five secondary supervisors institutes, they provide training courses on surveying, construction, architectural drawing road construction, water supply, sanitary work and hydrology.

The total number of students joined this type of education in the period between 1981 to 1992 was 8,787 students, only 2,295 of them graduated i.e. 26%. (see figure (1) and Chart (5) at the end of this chapter).

### **Second, The Vocational Training**

Vocational training is The other part of training provided by the General Organisation for Technical Education and Vocational Training. It had been designed for adults to acquire different vocational skills and it did not require a specific type of qualification.

Vocational training centres admit those who completed at least the fifth grade of primary education with minimum age of 17 and maximum of 42 years. The courses in the vocational training centres were offered in the morning and evening sessions. The duration of the morning courses was 14 - 18 months according to the nature of the course. The evening courses last for six continuous months. The main objectives of this kind of training are to:

1. qualify workers to meet industrial requirements.
  2. upgrade the level of ordinary workers to technical workers depending on their trades for their living.
  3. provide work opportunities necessary for people not having scientific qualifications, or those who completed limited stage of education.
  4. provide the opportunities for employees to join vocational training centres.
  5. create moral and religious values in the trainees, and encourage them to respect manual and vocational work.
  6. meet industry requirements for qualified manpower.
- (GOTEVT, 1989, p - 86)

Vocational training centres provided a variety of trades and crafts in the morning and evening courses; such as carpentry, painting, plumbing, welding, aluminum work, commercial and office work, diesel, and sheet metals. Vocational Training is delivered by three departments; Vocational Training, Pre-vocational Training and On-the-Job Training.

Due to the short length of the study, this provision enjoyed a large number of both applicants and graduates. The number of trainees joined the morning and evening programmes in the period 1981 to 1992 was 109,519 trainees while the number of graduates was an impressive 77,135 graduates i.e. 70.4% (see figure (1) and Chart (6) at the end of this chapter.

To sum up, the education and training system in the Kingdom of Saudi Arabia had to suffer from three angles. The first, was the lack of a national training policy with a practical framework. In stead training was taken by different establishments public and private each according to its immediate needs. The second, was that stubborn and insistent traditional views which advocated memorisation and repetition as a valid method of learning. The third, was the dual system of administration adopted by the government. The result of the latter was almost a total isolation of the education system from the social, political, and economic aspects of the Saudi society. This dualism of

administration system - which existed by necessity - bred another dualism, that of the training system.

The different preparation of students which was conducted on different standards from those required by the employer and the society at large had made the task of training and socialisation of the graduates a very expensive and laborious process. In the following chapter this discrepancy will become clearer when the five Development Plans are examined. The following chapter will also present the results of a field study conducted by the IPA concerning the representation of national workforce in the private sector.















## **CHAPTER THREE**

### **Context and Development in the Kingdom of Saudi Arabia**

Chapter two presented the various training systems in the Kingdom of Saudi Arabia. The Chapter showed how negative were the effects of the absence of the educational system from the development process. It also showed that there was a lack of national training policy which could guide the training activities around the country.

Since the Development Plans represent the official policy of the country towards education generally and technical education in particular, this chapter will focus on studying these five Development Plans (1970 to 1995). This will clearly show the government's stance on the educational planning. The chapter will end by presenting the results of an empirical study conducted by the Institute of Public Administration on the participation of the national manpower in the private sector.

#### **First Development Plan (1970)**

It is worthwhile mentioning at the beginning that only selected articles of this document that are closely related to the subject of technical education will be presented and analysed. The Ministry of Planning issued the First Development Plan in the year 1970 to cover a five year period until 1975. In this plan a considerable effort was made towards sustaining the emerging economic growth in all fields and at all levels. The main message was to shift from oil as the main source of income to more diversified forms of economy.

Realizing the importance of education in the development process, the Plan proposed an expansion of the educational system at all levels. It is worth pointing out at this stage that technical education was the responsibility of the Ministry of Education and that vocational training was the responsibility of the Ministry of Labour and Social Affairs. The plan presented the actual requirements of industry from manpower as well as forecasting the future demands:

“ The computations reveal that between 1386 AH (1966) and the end of the plan, total requirements in the private sector will increase by 405.6 thousands, and for the period of the

plan by 261.2 thousands. The construction, trade and service industries will each absorb more than 20 percent of the latter increase; while the other industry group with a significant additional demand, (that is, transportation, communications, and storage) will account for nearly 14 percent.” (p - 75)

Meanwhile, it projected the output of educational institutions by completed grade 1970 - 71 to the end of the plan, and pointed out that secondary vocational schools had graduated only 1765 students (p - 68). The comparison of these figures, although general, showed the big gap between educational output and the requirements of the economy of manpower which was going to increase by 261.2 thousands during the Plan period.

Nevertheless, the plan summarized the overall objectives of the proposed changes in the educational field as follows:

- “ 1. Continued expansion of opportunities for education at all levels to provide the capability at each level of accepting all qualified graduates from subordinate levels who seek enrollment;
- 2. Strengthening educational institutions at all levels with efforts concentrated on those measures that will improve efficiency and produce excellence in the educational program;
- 3. Concentrated efforts to preserve national sites of historical significance and to uncover links with past societies and cultures;
- 4. Improving quality and reliability of existing radio and television broadcast system with augmentations to extend coverage to additional areas of the Kingdom.” (p - 95).

The plan went on describing the specific objectives of each provision of the educational system as follows:

#### **Intermediate education**

- “ a). To provide facilities for all elementary school graduates who would be expected to apply for intermediate school enrollment ( 85 percent of elementary schools graduates);
- b). To increase the proportion of building designed and constructed as intermediate schools by 30 percent during the plan period;
- c). To expand the curriculum to include vocational guidance that is oriented to the environment, activities, and opportunities of school community.

#### **Vocational education**

- a). To extend the system of secondary level industrial education to include six more areas in addition to the present four;
- b). To initiate a system of secondary level commercial education with three schools to be operational within the first two years of the plan;

- c). To establish an institute for technical / vocational teacher training;
- D. To complete the agricultural technical school in Buraydah as scheduled and initiate work on three additional schools by 1391 - 92 (1971 - 72)." (p - 98)

The main prominent feature of this plan was that it concentrated on the quantitative expansion of the educational system rather than the qualitative. This trend was understandable in the case of the growing economy and the rapid expansion of industry in the country. In other words, the speed with which the economic growth in the Kingdom of Saudi Arabia had taken place had outstripped the slow development of education and training. Nonetheless, the plan showed some concerns about the significant role technical education could play in the development process. It also showed the weak nature and status of technical education at that time by the introduction of only basic and modest developments. Furthermore, the introduced changes were mainly concerned with increasing institutes' capacities and numbers. Notwithstanding the recommendation of extending intermediate education curriculum to include vocational guidance, nothing had been said about promoting this type of education socially through media, for instance.

### **Second Development Plan (1975)**

The Ministry of Planning issued the Second Development Plan in the year 1975 to cover a five year period i.e. from 1975 to 1980. The plan reflected the process of development in three main stages: first it presented the developments and achievements of the previous plan; the second was a profile of the present situation of each sector; and the final stage, which was the main bulk of the document, proposed the desired changes and targets throughout the coming period. These stages were not clearly separated as explained, but they were presented in an integral form of each chapter in the plan. The main focus in this part, however, will be on the educational system in general and technical education in particular.

Unlike the first plan, this plan gave special attention to the educational system at all levels. Explicitly it expressed the importance of education and its vital role in the economic developments. Nonetheless, it fell short of establishing direct links between

education and economy. The plan started by highlighting the achievements of the First Plan:

“ The education system has established a strong base from which to move toward further development. Almost 800,000 students are enrolled full - time in public schools and another 12,000 are attending college and universities. With night schools, part - time classes and adult literacy programs having close to 90,000 enrollees, approximately one out of every seven persons in the Kingdom is participating in an organized educational program.” (p - 50)

Although the plan pointed out the quantitative expansion in the general education system, it did not tell of any kind of development or expansion in the technical education field. Instead, it went on describing the modest situation of technical education at the present and the insignificant progress it had made:

“ The industrial education program in the secondary level technical institutes has not progressed at the pace anticipated in the first development plan; as already noted only four of the ten proposed institutes are in operation and enrollments prior to 1394 - 95 (1974 - 75) have been well below plan projections.” (p - 257)

Meanwhile the Plan projected the growth of the labour force in Saudi Arabia during the previous plan:

“during the first plan period, Saudi Arabian’s labour force has grown by an estimated 3.8 percent each year, from 1,328,000 in 1390 (1970) to 1,600,000 in 1395 (1975). The growth rate for Saudis was lower than for non - Saudis - 3.7 percent compared with 4.2 percent - but Saudis still comprise about 80 percent of the labour force in 1395 (1975). The proportion of the total Saudi population participating in the labour force rose from 22.2 to 23.3 percent over the five years of the first development plan. The participation rate for Saudi men changed from 43.3 to 45.1 percent, and for Saudi women it rose from 0.5 to 1.0 percent. The rate for non - Saudi men grew very slightly, from 67.3 to 67.4 percent and for non - Saudi women from 3.6 to 3.8 percent.” (p - 12)

This, however, showed the rapid expansion and growth of development in the Kingdom at that period. It was also an indication of the urgent need for further development of the education and training system. The plan then forecasted the anticipated growth in the labour force in the coming period:

“ The projected increase of Saudi labour force over the period 1395 - 1400 (1975 - 1980) will be about 232,000 or an annual rate of 3.4 percent. The non - Saudi segment of the labour force must grow more rapidly than the Saudi portion to fulfill the manpower demands of the development plan. The number of foreign workers will reach 812,600 by 1400

(1980), a net increase of 498,600 over the plan period.” (p - 63).

It then outlined its development strategy for the coming period which consisted of three key elements:

- “ 1. Diversification of the economic base through emphasis on increasing agricultural and industrial production.
- 2. Rapid development of the Kingdom’s manpower resources.
- 3. Development of economic regions of the country by:
  - wide distribution of productive investment based on the distinctive physical and human resources of each region, and;
  - social programs applied in accordance with need, thereby extending the benefits of national development to all sectors of the population without removing the incentives to individual effort and achievement.” (p - 58)

As far as industrial education was concerned, the plan outlined the policies and objectives which should be followed in the five year period. It pointed out that these objectives and policies were to be followed to

“ assure each Saudi boy a quality education throughout his school career. Education will be available for all boys who reach school-going ages as well as opportunities for all to continue their education through the secondary level.” (p - 258).

Therefore, the proposed objectives for technical education in general and industrial education in particular were:

- “ 1. Expand the present secondary level industrial education program from 4 schools with 2,160 students in 1394 - 95 (1974 - 75) to 13 schools with 7,375 students by the end of the plan. The number of graduates will increase from 297 in 1394 - 95 (1974 - 75) to 1,650 in 1399 - 1400 ( 1979 - 80) for total of 5,537 over the plan period.
- 2. Expand existing fields of study and introduce new programs in such subjects as electronics, petrochemical technology, civil engineering, mechanics and hotel services.” (p - 275)

Although the plan proposed large quantitative expansions and development to the technical education provision, it did not take into account the actual capabilities of the existing institutes. At the beginning it showed the modest progress industrial education had made during the last period of the First Plan and yet it proposed even more ambitious objectives. Instead of going back to the main reasons that made industrial education fail to achieve its objectives in the first period such as curriculum, teaching methods and the internal system, it asked for more development and advancement. These developments were needed in the light of the industrial advancement in the

country, but they should have been built on feasibility studies taking into consideration the actual capabilities of the institutions.

It appeared at this stage that the economic and industrial development was going at a faster pace than the educational system, more particularly than industrial education which could be the main supplier of manpower. Yet again this plan reflected the modest nature of the technical education system in the Kingdom of Saudi Arabia. Furthermore, efforts to elevate and upgrade it were still too modest. The main focus of the plan was the great concern with the quantitative expansion of the educational system. The plan proposed the main educational skeleton to be established in the plan period, but the route of progress was not clear especially for those going to technical education. In other words, students of general education knew exactly what was waiting for them after finishing the particular stage they were in, but that was not the case for those who were in the technical education field. The general education students knew, for instance, that after secondary education they could go to university and then what kind of jobs would be waiting for them upon graduation. In the case of technical education students, the future was not always clear. That was because the link with the world of work was not clearly established. Nonetheless, this notion i.e. the relation between education and the world of work, can be discussed at later stages after analysing the rest of the development plans.

### **Third Development Plan (1980)**

The Third Development Plan had been issued in 1980 to cover a five year period i.e. until 1985. It mainly consisted of three parts, the achievements of the Second Development Plan, the present situation, and finally the objectives, policies and programmes to be implemented in the next five year period.

During the Second Plan period sizable achievements on the quantitative level had been attained in the educational provision. The number of general education schools as well as the numbers of students had been increased. On the other hand technical education in general and industrial education in particular had not expanded as planned in the Second Plan. The Second Development Plan anticipated that by 1980 the total

graduates' number would be 5,537. However, according to the statistics of GOTEVT the number of students admitted and graduated of industrial education during the period from 1975 to 1980 was, 9,086 students were admitted, and 2,950 of them had graduated. This obvious gap between the entrants and graduate numbers was discussed in some detail in chapter two. However, the Second Development Plan also aimed at raising the number of schools from four to thirteen. The statistics showed that the number of schools had risen from four in 1974 to eight schools and remained so until the end of 1979-80.( GOTEVT, 1989 P - 20).

That discrepancy was an indication of weakness not only on the part of the technical education system but also on the part of the planning process. It also implied that technical education problems were far from being understood in their context. When presenting the various achievements in the education field, this Plan did not show how much industrial education had or had not achieved. That might be because there had been nothing to report or the scale of changes in this field had been insignificant. Furthermore, the Plan reveals the manpower - related problems which were going to be addressed in its the coming period :

- “ 1. A continuing imbalance between the economy's growing manpower requirements and the number of Saudi entrants into the labour force;
2. The dependence on out migration from agriculture as an important source of Saudi labour supply for new employment;
3. The restrictive effects of the Government's own demand for Saudi labour on the availability of manpower for other sectors;
4. The concentration of demand for non - Saudi labour in the private services sectors, together with the Government's concentration on infrastructure development, encouraged the growth of the construction, transportation, and distribution sectors which are “throughput” sectors, contributing primarily in a supportive sense to the growth of GDP, despite otherwise important functions. Thus the growth of GDP as a whole did not stem mainly from new productive enterprises in agriculture and industry, but from “throughput” sections which by their nature could offer no long - term potential alternatives.” (p - 15)

These factors were contributing more to the pressure of the urgency of advancing and developing technical education to meet the economy's needs. The plan then turned its attention to the present situation of technical education. It only showed the scale of

quantitative expansion in the form of physical development. It pointed out that technical education :

“ saw a significant development of physical facilities. A total capacity of 6120 places was created in the industrial education programs. Enrollment lagged behind capacity at 1,217 (i.e. 19.9%) in 1398 / 99 (1978 -79) largely as a result of the greater flows from intermediate to general secondary education.” (p - 295)

This clearly showed that studying technical education and its qualitative capabilities was lacking in the process of planning. Nonetheless, it was understandable that at this stage of development that concentrating on infrastructure development should be the norm, keeping in mind that qualitative development must follow. It was a fact though, that the speedy economic developments in the Kingdom due to the rise of oil revenues had had its negative effects on qualitative expansion of the educational system in general and more specifically on technical education. There were two important obstacles which hampered the development process and consumed most of the efforts; first was the lack of sufficient indigenous manpower, and second was the limited availability of suitable infrastructure needed for that kind of development. With the sudden wealth large numbers of workers were needed and since the required number was not available, thus, large number of foreign labour were invited to work in the Kingdom. Furthermore, these large numbers needed to be accommodated, therefore, the full concentration of the development plans was on developing the infrastructure. In other words, the Kingdom of Saudi Arabia was not fully prepared to receive such wealth and such development at such speed.

The Plan then moved on to propose the objectives and policies for the development during the coming five years. The proposed objectives for the education and training system as a whole were :

- “ 1. To expand coverage to provide equal access to at least basic education for all citizens while improving educational quality;
2. To equip citizens as future participants in the labour force by providing types of training which are responsive to the changing needs of the economy.” (p - 287)

The more specific education and training goals and policies were :

“ All plans respond to the following four major strategic goals for education. These are : (1) to improve the quality of

education and training ; (2) to make the education and training system more responsive to the needs of the economy; (3) to increase the efficiency via improved administration and management; and (4) to facilitate a balance quantitative growth of the system.” (p - 299)

Meanwhile the policies to implement these goals were :

“ The Government, in conformity with national strategy, seeks to improve the quality of education and training by undertaking the following policies, recognizing that qualitative change requires a significant head start and special institutional provisions to remedy current weakness:

(1) Establish the institutional capacity ( staff, facilities, procedures) for identifying, developing and extending programs of qualitative change adapted to the environment of the Kingdom;

(2) Install the necessary mechanisms for reporting on qualitative aspects ( assessment of student performance, evaluation of instructional programs);

(3) Develop a capacity for planning and programming qualitative change;

(4) Manage more adequately those variables in schooling which impact on qualitative change.” (p - 305)

In order to improve the responsiveness of education and training system to the economic needs, the Government should be undertaking the following policies :

“ 1. Ensure that general education programs reflect the broad economic concerns of Saudi society, and that appropriate linkages with work - related training are established;

2. Improve public knowledge about the economy and its private returns, with a view to influencing attitudes toward technical and vocational training in particular;

3. Make every effort in technical and vocational education to ensure the participation of major employers with regard to determining priority programs in setting up appropriate standards of certification.” (pp. 305 - 6)

It was obvious that this Development Plan was laying down the principles of establishing the relation between education and the world of work. It appeared that the emphasis was right; nonetheless, it was in its infancy stages. In other words it was too early to give an accurate judgement of its success until the results of this approach become available, that is to say, after another five year period, more specifically in the Fourth Plan. The Plan also asked for commitments from industry to employ graduates to compensate for Government financial support. On the other hand, the Plan proposed the establishment of the Education Development Centre (EDC) within the Ministry of Education to maintain the relation through curriculum matters. Through that, the Plan hoped to accomplish a comprehensive and constant supply of indigenous manpower

matching the economic needs of the country. Nonetheless, it could be said at this stage that more research and studies in this field were needed to generate a strong base of manpower supply and its means.

#### **Fourth Development Plan (1985)**

The Fourth Development Plan was issued in 1985 to cover a five year period until 1990. Unlike the previous plans, this Plan had given the development of human resources sectors special attention. It was mainly divided into three parts: the achievements of the previous plan, the situation at present and finally the proposed changes and development in the coming period. The Plan displayed at the beginning the general objectives of development in the Kingdom of Saudi Arabia. Some selected objectives were :

- “ 1. To form productive citizen - workers by providing them with education and health services, ensuring their livelihood, and rewarding them on the basis of their work;
- 2. To develop human resources, thus ensuring a constant supply of manpower, and to upgrade and improve its efficiency to serve all sectors;
- 3. To continue with real structural changes in the Kingdom's economy to produce a diversified economic base with due emphasis on industry and agriculture.” (p - 41)

In this plan more explicit terms were used to establish the relationship of education and work. It urged both private and public sectors to work closely with the education and training system.

- “...it will be necessary for the whole educational system to become more explicitly oriented towards the labour market in all its relevant activities. To achieve a better balance between supply and demand it is essential that :
- the quality and quantity of those graduating from the education and training establishments match the requirements of the private economy;
- special technical and vocational training programs for adults ( both currently in the work force and potential workers) be expanded and based on private sector needs.” (p - 51).

The Plan also highlighted the policy options to maximize the immediate and long - term employment prospects of Saudis. It stated that :

- “ the Government will study the effectiveness of the following measures:
- influencing formal education and training curricula to adapt to the needs of a competitive economy relying on

advanced technology and related systems of related economic organization and management;

- Providing financial incentives to private sectors employers to promote the employment and specialised training of Saudi workers;

- collecting and disseminating information on current labour market conditions and future requirements to all citizens, as well as information on , social, moral, and religious value of work, to influence their attitudes and expectations.” (p - 52)

Meanwhile, the Plan recognized the limits and capabilities of the society in order to put forward the appropriate development strategies. It acknowledged that:

“ There are elements as well, however, in terms of the risks associated with the free flow of technology transfer. The risk lies in the duality of dependency and obsolescence. Saudi society can not as yet be expected to counter it in the Japanese way, that is, by further developing the imported technologies on home ground and through domestic research. The main option available to the Kingdom is to achieve maximum efficiency in the use of technology and prolong the period of utilization of imported technology.” (p - 57)

The Plan then presented the achievements of industrial education in the Third Development Plan. It highlighted the quantitative expansion of technical education. It is worthwhile to mention at this stage that the General Organization for Technical Education and Vocational Training (GOTEVT) had been established during the Third Plan period. The achievements of industrial education, however, during that period was as follows :

“ The capacity of technical education is limited to 6,610 students. In 1983 -84 (1403 /04), total enrollment was 4,028 students 739 students graduated. Enrollment in 1984 - 85 (1404 /05) was essentially unchanged. Through the first four years of the Third Plan, the cumulative enrollment was 11,334 and the cumulative number of graduates was 1,957.” (p - 296)

Yet again the exact development and advancement of industrial education had not been revealed clearly. Instead, the Plan showed the total and cumulative enrollments and graduate numbers. It did not show the scale of participation and responsiveness of technical education to the economic needs, a goal to which the previous plan had aimed at. However, from now on and for the first time, technical education and training would be under the supervision of a specific body, that is, the GOTEVT. That might give technical education a clearer role to play in the development process in general and in responding to economic needs in particular. It might also help to change the negative

social attitude through skillful use of media and other available means to promote this type of education among Saudis. This Organization would be the main body to implement the Government policies concerning training matters. It would have its own specific objectives and specific allocated budget, whereas in the past it was divided between two Ministries, that is , the Ministry of Education and the Ministry of Labour and Social Affairs. In other words, technical education and vocational training had no particular or specific role to play. Recognizing that, the Plan, for the first time, put forward a precise development strategy for technical education advancement and compliance with the rising economic needs:

“ A fundamental task in which GOTEVT's efforts will be especially important is to modify the outlook and attitudes of Saudi manpower towards a more positive view of vocational trades and manual work. At issue is the ability of the Kingdom to achieve manpower self-sufficiency. To accomplish this an increasing flow of Saudis towards vocational and technical occupations will be needed. GOTEVT can play a constructive role in this effort through continuous and critical evaluation of the relevance of its training programs to the manpower needs of industrial and commercial concerns throughout the Kingdom. Special attention must be given to the needs of small firms and underdeveloped communities, because larger firms and developed areas are better able to meet their specialised needs through their own efforts.” (pp. 299 - 300)

The Plan also stated the outlines and objectives of those agencies responsible for human resources development. These agencies were; The Civil Service Bureau (CSB), The Deputy Ministry of Labour Affairs (DMLA), and The Secretariat of the Supreme Manpower Council (SMC). Within these three agencies the main Government's policy of manpower supply and demands would be carried out.

It appeared that although the goals of the Third Plan were suitable and responsive to economic needs, the achievements of technical education did not show that it had performed as anticipated. It seemed that the problem was not the lack of specific goals for development as much as the lack of fundamental and basic studies of the actual capabilities of the industrial institutes and the problems of their applicants. The Third Plan had also put forward policies, objectives and programs to be implemented in the past, but the results were also not as anticipated. In this Fourth Plan, yet again, more policies, objectives and programs had been proposed in order to make technical

education more responsive to economic needs. The success or failure of them were yet to be seen in the following plan.

### **Fifth Development Plan (1990)**

The Fifth Development Plan was issued in 1990 to cover a five year period until 1995. It was a continuation of the previous plans. It concentrated mostly on the development of human resources. It gave a special attention to the relationship of technical education and vocational training to the world of work especially to the private sector.

At the very beginning it highlighted the most important key issues which were going to be the main concern of the coming five years. It pointed out three important key issues :

“ Although impressive progress has been made by the Kingdom in developing human resources at all levels, a number of issues have emerged which require special attention for the realization of the Fifth Plan’s goals:

1. Balanced manpower development.
2. Upgrading manpower efficiency.
3. Manpower Utilization.” (pp. 55 - 6)

Around those three issues, the Fifth Plan drew its policies, objectives and programs for the five year period. Therefore, the Plan moved on to present the general objectives of the training sector in the Kingdom during the Fifth Plan period. These objectives were :

“ 1. To increase the horizontal and vertical coverage of vocational and technical education and training programs with due emphasis on on-the-job training in both public and private sectors, in order to meet the requirements for qualified national manpower;

2. To place great emphasis on the quality of vocational and technical education and training, with particular emphasis on modern technology at all levels in order to meet the national economy’s requirements;

3. To maintain coordination and cooperation between vocational and technical education and training institutions, and other competent agencies, with a view to achieving manpower development objectives;

4. To improve internal efficiency and external effectiveness of the training system by increasing the quantity of output and raising its quality, and by upgrading the system’s operating efficiency through the development of its administrative and technical functions.” (p - 274)

In this Plan as in the previous plans, the achievements of the past were presented. In doing so this Plan also presented a general presentation of figures rather than specific and accurate analysis of what actually had happened during the period of the last Plan. This made the evaluation of the actual progress made by the industrial education very elusive and not clear. The Plan presented the achievements of the past two decades instead of the last Plan as follows:

“ The last two decades have witnessed a rapid expansion in the training sector’s infrastructural facilities and enrollments at all levels, along with sweeping organizational changes:

- The total number of students and trainees undergoing secondary and post- secondary vocational and technical education, and short- term pre- service and in- service training programs, has increased more than tenfold from around 6,000 to over 70,000.” (p - 274)

It was revealed in this Plan that technical education and vocational training system had some negative aspects. These problems had been presented to be addressed in the Fifth Plan period and to propose the appropriate alternatives. The negative aspects mentioned in the Plan were :

“ 1. External Effectiveness of Training Institutes.

2. Low Operating Efficiency.

3. Coordination ( among vocational and technical education and training institutions is important for identifying the role and tasks of individual institutions in accomplishing manpower development objectives.)

4. Identification of Training Need. ( Statistical surveys of labour market requirements for various specializations are an important method for identifying training requirements and planning technical education and training output. The absence of such information poses a constraint on planning for the development of national manpower. An important focus of the Fifth Plan is to stress the importance of such information and statistics in the definition of planning targets for some training agencies.

5. Master Plan for Training.

6. Provision of Educational Leaders and Upgrading their Efficiency.” (pp. 277 - 8)

Therefore, in order to overcome these deficiencies the Plan proposed some policies and programs to be carried out by the Government and the private sector alike throughout the plan period. It had been recognized ( not for the first time) that technical education and vocational training must comply with economic needs and the requirements of the market. Thus the major policy of this Plan would be to :

“ further develop the vocational and technical education and training system with a philosophy and operational structure that is

responsive to the changing labour market environment and that meets the skilled manpower needs of the Saudi economy effectively and efficiently. Towards this goal the following policy measures will be implemented :

1. Increase the coverage of vocational and technical education and training services.

2. Re- orient the training system towards labour market requirements.( Advisory committees, consisting of representatives of employers and training institutions, will be established at the national, regional and local levels. Selected administrative functions will be decentralized to make the system more responsive to local needs. The curriculum will be periodically reviewed and revised to keep abreast of technological developments and to inculcate in trainees a sense of responsibility and entrepreneurial skills. Occupational standards in priority areas will be developed. Graduate placement and follow- up services will also be established. The nature and scope of financial incentives provided to students and trainees will be reviewed.

3. Improve the policy making and coordinated implementation mechanism of the training system.

4. Develop a centralized support system.

5. Improve the professional competence of training personnel.

6. Increase the participation of the private sector in the financing and delivery of training services.

7. Coordinate admission policies among vocational and technical education and training institutions.

8. Increase the utilization of existing training resources.

9. Saudiization in the private sector through training.” (pp. 280 - 1)

To achieve that, the Plan presented the role of the government and the private sector alike. It set out the main responsibilities and contributions of each side. It also acknowledged the modest role of the private sector in the field of training and manpower development as a whole:

“ The government has been always the major producer and user of vocational and technical education and training services. The private sector, with the exception of a few large companies, has neither used the training services provided by the government, nor made any significant investment in developing its own training activities.

The Fifth Plan period will bring a new outlook to the sector. The government will continue to provide basic training services, through the following measures:

- continued financing of vocational and technical education and training;

- continued construction of educational and training facilities;

- emphasis on the importance of national manpower development;

- provision of financial and other assistance which contribute to manpower development.

In the meantime, more active contributions will be made by the private sector during the Fifth Plan in the provision of training resources, through:

- contribution in setting up some vocational training centers, institutes, schools and technical colleges under long term lease agreements;

- contributions to technical manpower preparation by creating specialized technical institutes;
- the formation of national technical committees which would contribute to the development of vocational and technical education and training.

The expansion of private sector training activities will be actively encouraged and supported by the government.” (pp. 278 -9).

The plan then presented the main programs to be implemented in its duration. It proposed seven different programs as follows:

“ There are seven main programs for training sector in the Fifth Plan, which specify the essential activities required to operate training institutions. The programs are:

1. Education and Training.
2. Research and Development.
3. Administrative Development.
4. management and Operation.
5. Manpower Development.
6. Operation and maintenance.
7. Construction.” (pp. 281 -2)

Finally the Plan presented the growth targets for total enrollments and graduates of industrial education students between 1990 to 1995. The Plan predicted that in its first year 1989/1990, 2,864 students would apply for technical/industrial education, and the number of graduates would be 1,512 students for the same period. The Plan also predicted that the total number of applicants in its final year 1994/1995 would reach 5,191 students, and the graduates number would extend to 3,075 graduates. These numbers seemed to be to some extent realistic, but only on the part of new entrants because enrollments had been on the increase since 1986. On the other hand, the number of graduates was not so promising because the rate of drop-out was high throughout the years. Since this issue of drop-out had not been discussed as an important factor of industrial education failure, therefore, the target may not be achieved.

This Plan, like its predecessors, proposed some structural changes; though wider this time, it did not take into account the general social attitudes towards this type of education. When it presented the achievements of the last plans, it tended to show the cumulative progress, which was presented as overall totals rather than sub dividing them and attempting to explain the drawbacks. That is to say, it did not show how responsive technical education had become since the previous plans. The actual situation was that technical education was still in its early development stages in the Kingdom of Saudi Arabia. Nevertheless, that should not prevent the policy makers

from pinpointing the main driving force behind its continuous failure and tackle it. Although many changes had been proposed in the previous plans, technical education was still lagging behind the actual economic developments in the country. The results in these plans showed clearly the modest progress made by the training system during the past. It seemed at this stage that development plans were concentrating on the economic development more than the education and training system in the country which could act as a vital source of development. This division of planning for the economy and planning for education had emerged as a serious cause of failure of the education and training system in the Kingdom.

### **Comments on the Five development Plans**

The picture of technical education and training in the Kingdom of Saudi Arabia by the end of the Five Development Plans became clearer. At a birds-eye-view of the technical education system in the Kingdom the following observations have emerged:

1. The degree of emphasis on this type of education as the main provider of national manpower had not been strong. In other words, the Saudi Government probably had not yet given very high priority to his type of education.
2. Although the intention to develop this type of education to become the main manpower supplier was there, the means to achieve it were lacking. The vitality and importance of education in general and technical education in particular to the development process was obvious in each and every development plan. Considerable attention and careful planning was included in all plans. The linkage of the education and training system to the world of work was established at least in theory.

As a result of all that effort technical education provision had expanded in terms of physical structure i.e. the number of students, the number of schools and colleges. Nonetheless, in each stage of development technical education seemed to be lagging behind the general economic situation of the country. Throughout the five development plans it failed to achieve the proposed objectives. Despite that failure, in every new plan instead of raising the failure as an important issue, the plan proposed new expansion. The Ministry of Planning in this sense did not launch an investigation or

commission a field research to study the problem and come up with suitable alternatives. In every new plan more demands and programs were placed on technical education to attain, mostly the same demands that technical education had failed to achieve in the past.

3. The separation of the general education system from involvement in the development process was clear.

4. Effective participation of the private sector in the education and training system was not encouraged.

5. There was no policy of promoting technical education and combating negative attitudes. One of the causes of the negative attitude was the little information the public had about this type of education and its future. To that end the GOTEVT did not make useful use of media or other dissemination methods to promote technical education socially. Nonetheless, lack of information was not the only factor to generate negative attitudes toward technical education in Saudi Arabia, but there were many other factors. One of these factors was the lack of coherent policy, that is to say, at the same time of stating the importance of this type of education in each development plan no practical steps had been taken to involve the private sector. The private sector had their own vision and requirements which these schools could not meet and thus they imported more foreign labour. On the other hand, general education had not been used as a preparatory base for promoting technical education and presenting it as one of the future route for its students. Finally, the future in terms of jobs was not clear to the students of technical education. It was an irony to have a practical education without a practical end.

6. Despite the efforts to develop a technical education curriculum according to the national economic needs, the relevance of technical education to the national economy was remote and insufficient to provide substantial support to the economic developments in the Kingdom.

7. There was a lack of coherent policy for the private sector to participate more effectively and efficiently in the training system development. The goals and policies put forward by the Ministry of Planning for the private sector seemed general and not

clearly identified. In other words, there was no specific programme that regulated the relation between the training system in the Kingdom and the private sector. However, the private sector had its own reasons for not participating in this process and for not employing Saudi graduates. They were:

- a) It was more expensive to employ Saudi workers than foreign labour who had the required training and the past experience;
- b) Saudi manpower were less committed to the work than the foreign labour. The non-Saudi workers were punctual, disciplined and flexible;
- c) Saudis were reluctant to work far from where their families live, while foreign labour were ready to work anywhere;
- d) The foreign labour were working on a contractual basis, thus, the manager had the authority to terminate their contract whenever it was necessary. That, however, was not possible in the case of Saudis;
- e) The kind of technological skills and knowledge required were mostly not acquired by the Saudi workers.

These factors were mostly reiterated in every discussion about the role of the private sector in the development process.

8. It appeared that the Development Plans were mainly concerned with the immediate economic progress rather than the long - term planning for human resources. When the oil revenues had increased during the 1970s many jobs were created and since Saudi Arabia had not enough manpower to fill these jobs, thus, many expatriates had to be brought to compensate the deficit. Accordingly many roads, airports, housing blocks and hospitals had to be built to cater for these numbers. Those two factors were mainly dominant during that period i.e. lack of indigenous manpower and lack of infrastructure. Since that time nearly all efforts were directed to achieve one part of that goal, that is, the rapid establishment of infrastructure. Meanwhile, the other part, that is , technical education was not treated as an important factor of development and therefore, it had not achieved sufficient success over the past years. This situation seemed to be continuing until this date, that is to say, technical education in general and industrial education had not been focused on by the Development Plans.

## **Empirical Study**

On 13 of February 1993 a seminar about national manpower was held at the Institute of Public Administration in Riyadh. The main aim of this seminar was to discuss the proportion of Saudi workforce participating in the private sector, and find suitable alternatives to overcome the manpower problem in general. To prepare for this seminar the Institute had conducted a field research to investigate the problem. The results of this research along with other papers were the main components of the seminar. The title chosen for this seminar was "National Manpower in the Saudi Private Sector, the Reality, ambitions, obstacles and recommendations". The participants in this seminar were sixteen governmental and private sectors. Each participant provided a different account of the problem according to his experience, nonetheless, all of them had to cover the same points in their presentation. In other words, each participant had to describe the problem first, present the various reasons and finally list the recommendations and suggestions.

