1. **Abstract:** Teachers and Industrialists are not only focusing on preparing vocational graduates with the required skills that enable them to manage, maintain and cope with the imported technology, but rather facing with the issue of work ethics. This paper reports on a study that examined whether the management of the College of Technological Studies, CTS, has taken into consideration work ethics while designing, implementing and evaluating curriculum. The study also examines the degree of industrialist’s involvement in determining work ethics. The study consisted of: a review of the literature; a questionnaire distributed to a sample of teachers in selected departments and students; Personal interviews with selected head department; dean of industrial liaison offices; and graduates direct supervisors in local industry. This paper concluded that the College of Technological Studies management must ensure that graduates not only well equipped with the needs knowledge, skills and attitudes that mostly needed by local industry, but also those work ethics that help them to perform at optimum levels.

**Key words:** Vocational and technical Education, work ethics, developing Indigenous Manpower, Interaction between vocational and technical education and local industries and business, Kuwait.
2. **Introduction:** A review of the related literature revealed that work behaviours of the majority of graduates do not satisfy employer’s needs. (Committee on Small Business, 1990; Magaziner, as cited by Jesser, 1991) In fact, employers regard work ethics and an important attribute of job applications and incumbent workers, since 80% of a survey managers agreed that productivity is suffering due to the work ethics has eroded. (Lipset, 1990)

Miller and Coady, 1986, have categorized work attitudes into three development stages. First stage, when behaviour is totally influenced by positive or negative reinforcement. Second stage, is the ability of students to practice and apply previously learned rules to real and routine situations. Third stage is the ability of students to observe the underlying principles rules and able to apply and adapt previously learned rules to develop new responses to real problem. A review of related literature revealed divers definitions and concepts of work ethics. (Cherrington, 1980; Lipset, 1990)

Work ethics can be defined to reflect not only attitudes and desire, but also behaviours in order to develop pedagogy that would encourage positive change in employee’s behaviour. Therefore, work ethics is considered significant in an individual’s responses in the workplace. (Aldag & Brief, 1975) There are many methods of transferring work ethics to potential students. Training programme can transfer those positive work ethics mostly needed by industries. Another method is work-based apprenticeship training programme, can also develop and enhance attitude, desire, value and behaviour that are considered essential in the occupational and the industry. In this respect, Cherrington, (1980), added that “work values are learned values; employees will learn the values they are taught in their work [learning] environment” (p.16) As a result, many studies indicated that work ethics were influenced by socialization as an important component of training (Blau, 1988) Social work values and ethics have been viewed as an integral part of social practice and education. Others view work ethics among occupational groups (Hill 1992).

Work ethics curriculum must be taught in vocational and technical education (Douthitt, 1990) The Council on Social Work Education (CSWE, 2003) stressed that students must be taught their own values and understand ethical dilemmas. However, educators cannot properly transfer work ethics to potential students in classroom unless they understand and absorb
development stages within the students function. Educators must also understand who students gain the right values, communications skills, solving problems, and courage. Indeed, there are many educators who teach work ethics in classroom but indirectly. An organised work ethics curriculum by both educators and related industries is mostly needed to shape not only student’s skills but rather students morality, honesty, commitments, loyalty, attendance, dependability, and responsibility. Berryman (1991) provides an appropriate model for teaching work ethics suggested seven-strategies approach:

1. Modelling – the performance of an activity by an expert so that students can learn from the expert how that task can/should be done.
2. Coaching – a teacher observes a student performance a task and provides helpful feedback in the form of support, modelling, reminders, and suggestions of new tasks which could bring his/her performance closer to that of an expert.
3. Scaffolding – support for the students so that they can carry out the tasks.
4. Fading – gradual removal of support so that the students finally come to perform their tasks on their own.
5. Articulation – means for providing students the opportunity to articulate their reasoning and their problem solving strategies.
6. Reflection – any technique that allows students to compare their own problem solving process with that of an expert or another student, and ultimately an internal model of expertise.
7. Exploration – any devise that pushes the students into mode of problem solving on their own.

In Kuwait, the need for skilled and semi-skilled national workers is the highest government priority in national human resource development. Expatriates form 69% of the total workforce. In fact, the World Bank report has classified Kuwait as having the fourth smallest ratio of national to expatriate workers in the world. However, Kuwait is currently one of the top countries in terms of financial transfer to expatriates’ countries of origin (AlRai Newspaper, Kuwait, 2010). The domination of expatriates is visible in most sectors, especially manufacturing, construction, transportation, storage,
communications, financial insurance, real estate and business services. The variation of national labour and expatriates is also noted in occupational groups. In 2008, there were 22,825 non-Kuwaitis amongst medical and science technicians, compared to 7,028 Kuwaitis, 120,438 non-Kuwaitis in the production sector, compared to 8,986 Kuwaitis and 24,313 non-Kuwaiti engineers, compared to 6,741 Kuwaitis (Ministry of Planning, Annual Statistical Abstract 2009).

