

Analyzing the Industrial Internship Training Practices at the Institute of Applied Technology: In affiliation with the three stakeholders: students, institute and industries

تأثير التدريب الصناعي الداخلي في معهد التكنولوجيا التطبيقية: في
الانتماء مع أصحاب المصلحة الثلاثة: الطلاب، ومعهد والصناعات

**By
Gilda Minnette Rodrigues**

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Dissertation Supervisor
Dr. Clifton Chadwick
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Analyzing the Industrial Internship Training practices at The Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

Abstract:

This study aims at giving prominence to the Industrial Internship Program at the Institute of Applied Technology, in the United Arab Emirates, for grade 11 students, who graduate in one of the Engineering Science, Electrical Engineering, Automation & Mechatronics or Information & Computer Technology clusters. There are three stake holders involved in this research: the students undergoing the Internship, the Institute catering to the program and the Industries hosting and providing the internship. This study is centered around the perspectives of these three stakeholders. The research investigates if the following aims of the program are met:

- a. to gain work experience and work ethics
- b. to put to practice what they learn at school.
- c. to foster close and cooperative relationships with the community, industry, commerce, and the government.

This research also highlights the role played by potential businesses in making the internship experience a success. The data required for this research was collected from students and all company supervisors during the internship period, through questionnaires and interviews. The data was then analyzed through Statistical Package for Social Sciences (SPSS). This study will help the three stakeholders in enhancing the Industrial Internship Training effectiveness in the near future.

تأثير التدريب الصناعي الداخلي في معهد التكنولوجيا التطبيقية: في الانتماء مع أصحاب المصلحة الثلاثة: الطلاب، ومعهد والصناعات

1. ملخص

تهدف هذه الدراسة إلى إعطاء الأولوية للبرنامج التدريب الصناعي في معهد التكنولوجيا التطبيقية، في دولة الإمارات العربية المتحدة، لطلاب الصف 11، والذي سيتم تخرجه في واحدة من التخصصات التالية: العلوم الهندسية، الهندسة الكهربائية، الميكاترونكس أو الحاسب الآلي و تكنولوجيا المعلومات. وشارك في هذا البحث الفئات الثلاثة المعنيه وهم: الطلاب تمر التدريب، وخدمات المطاعم معهد للبرنامج والصناعات استضافة وتوفير التدريب. وتتركز هذه الدراسة حول وجهات نظر أصحاب المصلحة هؤلاء الثلاثة. وبحث التحقيق في حالة تحقق الأهداف التالية من البرنامج:

أ. لاكتساب الخبرة في العمل وأخلاقيات العمل

ب. لوضع لممارسة ما تعلموه في المدرسة.

ج. لتعزيز العلاقات الوثيقة والتعاونية مع المجتمع والصناعة والتجارة، والحكومة.

هذا البحث يسلط الضوء أيضا على الدور الذي لعبته الشركات المحتملة في جعل تجربة التدريب ناجحا. وقد تم جمع البيانات اللازمة لهذه البحوث من الطلاب وجميع المشرفين على الشركة خلال فترة التدريب، من خلال الاستبيانات والمقابلات. ثم تم تحليل البيانات من خلال الحزمة الإحصائية للعلوم الاجتماعية (SPSS). وتصور أن هذه الدراسة سوف تساعد أصحاب المصلحة الثلاثة في تعزيز فعالية التدريب الصناعي في المستقبل القريب.

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ABBREVIATIONS

- AI Ain F C Al Ain Female Campus
- AI Ain M C Al Ain Male Campus
- CV Curriculum Vitae
- DEWA Dubai Electricity and Water Authority
- DUBAL Dubai Aluminium Company
- FEWA Fujairah Electricity and Water Authority
- HCT Higher Colleges of Technology
- HR Human Resource
- IAT Institute of Applied Technology
- IIT Industrial Internship Training
- NCTA National Council for Technological Awards
- SBL School Based Learning
- SCD Sharjah Civil Defence
- SEWA Sharjah Electricity and Water Authority
- TVE Technical and Vocational Education
- UAE United Arab Emirates
- UK United Kingdom
- US United States
- WBL Work Based Learning
- SPSS Statistical Package for Social Sciences

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1. Abstract

This study aims at giving prominence to the Industrial Internship Program at the Institute of Applied Technology, in the United Arab Emirates, for grade 11 students, who graduate in one of the Engineering Science, Electrical Engineering, Automation & Mechatronics or Information & Computer Technology clusters. There are three stake holders involved in this research: the students undergoing the Internship, the Institute catering to the program and the Industries hosting and providing the internship. This study is centered around the perspectives of these three stake holders. The research investigates if the following aims of the program are met:

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2. Introduction:

The United Arab Emirates and the nations have spared no means in creating awareness and educating its people since 1971. General Education and Higher Education sectors had been the focus of the United Arab Emirates (UAE) government, in providing commercial, and industrial education from grades nine to twelve. However, during this time there were many obstacles such as budget constraints that hindered their growth. Nevertheless, from 1988, onwards the establishment of the Higher Colleges of Technology and the Ministry of Higher Education and Scientific Research, UAE, gave the Vocational Education and Training a renewed vision.

The Higher Colleges of Technology, the HCT, in the UAE, has been delivering technical and professional programs of a very high standard to all its students, keeping in mind a respect for values and beliefs of all cultures. The graduates are trained to face the international market and the world at large both technologically as well as intellectually. Since the HCT offers such a program to its students, it has increased the student enrolment from 2,568 in 1996 to about 9484 in 2007, during the last ten years and it keeps growing every year, as mentioned by the Dean of HCT in an interview conducted at the Career Fair 2011.

During the same time, another institute, the Institute of Applied Technology – the IAT, was established to replace the vocational schools of the Ministry of Education in the UAE. The IAT was founded in 2005 through a Royal decree of His Highness Sheikh Khalifa Bin Zayed Al Nahyan, President of the United Arab Emirates as mentioned in the IIT@IAT handbook. The establishment of the Institute was the initiative of General Sheikh Mohammed Bin Zayed Al Nahyan, crown prince of Abu Dhabi. His Highness envisioned The Institute- (IAT) as

a world class Technical Career Education System that would produce the scientists, engineers and technicians needed for the UAE, to build a knowledge-based economy.