All participants agreed that representation of Saudi workforce in the private sector was not only low, but also diverting from the actual Development Plans. They also agreed that the problem was consisting of two parts. The first part was the private sector and its policies, and the second was the education system and its outputs. Nonetheless, they presented the main general and educational reasons which according to their experience had caused the low participation number of Saudi workforce in the private sector. Those reasons were:

### **First, General Reasons**

1. The low wages the private sector offered to their employees.
2. The small number of qualified Saudi graduates.
3. The lack of training and incentives in the private sector.
4. Social factors: Saudis believed that working in the Government was more secure. Furthermore, to work for the Government is to serve the nation, while working in the private sector is only serving one person, that is, the owner.
5. Cultural factors: Saudis preferred to work near their families.

6. The private sector demanded long working hours.
7. The rate of Saudi dropping out from work was higher than the normal rate.
8. Speed and easiness of obtaining experienced foreign labour had contributed to abandoning the indigenous workers.
9. Saudi workers were slower than the foreign labour in adapting to the work roles and conditions.
10. There were increasing demands from the employers to more diversified skills, which were not acquired by the Saudi workers.
11. Promotion and demotion were connected to productivity. Therefore, the employer could get rid of any foreigner who did not perform satisfactorily during the contract period. That was not the case with Saudi labour.
12. The decreased local demands had forced the private sector to reduce the number of workers in their firms.
13. Inconsistency between education and training system output and the private sector needs and requirements.
14. Decreased value of maintenance and operation contracts between Government and the private sector.
15. Disdain of Saudi workers to some types of jobs like maintenance work, carpentry, plumbing, security and cleaning.
16. The private sector tended to exaggerate their need for long periods of experience and high qualification.

### **Second, Educational Reasons**

Some of the participants also pointed out certain educational reasons which had caused this problem to evolve. These reasons were :

1. The application of modern technology in the private sector had not been met by equivalent development in the levels and standards of education and training programmes.
2. Participation of businessmen in the planning of education and training policies at all levels was lacking.

3. Students at their early stages of education had been deprived of the opportunity to develop a creative and critical mentality through the 'spoon feeding' method of teaching.

4. General weakness of graduates in the field of English language which was essential to the private sector.

5. The absence of guidance in general education had lead students to wrong selection of their training courses.

6. The number of students joining technical education had increased, but they were mostly using the system to gain a certificate so that they could find jobs in the public sector, but not out of interest in this type of education.

In each paper presented in this seminar there were a list of recommendations. Some of these recommendations were general and some other were educational. In the following section the general recommendations will be presented first followed by the educational.

### **First, General Recommendations**

Participants agreed that the practices of the private sector and some Government departments were contributing to the problem, therefore, they had to introduce some changes. These changes were :

1. The private sector should encourage students to join their firms through contacting them during their studies.

2. Cooperation to establish a dual training system through which trainees could gain experience during their studies.

3. The private sector should provide financial incentives to the graduates to join them.

4. The private sector should be committed to employ Saudi work force gradually by taking a certain percentage annually.

5. The private sector should be asked to give more attention to on-the-job training.

6. The private sector should enlarge its training activities to include specialised technical training. Most of the training done now is administrative.

7. The government should encourage the private sector to increase Saudi workforce through connecting its contracts, loans and aids with a minimum percentage of Saudi manpower in a company.

8. The government should revise and update its roles and regulations of manpower.

9. The government should lay down specific manpower objectives which should be revised annually to meet the markets' needs and requirements.

10. The government should establish employment offices which should provide Saudis with information and guidance about available jobs in the private sector.

11. The government and the private sector should work to narrow the gap between wages offered by the private and the public sectors.

12. The government should establish a national committee under the supervision of the Ministry of Labour, Manpower Council and GOTEVT to study the employment problems in the private sector and then put forward suitable alternatives. These alternatives should then be presented to the highest authority to take action.

13. The government should specify a body to monitor the dropout and transfer among Saudi workforce in the private sector to minimize the rate of quitting.

## **Second, Educational Recommendations**

In all papers the participants agreed that the education and training system in the Kingdom of Saudi Arabia had its share in the problem. They agreed that unless education started to respond to the economic needs this problem would persist. They listed some recommendations for the educational authority in this respect:

1. Emphasis should be shifted from quantitative expansion of the educational system towards quality. That should be done through developing curricula, teaching quality and the introduction of modern technologies into the educational process.

2. Establish standards and criteria to test the quality of graduates.

3. Give priority to development of technical human resources through continuation of expansion of technical education and vocational training especially upper secondary.

4. Reduce the rate of drop-out and failing by improving the internal system of education and training and by taking full advantage of the available resources.

5. Establish centers to provide students with appropriate technical guidance within secondary and post secondary education and also within training institutes.

6. Establish comprehensive and general policy skeleton to develop and expand some aspects of education and training system.

7. Re- evaluate the content of the general education curricula in the three stages to include equipping students with practical and behavioral skills and help them to think creatively.

8. Ministry of education should be concerned to include in its curriculum the promotion of positive attitudes towards manual work.

9. Regular meetings with the private sector should be conducted to discuss the indigenous manpower problems and to develop practical ways to overcome them. Institute of Public Administration (1993, Translated and summarised by Y.M.)

To sum up, The study of the five Development Plans of the Kingdom of Saudi Arabia showed an obvious separation between planning for education and planning for the economy. The resultant effect of this separation in the planning process was almost a total isolation of the educational system from actual and effective participation in the development process. It appeared that, although technical education was supposed to be a modern system in nature, its participation in the modern system in the country was insignificant. That might be caused by its students who were still coming from a traditional background. A background which affected their performance ability and eventually isolated them from an effective participation in the practical life. The study conducted by IPA showed clearly the effects of this background on the overall performance of the private sector. Furthermore, it showed the role which the education and training system could play in the development process.

The development of one system at the expense of the other would not help either of them. The modern system would fail without the participation of the national manpower in all its fields. Similarly the traditional system of education would not fulfill the aspiration of the young generation if it did not involve itself with the actual developments in the country. The rift between traditional and modern systems had

many explanations. In the following chapter a more theoretical approach to the problem will be carried out.

## **CHAPTER FOUR**

### **The Concept of Vocational Education and Training**

In the previous chapters the reasons for the weakness of the education and training system in the Kingdom of Saudi Arabia were examined. This chapter will look into the general theoretical concepts of vocational education from the Western view as well as from the Islamic view. There are some similarities and differences between the two.

During the past centuries many attempts have been made to define education and its purposes. There is a different definition of what education is in each society. The question 'what is education ?' is highly complex and far from straight forward; it has not only one answer, but several. The way in which education is perceived and understood in a society is culturally related and is dependent on its philosophy about knowledge, man and the universe. This understanding of education determines the way in which educational aims and purposes are to be formed.

Some societies perceived education as a process of transmitting the worthwhile culture to the new generation. In other words, a process of reproduction of the social, cultural and political systems. In some other societies education was seen as a process of preparing the young people for their future jobs, or more generally for their future roles in their societies. However, it was almost an agreement between educationalists worldwide that education must develop the whole person, intellectually, spiritually and physically. The emphasis and interpretation of each term were different from one society to another; sometimes differences occur within the same society.

To set the aims of education in a country required philosophical or theoretical underpinnings. Most societies had established some kind of understanding of the nature of knowledge, man and the universe. Some of these understandings were spiritual or traditional, others were secular, and in some rare examples were combination of both spiritual and secular. Generally in secularist societies the spiritual aspects became second to economic aspects and the reverse would characterise the traditional or spiritual societies. The danger came from placing great emphasis on one at the expense of the other, which resulted in a total negligence of either of them. The

traditional definition of education remained unchallenged for many centuries, but the results of the industrial revolution had presented it with serious questions and issues which forced it to a defensive position. At present the technological advancements have exposed the traditional to many criticisms and challenges. There were those who called for pure materialistic approach to acquiring knowledge, and those who disregarded the material world and rejected it as an aim of education. Nonetheless, there was a third group who tried to find a justifiable balance between the two extremes.

In some societies the aims of education were treated as sacred statements and thus, immune to any kind of change. As a result, education was isolated from playing a meaningful role in the development process taking place outside the doors of its institutions. The academic/vocational division of education, then, became inevitable. In the Islamic countries the isolation and division did not stop at the level between academic and vocational but also led to the isolation of intellectuals from their societies.

From the time of the industrial revolution, pressures on the traditional education systems in the West as well as in the East to be more responsive to industrial needs were increasing. Since the aims and purposes of the traditional education (mostly elitist) were not geared towards this end, it did not accept the new calls for change or compromise. The demanded changes were not merely a question of responsiveness, but rather a call for radical change of attitudes, thought and methodology. The firm stance of the traditionalists and the persistence of the modernists necessitate an emergence of a two tier system of education and training. In the period of the mass production industry, this division was accepted as a reality, but many questions have been raised recently about its validity in the modern world of global economy and global communications. As Young (1993) pointed out that:

“ The first substantial increase in specialisation occurred with the emergence of the modern state in the last decade of the 19th century. It developed further through the expansion of industrial economies in the 20th century with the growth of mass production.... The consequences for the newly emerging system of mass education were twofold. Curricular specialisation was fuelled by the rapid development of knowledge expressed in the growth of and divisions between new subjects and vocational ar-

eas. At the same time school - based 'education' and work based 'training' became increasingly separate as the development of mass production: (made it possible [for the system of production] to rely on two separate institutions for training employees: the formal education system and the firm itself. The formal education system ... providing abstract knowledge of products and production... the firm [providing] training for the fraction of the workforce that needs skills. [Piore and Sabel, 1984])." (p - 210)

Many had attempted to find an end to this division. Those attempts could be explained at three levels, two extremes and one moderate. The first, was the traditionalists who degraded and disdained anything other than mental and intellectual learning. The second, was the modernist who called for educational reform on economic basis and questioned the efficacy and validity of intellectual learning in a practical society. The third, was the moderate who tried to build a constructive understanding of both stances. In the following sections these positions will be examined.

Ever since the industrial revolution and the French revolution took place in the eighteenth century, education and its purposes in the Western European nations had been undergoing constant change. There were two dominant views as Kelly (1989) pointed out :

“ those rationalist views that take as their starting point the supremacy of the intellect over other human faculties and stress that true knowledge is that which is achieved by the mind in some way independently of the information provided by the senses; and those empiricist views which have taken a contrary stance and maintained that knowledge of the world about us can be derived only from the evidence that the world offers us through the use of our senses.” (p - 30)

On one hand, the advocates of the former or the liberal tradition of education would argue that the most important and valuable is that education should aim at liberating the mind to be able to think and understand, to feel and appreciate. Their aim is to prepare the individual to achieve academic success which would be accomplished in the halls of the university. Academic or liberal education concern and focus is on thinking rather than doing, the mind rather than the hand.

On the other hand, the empiricists would say that the value of education is in its relation to the world of work rather than for its own sake. They would argue that education should aim at usefulness rather than abstraction, social utility rather than

personal improvement. In their pursuit of a respectable place in the general educational system empiricists sought to devalue the importance of liberal education and its norms and values by relating all economic and industrial failures to the failure of the education system to produce capable individuals. As Harris (1979) pointed out:

“ Classical idealists tend to play down the place of the real world in the process, or else see the world as something to be transcended; suggesting that real knowledge is to be acquired by contemplation, and that it is an ‘objectless’ production of the mind... At the other end of the scale there have been those, like Bergson, and like some extreme materialists, who have taken knowledge to be a process or a product without a subject. Neither of these positions is tenable.” (pp. 3-4)

However, there is a more balanced view about what is worth learning in the view of Pring (1995) “ *To educate people is to get them to learn those things which make them educated persons - to acquire those personal qualities and attributes, characterised by intelligent knowing and doing and appreciating, which enhance the quality of life.*” (p 139). Lawton (1989) also explained that:

“ One of the problems of industrial society is that work tends to take on a very powerful, even dominant, significance for adults. Employers, parents and the young themselves often see childhood and adolescence largely in terms of preparation for work. This must be an incomplete view of education and maturation, since work is only one of many features of the adult world. A real danger is that preparation for work is seen as ‘the’ purpose of education rather than one of several purposes; a related danger is that the distinction between education and training becomes blurred, or that training is confused with education completely.” (p - 9)

But the dualism between education and training, or between theory and practice is still affecting many educational systems today. Education has been used to reflect the desired culture of a dominant group, as well as an enhancement tool to reproduce the norms and values of a society. The decision on what is the purpose of education relied heavily on the basic philosophy adopted. In every case, one can say, education should be a fair reflection of the culture with all its variations, intellectual, social, economic, commercial and industrial. However, in many societies today education emphasised the importance of mainly one part of culture. That is not to say it ignores the other, but rather applies different degree of emphasis to one over the other. Nevertheless, some societies have combined both, theory and practice, education and work, thinking and doing with relatively equal stress. Young (1993) explained that it was not the division

by itself which caused the problem in England and Wales, but rather its social roots.

This can be observed in the case of the Netherlands which:

“ has a divided educational system, but one that is not embedded in a deeply divided social class structure. In such a situation, it is unlikely that the educational divisions will have the social consequences on levels of participation that they do in England and Wales.” (p - 204)

This chapter will look into the main reasons which made some societies separate academic education from vocational education and training. It will also look into the justification of those societies who treated both vocational education and academic education equally. It is worth pointing out from the outset that in each society there is some kind of division between academic education and vocational education because of their different nature; it is the emphasis which varies. In some societies the separation between academic and vocational had its profound negative effects on industry and the economy at large while in other societies separation had little effects, to the contrary it helped improve the national industry to a considerable extent.

### **Historical Background**

At this stage, a brief historical account of the basic theories which underpinned educational thinking in the West will be presented. That will help to understand the current educational problems more clearly.

Western thinking of education has its roots deeply embedded in the Greek philosophy of knowledge, especially that found in the works of Plato (428 - 347 BC). The basic feature of his theory was a powerful view of knowledge and truth. He believed that there are universal truths to be found even in areas such as those of aesthetic and moral values. One of the main emphases of his theory was on education as intellectual development i.e. the development of man's power of reason. Furthermore, intellectual excellence can be achieved by only selected few able and intelligent individuals. This in fact led it to neglect, and even to downgrade, all or most practical activities, and to have the greatest difficulty in accommodating aspects of development other than the intellectual aspects. Moreover, it alienated the majority of the population as they were not capable of receiving education. That view is still the basis of the attitudes of many

people towards education today. They, like Plato, are concerned to distinguish education from vocation, study for its own sake or for the sake of soul. This view is clearly stated in the idea of those who advocate the liberal view of education today. Under this view of education, the concept of vocational education is a devalued and less important path. It is the kind of education which is not the specialty of the elites. It is the domain of low achievers and failures.

Understanding of the purpose of education as a result had been affected to a certain degree by this philosophy in many European countries. The affect, however, was not the same as Lauglo (1983) has demonstrated :

“ There are three internationally influential models: The English interpretation of the ancient Greek concept of liberal education, the French concept of *culture général* and the German one of *Allgemeinbildung*. They differ in their emphases... There is greater stress on training of moral character and on specialised study in the English case, on rationalism in France, and on encyclopedic scope in the German tradition.” (p - 286)

In some countries like Britain liberal ideals had dominated the general understanding of education for long time. But that view did not go without opposition. In explaining the various and different points of view towards education in the nineteenth century, Williams (1961) identified three ideologies: the public educators, the industrial trainers, and the old humanists :

“ On the one hand it was argued, by men with widely differing attitudes to the rise of democracy and of working - class organization, that men had a natural human right to be educated, and that any good society depended on governments accepting this principle as their duty. On the other hand , often by men deeply opposed to democracy, it was argued that man’s spiritual health depended on a kind of variously described as ‘liberal’, ‘humane’, or ‘cultural’. The great complexity of the general argument, which is still unfinished, can be seen from the fact that the public educators, as we may call the first group, were frequently in alliance with the powerful group which promoted education in terms of training and disciplining the poor, as workers and citizens, while the defenders of ‘liberal education’ were commonly against both : against the former because liberal education would be vulgarized by extension to the ‘masses’; against the latter because liberal education would be destroyed by being turned into a system of specialized and technical training. Yet the public educators inevitably drew on the arguments of the defenders of the old ‘liberal’ education, as a way of preventing universal education being narrowed to a system of pre industrial instruction. These three groups - the public educators, the industrial trainers, and the old humanists - are still to be distinguished in our own time.” (p - 162)

The superiority of intellectual learning was stressed by Mill's (1867) argument, although he was an advocate of a utilitarian stance:

“ men were men before they are lawyers and if you make them capable and sensible men, they will make themselves capable and sensible lawyers... what professional men should carry away with them from an university is not professional knowledge, but that which should direct the use of their professional knowledge, and bring the light of general culture to illuminate the technicalities of a special pursuit.” ( Cited in Pring (1995) p - 184)

Manual work was also degraded and disdained. It was not only considered to be a different path which did not encourage thinking and the acquisition of knowledge, but also was inferior to the academic path. The superiority of knowledge and understanding was rooted in the Greek concept of education as Lauglo (1983) pointed out :

“ The Greek concept of liberal education stressed the superior importance of cognitive knowledge and its value as a foundation for virtue. Knowledge was ‘liberal’ in the sense of freeing the mind from error and illusion , enabling the mind to function according to its nature. The overwhelmingly cognitive orientation of modern Western secondary schools reflects this tradition.” (p - 286)

Pring (1995) summarised the general view of liberal education ideals :

“ A common thread in the different interpretations of liberal education has been the central significance given to the cultivation of reason and to those studies which enhanced the capacity to know, to understand, to pursue the truth. For that reason, liberal education was based firmly on the nature of knowledge, learnt not as set of inert and discrete ideas but as disciplines of active thinking, internalised and interconnecting with each other. And this idea of liberal education has dominated the formation of our educational institutions, at every level and in every shape, and the content of the learning promoted by them.” (p - 184)

In this view vocational education has been perceived as a separate part of education.

The idea of vocational preparation also was highlighted by Pring (1995) :

“ In general, vocational preparation signifies the acquisition of skills, qualities, attitudes and knowledge that are judged to be important for entry into the world of work - either because the economy needs them ( for example, trained mechanics or physicians) or because the learner would otherwise be ill prepared to find employment within it.” (p - 187)

And thus, the characteristics of vocational preparation will be as Pring (1995) pointed:

“ The aim is, not intellectual excellence for its own sake, but competence at work - or competence in the tasks which

adults have to perform not only at work but also at home and in the community... The content of the education and training programme is not derived from intellectual disciplines, or from the best that has been thought and said, but from an analysis of the work to be done... The value of what is learnt is not justified by reference to intrinsic worth or, indeed, to social improvement, but to the usefulness of it... The best place for this learning is not away from the busy world of commerce and industry, nor away from the practical problems that young person will face after school and university... Finally, such a view of learning - its aims, its context, its value and its location- cannot be left in the hands of the academics.” (pp. 187 - 8)

The liberal tradition of education had been treated as something holy and sacred which should be protected and preserved, by many people including some politicians, as Lawton (1994) has noted:

“ In general, however, Conservatives tend to take for granted that society is, and should be, divided hierarchically into ranks or classes, and that the Platonic view of different kinds of educational training for different levels in society is part of the natural order.” (p - 12)

In the eighteenth century, the process of revolution - as mentioned above- in many areas of thought in Europe had begun. In science, for instance, it was the beginning of the experimental approach to scientific exploration which led to many quite important developments in the knowledge of and control over the physical environment. John Locke (1632 - 1704) asserted that all knowledge comes into the mind through the gates of senses, and that the mind of newborn child is *tabula rasa*. It is experience rather than reason which is the source of knowledge.

There began what has come to be called the progressive movement in education. The core of the progressive view made clear by its first exponent, Jean Jacques Rousseau who unlike Locke believed that the mind of a newborn child is good and that the surrounding environment which caused the damage, and thus, turns him to evil. This view was expressed in his famous novel “Emile”. According to this view, it is the child who must be in the centre of the educational process. In this new development the focus of attention has shifted from knowledge and eternal truths to be transmitted by the teacher and absorbed by the pupil, to the subject of the educational process i.e. the child. The attention also was drawn away from the end product of the educational process and centred on the process of education itself, away from what is to be learnt

and on to the individual who is to do the learning. This view was advocated and indeed elaborated by many educationalists in the nineteenth century such as Pestalozzi, Herbart, Froebel and many others. The implication of it was the emergence of a new model of education, that is, 'the child-centered'.

Throughout the nineteenth century and the beginning of the twentieth century more demands were launched to make education more responsive to the current economic and industrial needs especially after the social structural change from feudal to industrial. The purpose of education was brought up as an important political and social subject. Many educationalists and sociologists thinkers started to examine the long held view of education. Williams (1961) pointed out that there are three general purposes that can be observed in the education systems. First, the major general purpose "*that of training the members of a group to the 'social character' or 'pattern of culture' which is dominant in the group or by which the group lives*". Second, the specialised instructions "*The teaching of skills prepares a rising generation for the varieties of adult work, but this work, and all relations governing it, will be found to exist within the given 'social character'; indeed one function of the social character is to make the available kinds of work, and the valuations and relations which arise from them, acceptable*". Third, general education or education for culture "*Schematically one can say that a child must be taught, first, the accepted behavior and values of his society; second, the general knowledge and attitudes appropriate to an educated man, and third, a particular skill by which he will earn his living and contribute to the welfare of his society.*" (pp. 146 - 7).

Pring also (1995) pointed out that :

" There are three kinds of answers to questions about the aim of education. One might point to the benefits of which educational activities bring about - for example, for the individual, a better job and, for society, a more effective workforce. Here 'education' refers to those activities which are a means to some desirable end. One is educated for something - a certificate which will ensure employment or a skill which will lead to promotion... However, this answer by itself is inadequate because it says nothing about the specifically educational aspect of these activities. To ask for the aims of education is to ask for the purpose intrinsic to activities described as educational....So education, in this sense, is to learn - to acquire knowledge, skills and understanding - not to get a certificate. A third answer to questions about the aim

of education is to point to the value which one finds in the activity and which provides a justification for engaging in it. Not any kind of learning counts as education. Indeed, we contrast education with indoctrination or conditioning or more training. Educational activities lead to learning outcomes which are regarded as valuable - qualities of thinking and feeling associated with being an 'educated person'. Thus the aim of education as such is not to earn a living (although that might be an extrinsic aim), nor simply to learn, whatever the value of that which is learnt, but to learn those things which are valued and which constitute a valued form of life. In that sense, education is an evaluative term." ( pp. 108 - 9)

In this respect three prominent theories had influenced the Western education, that is, Pragmatism, Polytechnic education, and Populism. This is not to say that they were the only theories but they were the most influential in the empirical domain. In the following those three will be presented and their influence will be examined.

### **Pragmatism**

Pragmatism is the philosophy of usefulness and practicability of education in human life. Lauglo et al (1988) pointed out that

" Pragmatist epistemology underlies ideas which hold that learning should be directly relevant for the active interests and concerns which pupils have - or will face - in their out-of-school life : in their private lives and in their future roles as workers and citizens. There is a stress of 'relevance' for out-of-school application. There is a rejection of the view that curriculum should be justified by reference to intrinsically worthwhile structures of knowledge. Pragmatists reject dualism between 'pure' and 'applied' knowledge. Pragmatists argue that learning occurs best when arising out of application to 'real - life' problems, and when it is derived from sensory experience. Further, they stress the importance of broad human development, including psycho - motor and aesthetic abilities." (p - 4)

Pragmatism was first associated with its two founders, the American philosopher of science and language Charles Peirce (1839 - 1914), and the American psychologist and philosopher William James (1842 - 1910). They both rejected absolute idealism, they differently introduced Pragmatism, however, the core belief was that the meaning of a doctrine was the same as the practical effects of adopting it. In James view religious beliefs are true provided that they work. Peirce on the other hand was educated to a mistrust and scepticism of metaphysical reasoning when compared to the laboratory habit of mind. In the twentieth century this view became stronger after it had been

explained by the American educator, John Dewey (1859 - 1952). Dewey was well known for his great influence on the American education. He recognised that the child is an active, exploring, inquisitive creature, and thus, the task of education is to foster experience infused by skill and knowledge. His humanistic conception of practice remains inspired by science. Kelly (1989) pointed out that:

“ He (Dewey) believed that the proper model for all knowledge is that of scientific knowledge, where hypotheses are framed and modified according to publicly agreed criteria, so that while such knowledge has no permanent status it is objective in so far as it at least enjoys current acceptance by everyone.” (p - 34)

Through this line of thought Dewey brought different threads together into a single theory of knowledge, of man, of society and of education. It relates the view of knowledge directly to educational theory and practice. To him knowledge is ‘what works’ in real life. He developed the view that nothing in human experience can properly be seen as fixed or eternal, that everything must be recognised as being in a state of continuous change, development or evolution. Unlike the traditional theory which regards human knowledge as fixed, as objective and as true in a very strong sense, he saw knowledge as in a state of continuous evolution. Dewey (1916) explained that “ *Traditionally liberal culture has been linked to the notions of leisure, purely contemplative knowledge and a spiritual activity not involving the active use of bodily organs.*” (p - 306). With the vast and rapid technological development this view appeared to make sense, especially in the United States of America and other countries around the world. That is not to say that it has achieved absolute success like in USA, but it has to some extent contributed to the process of educational change.

The concept of vocational education and training in Dewey’s view is wide and not restricted to a list of tasks of manual work. It pays much attention to the person who does the job and to its social utility. In other words, the development of the human’s ability as a whole is more important than increasing the economic profits :

“ We must avoid not only limitation of conception of vocation to the occupations where immediately tangible commodities are produced, but also the notion that vocations are distributed in an exclusive way, one and only one to each person. Such restricted specialism is impossible; nothing could be more absurd than to try to educate individuals with an eye to only one line of activity... No one is just an artist

and nothing else, and in so far as one approximates that condition, he is so much the less developed human being; he is a kind of monstrosity. He must, at some period of his life, be a member of a family ; he must have friends and companions; he must either support himself or be supported by others, and thus he has a business career. he is a member of some organised political unit, and so on.“ (p - 307)

Dewey (1916) also pointed out that :

“ A vocation means nothing but a direction of life activities as renders them perceptibly significant to a person because of the consequences they accomplish, and also useful to his associates. The opposite of a career is neither leisure nor culture, but aimlessness, capriciousness, the absence of cumulative achievement in experience, on the personal side, and idle play, a parasitic dependence on others on social side. Occupation is a concrete term for continuity. It includes the development of artistic capacity of any kind, of special scientific ability, of effective citizenship, as well as professional and business occupations, to say nothing of mechanical labor or engagement gainful pursuits.” (p - 307)

Dewey was calling for a unified curriculum, a combination of the two sides theory and practice as Lauglo (1983) pointed out :

“ A theme that recurs in Pragmatist curriculum development is a quest for greater relevance both in terms of students' motivation and the prospect of applying school learning to 'real problems', than that believed to be accorded by academic subjects or disciplines.” (p - 290)

In the United States of America Pragmatist Perspective had its impact on the educational system as a whole, as Lauglo (1983) explained:

“ In accordance with individualist cultural values, the Pragmatist Perspective has in the United States supported variety and choice in secondary school curricula and in higher education. It has weakened the case for a large core of required courses for all students, because it has challenged the claim that certain forms of knowledge are of greater worth. The requirements which have been made have often been justified as fundamental 'communication skills' or on other utilitarian grounds.” (p - 290)

Nevertheless, there were advantages of applying this model as he added:

“ the Pragmatist Perspective has undoubtedly helped to reduce the inequality in status between 'pure' and 'applied' knowledge, between theory and practice. In post-compulsory curricula, it has 'solved' the problem of shared general education by stressing variety and choice.” (p - 291)

## Polytechnical Education

In other European countries more specifically Eastern Europe which were in alliance with the former Soviet Union, the notion of Polytechnic was adopted. The main philosophy of this perspective was related to the Marxist ideals as Lauglo (1983) pointed out :

“ As a philosophy of education it is rooted in Marxist epistemology. The notion of *praxis* is central : that man learns by acting on natural phenomena, transforming them while experiencing their influence. This experience is also the criterion of truth... Another core concept is the centrality of natural science: the view that it develops in response to practical needs and that, widely defined, ‘natural sciences’ underlies all knowledge. A third key concept is the claimed unity of Marxism and science; that Marxism is unique in its ability to give a ‘correct’ scientific explanation of the human environment, including its social and physical aspects.”(p - 292)

There are some similarities between the polytechnical view and pragmatism. One of those similarities was pointed out by Lauglo et al (1988) “ *the rejection of dualism between ‘theory’ and ‘practice’ (or ‘pure’ and ‘applied’ knowledge), and of the educational superiority of the former.*” (p -5). There are also some differences; “*whilst pragmatism stresses the value of ‘experience’ and ‘activity’ more generally, Marxism holds up the educative value of productive work in particular.*” (p - 5).

## Populism

Populism, as its name indicates, is the type of view which cares for the rights of the public and ordinary people. It defends the economic and political rights of the ordinary people against elites. It shares with the polytechnical perspective the theme of practical work as means of teaching values. It holds the idea of ‘the common folk’ and its rights as Lauglo et al (1988) pointed out that

“ Hard, physical toil is an important basis for identification as ‘common folk’. Populism typically celebrates the importance of work as source of moral fiber, self-reliance and civic virtue. Productive physical work is by this perspective educational in that it develops valued personal qualities. Populism may be sceptical of formal schooling on the ground that it unduly distances the young from their cultural origins, or because school removes a person from the hurly - burly of ‘real - life’ situations in which true character is formed.” (p - 7).

The populist ideals had affected education in some European countries like, Norway, Sweden, and Denmark. Lauglo (1983) pointed out

“ The populist notion that productive work is in itself a maturing experience that can compete with schooling in its value as general education has in recent years influenced policy in some countries. In Norway, work experience has become an important credential, on top of prior scholastic achievement, in competitive entry to different post-compulsory courses. In Sweden, five years of work experience by age 25 is in principle sufficient to qualify for university as a mature student, regardless of credentials from school. Characteristically, both countries have a tradition that not only includes a politically dominant Social Democratic Labor movement but also a more generalised record of populist challenge to ‘high culture’. Thus socialist and populist ideas have coincided to make labour count as a credential of general education.” (p - 293)

As a result of these different trends and views towards education and its purposes, a number of vocational education and training models around Europe had emerged. Those forms and models are focusing on relevance of the educational process to economic and industrial developments with different level of emphases. There are also different names and titles attached to institutions provide these types of education. The most regulated and best known models are three as Green (1991) summarises them :

“ there are three principal models which one can distinguish, each of which has different national variants. There is the employer - led, work - based system of training long familiar through the apprenticeship system; the education - led, college - based system which provides both general education and vocational training but in different institutions; and lastly, the education - led, college - based system which integrates education and training in a single comprehensive institution.” (pp. 3-4)

**The employer - led, work - based** is clearly demonstrated in the German Dual System where students at the age of 15 to 17 join an employer and then they will be released for two or three days for training. In this model training policy and curriculum will be greatly influenced by the employer’s requirements and needs. This model is highly productive despite its problems and difficulties. The aim of this model is as Lauglo (1983) put it was:

“ vocationally specialised knowledge and skill. school is only a second base and is intended to support training at work by teaching those practical skills which are not learned at work, vocationally relevant theoretical knowledge, and some further general education such as language and civics. The apprenticeship, with its historical roots in the medieval

guilds, is the clearest expression of this concept of vocational education. The concept of knowledge and skill is that of an *art*: tasks which are complex and in important respects non-repetitive, techniques which resist being broken down into constituent components so that they could be subjected to programming specifications. In this 'organic' concept of craft the appropriate learning method becomes supervised practice and 'modeling' - learning from observing the master at work." (pp. 294-5)

And the cultural beliefs of this type are :

" According to this tradition, vocational education is more than mere knowledge and skill and subtlety of professional judgement. The lore of craft or trade stresses values and norms: enduring commitment to one's trade, a personal identification with it , and pride workmanship. The tradition of the medieval guilds survived longer in Germany than in the rest of Europe." (p - 295)

Lauglo (1983) added :

" Kerschensteiner saw more general moral and civic virtues implied in that goal : conscientiousness, industry, perseverance, responsibility, self-restraint, and devotion to an active life." (p - 295)

Jochimsen (Secretary of the German Federal Ministry of Education and Science) (1978) explained the importance of training to the general social structure, he noted that:

" we are convinced that a carpenter journeyman is better off on the labour market, even if there is a surplus of carpenters, than if he were unskilled. We are also convinced - and here our outlook may be different from that in other countries - that it is better to make every effort to get a boy or girl of 16 into a regular training for an acknowledged vocation than to set up a range of short - term training courses for specific job or just 'to give them something useful to do to keep them out of unemployment, or out of the drug and juvenile delinquency scene.' ( Cited in Lauglo 1983, p - 296)

The second model is the **education - led, college - based** system which provides both general and vocational education but in a separate institutions. This model can be observed in France, Japan, Italy and Saudi Arabia with various degrees of effectiveness. The main feature of this model is that it allows students from both sides to go on for higher education. In the case of Saudi Arabia the system is a copy of the French model which was implemented in 1950s as a result of joint cooperation between the two countries. Though it has been modified several times, it still follows the same framework.

In this model both paths, though different, have been recognised as important for the students to pursue. It pays considerable attention to the significance of progression to motivate students to join this part of education. Nonetheless, the negative social attitude towards vocational education and training, though less than before, is still there if we compare the students numbers in both tracks.

The Final model is **the education - led, college - based** system which provides both general and vocational education in a single comprehensive institution. This can be seen in the Swedish model where a student can join the upper secondary school at the age of 15 -16 for three years. They have 20 different lines to choose from and the route to higher education is available for all of them. It resembles the populist perspective. This model derived its support from two main sources as Lauglo (1983) pointed out :

“ two main trends in policy during the 1960s: optimism about the importance of schooling for economic growth, and the view that social harmony could be furthered by educational reforms. Comprehensive education was advocated both on ‘equity’ and ‘efficiency’ grounds. Therefore, to develop school-based vocational education and to lodge it within more comprehensive institutions was part of a wider strategy of economic and democratic development. There was the desire to mitigate the socially divisive dualism between manual and mental labour. There was a vision of an economy that would be based on high technology and fast structural change. This was an argument for a broad vocational education which would prepare for a wider range of jobs, for more instruction in vocationally relevant theory, and for a higher level of general education.” (p - 298)

The West with its varied cultural and social background had been using these models for the past century. There were many reasons that made these different views to emerge and to be acceptable in some societies. In fact the existence of these different models was self evident that they had emerged in different circumstances within the Western industrial countries. For instance, the implications of the French revolution were different in France from the implications of the Industrial revolution in England. The French revolution was characterised as antiestablishment which demanded the uprooting of all establishments including the Church. In England, on the other hand, the industrial revolution although went on without the participation of the Church, it did not demand changes similar to those of the French revolution. Consequently, the emerging European models were diverse and different. In other words, the

academic/vocational division of education had its specific reasons in each and every society in the Western Industrialised countries.

However, in most developing countries these models were imported and used but not for the same reasons. Dualism between vocational and academic was there but its reasons within its cultural context were not precisely known. Instead of studying each country as a separate case, the Western solution was uncritically generalised and seen to be appropriate for every case around the world. Nevertheless, the pronounced reasons to make education responsive to economic needs in the developing countries were two as Dore et al (1984) pointed out "*unemployment and migration to urban areas*" (p 5). By relating general education to the economic needs - vocationalisation- policy makers believed that it would help to find jobs for the jobless and elevate poverty. Studies showed that the programmes of this nature in the developing countries neither secured jobs for young people nor improved the economic situation. It had achieved very limited success (Dore et al (1984); Lauglo et al (1988)). That is not to say relating education to the world of work is rejected in any shape or form, but rather to say that it is important to study and analyse the indigenous problems in their cultural context of each country as a separate entity and then suggest the appropriate alternatives. Any educational project which does not take the native and indigenous concerns into account doomed to fail. It will be considered as alien and in some cases hostile, and thus, less people participate effectively. In the following sections the Islamic concept of education will be presented and then compared to the current situation in the Kingdom of Saudi Arabia as an Islamic country.