In Kuwait, the Public Authority for Applied Education and Training (PAAE&T) has been established to respond to the urgent need for skilled and semi-skilled national labour. The PAAE&T consists of the College of Technological Studies, the College of Business Studies, the College of Business Education, the College of Health Service, the High Institute of Energy, the Sabah Al-Salem and Shweekh branches of the Industrial Training Institute, the Institute of Nursing, and the Higher Institute for Communications and Navigation. “The College of Technological Studies established an educational philosophy in order to achieve a strategic national objective; that is, to invest in Kuwaiti people in building a productive future for Kuwait. The role of the college is to design and offer study programs, to develop the graduate with executive capabilities and grant academic credentials from vocational licenses to scientific degrees”. (The PAAE&T main Website)

3. Research Objectives:

The research objectives of this study were to examine the followings:

1. Whether the management of the College of Technological Studies, CTS, has taken into consideration work ethics while designing, implementing and evaluating curriculum.
2. Whether lecturers discuss some of work ethics that are mostly needed by concern industry in classroom.
3. The methods used by lecturers in transferring and evaluating the worth ethics to students in classroom.
4. The degree of industrialist’s involvement in determining work ethics.

5. Industrial perceptions towards the standard of the college graduates in terms of work ethics.


4. Research Methodology:

The study employed a mixed method approach (Cresswell, 2011). This included a quantitative survey that provided a large number of responses to specific questions and a series of interviews that allowed for the collection of detailed qualitative data. Three data collection methods were used in this research: a literature review, a structured questionnaire and a personal interview. The examined factors include whether lecturers are aware of the type of work ethics needs to be transferred to students in classroom; the methods used by lecturers in evaluating work ethics; the degree of the college management involvement in determining work ethics that must be inserted in related courses; whether industry plays a vital role in setting work ethics; measuring industrial perceptions towards the standard of the colleges graduates terms of work ethics. Questionnaire was designed, tested, and distributed to a sample of lecturers at the College of Technological Studies (10) lecturers in each of the Department of Production and Welding Engineering, Department of Petroleum Engineering, Department of Electrical Engineering; Personal interviews with the heads of three departments (those departments delaying with the oil sector and electricity power stations due to their vital role in enhancing the country’s economy); dean of industrial liaison offices; and the department trainee’s direct supervisors in local industry and electricity power stations. The research also involved examining student’s perception towards work ethics. A questionnaire was designed, tested, and distributed to a sample of 300 students in the three selected departments. Out of the 300 questionnaires distributed 255 completed questionnaire were collected, thus, represented 85% of the total sample. Among the issues discussed were: whether lecturers stressed on work ethics in classroom, the
methods used by lecturers in transferring some of the issues related to work ethics to students, the methods used in evaluation work ethics, whether the issues of work ethics taught in classroom meet industrial expectations. The research tool used for the purpose of this research was the Occupational Work Ethics Inventory (OWEI), developed by Petty 1991. Four main factors were examined. They are namely: interpersonal skills, initiative, being dependable, and work commitment. Interpersonal skills include items dealing with work interactions and personal characteristics. Initiative explains those characteristics related to positive change at work. Dependable include meeting employers satisfaction and achieve assigned work with acceptable standard. Work commitment consists of items related to sense of belonging and the desire to invest in work.

Personal interviews were conducted with the heads of the selected departments in the College of Technological Studies. The main objective was to obtain an inside view of work ethics and whether graduates from the CTS are well equipped with the necessary work ethics that meets industrials requirements. Several issues were discussed, such as whether lecturers are well aware of work ethics, whether work ethics is included in the assigned curriculum, the methods used by lecturers to teach work ethics in classroom, the degree of industrial involvement in determining the most needed work ethics, the method used by lecturers in evaluating work ethics in classroom, and industrial perception towards the quality of the college graduates in terms of work ethics. The research was also expanded to include meeting with head of industrial training programmes in the College of Technological Studies in order to evaluate the effectiveness of such programmes in enriching student competence, particularly those related to work ethics. The issues raised include the length of the industrial training programme, measuring students level of knowledge, skills and attitudes, the evaluation system, collaboration with a employment sector in the area of work ethics, and obstacles (if any) facing suppliers (CTS) and employers. The dean of the CTS was also interviewed to identify and examine the colleges’ overall plans (if any) for providing employers with graduates equipped with the necessary work ethics and to pinpoint any obstacles hindering the achievement of such an aim. The
investigated areas include whether the employers of the CTS gradates and the departments in the CTS participated in setting, implementing and evaluating the standard of the CTS graduates in terms of work ethics; whether industry play a significant role in setting work ethics; and the obstacles facing both industry and the CTS in upgrading the standard of the CTS graduates in terms of work ethics.

Personal interviews were also conducted with supervisors in the employment sectors who were in direct contact with CTS trainees and graduates. Several aspects were investigated, such as the following: effectiveness and efficiency of the industrial training programme; students’ knowledge, skills, attitudes, and problem-solving ability; the number of the CTS who drop out after working in a related industry; degree of collaboration between students and CTS staff in the area of work ethics; students’ awareness of work ethics; students’ communication skills; and whether students met overall employment requirements.