According to the Director General of The Institute of Applied Technology, this is an innovative and modern world, which is developing so rapidly, that one needs to keep abreast of all the knowledge flowing around. And, in order to achieve this there is a need to master all the knowledge in Science and Technology and acquire occupational skills through Career-based Technical Education. It is this passion that provides the drive to this program.

2.1: Industrial Internship Training at The Institute of Applied Technology:

The IAT offers programs to local students from grade nine to grade 12. It has grown over the years from 2005 until now. Initially, It began with five campuses in Abu Dhabi, Dubai, Al Ain, Fujairah and Ras Al Khaimah. However, in the last three years it has grown from 5 campuses to establishing all over the Northern Emirates. The motto of the IAT is to teach, train and equip the younger generation with the required knowledge and skills as deemed fit by the labor market in the UAE and the world.

Along with its commitment in developing intellectual and creative capacities of the IAT students through the ethics program, summer internship has been a long-held tradition at the school. Each year students choose from among hundreds of individual volunteer opportunities — from working in hospitals to assisting senior citizens to organizing cultural activities in old aged homes and more. The Community Service / Careers office of the school, serves as both a clearinghouse and referral agency for these volunteer placements.

Students can choose to participate in the Community Service Learning Program known as the Industrial Internship Training at The Institute of Applied Technology (IIT@IAT), a series of elective courses designed to give students an inside look at the operations and organization of actual community service agencies and to develop and implement service project models of their own as their graduation projects. The elective sequence begins in 9th grade with an Introduction to Industrial Internship Training course designed to acquaint the prospective volunteer to the wide range of non-profit service placements available in the United Arab Emirates. By 10th grade, the students go through participation of career fairs and more insight into the Industrial Training Opportunities.

When the students reach the 11th grade they are given the option to work as Interns in companies in the UAE and abroad. When they reach the 12th grade students may choose from several options which include continuing with the previously developed school project to engaging in research at a community service agency or working with the company they were placed in for their summer jobs. However, finding the summer internship that is a perfect match can be a challenging first step for the students.

Work in service to others has long been a tradition at the IAT. It is believed that there is much educational value in work - the opportunity to cope with non-academic settings to have new experiences, and to be of genuine use to others. Community service credit is a requirement for graduation. Some of the service jobs are primary: The students provide services directly to people in need, such as answering correspondence for a person who does not know to read and write or helping a friend with learning problems. Other service jobs are secondary: The student performs routine tasks, such as filing, book sorting or organizing an event.

Both kinds of service are worthy, and are for community service credit. The organization where the students do their internships is clearly non-profitable to

most of the students. However it is the initiative of the Institute that provides a stipend at the end of the Internship. Students and Company personnel are congratulated at the end of the Internship, during a special Internship Ceremony where certificates of work well done and certificates of successfully completing the internship are awarded.

In order to aid students in their search for appropriate placements, the Community Service / Careers office, serves as a referral agency for volunteer student placements. Based on the initial interview of the student, the staff works to structure and monitor the quality of the work of the student, maintains contact with more than 100 non-profit agencies which serve as job sites in the community, oversees and arranges agency orientations and training of volunteers, and act as resource consultants to school-wide social clubs and teachers who wish to incorporate service projects into their course material. The career counseling office keeps a track of all the potential businesses around the UAE, and abroad. Students are then given an opportunity to choose their workplace keeping in mind their cluster of study.

Summer internship is also an investment in oneself and one's own future. According to the post on edublogs 2011, the internship programs are designed to help develop skills essential to specific industries or job types. Internship can be the perfect opportunity to expand ones knowledge outside of the classroom. The hands-on real-world experiences that one encounters during an internship program enable a person to develop his potential and make key contacts for future networking. The IAT students have utilized their internship to determine their interest level in certain career fields, get feedback from professionals regarding their strengths and weaknesses, and to further their education and expand their resume.

2.2: The Importance of Internships:

One of the most important steps to be successful in life is to have a secured career. This can be achieved by completing an internship before graduation. There are many benefits for pursuing an internship opportunity. Some of the reasons are:

1. Gain Real-World Experience:

Many companies and employers look for candidates who have had some real – world experience. They prefer individuals who have worked in an industry and one of the ways to gain this experience is by supplementing classroom education with on-the-job experience as provided by the Institute of Applied Technology. An interview with the HR Manager of Dubai Aluminium Company (DUBAL), confirmed the above statement. He said that his organization looked forward to recruiting students who had some knowledge of the work place. He said that it made things much easier for the Human Resource (HR) team to explain to the person being recruited as after an internship, the person being recruited would know and follow all the work ethics.

2. Set Yourself Apart:

Students, who have completed their internship over the period of their study at IAT-Dubai, said that it had made them unique individuals, who had the prestigious experience of an internship. It had set them apart from the others, as they were more knowledgeable about the job they were in. Humaid Hathboor, who did his internship abroad at PHYWE, said that his internship experience had made him a better person. Besides, teaching him how to organize his time, it had also given him the confidence that he lacked before. He said that he could now face the challenges of the world especially in a place such as the United States of America, where he is pursuing his studies. He said that his experience had made him confident and independent.

3. Continue Your Learning:

The student interns felt that internships offered them additional training and learning, enriching their education as they applied what they learnt in class at their workplace. They felt that they could understand concepts better after an internship. Mohammed Abdulla who did his internship at Sharjah Municipality said that he put to practice all that he had learnt in the Automation class. He added that it was hands-on experience, which gave him the joy of using his knowledge in real life.

4. Test the Water:

The employers have the benefit of testing their employers over a period of time during their internship. It is a great opportunity to achieve one's career goals. It is also a time where one can decide which career to choose and which to opt out from. Mohammed Essa, a graduating student said that he had finally decided what he wanted to do after his graduation. He said that he wanted to work as a pilot in Emirates Airlines. The internship experience had shown him the various opportunities that were open for him, and had helped him to take a decision.