### **The Islamic view of education**

The religion of Islam holds the belief that there are two worlds, one is on this earth (temporary), and the other is after death (eternal). Individuals should use this temporary and short life for preparation for the eternal one. Since the most certain thing in this life is death and the most uncertain thing is the time of death, then it is a priority that a person must know his duties and responsibilities and try to fulfill them before death. These duties and responsibilities were extracted from and determined by

the main fundamental sources, that is, the Holy Quran and the Prophet's (p.b.u.h) traditions. Therefore, religion is not part of life but it is the life. In other words, religion is the constitution which ought to govern all aspects of life economic, social, political and intellectual.

This may imply that life on this earth with all its activities are worthless. To some extent that is true, unless those activities were used to gain more understanding of the power of Allah, and thus, strengthen the faith that He is the Creator. In other words, each part of the worldly gains whether it was knowledge, experience, or any other life activity should be acquired for the sake of exploring and understanding the will and power of Allah. Obviously this view had its implications on all aspects of life including education. However, neither exploring the world for its own sake nor for the sake of contemplation and passive appreciation were the aim of Islam. Exploring the world should be conducted with full command, an inquisitive mind, and with righteous intentions. The Muslim should not be a passive spectator of the world around him, because the full understanding which is a prerequisite for strong faith could not be achieved by merely watching and appreciating.

The concept of education based on this view was that the child is always born neutral, that is to say, he is capable of going both ways - evil or good- all depending on his upbringing. Nevertheless, Islam acknowledges that he is full of natural instincts and that these instincts were implanted in him for his own good. They are important for his growth, existence and continuity in life. They should not be totally ignored or totally released but controlled according to the teachings of his Creator. The result of absolute release or absolute negligence will be evil but balanced control will lead to good. He will destroy himself if those desires are not controlled, therefore, he should be directed to use them in the proper manner which will harness good for him in the first place and for society at large. It is the task of education then to ensure that the child will get the proper direction to become a Muslim in the first place and to learn how to control his natural instincts and how to use them according to the laws of the religion. In this sense the purpose of education is to inculcate in the young people the value of virtue.

It is worthwhile at this stage to define the meaning of the word virtue in this context because it is fundamental to understand the meaning of education based on this view. Virtue is a middle stage between two evils. For example, bravery is a virtue and it is middle stage between imprudence and cowardliness, and thus, it is the task of education to keep this balance. In the Quran “ *Thus have We made of you an Ummat Justly balanced*” (Surah 2, Verse 143). This notion of intermediary had influenced the thinking of Muslims scholars, and thus, the purpose of education. Abduldaim (1984) pointed out that :

“ The purpose of education among Muslims was not totally worldly as it was with the Greeks or the Romans. It was not also purely religious as in the case of the early days Jews. It was rather a combination of both, religious and worldly. Muslims were aiming at preparing the individual for both lives, here and after death.” (Translated by Y.M. pp. 142 - 3)

In the early days of Islam education was a necessity for everyone and it was instrumental. Muslims had to learn reading so that they could read the Quran, they had to learn writing so that they could write it and they had to learn arithmetic so that they could apply its teachings into real life, like calculating the wealth and distribution of heritage, Zakat, and commerce according to the laws of Islam. Since human beings in different societies valued education according to certain interests, it is essential at this stage to show some examples of the driving force which led the early Muslims to place great importance on education.

As mentioned in chapter one, Arabs before Islam had some kind of education going on which mostly served the interests of individual group or tribe. After the emergence of Islam monotheism, collectivism and togetherness became the main values of education. The teachings of the Holy Quran and the Prophet (p.b.u.h) had encouraged learning and gave great value to those who possessed knowledge. Learning and knowledge acquiring had been encouraged because it is the means for a person to gain the blessing of Allah. As mentioned in the Quran: “ *Those truly fear Allah among His servants who have knowledge*” (Surah 35, Verse 28). In other place “ *Allah will raise up, to (suitable) ranks (And degrees), those of you who believe and who have been granted knowledge. And Allah is well - acquainted with all ye do*” (Surah 58, Verse 11). To compare between the two groups “ *Say: are those equal, those who know and those*

*who do not know ? It is those who are endowed with understanding that receive admonition”* (Surah 39, Verse 9). There are also the Prophet’s (p.b.u.h) traditions which indicates the importance of learning and knowledge acquiring like: *“Knowledgeable people are the inheritors of the Prophets”*. It was also reported that Imam Ali (one of the Prophet’s (p.b.u.h) companions) had advised one Muslim that *“Knowledge is better than wealth. Knowledge will guard you but you guard the wealth. Knowledge is the ruler but wealth is the ruled. Spending will decrease the wealth and expand knowledge.”* (Translated by Y.M- Cited in Al-Abrashi, p - 227).

It was through that kind of teachings that Muslims had recognised the importance of learning and knowledge acquiring, and thus, children were encouraged to acquire more and more knowledge. The social status of the learned men and women (the educated person) became high in the society; learning was valued and education was aspired to by everyone. They held a powerful rank in the society, more powerful even than the ruler, people would listen with respect and obedience to what they said or instructed.

According to this background, Muslim scholars had interpreted the purpose of education as eternal and worldly . In other words, education, on one hand, should prepare individuals to understand their duties as Muslims and then comply with those responsibilities. On the other hand, it should prepare them and instil in them the value of work and earning a living within the frame work of the former. This notion evolved from the basic source, that is, the Holy Quran:

“ But seek, with the (wealth) which Allah has bestowed on thee, the Home of the Hereafter, nor forget thy portion in this world: but do thou good, as Allah has been good to thee, and seek not (occasions for) mischief in the land: for Allah loves not those who do mischief ” (Surah 28, Verse 77).

In the early days of Islam, the concept of education did not reach the complexity and diversity it has reached today. It was free in two ways, free of cost and second free of any outside intervention i.e. thoughts were not restrained or prohibited by political interests of the state. Education also was for all in the sense of equality, that is to say, everyone had the right to be educated despite their material background or social status, all should get the same quality of education. Finally, and more importantly education was beyond state intervention. Muslim scholars were respected and enjoyed a high

status among Muslims which exceeded that of the ruler. Later on when Muslims came in contact with new cultures and civilisations, many translations of these foreign cultures, especially the Greek philosophy, took place and new types of knowledge began to emerge in the Muslim thoughts. As a result many sects and groups began to emerge such as Mutazilah (725) who advocated the interpretation of the Quran in the light of reason. On the other hand, Muslim scholars in the Sunni system, like Abu Hanifah (699 - 767), Malik (715 - 795), Al - Shafi'i (767 - 820) and Ibn Hanbal (780 - 855) had started to establish their schools of thoughts which stressed the superiority of the divine message over reason. These various views and interpretations led to many intellectual debates and sometimes conflicts between Muslim scholars. This allowed the state intervention, as a referee at the beginning and subsequently to apply its total control, and thus, the ruler claimed an absolute power over intellectual deliberations. Furthermore, during the Abbasiad reign (750 - 1858), the state sanctioned all new interpretations of the Quran (ijtihad). The call for closing the door of ijtihad was in fact a call for a halt on all intellectual activities, which in turn gave the ruler additional powers and isolated the intellect from real life. All this was done under the umbrella of preserving the culture or protecting the religion. Moreover, any attempt by any scholar to break this restriction was met with severe punishment. For example, when the Caliph took an oath from people to be loyal to him and that their wives would be divorced from them if they did not comply, Imam Malik gave his fatwa that divorce was unlawful under duress, he was as a result beaten until his hands were paralyzed (AbuSulayman - 1993). As a result of these harsh ways of punishment, scholars began educating people in those fields which did not cause direct confrontation with the state. Some of them even tried to please the ruler, and thus, preached obedience and passive involvement in real life as virtues. The emerging split between spiritual and practical life had its devastating effects on the Muslim education system. The Muslim education emphasised the importance of the spiritual aspects of life leaving the other important aspects without mentioning or even as degraded activities.

Many Muslim scholars such as: Al-Ghazzali, Avicenna, and Ibn Khaldun, had explained the basic role and the main aims and purposes of education. In the light of

these circumstances the following sections will examine their views on education. At the beginning a brief presentation of their views followed by a discussion of their stances.

**Avicenna (978 - 1046)** had established his view of the purpose of education by combining both trends religious and worldly knowledge. He asserted that :

“ When the boy finishes the learning of Quran and has memorised the fundamentals of the language, he should then look into what kind of vocation he want to pursue in his life. The teacher also should know that not any type of vocation the student chooses is suitable for him, but what suits his capabilities and limitations.” (Translated by Y.M. Cited in Al-Abrashi, p - 204)

For Avicenna both tracks were important but to teach religion first was a matter of priority. The religious education should act as a set of principled criteria to which the learner can always refer to in his judgments. After absorbing the basic teaching of religion individual can choose the trade or vocation upon which he is going to live. In that sense to acquire a vocation was not as important as knowing enough about the religion which is the way of life. Furthermore, the teachers' role should not end there but continue to guide his students to the most appropriate vocations which suit their abilities. That also indicated the quality of teachers who should possess the required knowledge to guide their students.

**Al-Ghazzali (Algazel) ( 1059 - 1111)** believed that the profession of teaching is the highest among professions and he referred to two sources to support this argument; first from the Quran and the Prophet's traditions, and second, was the logical reason. He supported the former by relevant verses from the Quran and sayings of the Prophet (p.b.u.h), and supported the latter by saying that the rank of a profession can be identified by its subjects, like the superiority of shaping gold (goldsmith) over tanning. The subject of former was gold while the latter's was the skin of the dead animal. Therefore, the highest profession of all is teaching because its subject is the human who is the master of all creatures.

Al-Ghazzali in his book *'Self-destruction of the Philosophers'* attacked and challenged the Aristotelian doctrines of the power of reason which was introduced through the work of Muslim scholars like Al-Farabi (870 - 950), and Avicenna (980 -

1046) who were influenced by Greek philosophers such as Aristotle and Plato. In establishing his view, Al-Ghazzali did not deny the power of reason or logic, but he stressed that by reason alone true knowledge of the metaphysical could not be reached. He used the analogy that: 'mind is like the eyesight, and the divine law is like the sun light and that both are necessary tools to reach to the true knowledge'. As a mystic, he emphasised the spiritual importance in education. However, he placed considerable importance on the practical knowledge and their relevance to the Muslim society.

His view was that individual should seek knowledge with a purpose of becoming closer to Allah and not for the purpose of "*higher position, showoff, or competition.*" (Translated by Y.M. Cited in Al-Abrashi, p - 224). That would distort the main purpose of education. He also praised acquiring knowledge for its own sake, because it would lead to gaining Allah's blessing:

" If you look into knowledge, you will find it attractive in itself, and thus it should be acquired for its own sake. You will also find it a means for the eternal happiness in the hereafter, and a reason for closeness to Almighty Allah which cannot be attained and reached through any other way except knowledge. Eternal happiness is the most important rank of human right, and the means to it is the highest of all. That would not be reached without knowledge and work (application), and thus, knowledge acquiring is the best thing to do in this world" (Translated by Y.M. Cited in Al-Abrashi, p - 225)

The concept of acquiring knowledge for its own sake in this text does not imply that pure knowledge should be acquired for no purpose but rather for the ultimate aim, that is, the blessing of Allah. This can be observed clearly in his dichotomy of knowledge into two main categories, religious and worldly. The former is the knowledge which is brought about by Prophets, and the latter is the knowledge which can be found in subjects like mathematics, literature, and medicine. He then divided the worldly into three parts, commendable or praiseworthy knowledge, unworthy knowledge, and permissible knowledge. He pointed out that :

" The commendable knowledge is divided into two stages; one is adequate duty, and the other is virtue. Adequate duty means it is compulsory on every body until some of them had acquired it, like medicine, mathematics, engineering...etc., because without them society would suffer and face difficulties. The other stage of the commendable is virtue which means that if a person wanted to explore this field of knowledge beyond

the current needs, then more understanding would occur, and thus, more benefits.

The unworthy type of knowledge is magic and witchcraft and any of their kinds. The final part is the permissible, like poetry (especially those which emphasise virtues and morals), and history.” (Translated by Y.M. Cited in Abduldaim, p - 233)

In this text Al-Ghazzali had shown the superiority of the religious knowledge as the ultimate goal of education over any other types of knowledge and vocations. In other words, all worldly types of knowledge should serve one purpose, that is, the religious understanding of universe, man, and life.

Other Muslim scholars agreed with this notion of knowledge division. For example, **Ibn Khaldun (1332 - 1406)** had also divided knowledge into two main categories, that is, original and instrumental. In his view the original knowledge should be acquired for its own sake, like the Quran and its interpretation, Hadith (Prophet’ traditions), Jurisprudence, and theology. The instrumental knowledge are to be acquired for purpose of expounding the former, those can be found in subjects like (Arabic language, Mathematics, Philosophy). Furthermore, original knowledge should be studied thoroughly and explained, meanwhile instrumental should be used only as tools for the former otherwise the main purpose of learning would be lost. Again the emphasis here goes in favor of the religious education as the superior setting. Through this individual would have built strong and solid base upon which his latter judgments and perceptions would depend.

Muslim scholars also viewed the mind as a flexible tool for anyone who had the power of influence. Therefore, the dominant influence should be to religion so that it could guide the individual to win the blessing of Allah, and thus, eternal happiness. Accordingly there were three areas which the mind was prohibited to explore, because of its feebleness, thinking in the self of Allah, thinking in the fate, and endeavors to put rules other than those of Allah’s. These areas are considered to be fruitless fields because the power of the mind of the human being is limited, and thus, can not reach to the ultimate answer. It is only through believing and following the teaching of Him that a person can be sure of the truth of His existence. Other than those three areas the mind was free to think and explore.

The three views presented above characterised and dominated the main trend of Muslims thought on education for the last centuries. The superiority of intellectual and spiritual learning over practical learning came to existence in the Muslim education due to two factors: first, the influence of the Greek philosophy which placed high emphasis on intellectual learning; and second, the subsequent political oppression which prevented Muslim scholars from interfering in the matters of the state. That could be observed clearly in the small value they placed on the important aspects of practical life. They, on the other hand, placed great value on spiritual aspects of life and viewed other activities less important. This division of knowledge was indeed an isolation of the religion from real life which contradicted the main message of Islam. Furthermore, the atmosphere of fear had isolated the Muslims scholars, misled the commons and gave absolute power to the ruler. The view that education should be presented in two different contexts (religious and worldly) and that the former was superior to the latter or essential was understandable. However, the insistence on neglecting the latter almost totally, resulted in long period of stagnation and backwardness.

### **Current view**

After the industrial revolution many technological developments and advancements took place in the Western world. Progress in industrial and technological fields contributed to the alteration of the purpose of education to be more geared towards social and economic involvement in many Western countries. The implications of these developments were not confined to the Western world, but expanded through colonisation to the rest of the world especially the Islamic.

In response some Muslim countries - after independence- preferred to remain with the old traditional education and abandon modern education, either because they did not have enough confidence in the new initiatives or because they did not have the affluent resources this type of education required. Other countries had adopted and modified the notion of modernity according to their economic needs and marginalised the traditional education; like "Arab Nationalism" in Egypt and "Secularism" in Turkey. Nevertheless, other countries had introduced both the traditional and the modern

models but separately. This can be observed in the case of the Kingdom of Saudi Arabia today.

General education in Saudi Arabia is still based on the traditional model, while technical education and higher education are modern. The educational policy states that humans must acquire the knowledge and practices of Islamic religion in the first place. The aims of education then should be to prepare and bring up children to be aware of the will of Allah and to be loyal to Him so that they get His blessing on this life and after death. Article 28 in *The Educational Policy* reflects this meaning :

“ The purpose of education is to have the student understand Islam in a correct comprehensive manner, to plant and spread the Islamic creed, to furnish the student with the values, teaching and ideals of Islam, to equip him with the various skills and knowledge, to develop his conduct in constructive directions, to develop the society economically, socially and culturally, and to prepare the individual to become a useful member in the building of his community.” (p -10).

Vocational education and training in this context has been defined as a modern system. Nevertheless, the Islamic values and norms should be observed within its context. In *The Educational Policy* , the objectives of vocational education and training are demonstrated as follows :

“ 1. The objective of technical education is to supply the Kingdom in all fields and at all levels with qualified workers who possess solid faith, sound character and ability to perform the duties entrusted to them;

2. relevant educational authorities look after technical and vocational education in all its forms and provide it with technical and financial support;

3. a special plan is set up to determine the Kingdom's needs for technical labour force at various levels and forms in order to attain self - sufficiency within a period to be defined in the light of existing resources. All other resources that can operate in this field will be utilised;

4. technical and vocational education curricula and plans are set up to achieve this purpose with special emphasis on flexibility and diversification to meet all needs and developments in the field of knowledge and labour, and to acquire other skills, experiences and experiments. (P - 29)

All this should be done in isolation from the general academic education. General education became then separated from the actual needs and requirement of the society. Furthermore, graduates of general education were not adequately prepared to be involved in the modern systems of either technical education or higher education. As a result large number of students were dropping out in the middle of their study. It was

obvious that the Policy had adopted the original Islamic view of education but it had failed to be implemented fully. Although there was an apparent connection between religious and worldly knowledge in the educational policy, the link had not been effectively established in reality. The division does not stop at separating technical education from academic education but also applies to the division between the education system as a whole and society at large. Furthermore, the total dependence of the Government on certificate holders, and the widespread belief that the more certificates you have the more competence and intelligent you would added to the problem. Knowledge acquiring became more towards obtaining high certificates and seeking exquisite social status rather than interacting with reality. It was not strange then to see attitudes of disdain and scorn to the practical side of education became a widespread notion in the society.

The experience of vocationalising the general education in the Kingdom of Saudi Arabia had achieved very little success. From the early beginnings the government had provided a vocationally orientated curriculum at later stages of primary schools, so that children would be equipped with practical skills enabling them to continue their studies in technical schools. However, it was found in 1936 that this project was not fulfilling its objectives, and thus, it was abolished to be reintroduced into the Orphans' schools in 1937, so that orphans could attain skills or vocations to make a living.

In 1954, 1955, and 1956 three industrial intermediate schools were established in Riyadh, Al - Medina, and Damam respectively. The aim was to build a vocational base among students so that they would become attracted to the technical track. Not before long, these schools were closed for their failure and as the Ministry of Education had noticed that :

“ The number of applicants were very small, and thus, it was necessary to reintroduce the vocational curriculum at the last two years of primary schools. That was to prepare students for vocational studies later on. Courses of study were the same as that of general schools with the replacement of history and geography by engineering drawing and technology.”  
(Translated by Y.M.- Cited in Al- Khateep, 1992, p - 152)

In 1961 the Ministry of Education had launched a new scheme that was the Model Intermediate School. Study in this school included practical and manual work and

students had to stay for a full day. This type of schools did not achieve any success in meeting its objectives, and thus, they had been closed.

In 1968 another scheme was introduced, that was, the Modern Intermediate Schools with a purpose of introducing technical subjects into general education. These schools represented a first serious interaction between technical and general education in a unified system as Al-Khateep (1992) pointed out : “ *These schools were one of the important experiments of vocationalising general education in the Kingdom of Saudi Arabia.*” (Translated by Y.M. p - 156). The objectives of these schools were as he explained “ *To achieve the objectives of the general intermediate schools with an additional dimension, that is, to equip students with enough theoretical and practical knowledge, and to intensively guide them towards technical track.*” ( Translated by Y.M. p - 157 ). Accordingly four pilot schools of this kind were established in Riyadh, Jeddah, Al Medina, and Al Hassa.

In 1985 a circulation issued by the Minister of Education stating that:

“ Reports about these schools indicated that they became incapable of complying and achieving the basic aims upon which they had been established... Based upon the committee of the Assistants Deputy Ministers and the delegate of the General Organisation for Technical Education findings and recommendations to close these schools by 1986, and upon our support for that, then these schools should stop functioning from the beginning of the next year 1986 -1987.” (Translated by Y.M. - Cited in Al-Khateep, p - 163).

In his study of the reason of failure of these school Al - Khateep (1992) found out that

“ Most students of these schools were coming from poor families, and from the low achievers among students. The decrease in number of applicants was due to administrative and educational setbacks. The limited progression of students to higher education had been also a contributing reason of these schools to fail.” (Translated by Y.M. pp. 164 -5)

In 1980 the government of Saudi Arabia had separated technical education and vocational training from general education track when it established the General Organisation for Technical Education and Vocational Training (GOTEVT). This Organisation is still the main representative of technical and vocational education in the Kingdom of Saudi Arabia today.

To have an overview of the general reasons which made these educational projects to fail, Al-Khateep (1992) highlighted three points :

“ 1. The general weakness of students’ acquisitions of scientific and practical knowledge.

2. They lacked self confidence so that they could not start a business on their own, and also a positive social attitudes and cooperation were lacking.

3. The lack of any correspondence between industrial schools and factories and workshops in the Kingdom.”

(Translated by Y.M p - 166)

This failure of educational projects to vocationalise general education was not confined to the Kingdom of Saudi Arabia but the same could be said about other developing countries around the world as Dore et al (1984) had indicated. In their studies of other developing countries they found out that most educational projects either fail completely or achieve very little success. The reasons for that varied from one country to another, however, there were four general reasons which could be highlighted “ (1) *Educational weakness*, (2) *Dual economy and inequality*, (3) *Equality of opportunity and mobility*, and (4) *Qualification and the schedule of correspondence*.” (pp. 7-9). To explain the problem they presented a brief history of the evolution of occupational selection within social evolution and the evolution of educational systems. They stated that : “ *Societies tend to shift from rather simple forms of organisation to somewhat more complex ones and it is possible, therefore, to view the process as a species of evolution.*” (pp. 15-16). These gradual shifts had occurred in the West which had the chance to practice each stage and to move steadily and continually to another. That process of progression had not happened in the developing countries which most of the time borrowed form others as Dore et al (1984) pointed out :

“ Most evolutionary schemes are ethnocentric. They are generally produced by Europeans, or by those with roots in Europe, and try to schematise the history of ‘Western civilisation’.” (p - 16)

Societies may demonstrate more than one stage at the same time as Dore et al (1984) remarked:

“ There is no suggestion either that a society must be of only one type at one time - wholly feudal or wholly bureaucratic. On the contrary, part of the problem of social and economic development is that one section of a society moves into a later stage, while others linger in an earlier.” (p - 16)

And also:

“....a single state may simultaneously exhibit several phases of occupational selection between the tribal, proto - industrial, early capitalist and bureaucratic forms of society. The phenomenon is frequent among the developing countries and operates to exacerbate the impact of selection through education. The reason is simply that their contact with industrialised states, whether through colonial experience or voluntary commerce, has foreshortened the evolution of their education - employment institutions. The ‘bureaucratic’ pattern of selection for organisational careers by educational qualifications was not a slow, late growth coming after centuries of ‘proto - industrial’ and ‘early capitalist’ phases, when most people were making their living by selling goods and services in active markets, and the first schools developed to provide them with the skills they needed to do so. Instead, colonial or ‘modernising’ governments introduced transplants of *fully developed* bureaucratic systems into economies which were still in the feudal/tribal stage. Thus (1) the first entrenchment of the market system, and (2) the appearance of the first bureaucracies and the first generations of salaried jobs, and (3) the first schools, all appeared simultaneously.” (pp. 26-7)

The result of this was not only the failure of educational projects but also a change of attitudes towards education in general and vocational education in particular, again

Dore et al (1984) pointed out:

“ The effect was that schools in these countries were born into a bureaucratic age and linked almost indissolubly to bureaucracies. Schooling was about salaried jobs from the very beginning. There were no proto - industrial, early capitalist - period schools in which the tradition of schooling for personal development could have developed. Further, since the most coveted first salaried jobs were clerical and sedentary and required general not vocational education, schooling was from the beginning divorced from obvious occupational skills - and helps explain much of the opposition to vocational and pre - vocational courses... Schooling then was not about learning to *do* jobs, only about getting or qualifying for jobs. No necessary connection existed between what had to be learned and what would eventually be done.” (p - 27)

There are two points to make at this stage. First, the introduction of vocational education into the general education system either separately or in a unified curriculum, without a strong industry to back it and to employ its graduates is a great wastage of time and money. Unless, of course, there was a general belief that through schooling a country can build its industrial base. In reality this is inconceivable to be the case. In Western history, for instance, industry had preceded technical education. The demand for education to be more responsive to economic needs was raised to back up and

strengthen industry by supplying qualified workers, but not to create an industry. In most of the developing countries the belief was that through education an industry could be built.

The other point to be made is that the weakness of the education and training system in a country is only a sign of deeper cultural problem. To introduce a totally alien solution is in fact another way of evading the real problem. During the process of development in the developing world, most new educational projects tend to ignore or even devalue the indigenous culture. The result was a continuous failure of these projects and misuse of education as a whole. The reasons highlighted by Dore et al (1984) were true, but this point should be taken into consideration when educational reforms in developing country are to be introduced.

To sum up the concept of vocational education with its different meanings had many implications on the general understanding of the aims and purposes of education. It was not merely a question of responsiveness and relevance to economic needs. It was a question of reforming thoughts and methodologies.

This chapter attempted to throw some light on the main reasons which made some societies separate vocational education from academic education and also the reasons which made other societies combine both in the West as well as in Islamic countries. There were basically three reasons for separation in the West: first, the social class system which influenced the education system to be mostly intellectual and for the few. Second, the unjustifiable criticisms of and attack on the traditional education from those who called for the removal of the old in favour for the new. Third, the pure materialistic approach of the modern with little or no regard for the human factor. This made most of the proposed changes less effective and open to wide range of criticism. The reasons for the split in the Islamic concept were four : first, the influence of the Greek philosophy which stressed the superiority of intellectual learning on the Muslim thinking. Second, the absolute power of the ruler which did not allow Muslim scholars to be involved in social, political and economic spheres. Third, the subsequent closing of the door of new interpretation which was the starting point of stagnation and backwardness that followed. Fourth, the great emphasis which was given to the

spiritual against almost total negligence of the practical. Fifth, the atmosphere of literalism which dominated the Muslim world for long centuries until the present time. The following chapter will discuss the various aspects of the history of education in England in the nineteenth and twentieth centuries. It will focus on the main reasons which made vocational education ineffective and devalued provision. It also will examine the effects of the new changes in practice through conducting two case-studies in British Gas and British Telecom.

## CHAPTER FIVE

### **General Education and Vocational Preparation in England**

In the previous chapters (1 to 3) the main reasons affecting the education and training system in the Kingdom of Saudi Arabia were highlighted. One of the most important reasons, was the influence of the traditional view of education on its progress. The country was providing two different systems: modern administration and traditional education. Chapter four focused on explaining the concept of vocational education and stressed that it was concerned with more than mere relevance to the economic needs. It was a call for practical application of the abstract knowledge into real life. The responsiveness of the educational system to the economic needs was one of its prominent features. However, the reactions of the educational authorities in various countries to the implications of this stance were different according to their distinctive cultures. It was argued that traditional views had held back the British education system from progress. It is important in order to understand this argument to look at it in its cultural context.

Throughout the sixteenth century up until the end of the eighteenth century, vocational education and training was the route of the majority in England while academic education was élitist and for the rich minority. Vocational education was generally controlled by the different guilds in London and other big cities in England. In those days guilds had their own criteria which were used to select apprentices. Those rules and regulation were strict and at the same time varied according to the status of the guild. The goldsmith, for instance, was one of the prestigious guilds, therefore, its apprentices had to acquire some form of education which would enable them to read and write. Some other guilds did not require these capabilities.

As technology progressed and industry developed demands for certificates were increasing. However, since the educational system was not designed to prepare its subjects for the world of work, it could not cope with the new demands, and thus, changes and reforms were necessary. The call for relevance of education to the world of work had many advantages as well as disadvantages. One of its advantages was that it increased the number of students as well as the number of educational institutions.

Another advantage was the introduction of many new fields of knowledge into the main educational stream. Nevertheless, it had many disadvantages as well. One of them was that it created unnecessary race to gain more and more certificates for the sake of acquiring prestigious jobs. ( Dore, 1979, called it the diploma disease). Another disadvantage of the call for relevance was that it allowed more state intervention in the educational process.

With the growing demands of society for more trained men and women in all fields of industry, commerce, and agriculture, all kinds of training institutions have been established and flourished in England especially after the industrial revolution. All that had to be conducted outside the main stream of the education system. In other words, the education system remained academic and elitist. Later on demands on the educational system to be relevant and responsive to economic needs were increasing. As a result education had witnessed many reforms and changes. Some of these reforms were enacted in the form of Education Acts. As in many European countries, secondary education in England had passed through many stages of developments and advancements throughout the nineteenth century and the early parts of the twentieth century.

Most of the efforts spent in the nineteenth century were to form a coherent national system of education and to widen the base of the elementary education to cater for more students. However, widening the base of admission to the general education was part of the solution to the education system problem in England. The stance of rejection and opposition, with all the consequences, was not simply old versus new. It was a position which reflected deep cultural traditions towards the aims and purposes of education, these traditions (as mentioned in chapter four) go back to the Platonic view of education. The technological development which took place in England during the last century had its impact on the social structure and urged it to change. From the family bondage to the respect of the elders all had been transformed into new social structures which the conventional education system had little effect on. This chapter will look into the main reasons which caused the academic/vocational division, in England and will also look into the recent suggestions and studies in this field.

Towards the end of the eighteenth century and the early part of the nineteenth century, the pressure for educational change was steadily increasing in England as the social and economic effects of the industrial revolution started to spread. Schools and universities were then criticised and changes were demanded. These criticisms and attacks on schools and universities (for their devotion to Greek and Latin subjects) were led by the *Edinburgh Review*, which began in 1809 and were directed at both public schools and the Universities of Oxford and Cambridge, as Kandel (1930) pointed out:

“The chief defect of the schools was excessive devotion to Latin and Greek, to the exclusion of modern subjects. The classics were regarded as the only test of a cultivated mind, a tradition which engendered prejudices detrimental to any reform movement. The public school product had scarcely ‘a notion that there is any other kind of excellence.’ Yet according to the *Review*, the only proper criterion for education is its utility for future life. ‘The test established in the world is widely different from that established in a place which is presumed to be a preparation for the world’. Even though a good case might be made out for the retention of the classics for a certain number of scholars, they were not properly taught, and more attention was devoted to them as instruments than as ends; ‘not what may be read in Greek but Greek itself,’ had become the aim.” (p - 305)

Despite these attacks and the growing demands for educational reform, the effects on public schools and universities were very little. Therefore, many different experiments took place outside these public schools and both Oxford and Cambridge universities. At the same time the public schools remained:

“unaffected by the ferment and interest in education which prevailed at this time, and which sponsored the establishment of two great societies, the National Society and the British and foreign School Society, for the creation of elementary schools; the active movement for Diffusion of Useful Knowledge; the establishment of University College (1827) and King’s College (1828), which were to become constituent parts of the University of London (1836); and the first state grant for education (1833).” (p - 308)

Many other institutes and schools which followed the same path were established during the nineteenth century. Institutes and schools like Liverpool Institute (1825), King’s College Schools (1829), Blackheath Proprietary Schools (1830), University College School (1829), City of London School (1837), and Liverpool College (1840). Nonetheless, the spread of this type of schools and institutes was far from meeting the

needs of the country. Therefore, the state intervention became inevitable, and thus, in 1861 the government appointed a Royal commission with a task to:

“ inquire ‘into the nature of the endowments, funds, and revenues belonging to or received by’ certain specific colleges, schools, and foundations, ‘and into the administration and management of the said colleges, schools, and foundations, and into the system of studies respectively pursued therein, as well as into the methods, subjects, and extent of instruction given to the students” (p - 323)

The state intervention in education did not stop at that stage, but many reforms and educational Acts have followed. In 1894 the Bryce Commission was appointed ‘to consider what are the best methods of establishing a well - organised system of secondary education in England’. In 1899, the Board of Education was established to be the central authority of educational matters in England. In 1902 the educational Act was passed as Kandel (1930) pointed out:

“ The task was not simple, either for the Board of Education or for the local authorities. Secondary education had grown up chaotically and without system or organization; there existed a variety of standards set up by multifarious examining boards; in elementary education and in such education of a secondary level as had grown up under the Science and Art Department, freedom and elasticity had been restricted by a pernicious system of payment by results; there was considerable suspicion of a central authority, and a new tradition of cooperation between the Board of Education and the local authorities had to be built up instead of control and domination; vested interests had to be safeguarded, and the incubus of social class distinction had to be faced; finally, care had to be taken that the extension of facilities for secondary education should not be accompanied by any lowering of standards.” (p - 354)

One of the major achievements of the Board of Education was its insistence to prolong the school life as Kandel (1930) remarked:

“ ... the average school life has increased from 2 years 7 months for boys, in 1908 -1909, beyond the age of 12, to 4 years 1 month beyond the age of 11, in 1927 -1928, when a new method of calculation was introduced, while the average leaving age has advanced from 15 years 5 months for boys and 15 years 11 months for girls, in 1908 -1909, to an average of 16 years 1 month for both.” (p - 378)

Gradually a new national secondary education system began to emerge with new characteristics. Since 1944 Education Act, the notion of education for elites had been under attack and new approaches began to emerge. Education became free and compulsory. Lawson et al (1973) pointed out that:

“ The most important provision of the 1944 Act was that which proclaimed that ‘public education shall be organized in three progressive stages to be known as primary education, secondary education, and further education’. Local authorities now required to provide secondary education, and schools would ‘not be deemed to be sufficient unless they are sufficient in number, character, and equipment to afford for all pupils opportunities for education offering such variety of instruction and training as may be desirable in view of their different ages, abilities and aptitudes.” (p - 417)

The affect of this Act can be observed in the present system as Cantor (1989) pointed out that:

“ The present structure of educational institutions derives from the 1944 Education Act, together with subsequent amendments, which established a consecutive system. divided into three sectors : Primary, Secondary and further. Children attend primary schools from 5 to 11, and secondary schools from 11 to 16. At age 16, they may stay on in full time education in schools until 18 or transfer to a further education college for the same purpose; in either case, the education remains free.” (p - 119)

Nonetheless, all hopes and aspirations to establish a strong industrial base through strong education and training system were not fulfilled. In other words, education was not responsive enough to economic needs. Those scattered initiatives and programmes did not work as a coherent system to support the industrial power. The reasons for division between academic and vocational in England in Barnett’s (1986) view were that:

“ In the first place she - Britain - possessed no national system for further education and training; all depended on the initiative, or sloth, of local authorities. The result was rummage-bag of institutions under differing titles unevenly spread over the country.... The lack of a national system, to say nothing of the confusions and overlaps, was such that even the classification of institutions and the given student numbers vary from one official document to another.” (pp. 203-4)

The consequences of negligence and disdain toward vocational education and training were many, but the question to be asked is why does this branch have to endure such attitudes in England ? In answering such question Correlli Barnett (1986) singled out three main reasons :

1. The cult of the ‘practical man’.
2. Romantic Idealism.

3. The profound British dislike of coherent organization, especially if centrally administered, especially if under the aegis of the state, and especially if a charge on public funds.