5. Research Findings:

5.1 Instructor’s Awareness to the CTS Objectives & Strategies.

As in any organisation, regardless of its size, ownership, and activities, the issue of staff awareness of the overall organisation objectives and strategies is one of management’s priorities. It is though that through a proper understanding of such objectives, employees (academic & managerial) can dedicate their efforts and use the available organisational resources in a way which will serve the overall organisational objectives. It is also management’s responsibility to monitor the application of the organisational objectives and strategies so that quality can be maintained. In the case of vocational and technical institutions, due to the rapid change in technology, management must ensure that objectives are well understood and absorbed by all staff. The level of quality of graduates would be significantly influenced by such an issue, since staffs play an important role in shaping graduates knowledge,
In this study, an attempt was made to measure staff awareness of the CTS objectives and strategies. The findings indicated that all selected instructors at the CTS, as well as the Head of Industrial Training Programmes were well aware of their college overall objectives. However, instructors were found to be unsure of the future strategy of their department in specific and the CTS in general. In other words, there is no sign of any updated data on the expected number of graduates or their specialisation, which is required by industry. This unpleasant situation would not help the heads of the CTS departments, to some extent, to form an accurate departmental plan for meeting future industrial requirements. The Head of Industrial Training Programmes stressed the need to know the future requirements of industry from the CTS graduates. Details such as number of graduates, gender, level of knowledge, skills, competencies, specializations, and work ethics toward working in industry are some of the vital areas of information required by those who are designing, implementing, and evaluating industrial training programs. Comparing the CTS with similar institution in the UK, the management of Northumbria University, UK, (polytechnic previously) for example, has formed a closed link with the different schools and centres, mostly through periodicals meetings to ensure that the related schools and centres are well aware of the overall strategy and objectives. In fact, the University management would require that each head of school present and discuss their objectives for the next three to five years ahead. This would tackle the number of graduates, quality of curriculum, type of skills mostly needed by related industries and business.

5.2 The existence of work ethics in the CTS Objectives & Strategies.

An effort has been made to investigate if the CTS objectives and strategies include those items related to work ethics that mostly needed by the recipients of the CTS graduates. It is though essential for lecturers to understand and absorb the CTS objectives and strategies so that he/she can
convert their teaching methods to include not only those skills required by concern sector, but also those work ethics which can contribute positively in enhancing the competences of graduates. It is worth mentioning at this point that industrial involvement in setting the CTS objectives and strategies is highly significant and must not be in any case isolated from playing a vital part in such aspect. On the other hand, The CTS management must not relay on industry to provide graduates with the needed work ethics after graduation, such believe would hinder the development of indigenous capabilities.

The CTS is dedicating its efforts to achieve four general objectives:

- “To prepare applied technical labour at various levels which are necessary to meet the requirements of the industrial development of the country through practical and educational programs which vary from each other in nature and duration of study and practice.
- To develop the vocational capabilities of the national applied technical labour force.
- To prepare applied technical labour at various levels which are necessary to meet the requirements of the industrial development of the country through practical and educational programs which vary from each other in nature and duration of study and practice.
- To raise the level of awareness in the community as providers of technical information”.

The findings of this research revealed that the management of the CTS has consistently used the word “technical labour force” in its objectives. However, despite the importance of work ethics, no sign for any items related to the expectation of industry from the graduates of the CTS. Thus, it is essential for the CTS management to include in their objectives statements those work ethics that would satisfy the recipients of the CTS graduates.

In similar institutions in the UK, Northumbria University, NU, (polytechnic previously) for example, the university objectives have consisted of various issues related to work ethics. In fact, such issues were derived from industries and business to ensure that their graduates would maintain, to some extent,
the standard set by related industry and business. The management of Northumbria University has realised the important of work ethics and thus mentioned not only in the university mission statement, but also in the university aims and values. The NU mission statement stated in one of its paragraph “Underpin our activities through values of equity, diversity, collegiality and a concern for the ethical behaviour and welfare of individuals and society”.

5.3 The existence of work ethics in the departmental Objectives.

An attempt has been made to investigate whether the departments at the College of technological Studies have taking into consideration work ethics in forming their departmental objectives. The Departmental objectives statement for the manufacturing engineering for instance stated the following:

“The aim of the department is to give the students the practice to develop necessary technological skills. After theoretical and practical study in the field of specialization, students can undertake relevant work after graduation and pursue their advanced study. Students are prepared for two specializations presented by two sections of the department. The production section and the welding section, where the department offers appropriate education and training to ensure complete orientation of graduates with the equipment that they will deal with. Graduates will be capable to make, for relevant equipment and machinery, periodic and major maintenance procedures”. (The PAAE&T Website)

It is obvious from the above statement, that no items have been mentioned regarding work ethics such as: responsibility loyalty, respect, honest, commitments, dedication. The other selected departments at the CTS also have neglected (intentionally or unintentionally) work ethics in their departmental objectives statements.

5.4 The Current Status of the CTS Curriculum

Vocational education has its own unique characteristics but it can be considered useless if it fails to provide industry and business with the required
level of knowledge, skills, and work ethics. The success or failure of VET institutes would certainly be judged on the quality of their final product, which must meet and satisfy, to a degree, the standards set by industry and business. Therefore, it is crucial for those who are managing such institutes to absorb the purpose and objectives of vocational education. It is also imperative that instructors should possess the full understanding, commitment, and capacity necessary to be able to transfer not only the required skills to students but also work ethics that would enable graduates of the CTS to perform their duties within work standards. Indeed, any management philosophy adopted by VET would have a significant impact on the effectiveness and efficiency of the performance of lecturers. It is management responsibility to ensure lecturers’ awareness of work ethics involved in their teaching. It is also lecturers’ responsibility to assess the development of student’s work ethics during their courses and adjust any unfavourable diversion of behaviour or believe that might have a negative impact of student’s current and future performance. The research showed no sign of a sincere attempt to consult related industry and business in reviewing and developing the CTS curriculum, particularly those issues dealing with work ethics. Therefore, the CTS and industrialists continue to exchange criticism and blame for neglecting to establish proper links. This situation is worsened by the constant change in science and technology in related sectors. Interviewed lecturers felt optimistic that, once industry is being involved in curriculum review and development, lecturers would have a better understanding of the desired work ethics expectations including. Thus, extensive efforts are required by the management of CTS to narrow the gap with local industry and business. It hopes that the results would have a significant impact on the quality of graduates.