5. Opportunities for the community at large:

This provides the companies' involved ample opportunities to market their product. In simple words both the student community as well as the businesses in the UAE, flourish as it helps in the emiratization process and helps create opportunities for their future growth. Many of the company representatives who participated in the career fair at the Applied Technology High School Dubai, said that they were very happy to be participating in the career fair as it provided them a platform to explain to the students what they had to offer at the work place. They further stated that it also allowed them to recruit students for the future, and aid in the emiratization process.

2.3 Theoretical Framework:

The Activity Theory, which is drawn from the socio-cultural tradition of learning, has been the basis for the theoretical framework and was developed by prominent researchers such as Cole (1995), Wenger (1998) and Engestrom (2001). The main elements that help acquire the required knowledge and skill are the community of practice, meaning the place of work. Billett (2002) has clarified both the observation and analysis of learning at the work place. Fuller (2003) has also explained the various resources and the pedagogical relationships that are developed at the work place and which aid in developing the knowledge and skills needed by students.

Billett (2002), has further highlighted that internships are mainly of two types:

1. Integrating whatever you learn each day into the work environment.
2. Supervision by a mentor or an experienced person guiding you through the workplace.

In the first type, students are engaged both emotionally and socially in a productive activity where they acquire knowledge through various work activities as stated by Billett (2002). This provides the students with the adequate knowledge required to find solutions to the problems and seek professional assistance from immediate supervisors or mentors.

In the second type, learning is more explicit. Minor details of the workplace are either explained or demonstrated by the internship supervisors or mentors assigned during the internship period so as to take care of details, which could otherwise be forgotten. This makes the internship more meaningful as there is attention to detail. Billett (1994) suggested that this made the interns understand operations better.

Furthermore, Billett (1996) added that internships or work based learning are one and the same and suggested that the instructors play an important role while giving the knowledge of the work place. He suggested a collaborative learning curriculum, which would highlight the following:

1. A training plan featuring procedures and processes of productive activities.
2. Internship supervision by experienced work supervisors or mentors who were well versed in the job
3. Active involvement in problem solving activities that would impart and enrich professional knowledge.

The approach followed by Billett inspired the researcher to give prominence during the present internship study.

3. Relevant literature:

3.1: Introduction to Internships:

Internships or work based learning have been a strong feature since the 1950s, all over the world. Although it is only now that much is said and done about Internships, the curriculum of most of the programs incorporated industrial placements about 40 years ago according to National Council for Technological Awards – NCTA (1955), in the United Kingdom (UK). This was followed by a sandwich degree in 1988, and this included a period of supervised work experience – which meant supervising the student at his work place and assessing him as highlighted in CNAA (1988). It was Nixon (1990) who referred to supervised work experience-Internships and work based learning as the same thing. Lyons (1993) argued that it is just a little view of work based learning, but the fact remains that whatever the purpose, it does include work placement. Internships are termed as training and development in the company. It involves doing a job of work, which is then evidenced and assessed by the Institute within higher education.

3.2: Mission and Core Values of Internships

Internships help shape the life of an individual providing him with the required knowhow about any career or business development. The benefits are dual-both for the interns as well as the employers. However, much care has to be taken in order to arrange an internship. There is a range of internships available. This gives the individual student ample time to explore the idea of an internship and it gives the businesses time to explore the different options in providing internship,

before they enter into a commitment. This helps both the parties to benefit in achieving their goals. Businesses can expand their staff thereby improving their financial status and employ talented youngsters, while the individual students on the other hand gain rich experience at their work place, acquire a range of work skills and are often thrown earning opportunities by the employers for their future.

3.3: Internships and Work Based Learning:

Work based learning in the form of Internships is not a new initiative. According to Kampits et al (2001) about two-thirds of the graduate students make it a point to participate in at least one internship during their tenure at school and the remaining students participate in at least two or more work based learning activities thus highlighting the importance of internships.

As mentioned in the National Survey of Student Engagement (NSSE Viewpoint, November 2001), in the United States, almost two-thirds of the college and university students have to do some volunteer work to get the extra credits and about 72 percent are actively engaged in internships.

Work based learning is not a new trend in education. In fact all that we see and term as vocational education or internships were actually founded by John Dewey in the late 19th and early 20th century. Dewey believed in integrating the world of work with the education curriculum. Dewey (1916) pointed out that when such exercises formed a part of the school program, it kept the students' actively engaged and motivated in learning and this reduced the gap between the schools and the outside world. Although Dewey's thesis did not bring about a major change in the American education system it did create a renewed vision transforming and offering many practical ways to teachers and the school at large so that school education would be more genuine. The new Federal Legislation of the 1990s also brought with it a change in name from the vocational and

technical education to career and technical education leading to the school-to-work Act of 1994, in the United States. According to Hughes et al (2001) the main intention of the school-to-work Act was to provide education and career guidance during their secondary school years making them productive at work and self-sufficient. Research over the past decades has shown that internships in the form of work-based learning have been a positive factor and have enhanced both the academic and professional performance of the students.

Internships provide a natural bridge between college and the work world as stated by Coco (2000). It is a valid fact that internships are widespread on campuses that offer post secondary classes, rather four-year institutions. Coco (2001) has further argued that most of the students who do their internships are graduating students and prefer to do these internships as it offers them better job opportunities and chances for better options. He stressed that about 58 percent of the graduates who had done their summer internship, had job offers before graduation, compared to the other 30 percent graduating students.

Copa (2002) has expressed that keeping in mind the 21st century, learning needs to:

- keep the learners engaged and motivated.
- be challenging and help them achieve targets.
- be more project-based.
- be integrated with career education.
- assess learning in multiple ways.
- form various learning centers.

Research done by Hughes et al (2001) proved that students who completed their internships during their course of study tend to stay back and finish their diplomas as compared to students who didn't complete their internships and pursue their studies taking difficult courses. A further study done by Swail (2001)

highlighted that the students who had experience and were exposed to internships scored better in their results, and had high GPAs. Yet another research done by Swail (2001) showed that about 80 percent students indicated that they learnt better through projects and real world applications and preferred being interns rather than taking in only textbook classroom instruction. These students acquire knowledge and skills to do certain jobs, thereby learning all aspects of the job which in turn improves their personal and social competence making them do well academically as well as intellectually.