### **The cult of the 'practical man'**

The notion of the practical man had dominated the British thought for a long period of time. This notion entailed that the Englishman was the initiator of industry and commerce in the field - self taught -, and that education had nothing to do with it, and thus, there is no reasons for the state to fund or practice any control. It was one of the main reason for the backwardness of British industry and commerce when compared to its competitors in the same field. Barnett (1986) asserted :

“ Unfortunately the ‘practical man’s’ lack of interest in education and training since the 1840s and earlier had been all too completely matched by the lack of interest in industry and industrial success displayed over the same period by the dominant British educational establishment. Indeed, this displayed positive scorn for anything so low as ‘trade’-horror at the very thought that education might actually prepare the young for a working life and the gaining of an income rather than pursue other, nobler, purposes.” (p -213)

Education was and still is the way of gaining knowledge for its own sake not for application. Practical experience was the business of the market not the school. This kind of seclusion and neglect had affected the performance and productivity of Britain. In comparison with other industrial nations he pointed out:

“ In 1850 *The Economist* proclaimed that ‘the education’ which fits men to perform their duties in life is not got in public or parish schools, but in the counting-house and lawyer’s office, in camp or on board ship, in the shop or factory.’ Herein was encapsulated the by now immutable faith of self - taught ironmasters, coalowners, engine - builders and masters of textile mills that the native British genius of the ‘practical man’ had put Britain in her place as the world’s greatest industrial power, and would keep her there. The ‘practical man’ had learned how to make things or carry on his business by experience on the job; and he passed on his knowledge to the next generation orally or by example in much the same way as a medieval craft ‘mystery’.... The British ‘practical man’ was therefore the very opposite of the educated practical men who were to emerge from American and European technical schools to challenge him. Indeed the cult of the ‘practical man’ in Britain carried with it a positive mistrust of the application of intellectual study and scientific research to industrial operations; a deep suspicion of the very

kind of theoretically grounded professional for which Britain's rivals looked from the start. Such suspicion is, after all, a natural reaction of the self-taught towards the man with the certificate.... This shortsighted failure to appreciate the benefit of a well - educated effectively intelligent workforce extended to the question of systematic skill training." (p - 210)

This notion represents an obstacle facing the development and progress of vocational education and training, but it also reflects certain values in British thought. Values such as trust, trust in every individual to love his country and work for its prosperity. The only drawback of this is that it cannot be guaranteed that this love can occur without education. Education was and will remain the carrying ship of the nation's aspirations and ambitions.

### **Romantic Idealism**

Romantic Idealism which Barnett linked to Liberal Education is the second important reason for the lack of adequate vocational education and training system in Britain. Through this notion the purpose and aims of education had been formulated for the last centuries. It was through this approach that vocational training became a second class education, and the division between the two fields became wide. It was always stressed that the purpose of education is not to prepare the person for a job, but for the whole life where work is only one part of it. In presenting the ideal of this thought, Barnett (1986) quoted Cardinal Newman :

" I consider then that I am chargeable with no paradox, when I speak of a knowledge which is its own end, when I call it liberal knowledge, or a gentleman's knowledge, when I educate for it, and make it the scope of a University.... You see then, Gentlemen, here are two methods of Education : the one aspires to be philosophical, the other mechanical; the one raises towards ideas, the other is exhausted upon what is particular and external. Let me not be thought to deny the necessity, or to decry the benefit, of such attention to what is particular and practical, of the useful or mechanical arts; life could not go on without them; we owe our daily welfare to them; their exercise is the duty of the many, and we owe to the many the debt of gratitude for fulfilling it. I only say that knowledge, in proportion as it tends more and more to be particular, ceases to be knowledge.... Liberal education makes not the Christian, not the Catholic, but the gentleman. It is well to be a gentleman, it is well to have a cultivated intellect, a delicate taste, a candid, equitable, dispassionate mind, a noble and courteous bearing in the conducted of life; these are the connatural qualities of a large knowledge; they are the objects of a University." (pp. 213-214)

It was through this view that vocational education and training had been seen as a part of industrial activity and not as a part of an educational system. Vocational education and training was seen and still is as an element of the economy. The implication of this belief had been enormous and the consequences was a high price Britain had to pay from its place among other industrial nations. Britain considered herself as an industrial country and yet the efforts to be so were so little, especially when compared with her rivals. To explain the consequence of this argument Barnett (1986) quoted Spencer:

“ And here we see most distinctly the vice of our educational system.... It neglects the plant for the sake of the flower. In anxiety for elegance, it forgets substance. While it gives no knowledge conducive to self - preservation - while of knowledge that facilitates gaining a livelihood it gives but the rudiments, and leaves the greater part to be picked up anyhow in after life.... it is diligent in teaching whatever adds to refinement, polish, éclat.” (p - 216)

Vocational education and training in Britain is still suffering from such attitudes despite the many changes and developments introduced to it. Why then is the negative attitude and negligence towards it still persistent, Barnett (1986) wrote :

“ The debate thus being won by the Arnoldians and Newmanians, the natural consequences followed. In the public schools the classics continued to dominate the curriculum, especially for the ‘high - flyers’ , until after the Great War, and even although science and ‘modern’ subjects such as modern languages, history and English literature had crept in from the 1860s onwards, often in the first place as extras out of school hours, for long they were regarded as refuges for the second - rate.... Although the late nineteenth and early twentieth centuries were times of intense scientific progress, of the vast technological developments of the second wave of the industrial revolution, and of Britain’s more and more evident failure to ride the crest of that wave, little or no awareness of all this penetrated into the public schools. The growing threat to British industrial predominance from new competitors did not lead to a comparative examination for the benefit of pupils of the kind of evidence contained in the Devonshire or Samuelson Royal Commission Reports, but rather - in some schools - to a romantic and uncritical patriotism in the style of the Henry Newbolt’s verse, whereby other great powers were to be humbled by ‘pluck’ and team spirit. Modern history in the schools remained strong on political, constitutional and ecclesiastical topics, but weak on economic and social history; weaker still on the history of technology.” (pp. 217-218)

The key point in this view is that VET is not proper education for a gentleman. Its outcome does not match the elegance and quality of an Englishman. Since trades and

vocations have been carried out by certain groups in society then the belief of it as lower status becomes inevitable.

### **Dislike of coherent organisations**

This is the third and final key factor in Barnett's analyses of the reasons for Britain's backwardness in the educational field. This feeling had been created by the belief in the value of the individual liberty, and that the state had no right to dictate what is right or wrong. Matthew Arnold (1894) pointed out that :

“ We are left with nothing but our system of checks, and our notion of it being the right and happiness of an Englishman to do as far as possible what he likes, we are in danger of drifting towards anarchy. We have not the notion, so familiar on the continent and to antiquity, of the state, -the notion in its collective and corporated character, entrusted with stringent powers for the general advantage, and controlling individual wills in the name of an interest wider than that of individuals.” (Matthew Arnold (1894), cited in Barnett, 1984, p - 227)

Barnett explained this feeling :

“ From the time of Charles I onwards, and with the example of Louis XIV before them, the British had therefore, identified strong central government with the absolute monarchy to which Englishmen never, never would be slaves. State action to foster industries or set up training institutes for artisans or engineers, as taken by France and other European monarchies in the seventeenth and eighteenth centuries, was seen as just another manifestation of continental tyranny. The example offered by Bonapart in creating a complete centrally directed education system only served freshly to awaken the British to an active suspicion of the state's role in this sphere as a menace to individual liberty. And so, intellectually fortified by the laissez - faire ideals of Adam Smith and that education must be a matter solely for individual initiative or private charity.” (pp. 227-8)

It was not the ignorance of outside progress that caused the backwardness but as Barnett (1986) pointed out :

“...in the first place, plain unwillingness to emulate them. as early as 1834, in evidence to a parliamentary committee, Lord Brougham, the Lord Chancellor, pronounced strongly against compulsory free primary education funded and administered by the state, on the ground that they ‘who argued in favour of such a scheme from the example of a military government like that of Prussia, have betrayed, in my opinion, great ignorance of the nature of Englishmen.’” (p - 228)

This made the British vocational education and training system develop unevenly and also made it a complex field for the observer. The belief in an individual's liberty stood in front of any endeavours to centralise education, and also prevent direct state intervention. It had been reflected in the 1895 Royal Commission report on Secondary Education (the Bryce Report) the growth of the state's concern with education :

“ had not been either continuous or coherent; i.e., it does not represent a series of logical or even connected sequences. Each one of the agencies whose origin has been described was called into being, not merely independently of others, but with little or no regard to their existence. Each has remained in its working isolated and unconnected from the rest.... (AND SO) : This isolation and this independence, if they may seem to witness to the rich variety of our educational life, and to the active spirit which pervades it, will nevertheless prepare the observer to expect the usual results of dispersed and unconnected forces, needless competition between the different agencies, and a frequent overlapping of effort, with much consequent waste of money, of time, and of labour. “ (Cited in Barnett, 1986, p - 231)

Those are the three reasons in Barnett's account of what caused the negligence and therefore the backwardness of the British education and training system.

Another educationalists tackled the reasons for academic/ vocational division.

Michael Young (1993) summarised the reasons for division as :

“ In England and Wales the new social divisions between managers and factory workers emerged in the early 19th century in an environment still culturally and politically dominated by the feudal aristocracy and, in the new factories, by the traditional artisans who controlled the tools and new machines. The education of craftsmen took place almost entirely within the apprenticeship system and developed separately from the growth of mass elementary education. Thus the terms were set for the early and sharp separation between academic study and vocational education which was to emerge in England and Wales.

Relations between the expanding industry and services in the late 19th and early 20th century and the education system were mediated by a divided qualifications system consisting of two largely separate tracks: an academic track dominated by subject - specialisation and terminal examinations and an occupationally specific vocational tracks, until recently consisting of work - based apprenticeships. Such a selective system also ensured that large sections of the population received only elementary education and had no access to qualifications of any kind.” (p - 211)

In promoting the idea of a unified system of education in England and Wales he pointed out that:

“ Academic / vocational divisions have their origins both in a culture which associates manual work as of low status and in an economy which was based on the separation of mental and manual labour. A unified curriculum, on the other hand, does not separate the preparation of young people for employment from the wider role of preparing them to become citizens in a democratic society. It follows that such a curriculum implies a very different form of economy to that which has been dominant in industrialised societies since the last century.” (p - 208)

His argument was that the old system of separate qualifications was suitable for the mass production period. That system is not suitable anymore to the emerging ‘post Fordism’ society which based on information technology.

Another economic analysis of the problem of education and training in England has been presented by Finegold et al (1988). They examined the economic stance of the country instead of tackling educational and philosophical problems. They perceived Britain as:

“ ...trapped in a low - skills equilibrium, in which the majority of enterprises staffed by poorly trained managers and workers produce low - quality goods and services.” (p - 22)

The problem was a complex and far from straightforward one. It was the combination of:

“ poor performance during compulsory schooling and high percentage of students leaving school at sixteen has meant that the average English worker enters employment with a relatively low level of qualifications.” (p - 23)

They highlighted six weaknesses which made Britain fail to train its young people as it should be:

**1. Political Parties.** (Lack of commitment of the two major parties to real educational change. For Labour VET was seen as incompatible with the drive for comprehensive schooling, while the Party’s heavy dependence on trade unions for financial and electoral support prevented any attempts to infringe on union’s control over training with industry. For Conservatives, preserving the grammar school track was the main educational priority, while intervening in the training sphere would have violated their belief in the free market.)

**2. The State Structure.** (The weakness of central bureaucracy in both the education and training fields. The historical decentralization of exercise effective control.)

**3. The ET system.** (Technical and work-related subjects have long suffered from second-class status in relation to academic course in British education system.)

**4. Industrial / Firm Structure.** (The concentration of the country’s firms in those products markets which have the lowest skill requirements, goods manufactured with continuous, rather than batch or unit production process. Training has also been adversely affected by long-term shift in British employment from manufacturing to low-skill, low-quality services.)

**5. Financial Market.** (The historical separation of financial and industrial capital has made it harder for British firms to invest in training.)

**6. Industrial Relations.** (The structure, traditions, and common practices of British industrial relations have undermined attempts to improve the skills of the work force.)” (pp. 25-9)

They also asserted that there are three general criteria as determining the content of education and training:

“ First, the uncertainty of occupational needs in the future requires *adaptability*. Many people in the labour force will have to make significant career changes in their working lives, which will require retraining. There is some agreement that successful retraining depends on high level of general education and also on previous vocational training. Moreover, as much training for new occupations covers skills already acquired in previous ET (e.g. computing skills), a modular approach to training is efficient.

Second, ET needs to equip workers with the skills required for *innovation in products and processes* and the *production of high quality goods and services*.

Third, ET must be *recognisable* and *useful*, so that employers want to employ the graduates of the ET system and young people and adults want to undertake ET.” (p - 37)

They suggested that the chance now to build an education and training system for sixteen to twenty year - olds is better than before and they laid down five basic requirements :

“ 1. Good general education, covering both technical subjects and the humanities.

2. This should be designed to encourage interaction (project etc.) and reduce social class differences.

3. Rising percentage over time going into HE, and ease of switching between more vocational and more academic routes.

4. Structured vocational training for those not going on to HE, with acquisition of broad skills, including communications and decision - making competences.

5. Modularisation and certification.” (p - 38)

This study has highlighted an important point, that is, the change in the industrial and economic structure from mass production to more sophisticated styles of production. It stressed that this phase required a well educated, well trained workforce. Furthermore, the involvement of the education and training system became more urgent than before.

Other educationalists like Richard Pring (1995) have tackled the problem of division from an educational as well as economic and social perspectives. His argument was that the unnecessary division between academic and vocational was deeply rooted in cultural and philosophical beliefs and that in order to close the gap it was not necessary

to reject one and accept the other. He explained the positive aspects of the liberal education as:

“ ... such a broader educational landscape does find a central place for the development of the intellect and for the importance, therefore, of those public forms of thought - history, science, mathematics, literary and aesthetic expression - through which experiences are refined and understood and through which values are explored. It is foolish to jump from the narrowness of the liberal tradition to its rejection.” (p - 134)

It was the nature of this type of education which necessitate the separate tracks:

“ Such excellence requires teachers, people already acquainted with the best that has been thought and said. And they need space and time set apart, free from the distractions of the immediate and relevant. They need, in other words, schools and universities separated from the world of business and usefulness. Indeed, schools ideally should be like monasteries, rather than market places.” (p - 185)

However, vocational track has its own characteristics which are mainly derived from the actual needs and requirements of the market:

“ The content of education and training programme is not derived from the intellectual disciplines, or from the best that has been thought and said, but from an analysis of the work to be done. People in industry say what skills are needed to run a business or to be electrical engineer or to supervise staff, and the training programme is geared to produce those skills. There is an emphasis upon the ‘can do’ statements, on practical competence, as an object to be achieved through learning. The value of what is learnt is not justified by reference to intrinsic worth or, indeed, to social improvement, but to the usefulness of it.” (p - 187)

To call for such approach to be the basis of the education system will deprive the learner and the education system from an important field of knowledge:

“ The vocational alternative has, however, missed the point entirely, substituting a narrow form of training for a generous concept of education, transforming learning into an acquisition of measurable behaviours, reducing understanding and knowledge to a list of competences, turning educators into technicians. The resulting danger is a two - track system.” (p - 191)

The 1944 Education Act can be considered as the most important piece of legislation in the history of the British Education system because most of the subsequent developments in the system used it as a framework. The following is a brief presentation of the significant developments in the field of education since the 1944 Education Act. These

changes were mostly done to bridge the rift between academic education and vocational training.

### **The history of change in the education and training system in England**

The educational changes and reforms which took place in England after the 1944 Education Act were many. In 1964 the government launched its Industrial Training Act. The result of that Act was the establishment of twenty-three Industrial Training Boards. Cantor (1989) observed :

“ The upshot was the passing of the 1964 Industrial training Act, which provided for the establishment of twenty three statutory Industrial Training Boards (ITBs) for industries which together employed about half of the country's work-force. The ITBs were charged with the responsibility of ensuring an adequate supply of trained men and women at all levels of industry, and with improving the efficiency of training.” (p 117)

But this system did not fulfill its objectives, and thus, in 1983 most of it was closed and the remaining seven ITBs had become under the control and supervision of the Manpower Services Commission MSC. The MSC was established in 1974 to improve vocational education and training quality and promote skilled training. From that date the MSC launched many programmes to improve the standards of this branch of education. Another development came with the 1976 speech at Ruskin College as Pring (1995) pointed out that :

“ James Callaghan, the Prime Minister, gave a speech at Ruskin College, Oxford, in October, 1976... ‘preparing future generation for life’ was the theme and he pointed to the need for greater relevance in education on four fronts:

1. the acquisition by school leavers of basic skills which they lacked but which industry needed;
2. the development of more positive attitudes to industry and the economic needs of society;
3. greater technological know-how so that they might live effectively in a technological society;
4. the development of personal qualities for coping with an unpredictable future.” (p - 7)

In 1970s the number of unemployed school - leavers increased dramatically; as a response MSC introduced the Youth Opportunities Programme (YOP) in 1978 for jobless school - leavers. When this programme had proved inadequate it was replaced by another important programme in 1983, which was the Youth Training Scheme (YTS). At

the beginning YTS was a one year scheme and later on another year has been added in 1985. This scheme was intended to be a modernised apprenticeship for all school-leavers. YTS was based on eleven Occupational Training Families (OTFs) which reflect the general nature of training and do not contain elements which are specific to a single occupation. Furthermore, to tackle the problem of division between vocational education and academic education it launched a programme in secondary schools in 1983 to make the children aware of the different routes and opportunities which they could follow. This programme was called the Technical and Vocational Education Initiative (TVEI). Pupils at secondary schools could choose to go through TVEI or work-related courses leading to the Certificate of Pre - Vocational Education (CPVE). The latter was a one year full - time course, provided by schools as well as colleges to introduce 16-year-olds to a broad vocational area while at the same time continuing their general education. MSC also introduced the Job Training Scheme JTS in 1987 for young adults between the age of 18 and 25 who had been unemployed for some time.

There are also vocational and occupational examinations organizations such as City and Guilds of London Institute (CGLI) and the Royal Society of the Arts (RSA) and Business and Technology Education Council (BTEC). Nonetheless, vocational education and training, at operative, craft and technician level is provided by the maintained colleges of further education, in the form of Non - Advanced Further education; by the private sector of further education and by industry itself. Therefore, apprentices can be trained either by the colleges or by business and industry. These programmes and initiatives lacked a coherent system of qualifications as Jessup (1991) observed:

“ Numerous national initiatives, schemes, and programmes to improve and extend vocational education and training in the UK have been implemented during the last few decades. Their impact has been felt in schools, further education and industry. In recent years we can point to such programmes as the Youth Training Scheme (YTS), the Technical and Vocational Education Initiative (TVEI), Employment Training (ET), the Certificate of Pre - vocational Education (CPVE), JTS, TOPs, REPLAN, PICKUP, Open Tec, the open college and many more. But these initiatives do not relate to each other or add up to an overall national strategy or system of vocational education and training. Nor do these programmes effectively interface with GCSE, GCE ‘A’ levels, or previously, CSE and ‘O’ levels or with higher education.” (p - 8)

Therefore, in 1986 the National Vocational Qualifications (NVQ) were established as Pring (1995) pointed out:

“ to reduce the ‘jungle’ of vocational qualifications to an intelligible *system*. They assess competence at work. Those competences are identified in precise terms as a result of detailed analyses of the ‘can dos’ necessary for job to be done competently.” (p - 56)

Also in 1986 the British government had established the National Council for Vocational Qualifications (NCVQ) as a crediting body. NCVQ main aim was that of devising a national framework of vocational qualifications to be fully implemented by 1991. This framework should be easily understood by employers, students, and their parents. The NCVQ as Cantor (1989) observed :

“ is an accrediting and not an examining body and is currently formulating the criteria by which major organisation such as BTEC, City and Guilds and the Royal society of Arts must abide if they are to receive the council’s endorsement of their awards.” (p - 135)

Some of the certificates NCVQ gives to the trainees are equivalent to an A - Level. Through this the student can go on to continue his or her studies at the university.

Prevocational programmes and initiatives were important first steps for students who intended to take on vocational training later on. As Pring (1995) pointed out:

“ It was clear to many within the colleges that continuation of the same kind of subject-based curriculum as at school would not provide ‘relevance’. There needed to be a continuation of general education, but in a different form. The students were not ready for vocational training, but general education had to be vocationally relevant- not vocational, but prevocational.” (p - 60)

Several prevocational programmes and initiatives were introduced. In 1982 Technical and Vocational Education Initiative (TVEI) was announced by the Prime Minister. In 1991 the DES announced the prevocational qualification, the General National Vocational Qualification (GNVQ), in its White Paper *‘Education and Training for the 21st Century’*, and thus, in 1992 the GNVQ was introduced. This programme was meant to provide a general education with vocational aspects to young people aged 14 to 18 years old. Pring (1995) remarked that GNVQs :

“ are concerned with the continuation of general education whilst having a definite vocational orientation. They are intended as an alternative to A Levels for those who want a more relevant and practical extension of their learning. And

yet, like A Levels, they are intended to lead on to higher education for those who want that.” (p - 67)

They are Modular in design and they are available at three levels; foundation, Intermediate, and Advanced.

The call for educational relevance meant a radical shift of power and authority. Decision for educational matter was no longer in the hands of teachers or even the local educational authorities as government gained more control over education. The successive Education reform Acts facilitated this shift of control. The 1988 Education Reform Act, for instance, which was announced under the Conservative government was as Maclure (1989) pointed out, “ *the most important and far-reaching piece of educational law making since the 1944 Education Act.*” (p - 5). Pring (1995) also pointed out that:

“ Legislation in 1988, 1992 and 1993 gave the government powers to exercise detailed control over the organisation and content of education. The 1988 Education Act legislated a National Curriculum and the detailed assessment of it... The 1992 Act gave corporate status to further education and sixth form colleges, no longer to be under the control of LEA... The 1993 Act promoted the flagging policy of grant maintained schools, establishing a Funding Agency for Schools (FAS), making it quicker and easier for schools to become grant maintained, and providing the framework within which LEAs might share the administration of schools with the FAS after a certain proportion of schools had abandoned their LEA. The implications for secondary education is an even more fragmented, competitive and politicised system under the banner of ‘choice and diversity’.” (pp. 31-2)

The implications of these developments in Pring’s (1995) view were :

“ There is a powerful shift to centre of the financing and thus control of schools, thereby weakening, if not extinguishing, local responsibility for educational policy. At the same time, within this more centralised system, there has been, at least in theory, the creation of greater parental choice through the establishment of different kinds of schools and through the granting of parental rights to send their children to the school of their choice.” (p - 32)

The call for parental choice was accompanied by a call for more employer involvement in education. The latter did not achieve great success Pring (1995) pointed out that:

“ Therefore, the DE, in its 1981 White Paper ‘*The New Training Initiative: a Programme for Action,*’ aimed to change that, spelling out need for a national youth training scheme, competency-led qualifications, adult re-training, and

the demise of apprenticeship. Therefore, one major task of DEs' Manpower Services Commission in the eighties was to establish a major national scheme for youth, together with a framework for national vocational qualifications. The Youth Training Scheme (YTS) was put in the hands of 'managing agents' who had to be approved by the MSC, whose training programmes had to meet criteria established by MSC and whose performance was monitored by the MSC. A managing agent was usually an employer, in either the private or the public sector... The intention, however, was to shift responsibility eventually back to industry. With the creation of the Training and Enterprise Council (TEC), following the recommendations of the 1984 White Paper '*Training for jobs*', the new partnership finally became clear. There are nearly 80 TECs in England and Wales with an annual budget, initially from government, of over £3 billion." (pp. 35-6)

The recent development in this field came in the 1994 White Paper, when the Government appointed the National Advisory Council for Education and Training Targets (NACETT) to :

" consider the case for raising the Targets to match our competitors' achievements. After wide-ranging consultation and review, NACETT has recommended an update set of targets of the year 2000. The Government endorses the new Targets as the focus for its education and training efforts and hopes that employers, teachers and the wider community will also do so." (p - 2)

These New National Targets for Education and Training emphasised the need to develop education and training to the international standards, and thus, the Targets for 2000 are first, the foundation learning:

1. By age 19, 85 per cent of young people to achieve five GCSEs at grade C or above, an Intermediate GNVQ or an NVQ level 2.
2. 75 per cent of young people to achieve level 2 competence in communication, numeracy and IT by age 19; and 35 per cent to achieve level 3 competence in these core skills by age 21.
3. By age 21, 60 per cent of young people to achieve two GCE A levels, an Advanced GNVQ or NVQ level 3." (p - 3)

Second, lifetime learning:

1. 60 per cent of the workforce to be qualified to NVQ level 3, Advanced GNVQ or two GCE A level standard.
2. 30 per cent of the workforce to be have a vocational, professional, management or academic qualification at NVQ level 4 or above.
3. 70 per cent of all organisations employing 200 or more employees, and 35 per cent of those employing 50 or more, to be recognised as Investors in People." (p - 3)

These targets had been taken by Sir Ron Dearing as criteria in his Review of 16-19 Qualifications. Dearing was asked by the Secretaries of State for Education, Employment, and for Wales to conduct a study of the present framework of qualifications and suggest new ways for improvement and ultimately unification of crediting bodies. The aim was not only to strengthen the educational system, but also to bridge the gulf between academic and vocational pathways by strengthening a third pathway. In July 1995 Dearing had prepared an Interim Report detailing his plan and pointing out the relevant parties which should contribute to the second and final stage of the report which will be published in the first quarter of 1996. There are many channels through which he is collecting data for the final report. Those channels include seminars on relative questions and issues for discussion, written responses, meeting with organisations and individuals, regional conferences, a survey of a sample of 16-19 year olds taking GNVQ, GCE, and International Baccalaureate, the outcomes of reviews of GNVQs and NVQs being conducted by NCVQ, and evidence from other research. The present framework of qualifications “ comprises three pathways: one academic, and two vocational”, the purposes of the Review are :

- “ 1. provide diversity of opportunity and informed choice for learners;
- 2. motivate and recognise achievement by people of all ability levels;
- 3. ensure standards are rigorous, challenge expectations, and encourage excellence;
- 4. increase the coherence of the national qualifications framework, reduce its complexity, and make it more easily understandable by everyone;
- 5. contribute to the success of the young people in the world of work, and to their personal development and fulfillment;
- 6. and thereby support the achievement of the new national targets for education and training with their aim of providing a national workforce able to meet the international competitive challenge through high levels of skill and adaptability to change.” (p - 2)

In Dearing's (1995) view, the reason for vocational education being seen as second class to academic A level was that:

“ One of the strengths of A levels is that they have been available for forty years and are well-known and respected. By comparison the NVQ, and the GNVQ in particular, are relatively new. They are far from being generally known, especially among parents, and this is a powerful factor in disposing parents to guide their children towards the well-estab-

lished and prestigious A levels, when a vocational pathway may be much better suited to the student. The vocational pathways need time to develop and become well established.” (p - 7)

Dunford (1995) also reflected on the recent development of integrating BTEC and ULEAC and called for the end of division between academic and vocational in general education :

“ The 16-19 consensus is particularly strong in areas which BTEC and ULEAC will be well placed to develop a single framework of qualifications under a single title, with an overarching diploma, parity of esteem between the so called academic and vocational, breadth and balance through core skills, flexibility, modularity, credit accumulation and credit transfer. There is the potential for all this to be included in a coherently planned and well-serviced portfolio of courses from a joint accreditation body.” ( p - 12)

The most recent suggestion to reform the education and training system in England came in the initial report ‘*Learning for the Future*’ by Richardson et al (1995). The report stressed the importance of three factors as centre issues for reforms, that is, coherence, flexibility, and depth. Richardson et al (1995) explained the current circumstances and thus, the need for change :

“ Whereas previous technological innovation created the need for new kinds of jobs at all levels - from unskilled process worker to manager - the implications of current technological developments are very different. Information - based technologies are being used on a wide scale to replace work processes in factories and offices, In addition, they increase the intellectual demands of many of the jobs that remain. If technology is to be used to increase productivity and open new markets, those employed will need a more sophisticated understanding both of production (in its widest sense) and the context in which new products might be used.” (p - 1)

The report also highlighted the characteristics of the old system:

“ In the past the curriculum goals of education and training systems have been largely conservative, in the sense of reproducing and transmitting existing knowledge and skills with the assumption that they will also be useful in the future. The focus has been on the content of syllabuses, as it was taken for granted that teaching was largely a one - way process of transmission. Curriculum goals were expressed in schools and colleges through subjects and disciplines and in craft - based employment through occupational and trade apprenticeships... However, as the organisation of work and structure of society change, neither tradition provides students with all the resources they are likely to need.” (p - 5)

The report in many places ensured that 'breadth' would not be achieved on the expense of 'depth'. It advocated the idea of 'core skills' or 'generic skills' for the curriculum. However, it would be more appropriate if the report used the phrase 'controlled breadth' instead of general breadth. The report also envisaged that more government control and more centralisation of the educational planning and development were essential:

"... The role of government will increasingly need to become that of the regulator of national framework for qualifications and assessment, for policy and standards, for funding and incentives. Only by such means can full commitment and purposeful progress be achieved." (p - 74)

Furthermore, the report was clearly advocating the policy of blurring the distinction between academic and vocational studies:

"The direction of reform in other countries suggests that tinkering with our own system and its anachronisms is not enough. We are in a new era which demands new solutions. More and more countries will achieve high level of participation and attainment and there will be a blurring of old distinctions between academic and vocational studies, between college and work - based learning and between individual work and teamwork." (p - 74)

Although the report had highlighted some of the most serious problems of the British education and training system worth considering, it is still conveying an economic point of view.

To sum up, the development of the economy and technology had profound impacts on the English social structure. These social changes had placed the present education system under great pressure to change and to be more responsive. The danger was that in the process of change one tended to forget the positive aspects of the old and insist upon total rejection.

The chapter so far attempted to highlight the most prominent reasons for weakness of the education and training system in England. Among the many reasons the chapter focused on those highlighted by Barnett (1986). He pointed out three different reasons which caused the division between academic and vocational in the British education system, and thus, its weakness. They were the cult of the 'practical man', Romantic Idealism, and the profound British dislike of coherent organization, especially if centrally administered, under the aegis of the state, and a charge on public funds. The

chapter also presented various studies and suggestions to end the academic/ vocational division from both economic and educational points of view.

Pring (1995) looked into the problem of education and training from within, from philosophical and historical changes and developments. In his argument he stressed the importance of liberal education ideals and that it was not wise to ignore them, meanwhile the significance of vocational preparation could not be isolated anymore.

Vocational education in England had been exposed to many changes in the last decades. Part of this research plan was to look at how these changes were working in practice. The researcher conducted two case-studies, in which British Gas and British Telecom were used for this purpose. The following sections will present the overall results of two structured interviews with managers and instructors in the field in both establishments i.e. BG and BT.

## **Two Case Studies: British Gas and British Telecom**

The researcher visited two of the most successful British training establishments, that is, British Gas and British Telecom and conducted interviews with their managers. In the following section the results of these interviews will be presented. (For full versions of the structured interviews see Appendices 1 and 2)

British Gas and British Telecom are two private services companies. Each one of them has a set of objectives and goals to achieve. They follow certain policies and methods to accomplish their aims. One of these policies, maybe the most important, is training. Each sector has its own training system which ought to meet and fulfill its goals. In the following sections a general over view of the distinctive features of these training systems will be presented according to the interviews conducted in both sectors.

Technical training in British Gas and British Telecom are two examples of an employer-led, employer-based model. That is to say, training has a chief purpose to serve the end goals of the employer. All its activities and objectives are directed towards that aim. The sources of curriculum design and development in both sectors are almost the same. Despite the different services those two sectors offer, there are some similarities between their training systems. In both sides, for instance, the organisational needs and requirements form a corner stone in the designing process of their training courses. The national rules of health and safety are other examples of similarity between the two. Both companies rely on their training instructors and thus offer training for them whenever there are new technologies they want to train their engineers on and whenever there are new training practices and policies they want instructors to be acquainted with. The responsibility of those instructors is not only to train, but they are involved in curriculum design and development. They are also involved in evaluating the performance of their trainees during and after the training period in conjunction with the field managers.

In both companies there are evaluation systems for instructors. Classroom observation is one of the main tools of these systems. The trainees' feedback is another source

of evaluating the instructor's performance. There are also the administrative and office work which can be utilised as useful tools for evaluation.

There are though some differences, BG, for instance, has to comply with the standards of City and Guilds in order to be able to award its trainees the National Vocational Qualification (NVQ) certificates at the end of their training period. Meanwhile BT uses those standards as guidelines to design its courses, but without any obligations or end certificates. British Gas offers two types of training in the technical field. The first type is the formal, i.e. further education which is essential for those who are going to join the organisation. This type of training is offered to two age groups, 16 and 18 year olds. The two groups are not technically qualified when they first join BG and thus, a three year programme is set for the 16 years old and a two year programme is set for the 18 years old. The training programme comprises twelve courses spread over eight units in Gas services engineering and Gas distributing engineering. During their training, trainees should go to their districts to practice what they have learnt before proceeding to the next stage. This will enable both the field-managers and the training centre to evaluate the trainees' performance. On completing the training programme successfully, the 16 years old will be awarded NVQ level -3 at age 19 and NVQ level -4 for the 18 years old recruits at age 20. BG offers, however, the opportunity for its trainees to pursue further qualifications if they wish to do so. The first group, for instance, can continue to get NVQ level -4 and the second group to get NVQ level -5.

The other type of training which BG offers is on the job training or what they call adult training. It is the type of training which is designed to suit those who already have the work experience and need to know more. There is a variety of technical courses in this domain. To select the appropriate trainees for a course, BG training centres use a four step system. They start by visiting the field-managers two to three times a year and discuss with them the work problems. After identifying the main problems, they suggest suitable solutions which might be further training for his engineers. The following step will be what is the appropriate action to be taken. The final stage will be an agreed evaluation strategy between the training centre and the line manager. This, to

some extent, will insure that engineers have been given the most appropriate training. Furthermore, this will improve the work quality and increase productivity. The most important point of all is the significant role of the line managers in the selection process. They have to know exactly what their objectives are in order to choose a suitable solution.

Unlike British Gas, British Telecom offers training programmes which are mostly on the job training. Due to the rapid and vast development of computerised telecommunication technology, British Telecom is following a policy of reducing its total number of employees and therefore, it is not at present recruiting new employees. This has influenced its training policy to some extent. Most of the work which has to be done manually in the past is computerised today, in other words, less employees and shorter periods of training. Nevertheless, in the past BT used to accept two groups for its technical training, those two groups were 16 and 18 year olds. They used to join the field directly for a short period of time before they were sent to do any training programme. They would start their training with safety procedures regarding their fields. Then they would be joining the suitable courses for their work. These courses were short and no certificates awarded at the end. Although BT followed the standards of the NVQ, it did not award its trainees certificates at the end of their training period.

Telecommunication's field is large and diversified, and <sup>so are</sup> the number and types of training courses offered. British Telecom offers a variety of technical training courses to its engineers. An engineer can be trained on many different technical courses according to the multi-skill policy BT is following now. This policy entails that each engineer should be able to perform more than one specific job.

BT, however, follows a different system of selecting the appropriate trainees for a course than that of BG. It is totally the responsibility of the field manager to select the suitable course from the training portfolio for any one of his engineers. The training board in BT draws up an annual plan which is divided into four quarters. When the field manager selects a course he should fill a nomination form and files it into the administration office in his division. This form will be sent to the training board which

will decide the date and place of the course. There is though some flexibility in the system depending on the need and circumstances of the work.