The findings of this research showed that there was overall agreement among those interviewed, that the current curriculum in the CTS needs extensive review and assessment to ensure the embodiment of knowledge, skills, and work ethics required by local industry and business. There was also a common belief among all the selected staff, that industry and business must play a significant role in curriculum development, especially, in determining
work ethics mostly needed by related industry. According to the Dean Assistant of Academic Affairs, serious and sincere action is now being taken in the CTS to review and update the status of the curriculum in all specialisations. Again, industrialists were found isolated from taking an active role in reviewing, up-dating and evaluating the current and future curriculum.

5.5 The Current Status of Curriculum Needs Assessment

As in the case of any vocational education, needs assessment is considered crucial in order to determine the actual level of knowledge, skills and attitudes required by industry and business. In most cases, both vocational educators/instructors and industrialists would carry out needs assessment by means of a meeting, in the present of an official government labour representative. In developing countries (e.g. Kuwait, Saudi Arabia), the official government labour representative would only stress, but not insist on, the need to enhance local capabilities, and encourage both parties (VET institutes and industry) to work jointly in determining the quantity and quality of VET graduates. Unfortunately, since industrialists are not forced to employ graduates from the CTS, they can simply turn to expatriates to take up technical jobs such as electricians, technicians, and maintenance operatives. As far as needs assessment is concerned, the CTS have not applied a scientific method for determining an industrial needs assessment as yet. There has obviously been poor communication between the CTS and local industry, and each party has blamed the other for not taking a serious initiative.

5.6 Quality Assurance System

Unlike the trend in similar colleges in the UK, the CTS in Kuwait lack a proper system for reviewing, upgrading, and monitoring curriculum development. There is an obvious lack of a so called “quality assurance scheme”, which is aimed at ensuring the consistency of courses taught at the CTS with the requirements of local industry. Technical institutions in the UK for example, have entered into a partnership of joint validation with the
Council of National Academic Award (CNAA). Under the CNAA charter for validation the academic board is fully responsible for the validation, approval and review of all technical institution courses. This board is empowered to change existing courses and approve new ones. The two essential aims of the system are to strongly encourage high quality and continual progress in improving and safeguarding standards. Their aim is to stimulate and encourage an atmosphere within the institution which will encourage members of staff to review, assess, monitor and validate courses and share in these activities in a positive way, recognising that in so doing they will be developing their own powers, skills and expertise. (Quality Assurance Validation and Review Guidelines, 1991).

Several types of course review are undertaken in technical institutions in the UK. They are namely: annual course review, annual departmental review, annual review of central departments, annual faculty review, five-year departmental review, five-year central department review, and five-year faculty review. They are all aimed at achieving quality in technical education that meets the needs of local industry, rather than concentrating on how courses are operated within the college boundaries.

There was overall agreement, which form another area of strength in the favour of both the CTS and industry, among those interviewed that the current curriculum in the CTS needs extensive review and assessment to ensure the embodiment of knowledge, skills, and work ethics required by local industry and business. There was also a common belief that industry and business must play a significant role in curriculum development. According to the Dean Assistant of Academic Affairs, serious and sincere action is now being taken in the CTS to review and update the status of the curriculum in all specialisations. Several curriculum development committees have been established in the CTS. Their main objective is to review the curriculum from both the point of view of instructors, and related industry and business. It is worth mentioning at this point, that most of the current curriculum in the CTS is considered out of date. Selected industries indicated that theory and practice in the CTS was not as well integrated as in industry. Vickers (1994)
notes, “people learn more efficiently and perform more competently when motivated by the desire or need to solve real-world problems. Learning is less efficient when formal knowledge is delivered in the abstract and when there are no opportunities to apply that knowledge to tangible purposes in realistic concerns” (p.25).

5.7 Whether lecturers stress on work ethics in classroom.

Despite the total awareness of the importance of work ethics by all interviewed lecturers, only 35% of the selected lectures have mentioned some of the work ethics in classroom. Those lecturers tend to mention, but not to discuss in more details, some of work values that he/she believe essential for students to cope successfully with work environment. In other word, no specific class in the CTS were dedicated to emphasis of work ethics, nor did lecturers provide cases studies consist of some of the value required by related industry. Among the items related to work ethics that have been missed by selected lecturers are dependable, careful, effective, perceptive, efficient, adaptable, resourceful, friendly, cheerful, well groomed, devoted, and persistent. Again, industry was totally isolated from playing a significant role in determining those work ethics that are required to meet industrial standard. It is worth mentioning at this point, that lecturers were found interested to teach some of work ethics in classroom if the management of the CTS stressed on including some of work values in the assigned curriculum. Also, all selected lecturers were found positive in term of involving industry in determining areas of work ethics that might enhance the performance of the CTS graduates.