According to Kampits et al (2004) some of the work-based learning / internship activities that can be offered are:

1. Job – Shadowing programs that are usually for a day or two where in a student is allowed to observe a person at his work place – at his job.
2. Summer Internships that are usually for a specified period of time, as deemed fit by the institution and the company of placement, and allow a student to gain hands-on experience in a job of his choice or cluster.
3. Community service programs that are normally educational experiences, which give students credits for participating in identifying the needs of the community and helping out. This can be either school-sponsored initiative or an initiative by the student himself to earn the credits that the student requires.

3.4: Stake holders in an Internship:

For many, internships are a dynamic process, unfolding structured work experience. What distinguishes internships from other processes of learning is the fact that negotiation between the student, employer and the Institution holds good and it is this negotiation between these three stake holders that helps bring about the learning outcomes that are challenging to the student, relevant to the employer and have academic reliability as outlined by the Institution. The review of internships during studies is not limited to these three stakeholders, as cited above, although they do have relevance to the research, but it will determine the validity of learning that is envisaged from the workplace. Valuable internships provide the skills and knowledge, which people require at their workplace while doing their jobs and the main focus of this research is to see how the knowledge acquired is susceptible to the various forms of assessment in academics.

The three stakeholders in the internship process are the student, the employer and the academic institution, which provides the credits to the individual. Each of the above have varying interests such as, the student would like to work as an intern in order to gain work ethics and for his personal growth. Whereas the employer needs affordable staff and recognition in the market, and the academic institution on the other hand provides internships to its students as a way of enhancing teaching and learning and fulfilling the responsibility of providing vocational education. Each of the stakeholders has varying interests. However, it is in these interests that the internship was carried forward.

3.5: Benefits of a Required Internship Program:

Miller, R., et al (2007), have highlighted the importance of Internships to all the three stakeholders as shown in table 1 below.

Table 1
Benefits of Internships to Students, Departments, and Employers

<i>Stakeholder Groups</i>	<i>Benefits</i>
Students	<p>Work experience that strengthens resume</p> <p>Better understanding of the world of work</p> <p>Better base for adjustment to the work environment</p> <p>Learn about work in a guided and mentored environment</p> <p>Opportunity to see the application of academic concepts</p> <p>Ability to bring "real world" experiences into subsequent classes and to share those with other students</p> <p>Improved job-related skills</p> <p>Better prepared for post-graduation job</p> <p>Clarification of career goals</p> <p>Increased marketability compared to students without internships</p> <p>Enhanced leadership skills</p>
Departments	<p>Increased enrollment as students recognize the competitive advantage the internship provides</p> <p>Strengthened business connections</p> <p>Enhanced reputation of the program compared to programs that do not require internships</p> <p>Employer feedback helpful for assessment</p>
Employers	<p>Source of qualified, low cost, motivated workers</p> <p>Opportunity to evaluate potential long-term employees without long-term commitment</p> <p>Source of employees for peak load periods</p> <p>Strengthened relations with business schools</p>

3.6: Benefits to Students:

Students' benefit by gaining concrete work experience. The idea of completing internship adds to their resume and gives them extra chances of finding a suitable job. According to Perez (2001) students gain valuable experience during an internship and are exposed to the real world of work, which they can carry forward for their future. Smith (1998) added that an internship experience makes education more relevant and interesting for students. Watson (2005) stressed that students are able to apply all that they have learnt in the classroom to real life situations. Furthermore, students are able to share their internship experiences with the other students preparing them, in turn for their future internship, as stated by Swift (1999). Upon completion of an internship the student may be lucky enough to join the same organization as a permanent employee as investigated by Gault et al (2000). It does help the students to clarify their goals. Many researchers such as Joseph (2003), Coco (2000) and Schlager (2000) are of the opinion that there is not much adjustment needed at the work place once the students leave the school environment.

3.7: Benefits to the Department

As mentioned by Coco (2000) internships provide a good reputation for the Institute that caters to the Internship Program. There is widespread publicity to the department that offers the internship facility. Also, the feedback from company supervisors provides the comparative details of students who are placed in various companies for their internship with other students who do not have an opportunity to do the internship. An internship provides an interaction between company personnel and the Institute and proves beneficial in the long run to both the stake holders – the company as well as the Institute by providing long term benefits in the form of student job placements, participation in career fairs and by providing guest speakers to speak to students during career days.

Contacts made with business community enhance the professional growth and help keep up to date with the businesses at large.

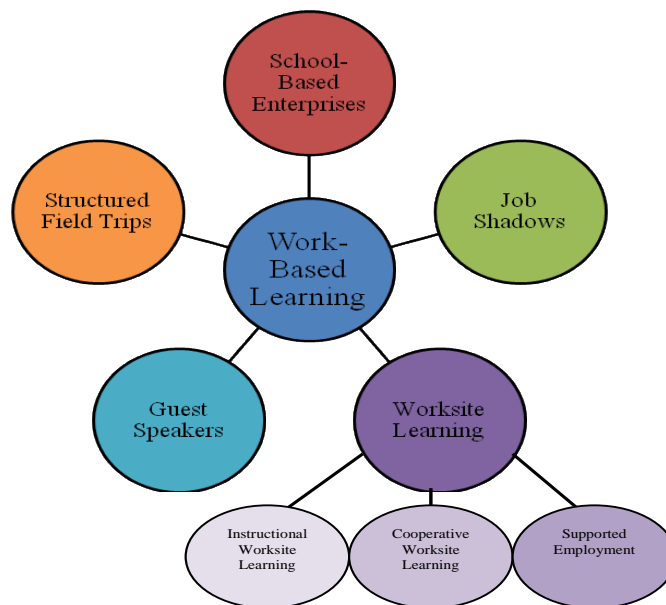
3.8: Benefits to the Employer

Employers tend to benefit by providing internships as this works out as a source of well qualified, and motivated labor that enter the workplace with their expertise and qualification as stated by many researchers such as Coco., et al (2000). Interns also work out to be cheap labor for the employers who end up on saving the cost of spending on their salaries. It also allows employers to evaluate the work done by the students and prepare them to be long time employees. Interns are an asset to employers as they can easily fill out positions when their employees go on vacation.

3.9: Types of Internships or work based learning

There are many types of internships that can be provided to students. Listed below are some internship types as cited in the Washington state Worksite Learning Manual by Bergeson, T., et al (2008) as shown in Fig 1.