BT training has two ways of appraising their technical trainees during the training period. In some courses there are formal assessments which trainees either pass or fail. In some other courses, assessment is formative, i.e. during training. In this latter type there is no formal assessment and thus, the trainee has to show that he is capable of doing the job in order to go back to the field. If he failed to acquire the skill, he should go back to his previous job. After the training period, however, the training centre will not be involved in any evaluation process.

Generally these are the most important features of similarities and differences in training both in British Gas and British Telecom. During the visits to those two sectors and interviews with the training managers, the researcher observed some important points which are worthwhile mentioning in the following section .

One of the most significant features of training in both sectors is the degree of instructors' involvement in curriculum design and development, which can serve at many levels. It will boost the instructors' confidence and knowledge of what he is delivering. It helps them to detect and understand the weakness and strength of the course. It will also help to make curricula development a continuous process and strengthen the relevance of it to the immediate needs. Furthermore, instructors will have the feeling of sharing the responsibility of making the success of the organisation. It will indeed make the training profession more interesting and not merely a job for making a living. The degree, however, of instructors' involvement in the designing and development process can be either constructive or destructive. It will be constructive if it has been done in the light of the national training policy and under the supervision of a professional body. But it can be totally destructive if it has been left entirely for instructors to bear the whole load. Generally instructors' involvement in the curricula development in the light of the national training policy will be to the benefit of the trainees who can get wide and strong instruction from well-informed instructors. Furthermore, the benefits of their training can harness good for them and for their country. As a result trainees' experience and knowledge will expand and the love for

what they are doing will be increased. Consequently, the quality of service the Organisation is offering, is going to be high.

The other important feature is the joint evaluation and supervision of the trainee during and after training (in British Gas case). This is important because through it one can be certain that trainees have learnt what they need to know to perform well. The connection between the field and training centre here is strongly established. Therefore, training always will be in touch with what is going on in the field, and thus, offer the appropriate solutions in the right time according to its capabilities. From another angle the field managers can make the right use of the training opportunities. It will also enhance the engineers' performance and ultimately increases the organisation's profits. It helps trainees to gain confidence in what they are doing and raises self-esteem. It also helps them to build an ambition for their future.

One of the important features which facilitates the selection of trainees to a course is the clear understanding of the line managers to what exactly they want to achieve. Each field manager has a specified job description. In it all tasks and duties are clearly stated, and thus, he knows what is exactly required from him. The manager is also introduced to all channels and routes which will help him to achieve his objectives. One of those important channels is training which he must be in continuous contact throughout the year. At the end of each year every manager will be appraised on how much did he achieve of his objectives and therefore he will be either promoted or demoted. This is important because it helps the line manager to find practical solutions to the work problems. It utilises the task of understanding the limits and capabilities of each engineer and therefore, the tasks distribution. It also assists the engineers to know what is exactly required from them and urge them to meet those requirements.

The four step selection process in British Gas for on the job training courses is a reasonable alternative for the courses lists used in British Telecom. It is well known that not all the problems of the field can be solved by training. A field manager might assume that the suitable solution for his work problems is to send his subordinates to a training course, the question here is what if they came back after training and the problem is still there ? What is the next step to be taken ? How much time and money con-

sumed during the training period ? In BG all this has been overcome by the four step system. The involvement of the field manager and the training centre has facilitated the training task and made it more effective and more productive. This system helps to a great extent in building a clear understanding of the training purposes and objectives.

During the visits the researcher had noticed the practicability of training managers. They are fully engaged with tangible and practical training matters. They pay considerable attention to administration matters, but their main concern is with the essence of training. This is important to build a positive training atmosphere around the trainees and the field managers. It makes them - the training managers- aware of all training problems and issues and above all how to overcome them. Nevertheless, practical side has overwhelmed theoretical side. In other words, trainees are mostly trained on how to do the job practically rather than learn the theoretical basis of it first. The trainee in this case will gain some kind of skill, but at the same time he will not be able to develop that skill any further in the future. Instead he will be always in need for training and retraining. The situation will be different if the trainee introduced to strong theoretical basis first. This may be take longer time but at the end it will produce a creative engineer who can enhance and develop his skill. Neglecting this fact, however, shows clearly that private sectors are mostly concerned with increasing their turnover more than the development of human resources.

Planing for future is one of the most important tools for success. In both sectors future planing is one of the main resources upon which training has been designed. Through planing both sectors have been able to identify the trainees number they are going to accept for the following five years. They also identify which area of training is more important than the other during that period. Planing is also essential to face other competitor in the market place. Again future planing for training is mostly directed towards organisation's profits and economic gains. In other words, the role of it in the society is entirely devoted to economic success more than any thing else. Such organisation, in my judgement, should play a greater and wider role in the society. It can not relate itself to economic reasons only. Instead it should participate in constructing other parts of the social life whether it is educational, economic or even moral.

Finally the enormous and fast development of technology especially in the field of telecommunications has urged a comprehensive reforms of the national education and training policies. Training is becoming shorter and cheaper due to the use of computer and electronic technology. The total number of employees had to be reduced, because the job which had to be done by number of employees in the past became a job for one or two. This will create great dissatisfaction among unqualified young people. The role of education system here is very important in preparing and initiating the youth both mentally and psychologically into the modern ways of life. It is very important to utilise the youth power and potentiality in a productive work rather than leaving them unemployed. That might cause large social and economic problems in the future.

The two case-studies presented above were clear examples of good training isolated from education. It appeared that the creation of the National Vocational Qualification had guided the practices of those two establishments. However, British Telecom was using the NVQ as a framework only for its training activities, while British Gas was using the framework and the scheme of qualifications which have been awarded to its trainees at the end of their training programmes. The study had shown that training had its own curriculum and teaching methodologies which had no connection to the general academic education system.

### **Summary of chapter five**

The reasons for the weakness of the educational system in England were many. Most important was the disagreement on the aim of education: either academic or vocational or a combination of both. As a result the country ended up with two separate systems of education and training and separate systems of qualifications. Although this system of separation had survived in the past, it will be unwise to assume that it will in the future.

In the following chapter the reasons for weakness of the educational system in the Kingdom of Saudi Arabia will be explored empirically.

## **CHAPTER SIX**

### **Organisational and Attitudinal Difficulties in Technical/ Industrial Education in the Kingdom of Saudi Arabia**

The previous chapter looked into the various reasons which affected the education and training system in England and caused its weakness. Some of those reasons were similar to that of Saudi Arabia while others were different. There were similar effects for different reasons like that of the rate of participation. In England general education was of an academic and elitist nature which prevented a large number from participating and thus, left without any kind of qualification. In the Kingdom of Saudi Arabia, although general education was academic but not elitist -it did not relate to a certain class structure- the number of participants was very small because parents could not see the usefulness of such education in real life. The economic and technological development, the demands of employers for qualifications, and the educational reforms in the past decades had increased the rate of students' participation as well as the number of the educational institutions in England and in Saudi Arabia.

Another important point of comparison was that the prominent feature of the education system in Saudi Arabia was its centralised nature. The curriculum planning and development was a centralised process rather than shared responsibility. England, on the other hand, is providing education at the present in a decentralised system. Nevertheless, recent researches and studies have shown increasing interest in more centralisation and government control. It appears that the shape of the future education system in England will be largely dependent on the central government.

A further point was that unlike Saudi Arabia, the vocational education and training track in England linked with industry which recognised its needs and requirements. In Saudi Arabia the vocational track was established by the government as an alternative path for low status practical jobs. However, in both cases the demands were the same, that is, for general education to be broad enough to accommodate the vocational aspects in a unified curriculum.

The Kingdom of Saudi Arabia, as mentioned before, is operating according to two different ideals, the traditional and modern. The provision of technical education was

considered to be a modern system. Technical/industrial education in particular was subjected to many changes during the past decades, however, its performance has remained ineffective. The literature surveyed about technical/industrial education in this study showed that the rate of participation was very low, and the rate of attainment was also very low. It was observed that the majority of students who joined technical/industrial education have dropped out before completing the course. Furthermore, the proportion of the Saudi workforce in the labour market was at its lowest level. Local and national industries had devalued the graduates of technical/industrial education and rejected them for their poor performance. These issues had emerged as some of the important factors which had weakened the technical/industrial education system in the Kingdom. Although the previous chapters of this study had also analysed the weakness of technical/industrial education in the Kingdom, it was from a theoretical point of view. In this chapter, however, the main reasons for weakness of technical/industrial education will be empirically examined.

In order to provide empirical evidence, the researcher devised two questionnaires and an interview to be implemented in the Secondary Industrial Institutes in the Kingdom of Saudi Arabia. The data collection process took place in the period from Oct. 1994 to Jan., 1995. The task had been divided into two parts. The first part was the pilot work of the questionnaires and interviews. The second part was the implementation of the final corrected version of questionnaires and interviews. From the literature surveyed, the researcher had formulated the following general hypotheses which the field work had been built on. These hypotheses are divided into two different sections; students of first and third year of industrial education; the administration of Industrial Institutes. Most of these hypotheses are tested by one or more questions in both questionnaires and interviews. The use of the word "hypotheses" here is more general than the normal use. In other words, they did not lend themselves to clear yes/no answers, but they threw light on the general problem and the reasons for the existence of the problem.

## **Hypotheses**

### **1. Hypotheses concerning students :**

1.1. students were not mentally prepared for this type of education,

- 1.2. students do not select their specialisation on the basis of their future jobs,
- 1.3. students have joined industrial education as second choice,
- 1.4. students prefer general education to industrial education,
- 1.5. students are not sure of their future jobs,
- 1.6. students are not fully acquainted with industrial education goals and purposes,
- 1.7. first year students do not gather enough information about industrial education before joining,
- 1.8. third year students do not like to work in industry after graduation,
- 1.9. third year students have little idea about the status of relationship between industrial education and industry,
- 1.10. third year students see the purpose of industrial education is to continue into higher studies.

## **2. Hypotheses concerning Industrial Institutes administration:**

- 2.1. the capacity of admission to industrial secondary education is too limited in terms of industrial needs,
- 2.2. individual institutes lack autonomy,
- 2.3. institutes' administration do not share information with their students,
- 2.4. institutes relationship with industry is weak on the local and national level,
- 2.5. industrial institutes do not respond to the industrial needs,
- 2.6. admission policy allows the minimum standards of students quality,
- 2.7. distribution of students is based on staff and equipment availability rather than industrial needs,
- 2.8. there is no mechanism of informing the students about the future jobs available for them in the market,
- 2.9. market studies which can inform curriculum design are lacking,
- 2.10. there is no specific number of graduates each institute should produce annually,
- 2.11. in theory the aim of industrial education is known by principals but not practically implemented,

Before going into the presentation of the pilot work, it is important to point out that the groups selected to answer the designed questionnaires were first and third year students

in the Secondary Industrial Institutes in the Kingdom of Saudi Arabia. The selection of those two groups and the omission of the second year students was because the researcher aimed to explore the new students' views, that is students in the first year, about technical education at the beginning of their study. These were compared with the views and aspirations of students who were going to leave technical education and go to the practical world after three years of study. The selection also was made to have an internal comparison between answers to same questions in those two groups to detect the effects of studying in industrial institutes on the overall of students' perception of this type of education. In other words, to measure the degree of change in the attitude towards this type of education among students that might have taken place.

It is also important to mention that all questions had been translated into Arabic language before implementation and the answers back to English language.

The researcher picked secondary technical industrial education rather than agricultural or commercial because he believed that it was better to concentrate on one aspect of secondary technical education in the time available.

### **1. The Pilot Work**

To test the reliability and validity of the first and third year questionnaires, a random sample of sixty students from one institute were gathered to answer the questionnaires. The number of questionnaires had been divided into two sets, thirty for each year. The aim of the study was explained to the students before they started answering the questionnaires. They also had been told to be prepared to retake the same questionnaire in two weeks time. On the same day an interview with the Institute's director was conducted. The original forms of first and third year questionnaires and the structured interview with principals before the pilot study are listed in appendix (3).

After two weeks the same students took the questionnaire again. Not all of them were present on that particular day; one student from the third year and two from the first year were absent. Therefore, the total number of questionnaires to be omitted from first year was four, and two from third year; thus, the total number of the piloted questionnaires was 114 instead of 120.

The output of this pilot study was entered into the computer of King Saud University in Riyadh for validity and reliability tests. The results showed that the percentage agreement between the two sets of students (measured by Pearson's test) was 70% for the first year students and 71% for the third year students. Nonetheless, some questions in both questionnaires appeared to have some problems and they needed to be altered, in order to have accurate results in the final implementation. In the first year questionnaire question number six had to be dropped totally because it did not seem that the students had understood its meaning. Also question number seven had to be reconstructed in order to make it more understandable. Therefore, the number of question in the final version of this questionnaire became eight instead of nine. (see table 4 in appendix 3)

In the third year questionnaire, question number ten had to be dropped for the same reason as question six in the previous questionnaire. Also questions six and seven had to be reworded to make them more understandable. The total number of questions in this questionnaire became thirteen instead of fourteen. (see table 5 in appendix 3)

After the content analysis of the first interview, some changes had to be introduced to the original form of the interview. It appeared through discussion with the institute's director that question number nine had to be extended. Also it appeared that a new question at the very end should be added. Therefore the total number of questions became twenty three instead of twenty two. (see table 6 in appendix 3)

## **2. Implementation of final questionnaire**

As a consequence of the pilot work, necessary changes had been introduced to both questionnaires and interview forms. The final form of the first and third year questionnaires and the structured interview will be presented in the following sections. (see appendices 4,5 and 6. For the final Arabic forms, see appendices 7,8 and 9)

**Sample:** The researcher had aimed to test a number of students of not less than 20% of the total population of first and third year students at the industrial institutes in the Kingdom of Saudi Arabia. The total numbers of students were gathered from the published statistics of industrial institutes of 1993. During the visit arrangements were

made with the administration of the institute to provide the specified number of students drawn from every section and specialisation. The total number of students who participated was 1327 students which constituted 22.3% of the total population of students in both groups which was 5957. The number of those who answered the questionnaire in year one was 840 students and 487 in year three. The number of students selected varied from institute to institute as a result of the variations of institutes' capacity of admission. Table (1) below shows the distribution of questionnaires in relation to students' number according to the Statistical report of 1993.

**Table (1)**

**DIAGRAM REDACTED DUE TO THIRD PARTY RIGHTS OR OTHER LEGAL ISSUES**



\*\* 1st Y.Q = First year questionnaire.

\*\*\* 3rd Y.Q = Third year questionnaire.

In order to achieve a high response rate, the researcher had chosen the method of self administered questionnaire. Therefore, in each institute the researcher had to meet the students to explain to them the purpose of his research and stressed the importance of accurate and honest answers. Also he emphasised the importance of reading each question carefully and not to answer before that. Picking only one answer to each question from the list of answers was also stressed. The researcher conducted the structured interview on the same day with the institute's director. Anonymity was guaranteed for both students and principals.

### **Analysis Of Questionnaires And Interview**

In the following sections each question of both first and third year questionnaires will be analysed according to the final statistical results and in conformity with the hypotheses

it relates to. Similarly the analysis of each question in the interview will follow later on in this chapter. There are similar questions in both first and third year questionnaires. In the following section the answers to these similar questions will be presented.

### **Similar questions of first and third year students**

The output of questionnaires of both first and third year students were also entered into the computer of King Saud University in Riyadh for the statistical analysis. Each figure and question in both questionnaires had been given a code number so that it could be numerically dealt with in the computer. To identify the range of statistical differences between the two groups, the researcher used Chi square test with 4 degrees of freedom and at .001 level of significance. The age distribution of the first year students who answered the questionnaires is shown in Table (2) below. (mean age = 18.5 years )

**Table (2)**  
**(Age scale for first year students)**

<b>Age</b>	15	16	17	18	19	20	21	22	23	<b>Total</b>
<b>Frequency</b>	2	63	153	210	229	119	30	33	1	840
<b>%</b>	0.2	8	18	25	27	14	4	4	0.1	100%

Also the age distribution of the third year students is shown in Table (3) below. (mean age = 20 years ).

**Table (3)**  
**(Age scale for third year students)**

<b>Age</b>	17	18	19	20	21	22	23	24	25	<b>Total</b>
<b>Frequency</b>	4	64	131	134	81	46	17	6	4	487
<b>%</b>	1	13	27	28	17	9	3	1	1	100%

It must be said at this stage that each question in these questionnaires had been designed to provide a picture of the nature and status of industrial secondary education in the Kingdom of Saudi Arabia as perceived by its students. Since the attitudes of those students towards industrial education can play an important role in its success or failure, then questions had been formulated as an instrument to measure the nature of their attitudes. For the first year students it was important to know their views as new applicants who had joined technical education recently, and also was important to explore the views of those in the third year who were about to leave technical education for the world of work. It would be interesting to know their own perception of industrial

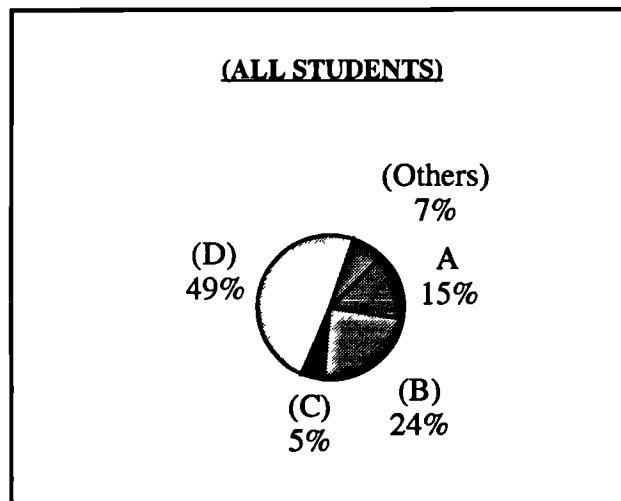
education. It would be equally interesting to know their expectation of their future jobs. These type of information can show the kind of attitudes students of industrial education have about it. Chart (2) in chapter two showed the magnitude of the problem in the large number of students quitting industrial education before finishing the course, and thus, very small percentage of those enrolled were actually graduated.

The questionnaires were distributed to a total number of 1327 students, 840 of which were for first year students, and 487 for third year students in eight Industrial Secondary Institute in the Kingdom of Saudi Arabia. It consisted of eight multiple choice questions for the first year students and thirteen questions for the third year students. In the following sections the similar questions of both groups are presented together to aid comparison and to be examined against the hypotheses they were related to.

### 1. Why did you join this institute?

- a) I could not find a place at the general secondary education.
- b) It is easier than the general secondary education.
- c) Financially better than the general secondary education.
- d) To become a skilled technician .

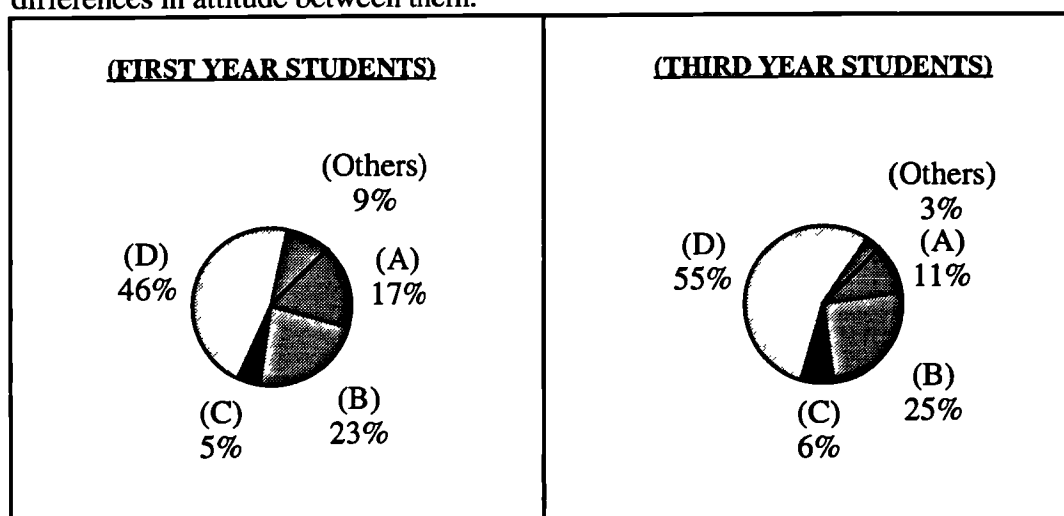
Others : -----



All students approached answered this question (840 first years and 487 third years). Answers showed that large number of students gave a positive reason for joining industrial education, where they reported that they joined because they wanted to become skilled technicians (49%). However quite a considerable proportion gave a rather negative reason for joining industrial education, where they reported that they joined because it was easier than the general secondary education (24%). A further 15% also

reported that they joined because they could not find a place at the general secondary education.

Although industrial education offers its students a monthly salary during their study period as an incentive, a very small proportion was motivated by it as the main reason for joining this type of education (5%). A further larger proportion of 7% gave other reasons for joining industrial education such as failure in the general secondary education, or industrial education was one of their major interest, or because of family influence. That was an overall picture of the responses of first and third year students. In the following section answers of both groups will be compared to find out the differences in attitude between them.



Answers to this question from first and third year students showed that a large percentage of them had joined the industrial education because they wanted to become skilled technicians (46% and 55% respectively). A smallish group of both first and third year students reported that they had joined industrial education for financial reasons (5% and 6% respectively). However quite a large proportion of both first and third year students gave rather negative reasons for joining industrial education that because they thought that it was easier than the general secondary education (23% and 25% respectively). Also a large proportion of first and third year students had joined because they could not find a place at the general secondary education (17% and 11% respectively).

The other 9% of first year students and 3% of third year students gave other reasons for joining industrial education. For first year students 8% had joined because they had

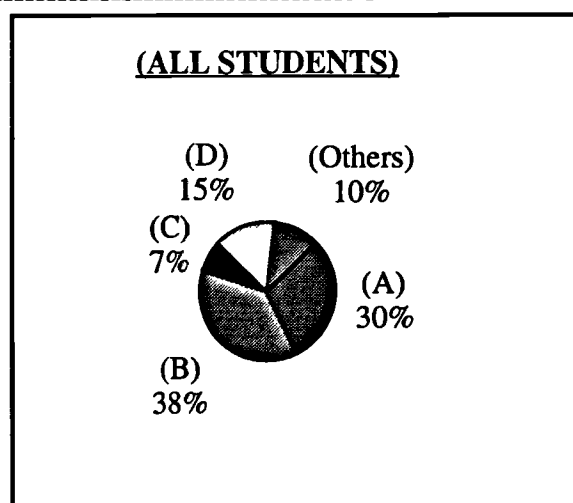
found a place at general secondary but failed to continue, and the remaining 1% reported that it was one of their major interests to join this type of education. On the other hand, 2% of third year students had joined this type of education because they liked manual work, and 1% had joined as a result of the influence of their family.

Overall the responses from first and third year students present a similar picture, though the differences which exist between the two groups were statistically significant (Chi square = 30.2 with 4 degrees of freedom,  $p < .001$ ), where the students differed was in the large number of first year students who reported that they were unable to find a place at general secondary education, and quite below average number of them reported that they wanted to become skilled technicians. However there was a very small difference between both groups in relation to the level of difficulty between general and industrial education, where more number of third year students than first year students thought that industrial education was easier than general education. Comparison also showed that more of first year students gave other reasons for joining industrial education than third year students. This question relates to the hypothesis number (1.3)

## 2. What kind of subjects did you like most before joining the institute?

- a) Science subjects ( math, physics...etc.)
- b) Arts subjects ( poetry, story...etc.)
- c) Both.
- d) I do not know.

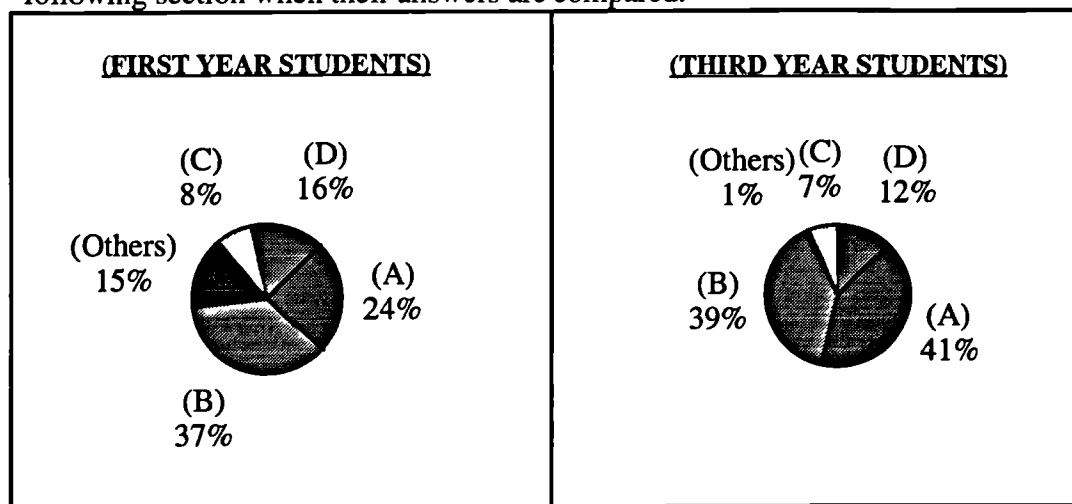
Others : -----



All students approached answered this question (840 first years and 487 third years).

It is important to point out that science subjects are more essential to industrial education

than any other subject. However students answers showed that a large number of them reported that they preferred Arts subjects (38%). On the other hand, quite low proportion of them reported that they did like science subjects (30%). A further considerable number reported that they did not know (15%), but 7% reported that they used to like both subjects. A further group of 10% reported that the subject liked was religious education. Differences between the two groups will be explored in the following section when their answers are compared.



The output results of this question showed a similar proportion of first and third year students used to like Arts subjects ( 37% and 39% respectively). Results also showed a different subject interest between first and third year students where a larger percentage of third year students used to like Science subjects compared to a smaller proportion of first year students (41% and 24% respectively). Another similar but small proportion of first and third year students reported that they liked both Art and Science subjects ( 8% and 7% respectively). However, quite considerable percentage of first and third year students, though slightly different, reported that they did not know (16% and 12% respectively). Finally, a large proportion of first year students compared to a small percentage of third year students reported that they liked Religious education other than Art or Science (15% and 1% respectively).

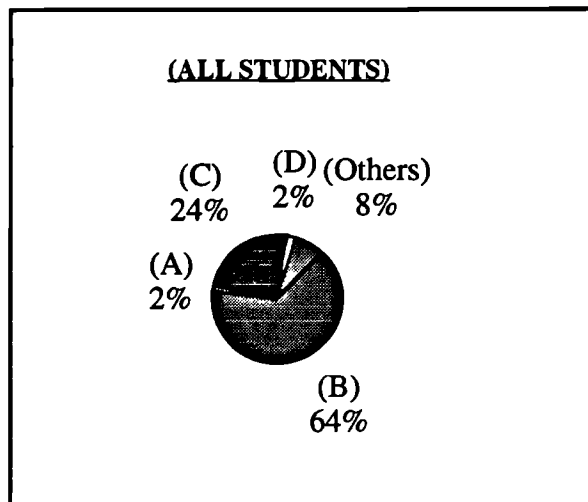
The overall responses from first and third year students showed a considerable differences between the two groups. These differences were statistically significant (Chi square = 94.5 with 4 degrees of freedom,  $p < .001$ ), where the students differed was in the small number of first year students who reported that they liked Science subjects, which are essential in industrial education. Comparison between the two groups showed

that first year students were less prepared than third year students. This question relates to the hypothesis number (1.1)

**3. Why did you pick this specialisation than others?**

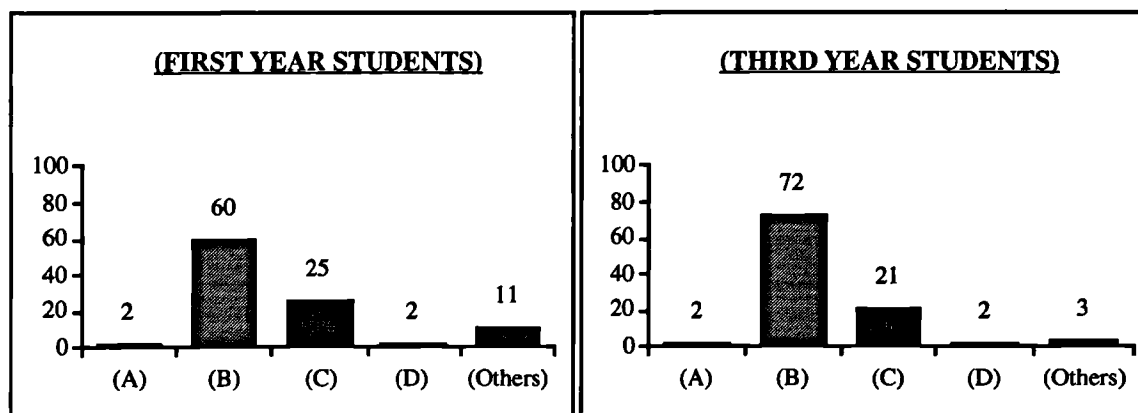
- a) I would like to be with my friends.
- b) Because it has better future work opportunity.
- c) The institute's administration had picked it for me.
- d) I do not know.

Others : -----



All students approached answered this question (840 first years and 487 third years). Students' responses to this question showed that the majority of them had picked his specific specialisation on the ground that it had better future work opportunity (64%). However quite a considerable number did not enjoy that privilege, where 24% of them were in that position because the institute's administration had picked for them. A further small group reported that they picked that specialisation in order to be with their friends (2%), in addition a similar proportion reported that did not know why they had picked that specialisation (2%).

On the other hand, a percentage of 8% of students gave other reasons for picking their specialisation. Reasons such as, it was one of their interest, or because they had previous experience in this particular field. Differences between the two groups will be explored in the following section.



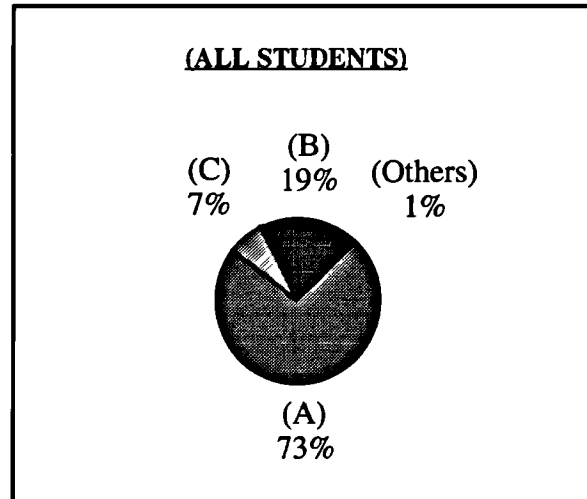
Answers to this question showed that the majority of first and third year students gave a positive reason for picking this specialisation, that because it had better future work opportunities (60% and 72% respectively). A further smaller group of both first and third year students reported that they did not choose but the institute's administration had picked it for them (25% and 21% respectively). A similar proportion of 2% of first and third year students gave a rather negative reason to pick this specialisation, that because they preferred to be with their friends. Also a similar percentage of 2% of first and third year students reported that they did not know why they picked this specialisation. On the other hand, 11% of first year students compared to 3% of third year students gave other reasons for picking this specialisation, where 10% of first year students and 3% of third year students picked this specialisation because it was one of their major interests. The remaining 1% of first year students reported that they picked this specialisation because they have had previous experience.

Overall the responses from first and third year students present a similar picture, though because of the large sample size the differences which exist between the two groups were statistically significant ( Chi square = 33.6 with 4 degrees of freedom,  $p < .001$ ), where the students differed was in the large number of first year students who gave other reasons for picking a particular specialisation. This question relates to the hypothesis number (1.2)

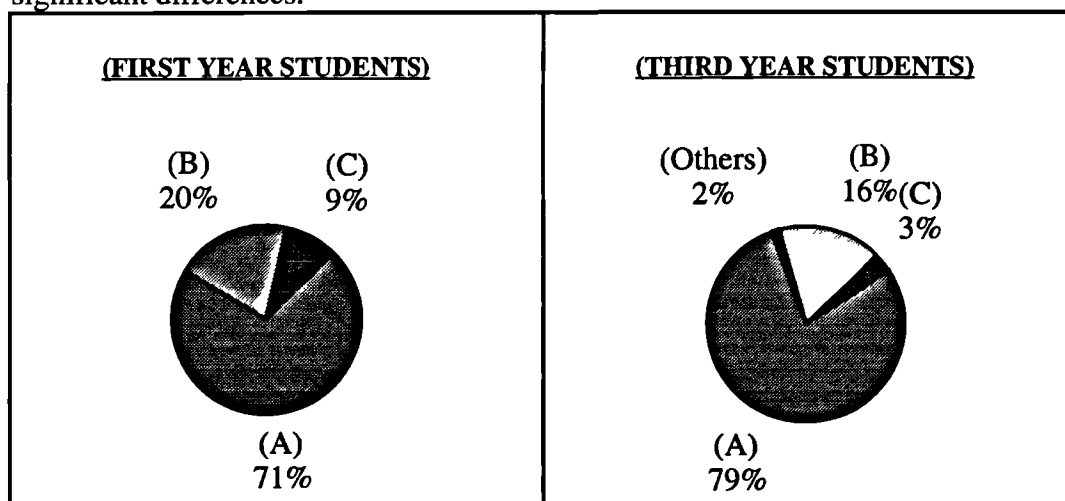
4. If you were given the choice, which of the following you would pick?

- a) Secondary Technical education.
- b) General Secondary education.
- c) Secondary Medical education.

Others : -----



All students approached answered this question (840 first years and 487 third years). They responded positively to this question where the majority of them reported that they would pick secondary technical education if they were given the choice to pick again. However a considerable number of them reported that they would pick general secondary education (19%), and only 7% of them reported that they would pick medical education. Finally, a small percentage of them reported that they did not know. In the following section the answers of the two groups will be compared in order to find out any significant differences.



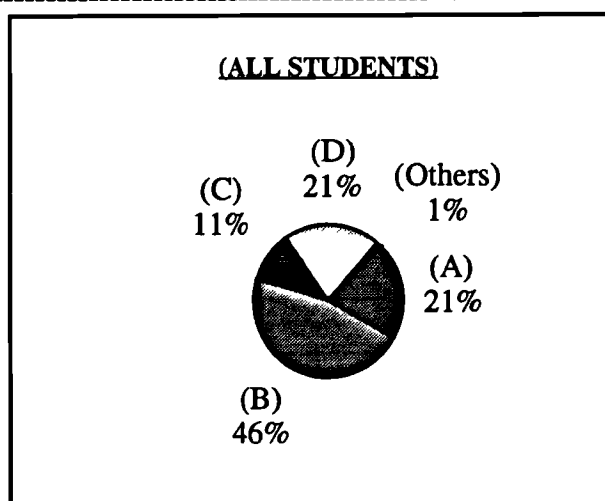
Answers to this question showed that the majority of first and third year students would choose secondary technical education again (71% and 79% respectively). However, a quite similar proportion of first and third year students would prefer the general secondary education (20% and 16% respectively). On the other hand, a different proportion of first and third year students would prefer to go for medical education (9% and 3% respectively). Finally the remaining 2% of third year students reported that they did not know where to go.

Overall the responses from first and third year students present a similar picture, though because of the large sample size the differences which exist between the two groups were statistically significant ( Chi square = 32.5 with 4 degrees of freedom,  $p < .001$ ), where the students differed was in the large number of first year students who reported that they would choose medical education. This question relates to the hypothesis number (1.4)

**5. What do you think this institute is preparing you for?**

- a) To become instructor in one of the vocational training centres.
- b) To find a job in one of the industrial private sectors.
- c) To start a business yourself.
- d) I do not know.