5.8 Whether heads of departments stress on work ethics.

A personal interview has been made with the selected heads of departments. Many issues were discussed among which: the importance of teaching work ethics in the CTS, collaboration with industry, designing
curriculum related to work ethics, evaluating the performance of the CTS graduates in related industry. All interviewed heads of department agreed that worth ethics must be taught at the CTS and must be a compulsory subject among all those attending the CTS. They also added “lecturers at the option of stressing on some of the issues related to work ethics, but there is no agreement among heads of departments on which issues must be elaborated in classroom”. Indeed, there are lecturers who totally ignored tackling the issue of work ethics since it is not part of their subject’s outlines and objectives. When asked about industrial involvement in curriculum development or is terms of discussing the issue of work ethics. All interviewed heads of departments confirm that industry is not taking any part in such issue. In fact, despite the criticisms of industry towards the behaviour of the CTS graduates, no sincere action was implemented by the management of the CTS to overcome or reduce such negative behaviour. The gap between the CTS and related industry encourage without any doubt industry to rely on expatriates.

5.9 Whether industrial training programs stress on work ethics.

The relationship between the CTS and related industry is in the form of industrial training program. It is where students spend some time in industrial premises and expose to some of the activities either in workshop or laboratories related to student’s specialization. It is the responsibility of student’s advisor to liaison with industrial representative to pin point of those items related to work ethics. However, the research findings showed that student’s college supervisors have, to some extent, have not discussed nor elaborate on issue related to work ethics, such as dependable, initiative, interpersonal skills, and work commitment. In fact, industrial representative voice some worried and complain since most of the students expose to industrial training programs did not take such vital initiative as serious. The neglecting of wearing safety apparatuses, high rate of absent, and lack of skills to read manuals and write final report were some of the issue voiced by industry.
5.10 Measuring industrial perception towards work ethics.

An effort has been made to measure graduates of the CTS direct superior in industrial premises in regards work ethics. As a result personal interviews have been made with selected supervisor in the oil industry and Ministry of Electricity and water. A senior foreman in the Central Workshops Team at the National Oil Company (NOC) indicated to the author in a personal interview that only three PAAE&T graduates were employed at the company. When asked to provide the reason for the low number, he replied that "PAAE&T graduates are not keen on handling hard work and working outdoors for long hours". He then added that "PAAE&T graduates think their jobs should guarantee high wages with less effort". As a result, the management of the National Oil Company relies on contactors to handle the assigned work. The ratio of Kuwaitis to non-Kuwaitis employed in the Central Workshops Team is 3 to 35. The senior foreman also had some negative comments regarding the performance of the three PAAE&T graduates working in his department. Some of the comments mentioned their lack of required knowledge in their field of specialisation, inability to handle the assigned machines and tools, high rate of absence, low work initiative, inability to handle work responsibilities, preference to stay indoors, inability to handle work problems, ignorance of health and safety rules and procedures, inability to write work progress reports, and inability to innovate. When asked to rate overall PAAE&T performance, the senior foreman rated it as very weak and described himself as being totally "unsatisfied". Another meeting was conducted with the head of the maintenance department in PIC, who shared the same views regarding the standard of PAAE&T graduates working in his department. He stated that the percentage of those graduates wishing to transfer to another job as opposed to continuing there reached 70% in his department. Indeed, he was "unsatisfied" with the standard of PAAE&T graduates and has clearly noted the lack of attitude and skills needed to cope with the type of work involved.
As far as the Ministry of Electricity and Water, Doha West Power Station, an additional personal interview was conducted. Meetings were carried out with a number of foremen in charge of supervising PAAE&T final-year students who attend industrial training programmes. There is a common belief that the level of student readiness to attend such programmes is weak, that they lack basic knowledge related to their fields of specialisation, that they lack skills, and that they are unwilling to complete an assigned job. In fact, students attending industrial training programmes are required to submit reports, all of which the interviewed foremen regarded as being weak and copied from the internet from the Internet. The interviewed foremen also highlighted the poor quality of student performances in identifying and using basic machines and tools related to their field of specialisation. Surprisingly, the study revealed that more than 60% of the workforce at Doha West Power Station is Kuwaiti. Therefore, an attempt was made to meet with the PAAE&T direct supervisor to obtain in-depth information regarding the standard of PAAE&T graduates. A personal meeting was carried out with the head of machinery safety and health, who indicated to the author that the majority of the work is being carried out by a contractor who employs foreigners. He added that "PAAE&T employees are less able to handle the assigned work than foreigners are". Most Kuwaiti workers prefer to work indoors and avoid contact with machines and tools. Another meeting was held with the PAAE&T direct supervisor in the mechanical department. He stated that "we rely on contractors to accomplish work plans because PAAE&T employees lack the initiative, skills and loyalty of foreigners". At another major electric power station, the Al-Zoor Electric Power Station, a senior engineer in the control room and an engineer in the maintenance department confirmed that PAAE&T graduates lack a positive attitude towards working in the station. The PAAE&T graduates lack knowledge, skills related to their field of specialisations, respect of work value, and loyalty. Indeed, employers are unsatisfied with the standard of PAAE&T graduates and want the PAAE&T management to take serious action.
6. Discussions & Conclusions

There was overall agreement amongst those interviewed that the current curriculum in the PAAE&T needs extensive review and assessment to ensure the embodiment of knowledge, skills, and attitudes required by local industry and business. There was also a common belief that industry and business must play a significant role in curriculum development. It is worth mentioning that most of the current curriculum in PAAE&T is considered out of date. Selected students and interviewees indicated that theory and practice in the PAAE&T were not integrated as they are in industry. The research showed no sign of a sincere attempt to consult related industry and business in reviewing and developing the PAAE&T curriculum. In fact, local industry and business were excluded from taking any part in forming and upgrading the curriculum to meet employer’s requirements. Therefore, the PAAE&T and industrialists continue to exchange criticism and blame for neglecting to establish proper links. This situation has been worsened by constant changes in technology in related sectors. As a result, the PAAE&T graduates have been rated “below the expected standard” and must, therefore, undergo extensive retraining to meet the standards of the workplace.