Fig 1:



1. Guest Speakers

Experts in a particular industry are invited to showcase their industry to a group of students. They are expected to showcase the skills needed to be successful in their industry along with the other employability skills. They are also expected to clear doubts of students by answering their questions and act as resources for students pursuing a particular occupation.

2. Structured Field Trips

These are work-based learning activities where a teacher accompanies a group of students to a worksite. A representative from a particular industry normally hosts this trip. During the field trip students are expected to observe employees at their work place, ask questions and learn by watching others. Subsequently, this trip ends up in discussions and follows up with letters to enhance the experience.

3. School-Based Enterprises

This is another service that keeps students engaged in production of goods or services as part of the school program. Students take part in organizing school events and assist in hosting and managing the events.

4. Job Shadows

Jobs shadows usually allow students to explore the work place and follow an employee to learn a particular job or to learn more about the industry. This helps the students to explore their career opportunities and plan their study beyond. It also helps students to connect their classroom study to real life situations, and exposes them to the educational options for their future.

5. Worksite Learning

Worksite learning occurs outside the classroom and fulfills the student's career plan. It is more structured and comprehensive. It provides the students opportunities to apply their knowledge and skills at the work place.

6. Instructional Worksite Learning

Instructional worksite learning normally takes place in vocational education schools where the students put their theory to practice. Whatever they learn in the classroom is practiced in the workshop. The student works under direct

supervision and instruction in order to gain the skills and qualifications required in pursuing the course and being competent enough in the same.

All worksite learning is categorized as either instructional or cooperative. Other terms used by some industries may include internship, clinical experience, youth, or pre-apprenticeship. These worksite-learning programs may also be either instructional or cooperative worksite learning according to many researchers who have done research in the field of work-based learning.

3.10: Challenges Associated with Implementing and Administering a Required Internship Program

During the implementation of the Internship program there are many challenges that make the internship process more exceptional. One that is most provocative is the assigning of an Internship Director. If the internship training is made mandatory for the grade 11 students, it increases the workload of the Internship Director. So, there is every possibility that the person assigned may not be willing to take up the position and the role of Internship Director. Getting the right person for that job too is very difficult, as the person assigned for that job should be exceptionally qualified and should possess skills such as solving problems, mentoring, advising, time management, solving conflicts, as well as teaching and planning the internship.

The internship Director should be well versed with all the possible careers offered in the market as concluded by Smith (2008). For this reason, it is often stated that it is difficult and challenging to find a person with so many skills and abilities and with the knowledge of what is going around.

In addition, typically, the person has to do both teaching as well as administrative duties. This unique nature of the position makes it unattractive to any person, because of the additional duties. Hence it is a challenge to get the right person

for the job. It is a challenge faced by the department to find the person who is both interested and capable for the job.

3.11: The need for Work Based learning and Internships:

The schooling process is mostly about the learning of content knowledge, academic knowledge and that, which has very little relevance to real life. This approach has made the youth of today question, why they learn what they learn. Research has shown that these students see little intrinsic value in their schooling process. This skepticism has made them question the educational reform and ask for a change in the system.

Youngsters in the UAE and the all over the world are dropping out of school. This has caused a big concern as the high school drop out rate has sparked a debate as to how best the educators can engage the student community. Just completing high school is not enough today, and the students need to pursue their studies for a better tomorrow. In order to succeed in their endeavors, the student community needs opportunities to develop both their mental and cognitive abilities, to gain the required skills and be competent enough for the work place.

Research has proved that work-based learning is a great tool to enhance student learning as it has multiple pathways. According to Canales et al (2009), students have to be introduced to different communities to provide exposure to their areas of interest, giving them an opportunity to demonstrate problem-solving skills, in ways, which are otherwise not provided in traditional classroom teaching. Canales et al (2009) further confirmed that work- based learning has a close link to the school-based instruction and opportunities need to be provided beyond the school curriculum. They are also of the opinion that work-based learning uses the

work place to engage graduating students and promote learning giving them an access to future educational and career opportunities.

Hoerner (2005) and many other researchers are of the opinion that the present generation is not interested in studies, or rather in the schooling system and it is this thinking that begs for an education reform. Hoerner (2005) has further stated that there is an urgent need to rectify this current condition by connecting school and work and see it as a matter of great concern, as the American education fails to produce work ready citizens as researched by the National Center on Educational Quality of the Workforce in America. They have much evidence to show that school and university students do not have basic problem solving techniques and that most of the time their knowledge is very limited, and when they actually go out on a job, their would be employers categorize them as undisciplined and not interested in work.

This holds true even for a place like the United Arab Emirates. It does give us a clear picture of the current educational system. Unlike many industrialized nations, the United States (US) has neglected to include work-based learning within the schooling process for the majority of its youth as mentioned by Hoerner (1996). However, much is said and done to improve this situation as everyone has realized the importance of integrating WBL into the curriculum. Stom (1996) suggests that work-based learning can include different forms such as internships, apprenticeships and workplace simulations. These can be integrated into the School Based Learning so that when a student graduates he goes out into the world with rich experience of the work place, too.

3.12: Critical Review of an article on work based Learning.

A Critical Review of Mishra, Rakesh, Alsiddiqi, Mohamed and Pislaru, Crinela (2009): An Improved Employability Skills Model and its Compliance Through Vocational Educational System in Bahrain. *The International Journal of Learning*, 16 (9). pp. 699-718. ISSN 1447- 9494.

This paper highlights the study conducted to find out the present gaps in delivering skills education in Technical and Vocational Education (TVE) System during School Based Learning (SBL) as well as Work Based Learning (WBL) in Bahrain, according to Al Seddiqi, M. et al (2009). It was done by questioning instructors, personnel from Human Resource Department, and supervisors in industries and getting their feedback to questionnaires to find out the existing gaps between students' skills and benchmarks with regards to three types of skills namely: cognitive, psychomotor and affective. Their answers were then analyzed quantitatively and qualitatively. Based on the data collected, they came up with a new model with modifications in SBL and WBL to be implemented in the TVE system in Bahrain.