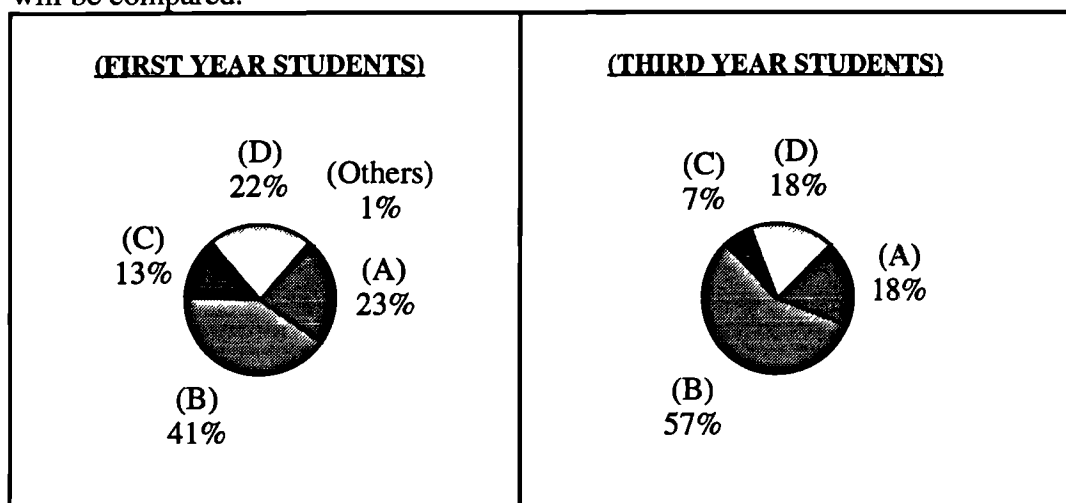
Others : -----



All students approached answered this question (840 first years and 487 third years). A large proportion of them responded positively to this question, where they reported that they thought this institute was preparing them to find a job in one of the industrial private sectors (49%). However, quite a considerable number of the students reported

that they thought this institute was preparing them to become instructor in one of the vocational training centres (21%), and a further similar percentage of 21% reported that they did not know what this institute was preparing them for.

Another small group thought that the institute was preparing them to start a business on their own (11%), and the remaining 1% reported that the institute was preparing them to work in the governmental sector. In the following section the answers of both groups will be compared.



Answer 5 to this question showed that a large proportion of first and third year students reported that the institute is preparing them to find a job in one of the industrial private sectors (41% and 57% respectively). A further groups with slight differences of first and third year students reported that they were going to become instructor in one of the vocational training centres (22.6% and 18.1% respectively). A further similar percentage of first and third year students reported that they did not know what this institute is preparing them for (22% and 18% respectively). On the other hand, quite larger proportion of first year students than third year students reported that the aim was to start a business on their own (13% and 7% respectively). Finally, the remaining 1% of first year students thought the aim was to work in the governmental sectors.

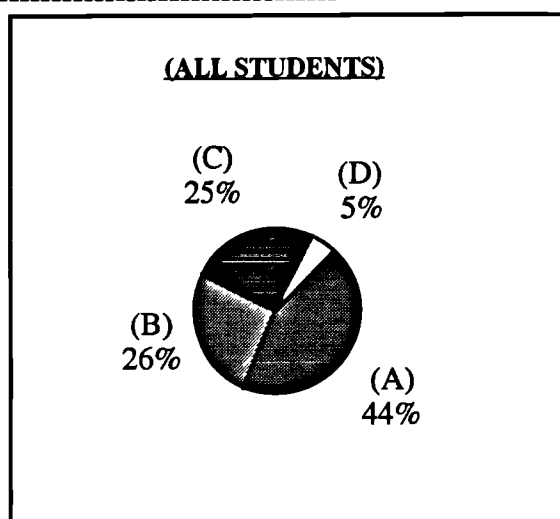
The overall responses from first and third year students showed some differences. These differences were statistically significant (Chi square = 40.6 with 4 degrees of freedom,  $p < .001$ ), where the students differed was in the majority of first year students who were not sure what was the aim of industrial education. Furthermore, quite a large number of first year students reported that the aim of industrial education was to become

instructor in one of the vocational training centres. This question relates to the hypotheses number (1.5 and 1.6)

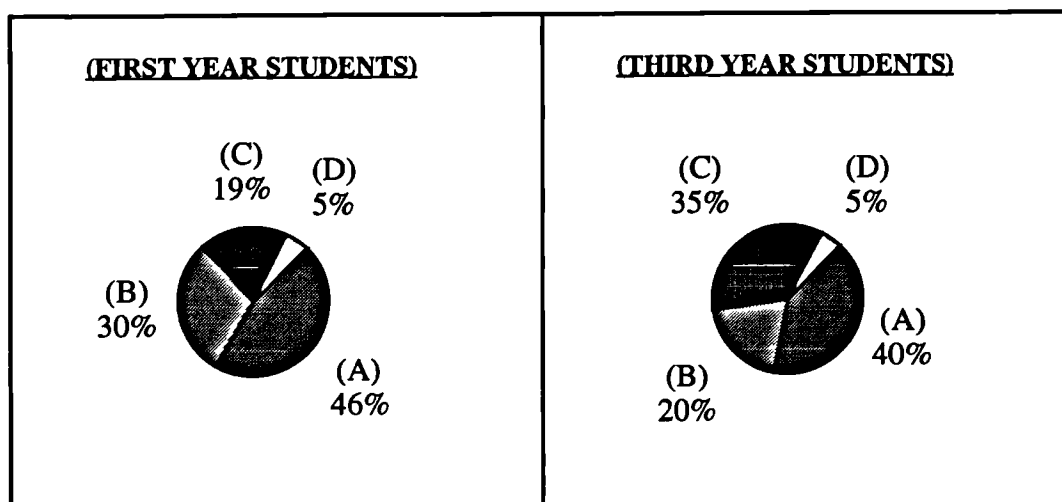
**6. Which of the following statements match your point of view?**

- a) Industrial secondary education is better than general secondary education.
- b) General secondary education is better than industrial secondary education.
- c) Both of them are equal.
- d) I do not know.

Others : -----



All students approached answered this question (840 first years and 487 third years). A large number of them responded positively to this question, where they reported that industrial secondary education is better than general secondary education (44%). However quite a considerable number showed their discontent with industrial education when they reported that general secondary education is better than industrial secondary education (26%). A quite similar percentage of students reported that both of them are equal (25%). Finally only 5% of students reported that they did not know which was which. In the following section the answers of both groups will be compared.



Answers to this question showed that a large proportion of first and third year students thought that industrial secondary education was better than general secondary education (46% and 41% respectively). However different proportion of first and third year students thought that general secondary education was better than industrial secondary education (30% and 20% respectively). Another unlike proportion of first and third year students thought that they were equal (19% and 35% respectively). Finally, a similar 5% of both groups reported that they did not know which was better.

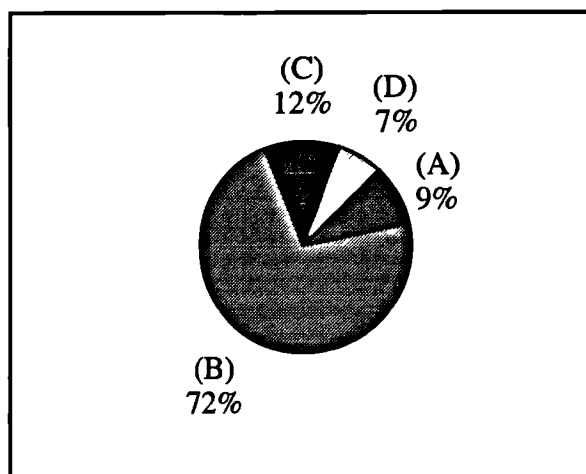
Overall the responses from first and third year students present a slightly similar picture, though because of the large sample size the differences which exist between the two groups were statistically significant ( Chi square = 45.1 with 4 degrees of freedom,  $p < .001$ ), where the students differed was in the large number of first year students who reported that general secondary education was better than industrial secondary education. This question relates to the hypothesis number (1.4).

***Question for first year students only***

**1. How did you know about Industrial Secondary Education?**

- a) The media.
- b) Friends.
- c) Family.
- d) Intermediate school.

Others : -----



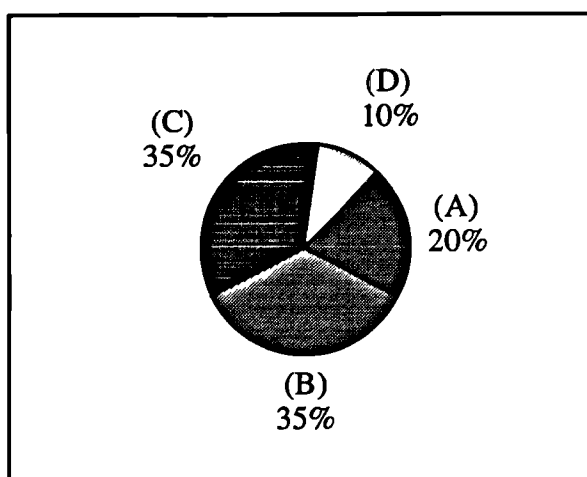
All 840 students approached had answered this question. Answers to this question showed that the majority of first year students knew about this type of education from a source which could be considered unreliable, that is, their friends (72%). Furthermore, few of them knew about it from another unreliable source, that is, their families (12%). A farther smallish group reported that they knew about it from the Media (9 % ). Finally, a small percentage of 7% knew about it from the intermediate school. This question relates to the hypotheses number (1.6 and 1.7).

***Question for first year students only***

**2. Did you visit the secondary industrial institute to know about it before joining?**

- a) Yes.
- b) No.
- c) No, because I knew about it from my friends.
- d) No, because it was not one of my desires to join this type of education.

Others : -----



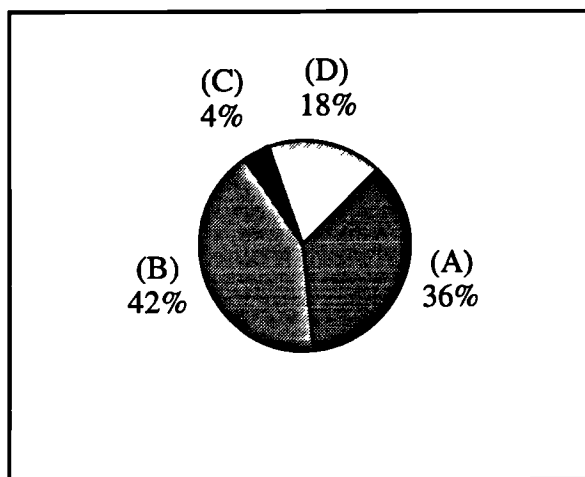
All 840 students approached had answered this question. Answers to this question showed that the majority of first year students did not visit industrial institute before joining for one reason or another. A large group of them reported that they did not visit the secondary industrial institute to know about it before joining for no reason (35%). Another similar percentage of 35% of first year students reported that they did not visit because they already knew about it from their friends. A further small number gave different reason for not visiting the industrial institute before joining, that because it was not one of their desires to join this type of education (10.4%). Only a small number of them reported that they had visited the industrial institute before joining (20%). This question relates to the hypothesis number (1.7)

***Question for third year students only***

**1. What do you think you will be doing after graduation?**

- a) Continue my studies in the Intermediate Technical College.
- b) Work in the field of industry straight away.
- c) Start a business on my own.
- d) I do not know.

Others : -----



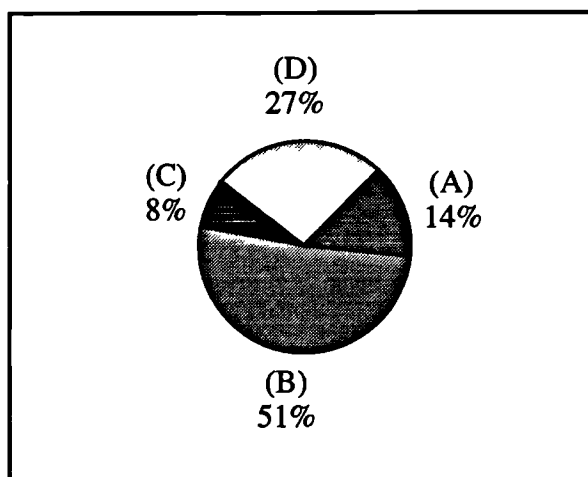
All 487 students approached had answered this question. Answers to this question showed that large proportion of third year students would work in the field of industry after graduation (42%). However another considerable percentage of them reported that they would continue their studies in the Intermediate Technical College (36%). A further proportion reported that they did not know what they were going to do after graduation (18%). Finally, a small percentage of 4% reported that would start a business on their own. This question relates to the hypotheses number (1.8 and 1.10)

*Question for third year students only*

**2. If you choose to work in industry after graduation, what would you like to be?**

- a) A factory manager.
- b) An apprentice in a factory.
- c) I will never work in industry.
- d) I have not decided yet.

Others : -----

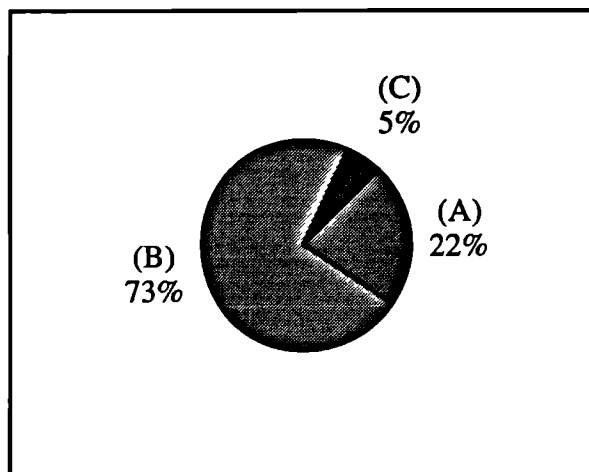


All 487 students approached had answered this question. Answers to this question showed that the majority of third year students would like to be apprentices in any factory if they choose to work in industry (51%). However, quite a large number of them reported that they had not decided yet (27%). Further 14% of them gave a rather negative insight of what they would like to be if they choose to work in industry, that is, work as a factory manager, and further 8% of them gave a rather more negative insight of what they would like to be if they choose to work in industry, that is, they will never work in industry. This question relates to the hypotheses number (1.5 and 1.8)

*Question for third year students only***3. After graduation do you think you will need further training?**

- a) I do not need more training.
- b) I need continuous training.
- c) I do not know.

Others : -----



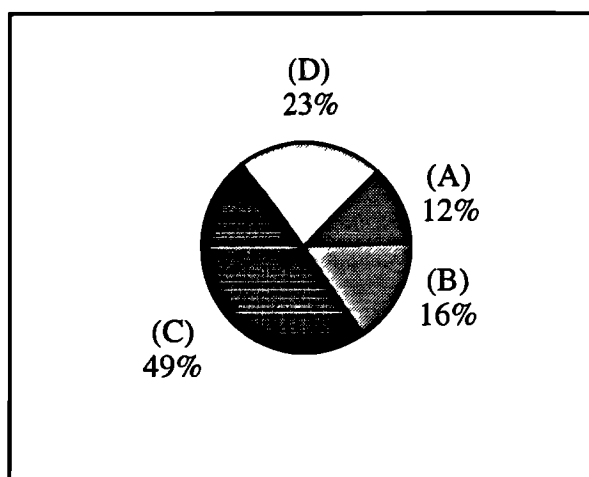
All 487 students approached had answered this question. Answers to this question showed that the majority of third year students thought that they need continuous training after graduation (72%). Another percentage of 22% thought they would not need more training. Finally, 5% of them reported that they did not know. This question relates to the hypotheses number (1.5 and 1.8)

***Question for third year students only***

**4. Why in your opinion will Saudi factories not employ you?**

- a) Saudi factories do not reject me.
- b) Because this institute is not preparing me to work in factories.
- c) Because I want high salary and they need cheap labour.
- d) I do not know.

Others : -----



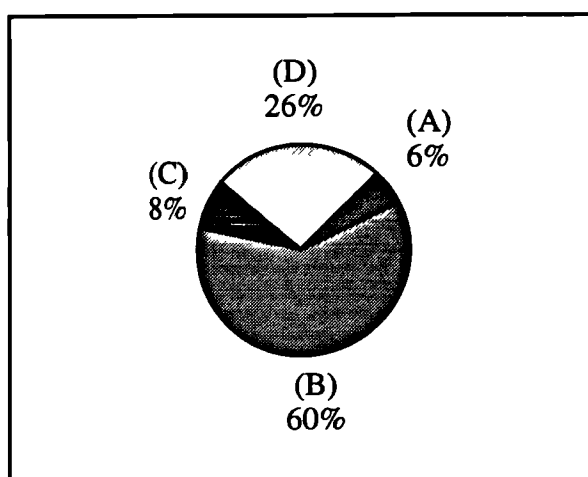
All 487 students approached had answered this question. Answers to this question showed that a large number of third year students thought that factories would not employ them because they wanted high salary but industry needed cheap labour (49%). However, quite a large proportion reported that they did not know the reason of why industry would not employ them (23%). A farther proportion of 16% thought that the institute was not preparing them to work in factories. Finally, a few number thought that Saudi factories would not reject them (12%). This question relates to the hypothesis number (1.5 and 1.9)

***Question for third year students only***

**5. The Higher Committee for the Educational Policy has defined the major goal of establishing technical education, what do you think it is?**

- a) To minimise the number of students going to university.
- b) To supply the market with qualified workers.
- c) To minimise the number of students going to general education.
- d) I do not know.

Others : -----



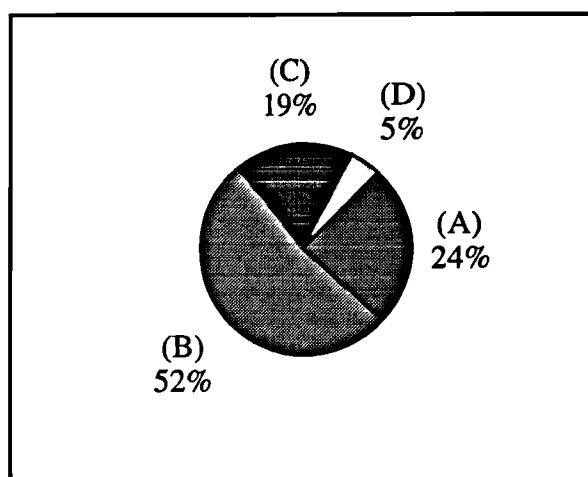
All 487 students approached had answered this question. Answers to this question showed that the majority of third year students knew the national aim of technical education, that is, to supply the market with qualified workers (60%). However, another percentage of 26% reported that they did not know, and another 8% thought that it was to minimise the number of students going to general education, and 6% thought that it was to minimise the number of students going to university. This question relates to the hypothesis number (1.6).

*Question for third year students only*

**6. Do you feel that there is a relationship between Industrial Secondary Institutes and Saudi industry?**

- a) There is a strong and clear relation.
- b) The relationship is there but not strong.
- c) There is no relation at all.
- d) I do not know.

Others : -----



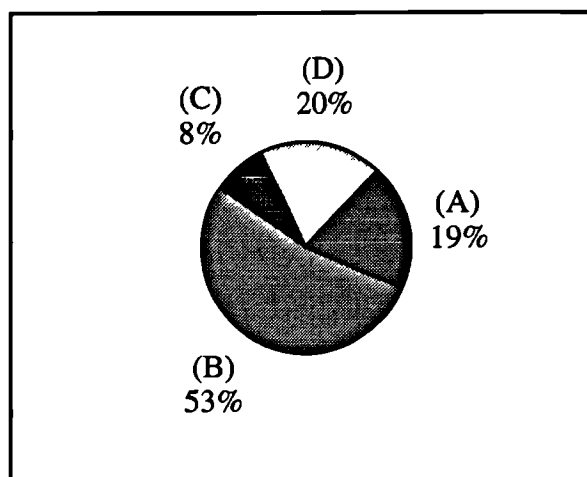
All 487 students approached had answered this question. Answer to this question showed that the majority of third year students knew about the nature of relationship between industrial education and industry, that is, it was there but not strong (52%). However, quite a large proportion of them reported that there was a strong and clear relation (24%), furthermore another 19% reported that there was no relation at all, finally 5% reported that they did not know. This question relates to the hypothesis number (1.9)

***Question for third year students only***

**7. How do you think the main purpose of this education would be fulfilled?**

- a) By joining Intermediate Technical College.
- b) By joining Saudi industry.
- c) By starting new business.
- d) I do not know.

Others : -----



All 487 students approached had answered this question. Answers to this question showed that the majority of third year students thought that the main purpose of this education would be fulfilled if they joined the Saudi industry (53%). However, quite a large percentage of 20% reported that they did not know how the main purpose of this education would be fulfilled, and another similar percentage of 19% reported that aim would be fulfilled if they joined the Intermediate Technical College, and the remaining 8% reported that the aim would be fulfilled if they started new business.

This question relates to the hypotheses number (1.8 and 1.10).

**Interview with Principals**

It must be said at the beginning that each question in this structured interview had been designed to provide a picture of the nature and status of industrial secondary education in the Kingdom of Saudi Arabia as seen by its directors. It would be interesting to know the actual nature and status of this type of education from the directors' point of view, and compare it with the perception and understanding of the students. These questions

had been formulated to explore the nature and status of the relationship between the institutes and Industry in the Kingdom. To know the capabilities and limitations of industrial education in the field of industry. To know the main aim of these institutes and to what extent did they comply with that aim. These information would be useful tool in answering the main research question of why industrial education in Saudi Arabia was not effective in responding to industrial needs.

There are eight industrial institutes in the Kingdom of Saudi Arabia. The structured interview was conducted with all eight principals of these Secondary Industrial Institutes. The interview consisted of 23 questions, in the following sections an answer to each of these questions will be presented according to the eight directors' response. Each question will be examined against the hypotheses it relates to.

**1. How many students do you have in this institute at present?**

Damam	Hofuf	Medina	Jeddah	Taif	Abha	Riyadh	Onaiza	Total
830	828	1134	1600	610	540	1100	470 (*)	7112

\* Hence the numbers here are different from those in table (4), that because the researcher went back to the statistics of 1993 before visiting the institutes.

This question relates to hypothesis number (2.1)

**Q.2. What are the specific aims and objectives of this institute?**

All principals agreed that there were no specific aims or objectives for the institute except those of the General Organisation for Technical Education and Vocational Training.

This question relates to hypothesis number (2.2)

**Q.3. Are these aims put forward by the institute or by the General Organisation?**

All principals agreed that the aims were put forward by the General Organisation for Technical Education and Vocational Training. In other words, objectives were imposed by GOTEVT.

This question relates to hypothesis number (2.2)

**Q.4. Do you explain and discuss these aims with your students before or after they have joined the institute, why?**

All directors agreed that they do not discuss the aims with the students either before or after they have joined the institute, but they do explain to them the rules and regulations of the institute when they first join. As standard procedures, they give them a broad and general idea about the study in the institute in the first few weeks of their study. They do not discuss the aims with them because it had been assumed that students should know all about this education before joining.

This question relates to hypothesis number (2.3)

**Q.5. What is the annual admission capacity of this institute, and on what basis?**

**A:** The maximum annual admission of each institute is as follows:

Damam	Hofuf	Medina	Jeddah	Taif	Abha	Riyadh	Onaiza	Total
500	470	500	700	330	320	774	470	4064

All principals agreed that these numbers were mostly determined by the availability of space and equipment, and the number of those who repeat i.e. the failures.

This question relates to hypothesis number (2.1)

**Q.6. Why do not you expand the admission capacity for more students?**

All interviewees agreed that they could expand their admission capacity to cater for more students but only under certain conditions .i.e. more funding because the limit was totally dependent on the availability of space and equipment. Nonetheless, at the present time they do not respond to the industrial needs, but if appropriate arrangements were made then they could respond positively to the industrial requirements.

This question relates to hypothesis number (2.4)

**Q.7. What are the criteria upon which you accept a student? (age, minimum grades...etc.)**

All interviewees referred to the standard list of certain criteria put forward by the General Organisation for Technical Education and Vocational Training. "The list states that the qualification should be that of an Intermediate School and the accepted age of applicants should be between 16 to 20 years old". The minimum grade acceptable is fair, but that will be determined by the number of the students applying and their grades.

This question relates to hypothesis number (2.6)

**Q.8. Are these criteria laid down by the institute or imposed by the General Organisation?**

All principals agreed that these criteria were imposed by the General Organisation for Technical Education and Vocational Training.

This question relates to hypothesis number (2.2)

**Q.9. How would you specify the number of students to each section, and do you evaluate their desires before hand?**

All directors indicated that the specifications of the number of students on each section were determined through standard procedures:

1. At the beginning of their study students should fill an application in which they indicate three different favourite options .
2. At the end of the first year each student would be granted his first option according to his performance in that year.
3. Finally, the capacity of each section was also one of the important factors which determined the number accepted .i.e. the availability of equipment and staff.

This question relates to hypotheses number (2.5 and 2.7)

**Q.10. Is there a relation between the number of students in any section and the availability of staff and equipment?**

All principals agreed that there was a strong and direct relationship between the number of students in any section and the availability of staff and equipment. In other words, the larger the section the larger the number of students would be.

This question relates to hypothesis number (2.7)

**Q.11. Are there certain sections more favoured by students than others? why?**

All interviewees agreed that there were certain sections more favoured by students than others. Sections such as Cars, Electricity and Electronics were the favourite because they were more popular in the market than others, that is to say, it would be easy for the student to start his own business if he got a certificate in one of these specialisations.

This question relates to hypothesis number (2.9)

**Q.12. Do local industries participate in putting forward suggestions for this institute policy?**

All principals agreed that there was no actual participation from Industry, but there were some irregular meetings between the institute and factory managers to discuss issues of common concern. In these meeting the factory managers always raised the point of efficiency and profitability. As far as the policy was concerned the institute could not add or delete any of its regulations without consulting the General Organisation, for example, they could not establish a relation with local industry, or start new activities without consulting the General Organisation.

This question relates to hypotheses number (2.2,2.4 and 2.5).

**Q.13. How far does this institute comply with the needs and requirements of local and national Saudi industry?**

All principals agreed that Secondary Industrial Institutes were training establishments, and thus, they did not know what the market needs were. It was their duty to give the students good preparation courses and proper basic training which they could employ after graduation, but not to meet industrial demands from the point of view of preparing them for a certain job only. Nonetheless, it was the General Organisation which would put forward any new policy or suggestion and in this respect any co-ordination or compliance should be arranged with it.

This question relates to hypotheses number (2.4 and 2.5).

**Q.14. Do you think that this institute can meet the demands of industry for skilled manpower? Why?**

All interviewees agreed that if they knew the exact needs of the industry then they could respond positively. Nonetheless, it can be said that the institute with its current capabilities could to some extent meet the demands. They needed, however, to upgrade their equipment and training style in order to do this.

This question relates to hypothesis (2.5)

**Q.15. Do you normally meet with people from industry to discuss their needs and your capabilities? How often?**

All interviewees agreed that they sometimes invite people from industry to visit the institutes and they would do the same. They also had made arrangements with some establishments to have their last year students practice in their firms before graduation. This dual training system was for the benefit the students, meanwhile, there was no obligation on the factory what so ever i.e. to employ them afterwards. There was, however, no fixed timetable for these meetings which were very informal and had no agenda. They were simply opportunities to visit rather than to plan.

This question relates to hypotheses number (2.4 and 2.5)

**Q.16. Is there a relationship between this institute and the Ministry of Industry of any kind?**

All principals agreed that there was no relation whatsoever between the institutes and the Ministry of Industry, but if there was one it should be with the General Organisation.

This question relates to hypotheses number (2.2,2.4 and 2.5)

**Q.17. On what basis do you do your annual planning?**

All principals agreed that they were totally following what the General Organisation had laid down as a system. Nevertheless, they put forward some demands for an increase in funding for the following year if they had received many applicants, they also send their needs for extra staff and equipment. But they did not build their list of demands according to the needs of industry.

This question relates to hypotheses number (2.2,2.4 and 2.5).

**Q.18. What is the minimum number of graduates upon which the institute can be considered to have achieved its objectives?**

All interviewees agreed that there was no specific number, but whatever number of students were ready to be graduated. In some years they had a very large number of graduates and in some other years very low.

This question relates to hypothesis number (2.10)

**Q.19. What percentage of graduates join Saudi Industry?**

Most of the principals agreed that although they did not have exact statistics, it could be said that only a small percentage not more than 20% to 30% of graduates join industry. That was because of the low salaries and long working hours and also due to the availability of vacant jobs. One principal could not answer this question due to lack of accurate statistics.

This question relates to hypotheses number (2.4 and 2.5)

**Q.20. What percentage of graduates join the Intermediate Technical College?**

Most principals agreed that the percentage was well above average of the graduates who went to join the Intermediate Technical College. The rest of the students join governmental sector because it was more secure. One principal could not answer due to lack of accurate statistics.

This question relates to hypotheses number (2.4 and 2.5)

**Q.21. Why do you think that Saudi factories reject the institutes' graduates?**

All principals agreed that the rejection was from both sides, the graduates did not like to work for long hours with low salaries. The factories' managers preferred to have more experienced and cheap foreign labour than less experienced and expensive labour. Three principals added that the easy way industry could obtain foreign labour was one of the main obstacles.

This question relates to hypotheses number (2.4, 2.5 and 2.9)

**Q.22. Is there a system of informing the students about the jobs available for them before graduation? Why?**

All interviewees agreed that there was no such system of informing students about future jobs. However, they found out that students during their training period had made deals with factories' managers to work for them after graduation. The relationship with industry was not sufficiently strong to give the institutes' administration the vacancies they needed to be filled. Therefore, they could not inform their students of future jobs.

This question relates to hypothesis number (2.8)

**Q.23. What is the principal goal you are preparing the trainees for?**

To answer this question five principals agreed that the aim was to graduate skilled labour to meet the demands of both private and governmental sectors, to educate them Islamically, and to cover the deficit in national labour market. The other three said the aim was to prepare students to participate fully in the building of the industrial base, and to minimise the dependency on foreign labour.

This question relates to hypothesis number (2.11). Hence the aim of technical education as stated in the Educational Policy is (The objective of technical education is to supply the Kingdom in all fields and at all levels with qualified workers who possess solid faith, sound character and ability to perform the duties entrusted to them.) -p 29-. Therefore, the above answer was a strong evidence to support hypothesis (11.2).

### **Summary and conclusion**

This chapter attempted to examine the reasons for the weakness of the technical/industrial educational from an empirical point of view. It presented the results of two sets of questionnaires for first and third year students of industrial education in the Kingdom of Saudi Arabia. In total 1327 students from both grades participated. A structured interview was also conducted with eight principals of the eight industrial institutes in Saudi. As a result several points were revealed about the nature and status of industrial education in Saudi Arabia. In the following sections those points will be presented.

The results indicated that students were not mentally prepared for this type of education. They did not enjoy science subjects in the intermediate school which were essential for joining this type of education. The majority of first year students reported that they liked different subjects other than science. In the case of third year students the majority reported that they liked science subjects. That might be because the economic situation of the country at the time they joined was different, that is to say, opportunities for work or study were available and they chose to join industrial education. Another possible explanation was that the time they spent in the industrial education had altered their interest in science subjects. A further explanation was that, most of the students

who were not interested in technical/industrial education would have dropped out by this stage. In other words, students in the third and final year of technical/industrial education, would have acquired some degree of understanding of the nature of this type of education.

Students also reported that industrial education was not their first choice. That type of response was clearer in the answers of first year students than third year students. It seems the longer the students spend in this type of education the more they become aware of its usefulness. However, first year students had shown their unawareness of their future jobs and further their unfamiliarity with industrial education goals and purposes. Nonetheless, third year students had shown some degree of understanding of the general goals and purposes. They spent enough time in industrial education to make them more aware of its general goals and purposes than their counterparts in the first year. The general unawareness of students of their future jobs can be pitched at three levels. First, the weak links between industrial education and industry, and the lack of internal mechanism of informing students about their future jobs. Second, the lack of previous preparation for this type of education had contributed to the problem. Finally, students themselves did not gather enough information before joining this type of education, and they did not show enough enthusiasm to work in industry after joining.

Students also reported that the main source of information was their friends which could not be considered entirely reliable. That affected the quality of information they had. In other words, they did not gather official information which could enhance their understanding of this type of education and what to expect.

When answers of the two groups were compared, they reflected a similar picture in some areas. However because of the large sample size, differences between the two groups had occurred which were statistically significant. The comparison showed that third year students had a better understanding of what they were studying. They also showed that they had gained some kinds of technical skills which made them feel confident. They displayed their readiness to work in the field of industry. Nevertheless, they did not seem to have a clear idea of what they were going to do after graduation.

As far as first year students were concerned, it appeared that they did not have a clear view about the nature of this type of education. They also displayed little understanding of the main purpose of studying industrial education. The previous preparation in intermediate school, and the way they gathered information about this type of education were not adequate. In other words, they joined industrial education without proper understanding of its nature.

Generally, it was found that students' attitudes towards industrial education was not the right one. The result of such attitudes could lead students to leave industrial education as soon as they discover that it does not match their expectations. This would cause large loss of funding and would contribute greatly to the failure of technical/industrial education in the Kingdom. This high rate of drop-outs could be observed clearly in the official statistics of enrolment and attainment of technical/industrial education in the Kingdom for the last 23 years. Those statistics showed that the majority of students (77.6%) had dropped out before completing the course. The effects of this high percentage of drop-outs had been revealed in the great loss of funding and in the general negative attitudes towards technical/industrial education in the Kingdom of Saudi Arabia. This phenomenon had shown the scale of the technical/industrial education problem in the Kingdom. Furthermore, it shows how large the challenges are, and how urgent to introduce real changes is. Studies and researches to enhance technical/industrial education are needed sooner than later. The field research presented in this chapter confirmed the overall picture of students attitudes as a source of an industrial education problem. This is a symptom of a deeper problem.

The interviews carried out with the eight institutes' principals reflected certain characteristics of technical education in the Kingdom of Saudi Arabia. First and foremost the centralised nature of its system whereby nothing could be done at the institutes' level without consulting the GOTEVT. That caused innovation and progress to move very slowly. This could be applied to all institutes' activities such as recruiting instructors, accepting more students, diffusion of information and above all co-ordinating with local and national industry. Second, the uncertain future of its students due to lack of specific

aims made many students take technical education as their last resort. Furthermore, large numbers of them chose to leave after a very short time.

In their responses, principals made it clear that the nature of the relationship with industry was not only weak but also did not entail any commitments from either side. Industrial institutes could not establish strong relations with industry because of their limited autonomy, lack of resources and above all the lack of attainable objectives. Meanwhile industry would not accept its graduates because they lacked up to date technology information. That had affected the selection and distribution of students on the available sections within the institutes which mostly related to the availability of staff and equipment. It also had prevented the institutes' administration to build a system whereby it could advise their students of the jobs available to them in industry after graduation.

The results of those interviews showed the rigidity and inflexibility of the technical education system which would make introducing any change a very difficult process. The uniformity of the system might be an indication of agreement, but in a large country like Saudi it would be hard to see how it would work. Some cities were on the west, others were in the middle of the desert and some were in an agricultural area. These types of different environment should have different sets of objectives, at least at the local level, because different institutes should have been providing different kinds of manpower for different kinds of industries.