As for academic staff competencies, it is the responsibility of management to ensure that instructors are well equipped with the necessary competencies so that knowledge, skills, and attitudes can be successfully transferred to students. It is also a management responsibility to establish an evaluation of competencies scheme that can identify the current and future competencies required by industry. Surprisingly, the findings of this research show that the PAAE&T has neither a health nor a safety policy, unlike similar institutions in the U.K. Department heads must develop a departmental health and safety policy that is complementary to institutional policy to ensure the safety of their instructors, students, managerial staff, and visitors. They must also ensure that instructors and students understand all aspects of the health and safety policy, particularly those dealing with chemicals, machines, and exposure to pollution, noise, and radiation.
It is evident from this research that even the industrial training programmes have not achieved the expected objectives for several reasons: lack of a positive attitude, avoidance of outdoor work for long hours, keeping a low profile in the employment sector, low desire to learn and be exposed to the reality of one’s future job, and relying on prewritten reports to present at the end of one’s industrial training programme. Various initiatives to extend the scale of collaboration with related industry and business have been announced, but no action has yet been taken to implement such vital initiatives.

The issue of negative attitudes amongst PAAE&T graduates was raised in all of the personal interviews conducted in the employment sectors. These interviews suggest that PAAE&T graduates lack the necessary knowledge and skills required by the employment sectors. However, the problem also includes the issue of behaviours. The bulk of PAAE&T graduates avoid working in the field that they were trained for and are eager to transfer to another job. In fact, even those who stay at their jobs rely on non-Kuwaitis to accomplish the assigned work. The Kuwaiti civil service office guarantees a job for all Kuwaitis regardless of their work performance. The issue of negative attitudes of PAAE&T graduates must be taken seriously by PAAE&T top management if the Kuwaiti government is serious about reducing dependency on expatriates.

Dialogue between vocational educators, related industry and business, and governmental labour representatives must be encouraged. One implication of such dialogue would be an agreement on standards that would define and promote required skills. It would also contribute to developing relevant curricula for vocational courses and determine the appropriate skills required by vocational instructors, thus forming guidelines for both vocational institutions and industry and business so that they may achieve their objectives and contribute to the long-term national labour plan. It would also encourage a positive attitude amongst PAAE&T graduates could apply throughout their studies in certain programs at their colleges and institutions.
and provide incentive for their assigned work. If it fails to do so, Kuwait will continue to depend on expatriates for years to come.
7. References:


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The educational philosophy of the CTS stated that: “The philosophy of education followed by the College of Technical Studies is designed to develop mental and executive capabilities. The College of Technological Studies established an educational philosophy in order to achieve a strategic national...
objective; that is, to invest in Kuwaiti people in building a productive future for
Kuwait. The role of the college is to design and offer study programs, to
develop the graduate with executive capabilities and grant academic
credentials from vocational licenses to scientific degrees”.


Centre for Middle East Commercial Information, AME, Friday 29 July, 2011, Main Page.

Selected staff (55%) were in favour of carrying out a proper needs assessment, however, several obstacles were found to hinder their attempt. Among these were: the lack of clear communication channels with industry, a lack of long term support from top management, the lack of an evaluation scheme for measuring the effectiveness of collaboration with industry, the absence of negotiation skills, and the absence of incentives to enhance collaboration with local industry.

On the other hand, industrialists’ perception of needs assessment is summarised by the statement made by a senior supervisor in the oil industry, in which he suggests that the CTS must keep in close contact with industry and reflect their findings in their curriculum and courses, so that students can gain the required skills. He also added that on close examination of the quality of graduates, he is lead to believe that needs assessment is indeed not part of the overall planning of the CTS. Eventually graduates would have to be retrained and their performance would need to be constantly assessed. However, Northumbria University has forged a system that encompasses a guidelines for determining the current and future need of the university curriculum. In fact, industries and business have played a vital part in provided information that help the concerned schools and departments to set the standard level of knowledge, skills and attitudes mostly required by the recipient of the university graduates. Prof. Liz McDowell stressed on the need
of close linkage with local industry through joint research, seminar, committees, and sandwich courses.

standards for that item. There are no right or wrong answers. There also is no time limit, but you should work as rapidly as possible. Please respond to every item on the list.

As a worker I can describe myself as:

1. Dependable
   - Never
   - Almost Never
   - Seldom
   - Sometimes
   - Usually
   - Almost Always
   - Always

2. Stubborn
   - Never
   - Almost Never
   - Seldom
   - Sometimes
   - Usually
3. Following regulations
   - Never
   - Almost Never
   - Seldom
   - Sometimes
   - Usually
   - Almost Always
   - Always

4. Following directions
   - Never
   - Almost Never
   - Seldom
   - Sometimes
   - Usually
   - Almost Always
   - Always