According to the authors AlSeddiqi et al (2009), there was a great shift from manufacturing-based economy to knowledge-based global economy, which brought about an immense development and changed it according to the needs of the labor market. It was no longer supply driven but was demand driven. According to the TVE Directory in Bahrain (2006), two types of learning experiences were seen: SBL and WBL. They felt the need to combine SBL and WBL as it would enable the students to be fully prepared to perform confidently and competently, in their professional careers and as it would raise graduates' self-awareness in technical and personal skills to join the job market successfully.

A comparative study of SBL and WBL revealed that although there were a lot of strengths some issues were predominant. Prominent among these were that School Based Learning was a traditional teaching and learning process with a narrow set of practical skills. It lacked a curriculum review and the abilities to link the theoretical contents and practical tasks that they acquired were limited bringing about low involvement with the private sector and the inability to meet the demands of the Bahrain market. WBL on the other hand, had a close tie up to the job market. It provided time for students' decisions during practical activities, according to the authors. They experienced and understood work rules and regulations. However, research revealed a few drawbacks. They observed that practical skills were lacking in the performance of TVE students. Another major issue was the non-availability of official supervisors to train students during the work placement which was an unstable quality standard of providing the training to students.

Mishra et al (2009) presented accurately what the other researchers have had to say with regards to Employability. According to Al Seddiqi et al (2009), the employability skills model contributes in identifying the skills required by the labor market. Kearns (2001) confirmed that most of the employers nowadays look for interpersonal skills with regards to the knowledge they possess and the right attitude to work. So, what the employers look for are the job related skills which according to the authors Al Seddiqi et al (2009) are not provided or acquired in SBL or WBL.

According to the authors and as confirmed by Modrakee (2005) learning at the work-place increased the abilities of students by making them competent in technical skills, problem solving activities and by increasing their communicative skills. The authors have further mentioned that some of the employability skills that employers look for in potential employees are generic skills, career development learning, work experience, a

positive attitude to work and self-efficacy with self-confidence as confirmed by Dacre et al (2007). But, research has shown that our students are not competent enough by the time they reach the work place. They do not have the required work-place skills. So, what the authors are trying to prove holds true.

Majority of the researchers highlighted the importance of imparting specific job skills to students so that they are prepared to face the world. Emotional Intelligence skill is one of them. It is a noted fact that people possessing high intelligence levels are self-motivating first and in turn are motivating to others. Cooper (1997) added that these people end up having successful careers, and good health as compared to people having low self-esteem.

The objective of TVE was to acquaint Bahraini graduates with all the job skills required for various industries in Bahrain according to the authors so that it would prepare them for the labor market. This can hold true even for a gulf country like the United Arab Emirates where much is said about student internships and work placement.

A Questionnaire was prepared to probe the skills required for employment. Although the questionnaire is a great tool for investigation, in this case, it was not very clear what specific skills they were testing. They have said that they were testing affective, psychomotor and cognitive skills. However, being specific and making a mention of the affective skills or the cognitive skills would have been appropriate. Moreover, as one group of respondents to this questionnaire were teachers, it definitely limited the responses as questionnaires were targeted to the teachers from only one school within TVE system in Bahrain.

Mishra et al (2005) mentioned that the data obtained from this exercise was then analyzed; it contained the results of quantitative data

analysis of the responses given by human resources specialists. It refers to the skills and proficiencies that industrial companies from Bahrain require from TVE. Benchmarking the results from section 2 against section 1 identified the employability skills gap. The benchmarking analysis revealed that industrial skills were not fulfilled and hence there was a need for improvement in teaching and learning processes from SBL and WBL.

The authors have established that the effectiveness of TVE system could be determined by using the industry requirements from TVE students/graduates as benchmarks. The analysis of the perceptions about the persisting skills gap had been proved.

The authors were in the opinion that in order to enforce the same, the quality of teaching and learning should improve along with the proposal of a new employability skills model with the development of SBL and WBL modules, by integrating the same with E-learning technology in TVE system as a support to the WBL programs.

4: Rationale: Internship / Work Based Learning

The UAE was established in 1979 and comprises of the seven Emirates: the main religion is Islam. The population is comprised of about 20% Emirati nationals according to the present census. The economy is mainly driven by oil and gas trades and, recently tourism as quoted by Bradshaw et al., (2004). The philosophy behind education in the UAE is directed toward preparing a generation of UAE nationals with the basic understanding and application of skills needed to enable them to contribute to the development of their country according to MOE (2010, n.d).

One of the UAE Government's 2010–20 objectives in the strategic plan is to achieve a first-rate education system that will promote student retention, educational achievement and values by reducing student drop-out rates at schools and colleges, getting parents and the community involved in student education, boosting up different types of activities, providing educational support and counseling in schools and universities, promoting the ways of achieving self-education, ethical values clubbed with educational values, and giving a push to sport, culture and competitions in all schools and universities according to the UAE Year Book (2010). So, this is a great topic for research as to how we can help create a career–technical education system that will help produce the qualified work-force required by the UAE, to make it a knowledge based economy.

In this research, the process of integrating curriculum to work based learning is investigated at the place of work of the Researcher. It was observed that there were gaps in the integration of school-based learning

and work based learning which hampered student placement during their summer internship at various companies in the UAE. These gaps arose due to lack of coordination between the Career Coordinator, Career Counselor, the Internship Supervisors and the students. Additionally, there were no proper guidelines to students highlighting the importance of summer internship and making it mandatory as a result of which, students would apply for summer jobs but not actually complete the internship period. This prompted the researcher to devise ways of making the internship experience challenging and interesting.

There is ample evidence to support work-based learning also known as work placement or Internships. Recent reviews of literature show a significant rise in Work Based Learning as an emerging learning based economy. The workplace provides academics and prepares them to be responsible adults, it also teaches them how to deal with the adults at the place of work, and in many cases incentives are given to attend the work placement according to Hoerner (1996). Further study by Hoerner (1996), has confirmed that in order to meet the needs of each and every individual in a school community, work based learning can be given in different forms such as internships, apprenticeships, volunteer work, student entrepreneurships and various other opportunities. This has also been confirmed by a study done by Stom (1996) in Dyrkman (2005).