From the principals' answers it was found that industrial institutes as part of the GOTEVT were merely following its instructions. Furthermore, their participation in the process of change and development was minimal. That implied the nature of industrial education institutes as implementing instruments and not the generating source of new changes and ideas. It was also found that the relationship between industrial institutes and industry in general and local in particular was very weak. Furthermore, the nature of that weak relation was confined to mutual visits and unorganised meetings. This was done in exchange for training third year students in the industrial firms without any form of rewards. Instead students would offer free labour in order to get acquainted with technical tasks. On the other hand, industrial firms had no commitments towards those

students after graduation. Students, however, were making some deals with factory managers to work for them after graduation. The factory manager then would pick and choose what was appropriate for him. Therefore, students had to bear the responsibility themselves as a result of informal and unorganised relation with industry. That situation did not and would not lead to fruitful results of industrial education until the relation became stronger and curriculum started to reflect industrial needs.

The interviews have also reflected the limited capabilities of industrial education. The actual capabilities of industrial institutes was smaller than the industrial needs and requirements. Institutes were limited by the available staff and equipment, and thus, they could not exceed their limits to accept more students. They also could not develop or design their own curriculum. Instead they had to go by the book i.e. the GOTEVT detailed instructions. Furthermore, being part of a highly centralised system entailed the slow movements of not only documents but also new ideas of improvement. The effect of that was obvious in the degree of agreement in the responses of the principles, which was not expected by the researcher.

In conclusion this chapter has revealed several important elements about the nature of the industrial education in the Kingdom of Saudi Arabia. First, the position of industrial education - considered to be modern - was neither modern nor traditional. It was in a middle position between the two. Due to the nature of the education system, industrial education was forced to be in this middle position. Its students were the graduates of general education who had no idea of the nature of practical education. Furthermore, they were not accepted in the modern industrial system when they graduated. Second, it appeared that the lack of a national policy for training had affected most activities of the industrial education. As a result most of their training programmes and initiatives were aimless and meaningless. Furthermore, the lack of market studies which could inform curriculum design and the national planning were also lacking. Due to the highly centralised system of administration, the industrial institutes had been prevented from playing a meaningful role in the development process.

The third important point revealed in this chapter was that although industrial education in Saudi Arabia had established its own higher studies, - which were not equivalent to

university education-its students were not allowed to apply for university after graduation. In the following chapter these points will be discussed in some detail as a final conclusion of this thesis.

## **Chapter Seven**

### **Summary and Conclusion**

The purpose of this thesis was to throw some light on the reasons for the weakness of technical/ industrial education in the Kingdom of Saudi Arabia. The researcher embarked on this study for three reasons. At this stage the evidence which stimulated the study of this type of education will be presented. Later on in this chapter a deeper analysis of the causes of the problem will be presented.

The first indicator of the problem was that although technical education in Saudi Arabia was subjected to continuous change and adjustments throughout the past decades, the results of those changes and adjustments were limited. For example, technical education was controlled by the Ministry of Education, and vocational training by the Ministry of Labour and Social Affairs. In 1980 they were combined to come under the supervision of the newly established General Organisation for Technical Education and Vocational Training (GOTEVT). That change was conceived in order to develop this type of education and make it more effective in achieving its stated goal. However, evidence in this thesis has shown that the amount of success to this end was insignificant and that the implementation process was more complex than had been anticipated. Furthermore, another change was introduced to enhance the effectiveness of this type of education, that is, prevocational courses were introduced in general education but this also ended into a failure. Consequently these courses were removed from the curriculum of general education.

The second indicator of the problem was that the introduction of the new technologies in many fields of life in Saudi Arabia needed to be met by a consistent supply of well educated and well trained workers. Furthermore, the existence of these technologies had begun adversely to affect certain aspects of the social order which needed to be redressed by the educational system. To this end the roles assigned to general education as well as industrial education were not clear. At present, government as well as private sectors rely heavily on either foreign labour or on retraining the indigenous young people to be able to enter the world of work.

The third kind of evidence of the problem manifested itself in the impact of information technology. It made the world 'a small place'; information travelled fast and without limits. In this sense the education provided by schools would not match with the information and knowledge provided by the modern media. The effects of this were many: one was that it would in the long run, make the gap between the school and the society even wider than it is now. Another was that formal education would not prepare the young people adequately to enter the world of work. Some of these effects were beginning prominently to appear as the major feature of acquiring formal qualifications. The graduates of both the general academic education or the technical/industrial education felt alienated and frustrated because their qualifications were not good enough to enable them obtain a job in either public or private sectors. Furthermore, they could not see the relation of what they were taught in the schools and institutions to the real life outside. As a result young people began to lose respect for their own national culture, which the educational authority was trying to preserve through its traditional methods.

This then was clearly the problem. In order to investigate that problem scientifically and to find an answer or a set of answers, the thesis was structured on the following contents.

Chapter one constitutes a presentation of the historical background of the evolution of the education system in the Arabian peninsula from before Islam until the emergence of the Kingdom of Saudi Arabia. In this chapter three points were highlighted as the important causes for the weakness of the current education and training system in the Kingdom. First, the transformation of people's life after the emergence of Islam. This was a transformation from a state of abject ignorance and widespread illiteracy to a state of great emphasis on education and the exceptional value of knowledge and practical righteous life. Islam gave the people a unified goal to work for and to aspire to. This emphasis on the value of education had exalted those who possessed it to a high status in the Muslim society. The status of the scholars was held higher in esteem than that of the ruler, so that people would obey the scholar more than the ruler. As a result the rulers imposed political pressures on master scholars to weaken them so that they should not educate to interfere in matters that concerned the state like politics, economy and social

issues. Consequently, most of their teachings were confined to spiritual matters which had little direct implications in real life which was left to the state to take care of. Furthermore, the rulers prevented the scholars from engaging in all research activities and from producing new interpretations of the Islamic faith so that old scholarship should remain in vogue. This move of conservation of knowledge had its devastating effects on Muslim thinking which can be observed until today. Literalism, imitation and 'worship' of classic scholars became the norm of righteousness and piety. Any attempt at innovation was seen as a threat not only to stability but also to the religion itself. With this background the chapter explained the difficulties which faced the Saudi government in this respect when it attempted to introduce changes in the general education system.

The second important point stressed in this chapter was that the region which became the Kingdom of Saudi Arabia was subjected to a long period of ignorance and stagnation in the field of education which lasted for four centuries during the Turkish rule. It was true that the Turkish government did not close the door of new interpretations of the faith, but it is also true that they refused to reopen it. In other words, the political oppression on intellectual activities which had been started centuries before, continued under the Turkish rule. However, although the Turkish government opened schools and educational institutions in the two holy cities of Makkah and Medina, ignorance and illiteracy were widespread. That was due to three major reasons:

Firstly the Turkish government was involved in so many wars and disputes both in Europe and Asia. That created fear among people that if they sent their children to Turkish schools they would be enrolled in the army, and therefore, they preferred to send them instead to one of the few private schools which used to concentrate mostly on religious education. The limited number of private schools, or Kuttabs as they were called, were mainly relying on charity and endowments. Moreover, they provided education only to a very small number of students.

Secondly as a corollary to the above, the number of public schools available was very small and not enough to meet the population needs. This may have been because the capital of the Turkish empire was situated outside the Arabian peninsula, and thus, the administration and funding for development and education were remote. Also the many

wars and disputes had their added burdens on the budget that prevented the government from establishing more schools in the area. That situation contributed largely to the isolation of the population of the peninsula not only from education but also from the outside world. The most isolated part of the area was that of Najd, the central region.

Finally, widespread ignorance and illiteracy also prevailed in the Arabian peninsula because towards the end of the Turkish rule, the Turkish rule imposed Turkish as the official language and as the medium of instruction in schools. This policy of Turkish nationalism antagonised the people especially in Hijaz who wanted to preserve the Arabic language at all costs because it was not only their mother tongue but also the sacred language of the Holy Quran, and losing it meant losing their religion. This policy had prompted many people to boycott the Turkish education totally.

The third important point highlighted in this chapter was that the Saudi government inherited only four public schools from the Ottoman Empire in Makkah besides a few private ones which used to rely on endowments and charities. The task of the Saudi government to spread education was not easy. Modern education was opposed by many, especially those in the centre, because it was conceived as a renewed threat to their religion. To confront that attitude of distrust and wariness, the Saudi government realised that time is the essence, and therefore, started spreading education in those areas which were more receptive, that is, Makkah and Medina. Through reasoning and negotiation, which were based on deep understanding of the cultural background of the people, the Saudi government was able to convince them that introducing modern education would not affect their religion in a negative way. Although the introduction of educational change was not impossible but it was, by no means, an easy task. The argument that the Saudi government followed was that Islam encouraged rather than discouraged people to acquire knowledge and skills of the life surrounding them and that education should better prepare them for this life and for afterlife. To convince people, they obtained the evidence from the Holy Book, the Quran. Their aim was to unite the different factions of society on one common, national goal and, at the same time, to preserve the original message of Islam.

Chapter two was a presentation of the current nature and status of the training system in Saudi Arabia. It followed from the various influences and consequences of the historical events presented in chapter one. It showed that the academic/vocational division was not the only division in the education and training system but also the training system itself was divided into two kinds of training: public funding by the state either directly or indirectly, and private funding by the private sector. The chapter highlighted the lack of a national policy of training and described the various training systems in the country. The most important point stressed was that these various training systems lacked coherence and cooperation among them. This lack of coherence and cooperation of training systems within a country indicated a deeper lack of overall training strategy. Furthermore, it had confused students and parents alike.

The researcher also collected and analysed the various statistics of the number of students who had joined industrial education for the last twenty four years and compared them to the number of graduates during the same period. The gap between the two was very high, indicating that there was a serious problem of drop outs that must be looked at. The reasons for the high percentage of drop-outs (77.6%) should also be dealt with. It is vital that such important findings should guide the planning process.

Chapter three on the other hand analysed official policies of the Saudi government. It studied the five Development Plans in relation to technical education in general and industrial education in particular. It has been found that despite the continuous failure of this type of education, Development Plans continued to neglect the basic question of why it was incapable of achieving their set goals. That there was a lack of detailed studies of this type of education which could have informed the planning process, was obvious. The most important point that emerged was that the national planning for the economy was almost totally separated from the planning for the education and training system. The chapter also presented a study conducted by the Institute of Public Administration in Riyadh about national manpower in the private sector.

The outcomes of the study showed that the participation rate of national manpower in the private sector was very low and that national industries were not interested in employing the Saudi technical education graduates. The study found that the main reasons for

the former were the low wages offered by the private sector compared to the government establishments. Also the government's easy procedures for recruiting cheap foreign labour were highlighted as an important reason for the disregard of national labour.

Chapter four looked into the various concepts of the origins and ideals of vocational education and training. In this chapter the researcher sought to conceptualise the problem and looked into a wider range of literature also examining the experience of other nations in this field. The Western as well as the Islamic normative perspectives of vocational education and training were analysed and compared. The outcomes showed that weakness of vocational education in some of the Western countries partly stemmed from their rejection of the narrow and limited view of the purpose of education as a preparation for work. Education in the West is considered, by and large, as a broad concept which aims to prepare the individual for life as a whole in which work is only one aspect. On the other hand, education in the Islamic perspective is seen as a means to help individuals to understand all their roles in this life. A Muslim's duty is to obey the commands of Allah, and thus, gain His blessing. Vocational education in the Islamic perspective is also therefore seen from within a narrow and limited view of the broad purposes of education. However, within each perspective there is a considerable need to stress the importance of this type of education.

The chapter stressed that there was no real contradiction between the Western and Islamic perspectives on vocational education; the latter took religion as its framework and ultimate goal within which vocational education has a second priority, while the former stressed economic prosperity as the goal and hence vocational education was a means to development. From an Islamic point of view it is not wrong to pursue an economic goal as long as it is in conformity with the overall spiritual and moral ideals of Islam. The difference between the two models was that of priority. Islam emphasises the importance of preparation for piety via a vis the preparation for the material ends of this life. Individuals should learn their duties as Muslims first and then seek their means of livelihood. The chapter also emphasised that in order for any change to be successful and effective it must take into consideration the indigenous culture, and that concepts and plans of development must evolve from within the cultural context. For example, in the

case of the Kingdom of Saudi Arabia, as a model Islamic country, it is important that the vocational question should be tackled to promote the Islamic culture. That was not to say that borrowing and learning from outside is wrong; on the contrary, studying and learning from the experiences of others has always been held very useful and insightful to tackling one's own problems, as Handy (1984) wrote "*If one grows up in one system, one culture, knowing only that culture, then it is not always obvious that there are alternative ways to do things.*" (p 10). In this sense the religious establishments in Saudi Arabia can learn from the experience of the Christian Churches during and after the industrial revolutions. The Church of England, for example, did not participate in the industrial revolution, instead it isolated itself and let the events develop. The result was that the effects of religion on the industrial and later on technological development were insignificant. Similar events are taking place in the Kingdom of Saudi Arabia at present, the religious establishments should not wait for these events to develop without their involvement. Instead they should participate effectively in them.

Chapter five presented a study of the education and training system in England. In this chapter a historical background of the development of the education and training system was presented along with recent initiatives to overcome the cultural, economic and organisational barriers. It has been found that most of these initiatives were concerned with development and advancement while maintaining the British customs and traditions. They highlighted the importance of the British culture and at the same time stressed the importance of catching up with other economic powers in the world.

The case of England resembled, to some extent, the Saudi situation in matters related to the weakness of vocational education. In England as in Saudi Arabia, the education system was trapped between traditional views of education and modernity with some varying degrees. The English model showed how difficult it was to introduce educational changes in the midst of persistent traditional views of education. Many studies and researches have been conducted to specify how best education and training system in England could be developed. The norm of these studies and researches was a call for a highly educated and highly trained individual whose contribution in the near future would

be calculated by how much he or she adds to the international community besides his or her community.

Some of these studies pointed out that education and training system in England was trapped in a “low skill equilibrium”. In other words, the education and training system was only able to supply low skills and workers who received low wages. Most of these studies urged the end of that tradition and stressed that it should be replaced by a more dynamic system based on international comparisons which showed the need for highly educated and highly trained work force. But the important line of argument in these studies remains that educational reform should be integrated within the context of the British culture in order to produce a unified education and training system.

The study of the British education and training system gave the researcher further insight into the case of Saudi Arabia in the sense that changes although important and urgently needed sooner than later, should still not be rushed and that they should address themselves to all aspects of Saudi society. They should be introduced gradually, consistently and in conformity with the living Islamic Saudi culture. Although traditional views of education could hinder or slow down the process of development, the best way to deal with them was to provide viable and practical alternatives to current problems such as unemployment, shortage of skilled workers, and low educational standards. And above all, development should proceed through involvement and cooperation rather than confrontation and imposition.

The chapter also presented two case- studies conducted within two successful companies, that is, British Gas and British Telecom. The interviews reflected the organisational factors and the various job opportunities young people have in Britain. It also showed the commitment of these organisations to comprehensive training policies which might be helpful in developing many practical innovations in the Saudi case. In both cases the organisations were careful to train exactly the scale of manpower which was required. In other words, they revealed two successful and well-planned examples of good training outside the main stream education system.

Chapter six attempted to explore the weakness of technical/ industrial education in Saudi Arabia through the field work which was designed to be conducted in the industrial

education institutes. It explored the organisational as well as attitudinal difficulties of both industrial institutes' administration and their students, specifically the first and third year students. The researcher had designed a structured interview to be conducted with the directors of the industrial institutes, and also designed two types of questionnaires to be distributed among the two groups of students. The interviews were conducted to discover the organisational difficulties which prevented industrial education from being more effective. Also questionnaires were distributed to the first and third year students of the industrial education to examine their attitudes toward this type of education. The empirical work covered the eight industrial institutes and a total number of 1327 students all over the Kingdom. The important points revealed by this study were that technical/industrial education in the Kingdom of Saudi Arabia was not an effective system and that most of the hypotheses about it were confirmed. The preparation of their students was not adequate to meet the employers' needs. Overall the technical/industrial education system was lacking coordination and cooperation with the general education system as well as the local and national industry.

In conclusion, the researcher believes that the reasons for weakness of technical/industrial education in the Kingdom of Saudi Arabia were closely related to the Saudi cultural context. The vocational concept can be conceived broadly or narrowly not for its proposals but according to the cultural background of a country. The researcher divided the causes of the problem of technical/industrial education in the Kingdom of Saudi Arabia into two categories: general factors, which affected the industrial education externally, and specific factors, which had immediate effects on its performance i.e. internally. The external factors were: the traditional views of education -especially in general education, the state of incoherence of the training systems and the lack of comprehensive planning for economy and education in the country, and finally the attitudes of industry to the graduates of technical/ industrial education. The internal factors were: the internal administrative policy of GOTEVT, the attitudes of students to industrial education, and the high rate of drop-outs. In the following paragraphs those two factors will be summarised.

### **External factors**

First, it appeared that education and training system in the Kingdom of Saudi Arabia was and still is trapped between the conflicts of the traditional and modern views of education. Modern education in the past had been wrongly viewed as a potential threat to Saudi traditions and to the Islamic religion. The Saudi government in response maintained the use of two different systems one modern and the other traditional. It introduced changes and modernity to its administrative and economic systems while the education system remained traditional. It was not until 1953 that the Saudi government was able to establish the Ministry of education to disseminate modern education all over the Kingdom. Since that date education had expanded in all fields and specialisations. Presently Saudi Arabia has seven universities and thousands of primary and secondary schools. The number of male students also had increased from a few hundreds to hundred of thousands, and similar expansion had taken place in the number of female students, which had been extremely difficult to establish in the early stages.

However, by studying the government policy, it appeared that it was mostly concerned with the quantitative expansion of education rather than the qualitative one. It was not an easy task, for instance, to find literature that presented a critical discussion of the quality of education in Saudi Arabia. Discussion about the curriculum, teaching methods or the evaluation system, especially in general education, were and still are following certain guided procedures laid down and monitored, remotely, by those in the top of the religious hierarchy or their delegates who hold the same views. However, although the Saudi Government is still committed to develop education both quantitatively and qualitatively, it does not want to upset the social order. Introducing any type of change is a very difficult process in any society with deeprooted traditionalism, educational change is even more difficult. However, difficulties should not be viewed as incurable diseases and then treated as hopeless.

This factor of low esteem had its profound effects on the quality of students of technical/ industrial education. General intermediate education- lower secondary school- prepares students mainly for general secondary education which is at the present the choice of the majority. It neglects vocational education through placing little emphasis on

it in its curriculum. This neglect has resulted in the fact that only those who could not cope with general education would join vocational education. Consequently, many vocational students were low - achievers academically and thought of themselves as failures.

The second external factor which affected the performance of technical/industrial education was that there was no national training policy which should act as an overall general guide line. As a result many kinds of training establishments around the country have emerged, but without proper coordination. Those establishments were basically providing the same kinds of training in many different fields. For example, Saudi Telecom is providing training on electronics and telecommunications technology which is also provided by GOTEVT for different purposes. Other ministries were providing similar training in the same field with different purposes and with different budgets.

This disunity had contributed to the general weakness of technical/ industrial education in the sense that training system in the country lacked focus. It had created confusion besides causing wastage of resources and funds. The consequences of this disharmony had not only weakened the training system but also produced low achievers. Furthermore, another disharmony was displayed in the lack of any comprehensive planning for the economy and for education in the Kingdom. This was a contributing factor which had led to the general weakness of the education and training system which had made the education system operate in isolation from real life problems and issues. Along with other causes this was the most important factor leading to the irrelevance of technical/industrial education to the general economic situation of the country. As a result, its graduates had no proper training which would enable them to obtain reasonable jobs in the market with any confidence.

The third external factor appeared in the form of negative attitudes of the national industry towards the recruitment of Saudi graduates of technical/ industrial education. Saudi factories were relying heavily on foreign labour who were not only cheap and easy to get, but also had more technical and professional experience. This undervaluing of the national industrial education graduates was justified on the ground that they lacked up to date knowledge and proficiency in information technology, and they demanded higher

salaries and shorter working hours than those who came from abroad. The graduates of national industrial education were rejected also for their poor performance, for their lack of job flexibility, and non-punctuality. On the other hand, the government policies of employment, with regard to industry, remained rigid. Industrialists had full freedom to employ and replace as many foreign workers as the factory manpower required. That freedom, however, did not apply in the case of Saudi workers regardless of their performance or the manpower situation. Saudi workers could not be dismissed even if they were inefficient. This rigidity forced the national industry to refrain from employing the graduates of technical/industrial education. Fearing that they would commit themselves to employ those graduates, the national industry even did not participate in the policy formulations, or designing the curriculum for industrial education. In this respect cheap labour was their softer option.

This attitude had a strong effect on the future of the graduates of technical/ industrial education in Saudi Arabia. Although these graduates had little or no experience, they still needed to work in their fields of specialisation, in order to gain sufficient experience. If the national industry would not make this work opportunity available to them it would be difficult to imagine who would. In this sense technical/ industrial education in Saudi Arabia has no future unless serious changes in the employment policy are made.

### **Internal factors**

The internal factors which caused technical/ industrial education to be weak were presented in the findings of the field work which attempted to examine the policy of administration of industrial education and the attitudes of its students. Through the field work, which was conducted in different industrial institutes in Saudi Arabia, the researcher had found out that the effects of intense centralisation of technical/industrial education system did not help it to be as diverse and versatile as possible. Instead there were eight industrial institutes all over the country which were doing basically the same job. They were delivering the same curriculum without any consideration to the needs of their local industries. Furthermore, collectively they did not respond to national industry. The relation with industry was very weak on both local and national levels. Their internal

activities were imposed from above and their job was simply to follow the standard instructions issued by the GOTEVT.

As mentioned before, the aim of technical/ industrial education in Saudi Arabia was to supply the market with qualified manpower. Although industrial education institutes were spread throughout the country, various regions with different kinds of industries still provided the same type of training despite their different local needs. It would be illogical to imagine that the aim of supplying the market with qualified manpower could be effectively implemented within this narrow system of training. If unity sometimes means effectiveness and some other times aimlessness, this was an example of the latter. Unity in this sense forced technical/ industrial education into a strait-jacket. When asked about the main goal of technical education, principals showed a full knowledge of it. However, implementing that goal seemed out of their reach. Industrial institutes have no autonomy to make their own decisions or planning. Instead they have, like the army, to follow a strict chain of command from the highest authority in the GOTEVT. Again, although it was clear to the principals that industry would not employ their graduates because of their poor performance and incompetence, they did not and could not act to rectify this problem.

It was also found that industrial institutes were not in the habit of publishing and releasing information about their activities and the future of their students. The fact that they did not have proper linkages with industry hindered their ability to motivate or encourage students to join industrial education. Moreover, they could not design a system or mechanism for informing the students about future available jobs. Students as a consequence used technical education as a means to pass through to higher studies having failed to enter through the route of general education.

This administrative defect had contributed considerably to weaken the state of technical/ industrial education. Lack of information about the activities of technical/industrial education had confirmed and strengthened the negative social attitudes towards this type of education. Furthermore, it did not give the national industry the chance to understand the strength and weaknesses of this type of education so that it could be involved in the processes of development.

From the students' questionnaires it was found out that even they did not have the right kind of attitudes towards industrial education. It appeared that they joined this type of education without acquiring enough information about it beforehand. It also appeared that a considerable number of them still valued general education more than the technical. However, quite a large number of them displayed their readiness to work in the field of industry after graduation if they were given the chance. The researcher also found that not only was the rate of participation in technical/industrial education at its lowest possible proportion, but also the attainment level of graduates was very low. Statistics showed that the majority of those who joined technical/industrial education chose to drop out in the middle of the course. This high rate of drop-out had devastating effects on the general performance of technical/industrial education. It damaged its reputation even further and discouraged many students from joining it. Moreover, national and local industries were discouraged from participating in the formation process of this type of education.

### **Recommendations:**

In the light of the research findings and in order to make technical/ industrial education more effective, the researcher will present some recommendations in the following sections. It is worth pointing out at this stage that these recommendations are by no means the optimum alternatives to the technical/industrial education problem in the Kingdom of Saudi Arabia. They are additional suggestions to those already in place and further incentives to future researches.

#### **First, the external factors**

It is essential at this stage of development in the Kingdom of Saudi Arabia that the government understands that the key to real development of technical/industrial education lies in the heart of its cultural and historical incentives. However, immediate changes to the system are of no less importance and they are necessary steps to overall reforms. A constructive integration of the two systems -traditional and modern- should be the prime aim of introducing change. The danger which must be avoided is that it should not transfer the society from one state of literalism to another. In other words, the interaction between traditional and modern should not lead to a new kind of pseudo modernism, but should lead to an effective and progressive participation in it.

One of the immediate and important changes the Saudi government should introduce at present is at intermediate education. The intermediate stage of general education could and should be used as a preparatory stage not only for general secondary education but also for technical secondary education. Continuous curriculum development and adjustment is needed now more than any time in the past.

The establishment of GOTEVT was a great leap in the right direction. However, this organisation needs to be more active and its responsibilities should be enlarged. There are large numbers of training establishments around the country which need to be coordinated within a uniform system of training to be supervised by one organisation. The GOTEVT with its present administrative system and limited capabilities can not do the job, and therefore, more research should be done to influence development in this field. Further researches and studies are needed to specify the best way of unification. Furthermore, a national training policy which can guide the activities throughout the country is needed urgently. This policy should be designed to be comprehensive enough to include all current institutions and activities. Moreover, it should have a strong and direct relation to the economic needs of the market and the country at large. The national training policy also should be flexible enough to accommodate the present and the future development programmes.

National industry, on the other hand, should be encouraged to employ national industrial education graduates on a trial basis. The minimum period of trial should be 12 months followed by a detailed report about the performance of those graduates. This report should inform the curriculum as well as policy making in both the industrial education institutes and the GOTEVT.

The separate planning for the economy and for education had isolated the educational system from effective participation in the development process which took place in the country during the last decades. The Kingdom can no longer afford to utilise the modern technologies without including its educational system and its youth. Most of the modern developments in the Kingdom remained superficial due largely to their foreign origins. This superficiality will continue as long as there is no commitment from its education and training system and no effective participation of its youth. The Saudi government should

concentrate in the coming Sixth Development Plan on comprehensive planning rather than ad hoc and piecemeal one. This should be the first step to involve various institutions and establishments in the society and to harness all the energies and capacities of its youth to one unified system.

### **Second, the internal factors**

The researcher recommends that each institute should be given the autonomy needed to deal with their internal as well as local problems. That would enable the GOTEVT to concentrate more on vital matters like strategic planning. The overall responsibility of the GOTEVT should be that of general supervision and funding. It should specify, in the light of the general policy, a set of objectives to be achieved by each institute upon which it will be evaluated annually.

GOTEVT should encourage individual institutes to establish a practical and strong linkage with their local as well as national industry. By that means institutes will be able to distribute their students to the different sections not according to staff and equipment availability but according to the local and national industrial needs. It follows that individual institutes should be able to do their annual planning according to the needs of the local and national industry.

Periodical publication of the institutes activities and involvement should be a standard procedure for each institute. These publications should be distributed to schools libraries as well as factories in the industrial field. That will promote a positive image of technical/ industrial education and strengthen their position. Furthermore, it will motivate students mentally and psychologically before joining this type of education. Other means of delivering the message like the media should be used effectively.

The institutes with the help of GOTEVT should establish the habit of developing responsive and innovative curricula. Innovation should be encouraged and an innovation section should be established in each institute. Also training programmes for both instructors and administrators should be an on going process of the GOTEVT.

Through comprehending the present problems and the on going international challenges, change and development has become necessary. However, merely to know is not the main aim, to do and how and when to do, are the main challenges. Change

should not be introduced for the sake of change. To follow up and accomplish the objectives of the change are the real tests. For example, the aim is not to build the school, but to use it as a means of a greater goal, of spreading education. Discussing the roles and purposes of these schools is harder and needs more courage and intellectual depth. Putting goals and objectives of education into practical outcomes is a demanding process. The ability to change again whenever change is needed is the greatest challenge of all. The present challenge in the Kingdom of Saudi Arabia is to put the stated goals into practice. That will provide the proof of their validity or invalidity and their compliance with the present situation and whether further developments are needed.

Traditional views of education can be modified through collective work and cooperation. When a new change in education is proposed the traditionalists often resist it on the ground that old methods are good enough. Traditionalists view new changes with fear and suspicion, sometimes with hostility. That is partly because the new change involves a degree of risk. Societies which are more willing to take that risk than others are more likely to develop faster and have the chance to learn from mistakes. That was not to say that wary cultures are not developing they are but always a step behind others. It is a fact that taking risks may result in either failure or success. It is the consequence of failure that is feared most by those wary cultures. The example of Saudi Arabia and England exemplified this culture of wariness. The desire to preserve the national culture was one of the major concerns. In the Saudi case the trend was more obvious, because changes might have negative implications on the religion and the status quo.

Advocates of traditional views of education need assurance that the proposed new changes are as good as the current views or even better. Since no guarantees could be given difficulties arose. Complaints about narrowness, lack of depth, and sometimes of conspiracy were leveled from both sides. This implies that a strong or weak vocational education provision in a society is a mirror image of its cultural convictions. The strength or weakness is a direct result of those convictions. In other words, vocational education is to be perceived in a society according to its specific interpretations of knowledge, man and the universe. Some societies adopt the abstract /theoretical interpretation of knowledge, while some other take up the practical interpretation. Since both of these

stances are essential for human development the task of the educationalists should be directed towards establishing the right balance between the two.

Culture is the aggregate of human knowledge and experience. Each culture consists of various concepts which are mostly taken for granted. Some of these concepts have positive effects but some also have negative effects on social progress. Those societies with a weak vocational provision should examine their culture and its philosophical underpinnings in order to achieve success in this field. The Kingdom of Saudi Arabia is one of those societies which needs to examine its cultural concepts critically in order for effective and successful education and training system to emerge in the future. The constructive integration of traditional and modern can not be achieved successfully without this critical examination of the culture.

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# APPENDICES

## Appendix (1)

Mr. D Jenkins,  
Human Resources Development Manager,  
British Gas plc,  
Head office,  
Rivermill House,  
152, Grosvenor Road,  
London SW1V 3JL.

Yahya Murtada  
75 Medway Drive  
Perivale,  
Middx UB6 8LW  
Tel. 081 997 7028

16 August 1993

Dear David

Thank you for the kind and helpful meeting on Monday 9 of August 1993. I would like also to thank you for giving me the opportunity to visit one of your training centres which will take place on 19 of August 1993 at 2.00. You will find attached to this letter a report of my visit to your office. It would be great help to me if you have a look at it and add whatever corrections or additional remarks you feel appropriate. You will find also a stamped envelop to post the report back after you finish. Finally, I would like to have any literature or publications about technical training in BG if available.

Sincerely Yours

Yahya H. Murtada

# British Gas

**Corporate Resources**

Rivermill House  
152 Grosvenor Road  
London SW1V 3JL

Telephone 071 821 1444

Facsimile 071 611 2199

15<sup>th</sup> August 1993

Dear Yahya,

I am returning your report with some minor amendments. I think you have captured very clearly the technical training system in British Gas.

I also enclose some of the brochures that we send out to graduates. You should be able to obtain literature on the 16 and 18 year olds when you visit the technical training centre.

May I take this opportunity to wish you well with your studies

Kind regards

Dave Jenkins

Mr. P. Mckiley,  
British Gas plc,  
Training and Development,  
Twelvetrees Crescent,  
Bromley -by- Bow,  
London E3 3JH

Yahya Murtada  
75 Medway Drive  
Perivale,  
Middx UB6 8LW  
Tel. 081 997 7028

27 August 1993

Dear Peter and Steve

I am grateful for the kind and helpful meeting on Thursday 19 of August 1993. You will find attached to this letter a report of my visit to your training centre. It would be great help to me if you have a look at it and add whatever corrections or additional remarks you feel appropriate. You will find also a stamped envelop to post the report back after you finish.

Sincerely Yours

Yahya H. Murtada

### **Questions for British Gas**

Under the assumption that British Gas has two types of training for its technicians, this set of questions will be divided into two sections as well. The first will be about formal training or the training for a technical job at BG, while the second will be about on the job training.

#### **Formal Training**

1. What type of students do you accept in your organisation :
  - a) What age group ?
  - b) What Qualifications ?
  - c) What abilities ?
2. What are the first steps of admission to this organisation ?
3. How many fields of training do you offer for your technicians ?
4. On what basis would the trainees be able to choose a certain field ?
5. How many trainees do you accept annually ?
6. What capabilities do you require in those applying for technical jobs ?
7. What is the course structure ?
8. What are the training methods used ?
9. How long is the training course last ?
10. What percentage is theoretical to practical in these courses ?
11. What percentage of the applicants pass the training phase ?
12. What action would be taken against those who fail the course ?
13. What qualifications to be given to those who complete the course successfully?
14. What chances are there for them to continue their studies into higher education
15. How would you convince the technicians of working for the organisation, and for how long ?
16. What rewards are there for those who perform well ?
17. What kind of problems do you normally face, and how do you overcome them ?

18. As an incentive, do trainees get a monthly payment while on training ?

**On The Job Training**

19. How would you measure the performance quality of your technicians ?

20. How many on the job training courses do you offer, and on what basis?

21. How often does the technician have to be trained in a year ?

22. What procedures would be taken if the technician refused to attend a training course?

23. Who recommends what course is appropriate for a technician ?

24. Do they have to pass these courses, what if they do not ?

25. Do you do an annual evaluation of the technicians performance ?

**British Gas Training Centre**

1. What kind of training do you offer in this training centre ?
2. When do you start the formal training ?
3. Do you offer housing and transportation during the training period ?
4. How many students do you normally put in a class ?
5. What is the normal day of training look like ?
6. Do you start with theoretical lessons followed practical ?
7. What action is to be taken against trainees who do some damages or waste materials during training ?
8. How would you plan your course ?
9. What is the source of your training policy ?
10. Who designs the curriculum and on what basis ?
11. Do instructors involve in curriculum design ?
12. Do you offer training for your instructors ?
13. Do you conduct a study in order to know what the needs are ?
14. Do you feel that technicians enjoy their jobs ?
15. Can a trainee move forward if he is performing very well, or he must complete the training phase ?
16. Do you have a strategy to follow up your trainees in the field after training ?
17. When you receive a certain feedback from the field what are the first steps you take?

## Appendix (2)

Mr. Mike Webster  
PP KGO9,  
Kents Hill Training Centre,  
Milton Keynes,  
MK7 6TT,

Yahya Murtada  
75 Medway Drive  
Perivale,  
Middx UB6 8LW  
Tel. 081 997 7028

27 August 1993

Dear Mike

Thank you for the kind and helpful meeting on Wednesday 18 of August 1993. You will find attached to this letter a report of my visit to your office. It would be great help to me if you have a look at it and add whatever corrections or additional remarks you feel appropriate. You will find also a stamped envelop to post the report back after you finish. Finally, I would like to visit one of your training centres sometime next week if possible.

I am looking forward to hearing from you.

Sincerely Yours

Yahya H. Murtada



13 9 93

twitda.

I have been asked to spend a  
of hour with you discussing general  
as of training within BT.

I would be pleased to do this, so  
you would care to telephone me on  
253 1010 ext. 320 we can agree a time  
date for a meeting.

Yours sincerely.

Ann Betts



ahya Murtada  
5 Medway Drive  
erivale  
iddlesex  
36 8LW

Tuesday 31st August, 1993

ear Mr Murtada

**isit to BT Training**

have added some comments to your report, but in general it  
ooks reasonable. I have passed your request for a visit to one  
f our Training Centres to Fred Ash in Customer Training. Fred  
originally handled your enquiry before passing it to me.

e has good contacts within the various centres and will let you  
now what is possible. I would suspect that he will try to get  
you a visit to the Paul St. centre in London, though I doubt that  
he will be able to do that as early as next week.