5. Independent
   - Never
   - Almost Never
   - Seldom
   - Sometimes
   - Usually
   - Almost Always
   - Always

6. Ambitious
   - Never
   - Almost Never
   - Seldom
   - Sometimes
   - Usually
   - Almost Always
   - Always

7. Effective
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<td>Never</td>
<td>Almost Never</td>
<td>Seldom</td>
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<tr>
<td>8. Reliable</td>
<td>Never</td>
<td>Almost Never</td>
<td>Seldom</td>
<td>Sometimes</td>
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<td>9. Tardy</td>
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<td>10. Initiating</td>
<td>Never</td>
<td>Almost Never</td>
<td>Seldom</td>
<td>Sometimes</td>
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<td>11. Perceptive</td>
<td>Never</td>
<td>Almost Never</td>
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27
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<thead>
<tr>
<th>#</th>
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<tbody>
<tr>
<td>12. Honest</td>
<td>![radio buttons]</td>
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<td>13. Irresponsible</td>
<td>![radio buttons]</td>
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<td>14. Efficient</td>
<td>![radio buttons]</td>
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<td>15. Adaptable</td>
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<td>16. Careful</td>
<td>Never</td>
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<td>17. Appreciative</td>
<td>Never</td>
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<td>Seldom</td>
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<td>Usually</td>
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<td>18. Accurate</td>
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<td>19. Emotionally stable</td>
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<td>20. Conscientious</td>
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<td>21. Depressed</td>
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<td>22. Patient</td>
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<td>23. Punctual</td>
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<td>24. Devious</td>
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<td>25. Selfish</td>
<td>Never</td>
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<td>26. Negligent</td>
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<td>27. Persevering</td>
<td>Never</td>
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<td>28. Likeable</td>
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<td>Usually</td>
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</table>
29. Helpful
- Never
- Almost Never
- Seldom
- Sometimes
- Usually
- Almost Always
- Always

30. Apathetic
- Never
- Almost Never
- Seldom
- Sometimes
- Usually
- Almost Always
- Always

31. Pleasant
- Never
- Almost Never
- Seldom
- Sometimes
- Usually
- Almost Always
- Always

32. Cooperative
- Never
- Almost Never
- Seldom
- Sometimes
- Usually
- Almost Always
- Always

33. Hard working
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<th>Sometimes</th>
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<th>Always</th>
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<td>38. Persistent</td>
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<td>39. Hostile</td>
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<td>40. Dedicated</td>
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<td>41. Devoted</td>
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42. Courteous
- Never
- Almost Never
- Seldom
- Sometimes
- Usually
- Almost Always
- Always

43. Considerate
- Never
- Almost Never
- Seldom
- Sometimes
- Usually
- Almost Always
- Always

44. Careless
- Never
- Almost Never
- Seldom
- Sometimes
- Usually
- Almost Always
- Always

45. Productive
- Never
- Almost Never
- Seldom
- Sometimes
- Usually
- Almost Always
- Always

46. Well groomed
47. Friendly
   Never
   Almost Never
   Seldom
   Sometimes
   Usually
   Almost Always
   Always

48. Loyal
   Never
   Almost Never
   Seldom
   Sometimes
   Usually
   Almost Always
   Always

49. Resourceful
   Never
   Almost Never
   Seldom
   Sometimes
   Usually
   Almost Always
   Always

50. Modest
   Never
   Almost Never
   Seldom
Sometimes
Usually
Almost Always
Always
The distribution of questionnaires is shown in Table 1.
Table 1: Distribution of Questionnaires at the PAAE&T

<table>
<thead>
<tr>
<th>Name of PAAE&amp;T College /Institutes</th>
<th>Selected Major</th>
<th>Selected Sectors</th>
<th>Distribution of Questionnaires in PAAE&amp;T</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Kuwait Oil Company, Kuwait Petrochemical Industry, Kuwait Fleet Oil, Kuwait National Petroleum Company, Ministry of Electricity &amp; Water,</td>
<td></td>
</tr>
<tr>
<td>College of Technological Studies</td>
<td>Electrical, Petroleum, Manufacturing, Mechanical, Production, Electronic &amp; Computer, Chemical, Applied Science.</td>
<td>181 Male 82 Female 173 Male 185 Female</td>
<td></td>
</tr>
<tr>
<td>College of Health Science</td>
<td>Nursing, Environmental Studies, Nutrition,</td>
<td>26 Male 61 Female 25 Male 44 Female</td>
<td></td>
</tr>
<tr>
<td>College of Nursing</td>
<td>Nursing, Medical Reports,</td>
<td>13 Male 19 Female 19 Male 40 Female</td>
<td></td>
</tr>
<tr>
<td>High Institute of Energy</td>
<td></td>
<td>34 Male 0 Female 78 Male 0 Female</td>
<td></td>
</tr>
<tr>
<td>Institute of Nursing</td>
<td>Nursing</td>
<td>0 Male 32 Female 0 Male 58 Female</td>
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<tr>
<td>Total (1069)</td>
<td></td>
<td>254 Male 194 Female 294 Male 327 Female</td>
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</tbody>
</table>

Personal interviews were conducted with the heads of the selected departments within the investigated colleges and institutions. The main objective was to obtain an inside view of the most important factors determining the quality of PAAE&T graduates and to evaluate whether graduates from PAAE&T are well equipped with the necessary knowledge, skills and attitudes. Several issues were discussed, such as curriculum
development, connection to related industry and business, staff competence, the evaluation system, and the quality of workshops. The research was also expanded to include meeting with heads of industrial training programmes in the selected colleges and institutions to evaluate the effectiveness of such programmes in enriching student competence. The issues raised include the length of the industrial training programme, student attitudes, the evaluation system, collaboration with a employment sector, and obstacles (if any) facing suppliers (PAAE&T) and employers. The deans of the selected colleges and institutions were also interviewed to identify and examine the colleges’ and institutes’ overall plans (if any) for providing employers with skilled and semi-skilled Kuwaiti labour and to pinpoint any obstacles hindering the achievement of such an aim. The investigated areas include whether the employers of PAAE&T gradates and the departments involved in selecting colleges and institutions participated in setting, implementing and evaluating the plan; whether the plan considered an overall national labour plan; the degree of success in achieving the plan's objectives; the sufficiency of the allocated resources; and obstacles in implementing the plan.