Work based learning can be paid as well as non-paid WBL. It can be job shadowing where students follow professionals / workers as they perform their job and is valuable as a career awareness and exploration tool for students according to Hoerner (1996). Such experiences provide the learners an opportunity to link classroom learning and get acquainted with

working requirements. Different options are provided to students to select different opportunities, understanding that they are not always going to get paid. It is something that definitely prepares individuals for the work-place. The basic purpose of this program is to prepare students for a successful career.

Cooperative education provides rich experience during the transition from school to work and helps meet the expectations that are required to job entry level. However, there are a few perceptions of WBL which show that many see it as something that belongs to vocational oriented institutions as mentioned by Nixon, I. et al (2006). But, research and data collected over the years has shown that work-based learning is seen as a means to pull together teaching and learning by the Higher Education System world wide, to make a contribution to the knowledge economy thereby bringing about an effect in the student learning experience as investigated by Brennan (2005).

With so much research being done on WBL, world wide, it was indeed an area for great research in the UAE, where we have so many young Emirati adults graduating and wanting to work. This initiative and motivation drives these youngsters to the work place. But, research and experience proves that these students do not have the expertise and the skills required for the job.

Some institutes and colleges in the UAE, provide opportunities for these students to have some experience of work- life. But, there are no proper guidelines or principles governing this integration into the curriculum. This

led to the investigation of how work-placement or internship can be integrated with the curriculum to make it more meaningful. Previous experiences of the researcher in supervising these students during their summer internship had shown a lot of gaps during their work-placement in companies in the UAE. These students were from different majors/clusters such as: Automation and Mechatronics, Engineering Science and Information Technology. When they were placed on summer jobs, they were not placed as per their subject major. This prompted the researcher to investigate so that, these students would have a real job experience, in their respective majors.

4.1: Different approaches to gather Data:

There are different approaches to gather the required data for this investigation. But the researcher opted to concentrate on the following:

According to Canales et al (2009), one of the instructional methodologies is having community classrooms, which provides unpaid short-term experiences at business, by taking a tour around the industry that helps students acquire the required competencies to get into the basic employment. So, field trips were organized to most of the potential businesses around Abu Dhabi, Dubai and Sharjah, to expose the students to the industries, thus enabling them to acquire hands on knowledge of the experience at the work field. Students were then asked to keep a log of what they had learnt and experienced during these field trips. The logbook data was then used to assess the learning that had taken place.

Another great methodology as described by Jacobs (1990) is to provide Career Technical Education, during paid on the job formal instruction, with

a regular schedule as followed by the other workers in the company. So, this was offered to all grade 11 students in most of the businesses in Abu Dhabi, Dubai and Sharjah during Summer Internships to get real experience at work under qualified professionals thereby exposing them to punctuality, discipline and work- ethics along with job experience. Students were asked to keep a logbook to note down their daily experiences at the work place. These books were then collected for analysis of the knowledge and skills acquired during the training period. Additionally, the work supervisors were also asked to keep a record of student behavior/learning as cited in Appendix 8.

Interviewing is a common technique for data collection. However, it provides quantitative as well as qualitative analysis of the data. Company personnel were interviewed so as to find out the different types of jobs offered for Summer Internships. Additional information with regards to the internship, whether it is paid / unpaid internship, whether transport would be provided or not, or whether students would be awarded certificates on completion of the Internship was clarified. Highly structured interviews in the form of administered questionnaires were held. The data collected was used for statistical analysis. This formed the basis for students' work placement according to their area of specialization.

Finally for qualitative analysis, students were asked to submit resumes, during the Career exploration week, held at the Institute thereby, fully preparing them for the job and to face the challenges in the world. Exposure to qualitative methodologies initiated an active approach to learning in WBL as students prepared to go out into the world and were exposed to all the opportunities available to them.

4.2: Research Questions:

The aim of this research was to analyze the work-based learning/internship experiences of students in vocational and technical education programs at The Institute of Applied Technology with a view to improving the quality of these students' work-based learning and integrating it with the curriculum and to try and increase the number of interns who do their summer internship each year. This research sought to answer the following questions:

1. What are the various opportunities provided by the companies in the UAE, for Emirati students to do their summer internship?
2. What do students learn in these programs? What is the quality of the work they produce? How do they perceive the learning experience? What kinds of student performance data are collected and how are they used?

4.3: Purpose and Objectives:

This research sought to find out the skills acquired by the students during summer internships and to see if it had an impact on their academic performance during the graduating year. It fostered to look into the nature of reflective capacity gained by the interns, the aspects within internships that help in developing critical thinking.

5. Research Methodology:

5.1: IIT@IAT

Learning Oriented Internship Approach: The Industrial Internship Training at The Institute of Applied Technology, IIT @ IAT is an undergraduate program offered by the Institute of Applied Technology providing pathways to Industrial experience. A pedagogical approach is adopted so that the main focus is student learning.

Boud et al (2007) argue that in most universities and higher learning, studying beyond the university is missing. Much emphasis is given to knowledge acquired from books. However, with the present times, it is necessary that we have to go beyond the books and expose the students to practical real life situations by providing valuable experience such as Internships at the Work place.

The Industrial Internship Training is given much emphasis at the Institute of Applied Technology. Students enter the IAT system at grade 9, and by the time they reach the grade 11, students are provided with internship experience during their 4-year tenure at school. By the time these students reach grade 12, they are able to decide their next course of study and work and utilize their knowledge and skills in the right direction. The program provides a curriculum integrated with work experience where students' attention is drawn towards teamwork and reflection moving into a slow transition of the work place. Students are guided into reflective thinking that will enable them to do well in the future. Furthermore, as stated by Clemens (2009), the IIT framework is built on meeting the needs of the stakeholders who in this case are the students, the Institute and the Industries.

The needs of the Institute are met through fostering the needs of the community and the student body, by providing meaningful graduate training. The driving force of this program is the dealing with Organizations that help these students in achieving their goals by providing a quality program that helps them to be committed people in life.