I wish you luck in your studies!

Yours sincerely

Mike Webster  
BT Training

Mr. Robert Betchley  
BTTC London,  
69/77 Paul Street,  
London,  
EC2A 4LX

Yahya Murtada  
75 Medway Drive  
Perivale,  
Middx UB6 8LW  
Tel. 081 997 7028

22 September 1993

Dear Robert

Thank you for the kind and helpful meeting on Thursday 16 of September 1993. You will find attached to this letter a report of my visit to your training centre. It would be great help to me if you have a look at it and add whatever corrections or additional remarks you feel appropriate. You will find also a stamped envelop to post the report back after you finish.

Sincerely Yours

Yahya H. Murtada

### Questions for British Telecom

Under the assumption that British Telecom has two types of training for its technicians, this set of questions will be divided into two sections as well. The first will be about formal training or the training for a technical job at BT, while the second will be about on the job training.

#### **Formal Training**

1. What type of students do you accept in your organisation :
  - a) What age group ?
  - b) What Sex ?
  - c) What Qualifications ?
  - d) What abilities ?
2. What are the first steps of admission to this organisation ?
3. How many fields of training do you offer for your technicians ?
4. On what basis would the trainees be able to choose a certain field ?
5. How many trainees do you accept annually ?
6. What capabilities do you require in those applying for technical jobs ?
7. What is the course structure ?
8. What are the training methods used ?
9. How long is the training course last ?
10. What percentage is theoretical to practical in these courses ?
11. what percentage of the applicants pass the training phase ?
12. What action would be taken against those who fail the course ?
13. What qualifications to be given to those who complete the course successfully?
14. What chances are there for them to continue their studies into higher education?
15. How would you convince the technicians of working for the organisation, and for how long ?
16. What rewards are there for those who perform well ?

17. What kind of problems do you normally face, and how do you overcome them ?
18. As an incentive, do trainees get a monthly payment while on training ?

### **On The Job Training**

19. How would you measure the performance quality of your technicians ?
20. How many on the job training courses do you offer, and on what basis?
21. How often does the technician have to be trained in a year ?
22. What procedures would be taken if the technician refused to attend a training course?
23. Who recommends what course is appropriate for a technician ?
24. Do they have to pass these courses, what if they do not ?
25. Do you do an annual evaluation of the technicians performance ?

**British Telecom Training Centre**

1. What kind of training do you offer in this training centre ?
2. How do you select the appropriate trainees for a course ?
3. How many students do you normally put in a class ?
4. What training methods do you use ?
5. What are the sources of your training policy ?
6. Who designs the curriculum and on what basis ?
7. Do instructors involve in curriculum design ?
8. Do you offer training for your instructors, what kind of training ?
9. How do you evaluate your instructors ?
10. How do you evaluate the performance of the trainees ?
11. Do you have a strategy to follow up your trainees in the field after training ?

## **Appendix (3)**

### **Pilot Study of First, Third Year Questionnaires and The Structured Interview**

#### **First Year**

1. How did you know about Industrial Secondary Education.
2. Why did you join this institute.
3. What kind of subjects did you like most before joining the institute?
4. Did you visit the secondary industrial institute to know about it before joining?
5. Why did you pick this specialisation than others?
6. Arrange the following according to your preference:
7. Which of the following is better from your point of view ?
8. What do you think this institute is preparing you for.
9. Which of the following statements match your point of view?

Note : The full structure of these questions will be unfolded later on in this appendix.

#### **Third Year**

1. Why did you join this institute?
2. What kind of subjects did you like most before joining the institute?
3. What do think your institute is preparing you for?
4. What do you think you will be doing after graduation.?
5. If you choose to work in industry after graduation, what would you like to be?
6. Which of the following is better in your point of view?
7. After graduation Do you think you will need further training?
8. Why in your opinion will Saudi factories not employ you?
9. The Higher Committee for the Educational Policy has defined the major goal of establishing technical education, what do you think it is?
10. Arrange the following according to your preference.
11. Do you feel that there is a relationship between Industrial Secondary Institutes and Saudi industry?

12. Why did you pick this specialisation than others?
13. How do you think the main purpose of this education would be fulfilled?
14. Which of the following statements match your point of view?

Note : The full structure of these questions will be unfolded later on in this appendix.

### **Structured Interview with Principals**

1. How many students do you have in this institute at present?
2. What are the aims and objectives of this institute?
3. Are these aims put forward by the institute or by the General Organisation?
4. Do you explain and discuss these aims with your students, why?
5. What is the annual admission capacity of this institute, and on what basis?
6. Why do not you expand the admission capacity for more students?
7. What are the criteria upon which you accept a student? (age, minimum grades...etc.)
8. Are these criteria laid down by the institute or imposed by the General Organisation?
9. How would you specify the number of students to each section?
10. Is there a relation between students' number in any section and the availability of staff and equipment?
11. Are there certain sections favoured by students than other, why?
12. Do local industry participate in putting forward suggestions for this institute policy?
13. How far does this institute comply with the needs and requirements of local and general Saudi industry?
14. Do you think that this institute can meet the demands of industry for skilled manpower, why?
15. Do you normally meet with people from industry to discuss their needs and your capabilities? How often?
16. Is there a relationship between this institute and the Ministry of Industry of any kind?
17. On what basis do you do your annual planning?
18. What is the minimum number of graduates upon which the institute can be considered achieved its objectives?

19. What percentage of graduates join the Saudi Industry?
20. What percentage of graduates join the Intermediate Technical College.
21. Why do you think that Saudi factories reject the institutes' graduates?
22. Is there a system of informing the students about the jobs available for them before graduation, why?

As a result of the pilot study the following changes were applied to both questionnaires and interview.

**Table (4)**  
**Changes to the first year questionnaire**

<b>Before pilot work</b>	<b>Status after pilot work</b>
<p>6. Arrange the following according to your preference:</p> <p>( ) Technical secondary education.</p> <p>( ) General secondary education.</p> <p>( ) Secondary medical education.</p> <p>Others : _____</p>	<p>This question had been dropped because of inaccurate responses.</p>
<p>7. Which of the following is better from your point of you?</p> <p>a) Secondary technical education.</p> <p>b) General Secondary education.</p> <p>c) Secondary medical education.</p> <p>Others : _____</p>	<p>6. If you were given the choice, which of the following you would pick?</p> <p>a) Secondary technical education.</p> <p>b) General Secondary education.</p> <p>c) Secondary medical education.</p> <p>Others : _____</p>

**Table (5)**  
**Changes to the third year questionnaire**

<b>Before pilot work</b>	<b>Status after pilot work</b>
<p>6. Which of the following is better in your point of view?</p> <p>a) Secondary technical education.</p> <p>b) General Secondary education.</p> <p>c) Secondary medical education.</p> <p>d) I do not know.</p> <p>Others : _____</p>	<p>6. If you were given the choice, which of the following you would pick?</p> <p>a) Secondary technical education.</p> <p>b) General secondary education.</p> <p>c) Secondary medical education.</p> <p>d) I do not know.</p> <p>Others : _____</p>
<p>7. After graduation do you think you will need further training.</p> <p>a) The training we had is more than enough.</p> <p>b) I need continuous training.</p> <p>c) I do not know.</p> <p>Others : _____</p>	<p>7. After graduation do you think you will need further training?</p> <p>a) I do not need more training.</p> <p>b) I need continuous training.</p> <p>c) I do not know.</p> <p>Others : _____</p>
<p>10. Arrange the fo lowing according to your preference:</p> <p>( ) Technical secondary education.</p> <p>( ) General secondary education.</p> <p>( ) Secondary medical education.</p> <p>Others : _____</p>	<p>This question had been dropped because of inaccurate responses.</p>

**Table (6)**  
**Changes to the structured interview with principals**

<b>Before pilot work</b>	<b>Status after pilot work</b>
9. How would you specify the number of students to each section?	9. How would you specify the number of students to each section, and do you evaluate their desires before hand?
The total number of questions before pilot work was 22, and thus, new question was added.	23. What is the principal goal you are preparing the trainees for?

## **Appendix (4)**

### **Final Form Of The First Year Questionnaire**

**Dear Student**

**Greetings**

As you know Technical Education in the Kingdom of Saudi Arabia has leaped large steps in the past period. It has participated greatly in the industrial, commercial and agricultural domains. To increase this participation to the needed level, it is necessary to know your point of view which is considered to be one of the most important input this type of education depend on. Therefore, this Questionnaire was designed as a part of data collection procedures for the purpose of preparing for PhD degree about industrial education and industry in Saudi Arabia. Since the output of this study will be used for scientific purposes only, then there is no need to mention your name. Nonetheless, it is very important to read each question carefully and select the most appropriate answer which reflects your point of view accurately and honestly. However, if none of the given answers match your point of view there is an additional space you can use to add more information.

**Best Regard**

**Researcher**

**Yahya Hussain Murtada**

**Institute of Education, University of London**

**The United Kingdom. 1994**

Name : -----

Age : -----

School Name : -----

City : -----

Specialisation : -----

Year : -----

**Please Read each question carefully and then circle the appropriate answer.**

**1. How did you know about Industrial Secondary Education?**

- a) The media.
- b) Friends.
- c) Family.
- d) Intermediate school.

Others : -----

-----

**2. Why did you join this institute?**

- a) I could not find a place at the general secondary education.
- b) It is easier than the general secondary education.
- c) Financially better than the general secondary education.
- d) To become a skilled technician .

Others : -----

-----

**3. What kind of subjects did you like most before joining the institute?**

- a) Science subjects ( math, physics...etc.)
- b) Art subjects ( poetry, story...etc.)
- c) Both.
- d) I do not know.

Others : -----

-----

**4. Did you visit the secondary industrial institute to know about it before joining?**

- a) Yes.
- b) No.
- c) No, because I knew about it from my friends.
- d) No, because it was not one of my desires to join this type of education.

Others : -----

-----

**5. Why did you pick this specialisation than others?**

- a) I would like to be with my friends.
- b) Because it has better future work opportunity.
- c) The institute's administration had picked it for me.
- d) I do not know.

Others : -----  
 -----

**6. If you were given the choice, which of the following you would pick?**

- a) Secondary Technical education.
- b) General Secondary education.
- c) Secondary Medical education.

Others : -----  
 -----

**7. What do you think this institute is preparing you for?**

- a) To become instructor in one of the vocational training centres.
- b) To find a job in one of the industrial private sectors.
- c) To start a business yourself.
- d) I do not know.

Others : -----  
 -----

**8. Which of the following statements match your point of view?**

- a) Industrial secondary education is better than general secondary education.
- b) General secondary education is better than industrial secondary education.
- c) Both of them are equal.
- d) I do not know.

Others : -----  
 -----

## **Appendix (5)**

### **(Final Form Of The Third Year Questionnaire)**

**Dear Student**

**Greetings**

As you know Technical Education in the Kingdom of Saudi Arabia has leaped large steps in the past period. It has participated greatly in the industrial, commercial and agricultural domains. To increase this participation to the needed level, it is necessary to know your point of view which is considered to be one of the most important input this type of education depend on. Therefore, this Questionnaire was designed as a part of data collection procedures for the purpose of preparing for PhD degree about industrial education and industry in Saudi Arabia. Since the output of this study will be used for scientific purposes only, then there is no need to mention your name. Nonetheless, it is very important to read each question carefully and select the most appropriate answer which reflects your point of view accurately and honestly. However, if none of the given answers match your point of view there is an additional space you can use to add more information.

**Best Regard**

**Researcher**

**Yahya Hussain Murtada**

**Institute of Education, University of London**

**The United Kingdom. 1994**

Name : -----

Age : -----

School Name : -----

City : -----

Specialisation : -----

Year : -----

**Please Read each question carefully and then circle the appropriate answer.**

**1. Why did you join this institute?**

- a) I could not find a place at the general secondary education.
- b) Because it is easier than the general secondary education.
- c) Financially better than the general secondary education.
- d) To become a skilled technician.

Others : -----

-----

**2. What kind of subjects did you like most before joining the institute?**

- a) Science subjects ( math, physics...etc.)
- b) Art subjects ( poetry, story...etc.)
- c) Both.
- d) I do not know.

Others : -----

-----

**3. What do think this institute is preparing you for?**

- a) To become instructor in one of the vocational training centres.
- b) To find a job in one of the industrial private sectors.
- c) To start a business yourself.
- d) I do not know.

Others : -----

-----

**4. What do you think you will be doing after graduation?**

- a) Continue my studies in the Intermediate Technical Collage.
- b) Work in the field of industry straight away.
- c) Start a business on my own.
- d) I do not know.

Others : -----

-----

**5. If you choose to work in industry after graduation, what would you like to be?**

- a) A factory manager.
- b) An apprentice in a factory.
- c) I will never work in industry.
- d) I have not decided yet.

Others : -----  
-----

**6. If you were given the choice, which of the following you would pick?**

- a) Secondary Technical education.
- b) General Secondary education.
- c) Secondary Medical education.
- d) I do not know.

Others : -----  
-----

**7. After graduation do you think you will need further training?**

- a) I do not need more training.
- b) I need continuous training.
- c) I do not know.

Others : -----  
-----

**8. Why in your opinion will Saudi factories not employ you?**

- a) Saudi factories do not reject me.
- b) Because this institute is not preparing me to work in factories.
- c) Because I want high salary and they need cheap labour.
- d) I do not know.

Others : -----  
-----

**9. The Higher Committee for the Educational Policy has defined the major goal of establishing technical education, what do you think it is?**

- a) To minimise the number of students going to university.
- b) To supply the market with qualified workers.
- c) To minimise the number of students going to general education.
- d) I do not know.

Others : -----  
-----

**10. Do you feel that there is a relationship between Industrial Secondary Institutes and Saudi industry?**

- a) There is a strong and clear relation.
- b) The relationship is there but not strong.
- c) There is no relation at all.
- d) I do not know.

Others : -----  
-----

**11. Why did you pick this specialisation than others?**

- a) I would like to be with my friends.
- b) Because it has better future work opportunity.
- c) The institute's administration had picked it for me.
- d) I do not know.

Others : -----  
-----

**12. How do you think the main purpose of this education would be fulfilled?**

- a) By joining Intermediate Technical Collage.
- b) By joining Saudi industry.
- c) By starting new business.
- d) I do not know.

Others : -----  
-----

**13. Which of the following statements match your point of view?**

- a) Industrial secondary education is better than general secondary education.
- b) General secondary education is better than industrial secondary education.
- c) Both of them are equal.
- d) I do not know.

Others : -----  
-----

## **Appendix (6)**

### **Final form of the Structured Interview with Principals**

1. How many students do you have in this institute at present?
2. What are the Specific aims and objectives of this institute?
3. Are these aims put forward by the institute or by the General Organisation?
4. Do you explain and discuss these aims with your students before or after they have joined the institute, why?
5. What is the annual admission capacity of this institute, and on what basis?
6. Why do not you expand the admission capacity for more students?
7. What are the criteria upon which you accept a student? (age, minimum grades...etc.)
8. Are these criteria laid down by the institute or imposed by the General Organisation?
9. How would you specify the number of students to each section, and do you evaluate their desires before hand?
10. Is there a relation between students' number in any section and the availability of staff and equipment?
11. Are there certain sections favoured by students than others, why?
12. Do local industry participate in putting forward suggestions for this institute policy?
13. How far does this institute comply with the needs and requirements of local and general Saudi industry?
14. Do you think that this institute can meet the demands of industry for skilled manpower, why?
15. Do you normally meet with people from industry to discuss their needs and your capabilities? How often?
16. Is there a relationship between this institute and the Ministry of Industry of any kind?
17. On what basis do you do your annual planning?
18. What is the minimum number of graduates upon which the institute can be considered achieved its objectives?

19. What percentage of graduates join the Saudi Industry?
20. What percentage of graduates join the Intermediate Technical College?
21. Why do you think that Saudi factories reject the institutes' graduates?
22. Is there a system of informing the students about the jobs available for them before graduation, why?
23. What is the principal goal you are preparing the trainees for?

## Appendix (7)

### First Year Questionnaire (Arabic Form)

بسم الله الرحمن الرحيم

أخي الطالب بالمعهد الثانوي الصناعي

السلام عليكم ورحمة الله وبركاته

كما تعلم أخي الطالب أن التعليم الفني بالمملكة العربية السعودية قد قفز خطوات واسعة خلال الفترة البسيطة الماضية وأصبح له إسهامات كبيرة في المجالات الصناعية والتجارية والزراعية. ولكي نزيد من هذه المساهمة الى المستوى المطلوب، فإنه من الضروري التعرف على وجهة نظرك والتي تعتبر من أهم المحاور التي يعتمد عليها نجاح هذا النوع من التعليم ، وعليه فلقد تم تصميم هذا الإستبيان لغرض الحصول على درجة الدكتوراة حول موضوع التعليم الثانوي الصناعي وعلاقته بالصناعة في المملكة العربية السعودية. وحيث أن نتائج هذا الإستبيان سوف تستخدم لأغراض علمية بحثية فإنه ليس من الضروري ذكر إسمك على الصفحة الأولى منه، ولكن من الضروري الإجابة عن كل سؤال بدقة و أمانة بما يعكس وجهة نظرك الفعلية، لذا أمل قراءة كل سؤال بعناية وتركيز ومن ثم إنتقاء الإجابة المناسبة من جملة الإجابات المعطاه أسفل منه، كما توجد هناك خانة إضافية للإدلاء بمزيد من المعلومات في حالة الشعور بأن أي من الإجابات لا تعكس وجهة نظرك الحقيقية.

ولك مني جزيل الشكر والتقدير

أخوك الباحث

يحيى بن حسين مرتضى

معهد التربية - جامعة لندن

المملكة المتحدة.

_____:	الإسم
_____:	العمر
_____:	المعهد
_____:	المدينة
_____:	التخصص
_____:	السنة

الرجاء قراءة السؤال جيداً وإختيار إجابة واحدة فقط مما يلي من حيث الأهمية لوضع علامة (X) في المربع المناسب.

١. كيف تعرفت على التعليم الثانوي الصناعي ؟

☐ وسائل الإعلام .

☐ الأصدقاء .

☐ الأسرة .

☐ المدرسة المتوسطة .

أخري :

٢. لماذا إلتحقت بالمعهد الثانوي الصناعي ؟

☐ لم أجد مقعد في الثانوية العامة .

☐ لأنه أسهل من الثانوية العامة .

☐ لأنه أفضل مادياً من الثانوية العامة .

☐ لأصبح فني ماهر .

أخري :

٣. ما نوع المواد التي كنت تفضلها قبل الإلتحاق بالمعهد ؟

☐ المواد العلمية (رياضيات - فيزياء..الخ) .

☐ المواد الأدبية (شعر - قصة - تاريخ..الخ) .

☐ الإثنين معاً .

☐ لا أعلم .

أخري :

٤. هل قمت بزيارة المعهد الثانوي الصناعي بغرض التعرف عليه قبل الإلتحاق به ؟

☐ نعم .

☐ لا .

لا، تعرفت على التعليم الثانوي الصناعي عن طريق الأصدقاء .

لا لم تكن لدي الرغبة في الإلتحاق بهذا النوع من التعليم منذ البداية.

☐

أخري :

٥. لماذا فضلت هذا التخصص دون غيره ؟

☐ أفضل أن أكون مع أصدقائي .

☐ لأن له مستقبل وظيفي أفضل .

☐ إدارة المعهد حددت لي هذا التخصص .

☐ لا أعلم .

أخري :

٦. لو كان أمامك أن تختار من أحد المجالات التعليمية التالية، فأيهم تختار ؟

☐ التعليم الثانوي الفني .

☐ التعليم الثانوي العام .

☐ التعليم الثانوي الصحي .

☐ لا أعلم .

أخري :

٧. ما الهدف الذي يقوم هذا المعهد بإعدادك له ؟

☐ لأصبح مدرباً بأحد مراكز التدريب المهني .

☐ للحصول على عمل في القطاع الخاص الصناعي .

☐ لإنشاء عمل خاص .

☐ لا أعلم .

أخري :

٨ . أي العبارات التالية تتطابق مع وجهة نظرك ؟

التعليم الثانوي الصناعي أفضل من التعليم الثانوي العام. ☐

التعليم الثانوي العام أفضل من التعليم الثانوي الصناعي . ☐

كلاهما متساويان . ☐

لا أعلم . ☐

أخري : \_\_\_\_\_

## Appendix (8)

### Third Year Questionnaire (Arabic Form)

بسم الله الرحمن الرحيم

أخي الطالب بالمعهد الثانوي الصناعي

السلام عليكم ورحمة الله وبركاته

كما تعلم أخي الطالب أن التعليم الفني بالمملكة العربية السعودية قد قفز خطوات واسعة خلال الفترة البسيطة الماضية وأصبح له إسهامات كبيرة في المجالات الصناعية والتجارية والزراعية. ولكي نزيد من هذه المساهمة الى المستوى المطلوب، فإنه من الضروري التعرف على وجهة نظرك والتي تعتبر من أهم المحاور التي يعتمد عليها نجاح هذا النوع من التعليم، وعليه فلقد تم تصميم هذا الإستبيان لغرض الحصول على درجة الدكتوراة حول موضوع التعليم الثانوي الصناعي وعلاقته بالصناعة في المملكة العربية السعودية. وحيث أن نتائج هذا الإستبيان سوف تستخدم لأغراض علمية بحثية فإنه ليس من الضروري ذكر إسمك على الصفحة الأولى منه، ولكن من الضروري الإجابة عن كل سؤال بدقة و أمانة بما يعكس وجهة نظرك الفعلية، لذا أمل قراءة كل سؤال بعناية وتركيز ومن ثم إنتقاء الإجابة المناسبة من جملة الإجابات المعطاه أسفل منه، كما توجد هناك خانة إضافية للإدلاء بمزيد من المعلومات في حالة الشعور بأن أي من الإجابات لا تعكس وجهة نظرك الحقيقية.

ولك مني جزيل الشكر والتقدير

أخوك الباحث  
يحيى بن حسين مرتضى  
معهد التربية - جامعة لندن  
المملكة المتحدة.

_____	: الإسم :
_____	: العمر :
_____	: المعهد :
_____	: المدينة :
_____	: التخصص :
_____	: السنة :

الرجاء قراءة السؤال جيداً وإختيار إجابة واحدة فقط مما يلي من حيث الأهمية لوضع علامة (X) في المربع المناسب.

١. لماذا إلتحقت بالمعهد الثانوي الصناعي ؟

- ☐ لم أجد مقعد في الثانوية العامة .
- ☐ لأنه اسهل من الثانوية العامة .
- ☐ لأنه أفضل مالياً من الثانوية العامة .
- ☐ لأصبح فني ماهر .

أخري :

٢. ما نوع المواد التي كنت تفضلها قبل الإلتحاق بالمعهد ؟

- ☐ المواد العلمية (رياضيات - فيزياء..الخ).
- ☐ المواد الأدبية (شعر - قصة - تاريخ ..الخ).
- ☐ الإثنين معاً.
- ☐ لا أعلم .

أخري :

٣. ما الهدف الذي يقوم هذا المعهد بإعدادك له ؟

- ☐ لأصبح مدرباً بأحد مراكز التدريب المهني .
- ☐ للحصول على عمل في القطاع الخاص الصناعي .
- ☐ لإنشاء عمل خاص .
- ☐ لا أعلم .

أخري :

٤. ما العمل الذي ستقوم به بعد التخرج ؟

- ☐ مواصلة الدراسة بالكلية التقنية المتوسطة .
- ☐ العمل مباشرة في القطاع الخاص .
- ☐ البدء بمشروع خاص .
- ☐ لا أعلم .

أخري :

٥. اذا كان إختيارك أن تعمل في الصناعة بعد التخرج فما العمل الذي تفضل ؟

- ☐ مدير مصنع .
- ☐ عامل فني بأحد المصانع السعودية .
- ☐ لن أعمل في مصنع ابداً .
- ☐ لم احدد بعد .

أخري :

٦. لو كان أمامك أن تختار من أحد المجالات التعليمية التالية، فأيهما تختار ؟

- ☐ التعليم الثانوي الفني .
- ☐ التعليم الثانوي العام .
- ☐ التعليم الثانوي الصحي .
- ☐ لا أعلم .

أخري :

٧. هل تعتقد أنك في حاجة الى تدريب بعد التخرج ؟

- ☐ لا أحتاج الى تدريب .
- ☐ أحتاج الى التدريب بصورة مستمرة .
- ☐ لا أعلم .

أخري :

٨. ما السبب في تصورك الذي من أجله ترفضك المصانع السعودية ؟

- ☐ المصانع السعودية لا ترفضني .  
☐ لأن المعهد لا يعدني للعمل في المصانع .  
☐ لأن مرتبي عال وهم يريدون عمالة رخيصة.  
☐ لا أعلم.

أخري : \_\_\_\_\_

٩. حددت اللجنة العليا لسياسة التعليم بالملكة هدفاً رئيسياً لتأسيس التعليم الفني . فما الهدف في تصورك ؟

- ☐ لتقليص عدد الطلبة الملتحقين بالجامعة .  
☐ لكفاية السوق المحلية من العمالة الفنية المدربة .  
☐ لتخفيف الضغط الحاصل على المرحلة الثانوية العامة .  
☐ لا أعلم.

أخري : \_\_\_\_\_

١٠. هل تشعر بوجود علاقة بين المعاهد الفنية و المصانع السعودية ؟

- ☐ توجد علاقة قوية وواضحة .  
☐ هناك علاقة قائمة ولكنها ليست قوية .  
☐ ليس هناك علاقة تربطهما .  
☐ لا أعلم.

أخري : \_\_\_\_\_

١١. لماذا فضلت هذا التخصص دون غيره ؟

- ☐ أفضل أن أكون مع أصدقائي .  
☐ لأن له مستقبل وظيفي أفضل .  
☐ إداة المعهد حددت لي هذا التخصص .  
☐ لا أعلم.

أخري : \_\_\_\_\_

١٢. هل تعتقد أن الهدف الرئيسي للتعليم الثانوي الصناعي يتحقق ؟

- ☐ بعودتك له كمدرّب بالمعهد الثانوي .
- ☐ بإلتحاقك مباشرة بالمجال الصناعي .
- ☐ بالقيام بمشروع فردي خاص .
- ☐ لا أعلم .

أخري :

١٣. أي العبارات التالية تتطابق مع وجهة نظرك ؟

- ☐ التعليم الثانوي الصناعي أفضل من التعليم الثانوي العام .
- ☐ التعليم الثانوي العام أفضل من التعليم الثانوي الصناعي .
- ☐ كلاهما متساويان .
- ☐ لا أعلم .

أخري :

## Appendix (9)

### The Structured Interview (Arabic Form)

#### المقابلة الشخصية

١. كم عدد الطلاب بالمعهد حالياً ؟
٢. هل توجد هناك أهداف محددة للمعهد ؟
٣. هل يتم وضع هذه الأهداف من قبل المعهد أو المؤسسة ؟
٤. هل يتم عادةً شرح ومناقشة أهداف المعهد العامة أو الخاصة مع الطلاب حين التحاقهم بالمعهد، لماذا ؟
٥. ما القدرة الإستيعابية للمعهد سنوياً وعلى أي أساس يتم التحديد ؟
٦. لماذا لا توسع هذه القدرة لتشمل عدد أكبر من المتقدمين ؟
٧. ما المعايير التي يتم قبول الطلبة على أساسها ؟ (السن ، التقدير.. الخ).
٨. هل تم وضع هذه المعايير من قبل المعهد أو المؤسسة ؟
٩. كيف يتم تحديد عدد الطلبة لكل قسم أو شعبة ، وهل يتم تقييم ميول الطلبة قبل الإلتحاق بأي قسم ؟
١٠. هل توجد علاقة بين عدد الطلاب في قسم ما وبين توفر المدرسين والآلات ؟
١١. هل هناك أقسام مفضلة لدى الطلبة أكثر من غيرها، لماذا ؟
١٢. هل يشارك أصحاب المصانع في وضع مقترحات لبناء سياسة المعهد ؟
١٣. الى أي مدى يلتزم هذا المعهد مع متطلبات المصانع السعودية في المنطقة بصفة خاصة والصناعة عامة ؟
١٤. هل تعتقد أن المعهد يستطيع تلبية إحتياجات السوق المحلية من العمالة الفنية المدربة، لماذا ؟

١٥. هل تلتقي إدارة المعهد مع أصحاب المصانع لمناقشة إحتياجاتهم وقدرات المعهد، كم مرة سنوياً ؟
١٦. هل توجد علاقة من أي نوع بين معهدكم وبين وزارة الصناعة ؟
١٧. ماالاسس التى تبني عليها سياسة المعهد السنوية ؟
١٨. ما الحد الأدنى للخريجين الذي يعتبر المعهد من خلاله قد أدي مهمة؟
١٩. كم نسبة الخريجين الذين يلتحقون بالمصانع السعودية؟
٢٠. كم نسبة الخريجين الذين يلتحقون بالكلية التقنية سنوياً؟
٢١. لماذا من وجهة نظركم ترفض المصانع السعودية تشغيل خريجي المعهد؟
٢٢. هل يوجد نظام لتعريف الطالب بالفرص الوظيفية المتاحة له قبل التخرج، لماذا؟
٢٣. ما الهدف الرئيسي الذي يعد هذا المعهد له المتدرب؟

بسم الله الرحمن الرحيم

Royal Embassy of  
Saudi Arabia  
London



المملكة العربية السعودية

وزارة التعليم العالي

مكتب الملحقة الثقافية فـجـ بريطانيا

الشنون :

الأكاديمية

ARABIAN CULTURAL BUREAU  
29 BELGRAVE SQUARE  
LONDON SW1X 8QB

Telephone : 071- 245 9944/5/6/7

Cable Address :

ELMIAH LONDON, S.W.1

Telex : 299909 ELMIAH G

Fax : 071 - 245 - 9895

الموضوع / بشأن تسهيل مهمة منته حلال رحلته العلية

الى من يهـه الأمر

أود الإفادة بان السيد / يحيى حسين مرتضى مبتعث وزارة البرق والبريد والهاتف للدراسة من أجل الحصول على درجة الدكتوراة فى مجال "التربية" من جامعة لندن ، سيقوم برحلة علمية للمملكة لجمع بعض المعلومات المتعلقة ببحثه وذلك خلال الفترة من ١٤١٥/٤/٢٦ هـ وحتى ١٤١٥/٧/٢٩ هـ. نأمل التفضل بتقديم المساعدة اللازمة له كى يتمكن من اجاز مهمته فى الوقت المحدد.

شاكرين لكم حسن تعاونكم،،

الملحق الثقافى فى بريطانيا

عبد الله بن محمد الناصر

م/ع ١٥

المرفقات:

الرقم: ٢٠٤٦ ٥ / ٥ / ١٥ التاريخ: ٥ / ٥ / ١٥

بسم الله الرحمن الرحيم

Royal Embassy of  
Saudi Arabia  
London

DI ARABIAN CULTURAL BUREAU  
29 BELGRAVE SQUARE  
LONDON SW1X 8QB  
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المملكة العربية السعودية

وزارة التعليم العالي

مكتب الملحقة الثقافية في بريطانيا

الشنون :

PTTE 4 : الأكاديمية

الموضوع / الموافقة على قيام مسعث برحلة علمية

المحترم

الاخ المبتعث / يحيى حسين مرتضى  
السلام عليكم ورحمة الله وبركاته...وبعد

نود الإفادة بورود رسالة سعادة مدير عام التدريب الإداري والابتعاث رقم ٣٠١٠/ت/٢ وتاريخ  
١٤١٥/٤/٩هـ المتضمنة الموافقة على قيامك بالرحلة العلمية للمملكة خلال الفترة من ١٤١٥/٤/٢٦هـ  
وحتى ١٤١٥/٧/٢٩هـ.  
للاحاطة بذلك ،

مع تمنياتنا لك بالتوفيق

الملحق الثقافي في بريطانيا

عبد الله بن محمد الناصر

م ع / ن !

المملكة العربية السعودية

وزارة برق والبريد والهاتف

وكالة الوزارة للتسجيل والحصانة

الإدارة العامة للتدريب

تخطيط الاعمال والموارد



الرقم: ٧٥٦ / ١٨  
التاريخ: ١٨ / ٥ / ١٤٠١  
المرفقات:

**سعادة مدير عام التعليم الفني  
بالمؤسسة العامة للتعليم الفني والتدريب المهني**

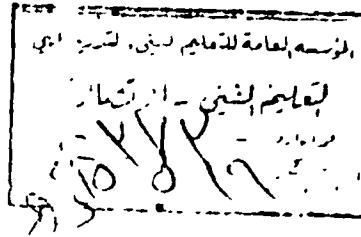
السلام عليكم ورحمة الله وبركاته .

نود الافادة بأن السيد/ يحيى بن حسين مرتضى ضمن مبتعثي الوزارة ،  
وملتحق للدراسة بجامعة لندن لتحضير درجة الدكتوراه في العلوم التربوية (التعليم  
الفني) ، وأنه يقوم حالياً برحلة علمية الى المملكة للتزود بالمعلومات اللازمة لاكمال  
متطلبات البحث والتخرج ، وبغرض تحقيق الهدف من هذه الرحلة وتمكينه من التزود  
بكافة المعلومات والبيانات التي تساعد في دراسته ، فبإتي أمل التكرم بتقديم  
المساعدة والعون اللازم لتزويده بالمعلومات المتعلقة بمجال بحثه ودراسته .  
شاكرين حسن تعاونكم .. ولكم خالص تحياتنا . ،،،

مدير ادارة التدريب الاداري والابتناعات

١٤٠١ / ٥ / ١٨ هـ

فيصل بن صالح الحسيني





**المملكة العربية السعودية**  
المؤسسة العامة للتعليم الفني والتدريب المهني  
الإدارة العامة للتخطيط والميزانية

الرقم : ١٤٤ / ٥٦  
التاريخ : ١٥ / ٥ / ١٤٤  
المشروعات :

**الدراسات والبحوث**

**تعميم للمعاهد الثانوية الصناعية**

المحترم	سعادة مدير المعهد الملكي الثانوي الصناعي بالرياض
المحترم	سعادة مدير المعهد الثانوي الصناعي بجدة
المحترم	سعادة مدير المعهد الثانوي الصناعي بالدمام
المحترم	سعادة مدير المعهد الثانوي الصناعي بالمدينة المنورة
المحترم	سعادة مدير المعهد الثانوي الصناعي بالطائف
المحترم	سعادة مدير المعهد الثانوي الصناعي بعنيزة
المحترم	سعادة مدير المعهد الثانوي الصناعي بأبها
المحترم	سعادة مدير المعهد الثانوي الصناعي بالهفوف

السلام عليكم ورحمة الله وبركاته ..

إيماناً من المؤسسة في تشجيع البحث العلمي وتسهيل مهمة الباحثين ، نأمل السماح للسيد / يحيى حسين مرتضى أحد مستعني وزارة البرق والبريد والهاتف للحصول على درجة الدكتوراة في مجال « التربية » من جامعة لندن ، وذلك بتطبيق الإستبانة الخاصة بموضوع التعليم الثانوي الصناعي والصناعة بالملكة على العينة المختارة من طلبة المعهد لديكم ، وكذلك الإجابة على الأسئلة المعدة للمسئولين بالمعهد من قبل الباحث حول الموضوع المذكور .

وتقبلوا تحياتي ....

نائب محافظ المؤسسة العامة للتعليم

الفني والتدريب المهني بالنيابة

فهد بن سليمان الزيد

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