Personal interviews were also conducted with supervisors in the employment sectors who were in direct contact with PAAE&T trainees and graduates. Several aspects were investigated, such as the following: effectiveness and efficiency of the industrial training programme; students’ knowledge, skills, attitudes, and problem-solving ability; the number of PAAE&T who drop out after working in a related industry; degree of collaboration between students and PAAE&T staff; students’ awareness of
safety and health rules and procedures; students’ hours worked; students’ communication skills; and whether students met overall employment requirements.
Personal Interview, Dean of the Faculty of Technological Studies.

1. Are you aware of SWOT analysis?  Yes ☐  No ☐

2. How often you conduct SWOT analysis in an academic year?
   One time ☐  Two times ☐  Three times ☐

3. Who normally conduct SWOT analysis?
   Heads of Departments ☐  Special Committee ☐  Outside committee ☐

4. What are the most areas tackled by SWOT analysis?
   - Research & Development ☐
   - Curriculum Development ☐
   - Evaluation Scheme ☐
   - Organizational Structure ☐
   - Strategy & Planning ☐
   - Staff Development ☐
   - Others (Please specify): ________________________

5. Are you satisfy with the outcome of SWOT analysis?  Yes ☐  No ☐

6. How you evaluate the following aspects:

   Excellent  V. Good  Good  Acceptable  Poor
   - the Faculty Mission, Strategy, and Planning in related to current and future market requirement. ☐ ☐ ☐ ☐ ☐
   - the Faculty organisation Structure. ☐ ☐ ☐ ☐ ☐
   - the allocated budget. ☐ ☐ ☐ ☐ ☐
   - the standard of workshops and laboratories. ☐ ☐ ☐ ☐ ☐
   - the standard of teaching. ☐ ☐ ☐ ☐ ☐
<table>
<thead>
<tr>
<th>Excellent</th>
<th>V. Good</th>
<th>Good</th>
<th>Acceptable</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>- the communication channels.</td>
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<tr>
<td>- the standard of linkage with related industry.</td>
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<tr>
<td>- the standard of research and development.</td>
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<tr>
<td>- the standard of curriculum.</td>
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<tr>
<td>- the evaluation system for the academic staff.</td>
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<tr>
<td>- the standard of health and safety.</td>
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<tr>
<td>- the quality of graduates.</td>
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</table>
Personal Interview, Head of the Department of Production Engineering, Faculty of Technological Studies.

1. Are you aware of SWOT analysis?
2. How often you conduct SWOT analysis?
3. Who normally conduct SWOT analysis?
4. What are the most areas tackled by SWOT analysis?
5. What is the outcome of SWOT analysis?
6. How you evaluate the following aspects:

- the Departmental objectives in relation to the overall faculty objectives.
- the allocation of budget.
- the standard of workshops and laboratories.
- the standard of health and safety procedures.
- the standard of teaching.
- the communication channels.
- the standard of linkage with related industry.
- the standard of research and development.
- the standard of curriculum.
- the evaluation system for both staff and students.
- the quality of graduates.
Personal Interview, Selected Academic Staff in the Department of Production Engineering, Faculty of Technological Studies.

Part One: Introduction

The main objective of this work is to identify and examine academic staff perception towards SWOT analysis as a main method for improving the quality of learning.

Please do provide accurate answers for the following questions. The gathered data would be dealt in great confidence.

Part Two: General Information

1. Nationality:  
   - Kuwait
   - Non-Kuwaiti

2. Qualification:  
   - Ph.D.
   - Master
   - Bachelor

3. Years of Experience at the Department:
   - Less than 2 Years
   - 2-4 Years
   - 4-6 Years
   - 6-8 Years
   - 8-10 Years
   - More than 10 Years

4. Years of Experience at industry before joining the Department (if applicable):
   - Less than 2 Years
   - 2-4 Years
   - 4-6 Years
   - 6-8 Years
   - 8-10 Years
   - More than 10 Years

5. Number of published work in a refereed journal:__________
6. Are you aware of the College Objectives?
   Yes  [ ]  No  [ ]

7. Are you aware of the College Strategy?
   Yes  [ ]  No  [ ]

Part Three: Measuring the perception of SWOT analysis

8. Are you aware of SWOT analysis?
   Yes  [ ]  No  [ ]

9. If “Yes”, How many times you have conducted SWOT analysis during the last five years?
   One times  [ ]  Two Times  [ ]  Three Times  [ ]

10. Which areas you have tackles in SWOT analysis?
    - Departmental Objectives.
    - Curriculum Development.
    - Teaching Methods.
    - Evaluation Scheme.
    - Research and Development.
    - Interaction with Industry.
    - Others (Please Specify):

11. How you evaluate the efforts in improving the following aspects:
12. Please indicate any comments/suggestions that you feel important for the topic under investigation.

_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________
_____________________________________________________________________

Thanks.