The IIT prepares students by giving them the required opportunities to develop their skills and be life-long learners. As investigated and mentioned by Boud, (2007), this initiative, makes the students more independent and helps them to face all the challenges that life offers them. The Institute of Applied Technology collaborates with many companies such as Dubal, Ducab, Emirates Airlines, Etihad Airways, DEWA, SEWA, FEWA, ADNOC Distribution, Emirates Group, Gulf Pharmaceuticals, Cisco, RTA, Dubai Police, Sharjah Police, DUBAI METRO, Dubai Municipality, Sharjah Town Planning and many other distinguished companies as shown in Appendix 32, in the UAE. These companies provide internship for these students. The procedure as to how this internship was carried out at IAT-Dubai is mentioned below.

As the career counselor has a list of all the potential businesses in the UAE, it becomes a little easy approaching the businesses with a view to providing internship. Appointments are made with the company personnel through emails and telephone calls. The date for a meeting is set with the prospective businesses. Both the stakeholders, the company and the school, finalize details and decide on the program for internship. At this point, the company either gives a positive reply or says a polite no to the internship. This has been the regular practice from 2008-2010.

5.2: Steps involved during the internship:

STEP 1:

The year 2011 saw to it that the researcher needed to get more and more businesses involved. A series of meetings were organized with the businesses. They were explained the importance of opening opportunities for these young gentlemen. It worked, as most of the companies that were approached, agreed to hold internships for these young, grade 11 students. There is a need to mention at this stage that these students are not adults and are students in the age group of 16 - 17 years. These students do need extra guidance and supervision, something that needed to be taken care of. Internship Supervisors were thus assigned to supervise the students during the internship period.

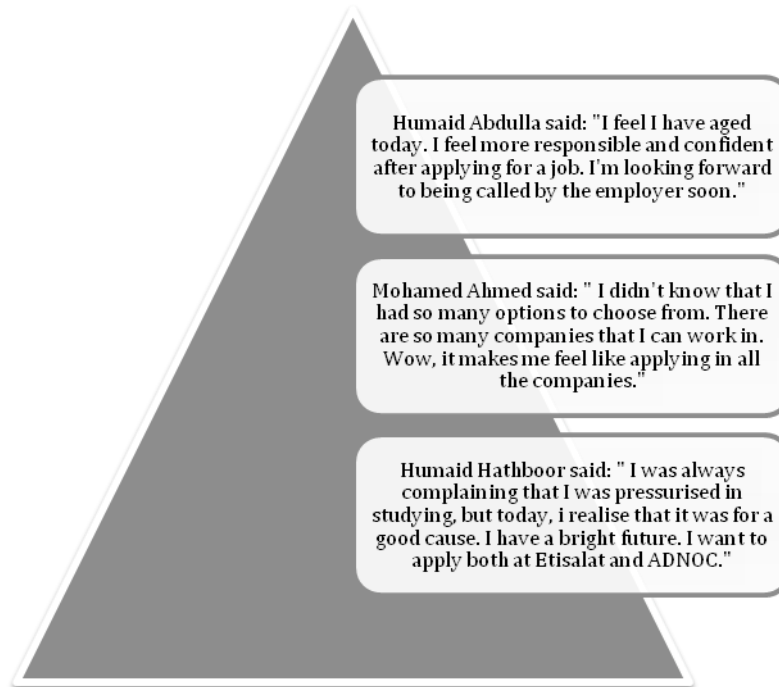
STEP 2:

Once the permission was sought from companies and there were a certain number of industries offering the Internship facility, the next step was to invite them to be a part of the career fair organized by the IAT.

The career fair is another important part of the program as students get to choose the company where they would like to do their internship. This also allows the businesses to advertise or market their companies. All three-stake holders stand to benefit from the Career Fair. Prior to the career fair, the students were informed of the Internship dates, during their school assembly. Students are then asked to have their Curriculum Vitae (CV) s ready in order to apply for Internship in companies. During the career fair the students are given an opportunity to present their CVs to the company personnel. The career fair gives these young gentlemen an opportunity to go through the experience of being young adults applying for a job.

At the career fair held in February'2011, the grade 11 students went round presenting their CVs. Some of the students who were interviewed during the Career Fair voiced that they were very happy to be applying for a job at this young age.

Fig 2: gives the feedback of some of the students who shared their thoughts on the Career Fair'2011.



As mentioned above, the students realized their potential and their worth through this career fair, which was their first step towards the Internship Program. There were a few more students who were interviewed on their thoughts of the Career Fair.

As part of an extension activity students were also taken on a field trip to another university to participate in a career fair. Students got the opportunity to mix

around with students of different nationalities and also had the opportunity to see the different options awaiting them. During such a trip, the researcher was exposed to 5 students from that university who were from different nationalities. One of the Syrian students voiced that they too, look for internships in the UAE, but are not so lucky to be called in to work. Another Jordanian student said that he was interested in a particular company in the UAE, and wanted to do his internship. He said that he too had sent in his CV, but had never been called. The remaining 3 students too had similar incidents to relate. They also informed the researcher how important an internship is for their future career, but are denied an internship. The researcher gathered that even these students knew the importance of an internship, but were denied the experience they were looking for, for reasons unknown.

STEP 3:

Having submitted their CVs, the students were then called for an interview. Interviews were held both at the IAT Campus and at the Company where the students sought to do their internship. The interviewees had to go through a series of interviews, after which they were informed of their internship placement.

STEP 4:

An assembly of all the students who were going to do their internship was then organized. During the assembly the career counselor and internship supervisors advised the students on their expected performance, behavior and assessment at their work place. Students were explained all the rules and regulations they had to follow during the internship period. They were then asked to sign a memorandum explaining all the rules and regulations.

A copy of the memorandum has been attached in Appendix 31. For any program, as these students are below the age group of 18 years parents' consent is needed to participate in any school activity.

A letter asking for the consent of parents was then given to them. They had to sign the same and submit it to the career counselor.

STEP 5:

The career counselor then collected the same and prepared a file for each of the student interns, as it was necessary to have all the documentation in place, and for the school records. At any given time, to avoid any eventuality, the file should have had a copy of the memorandum signed, a letter of consent from the parents, passport copy of the student, National Identity card, Khulasat Al Khaid which is a copy of the family book, and a copy of the students' Curriculum Vitae. This was maintained for each and every intern, as it was mandatory for the company procedures. As the students were below 18 years of age, much care had to be taken to ensure that all the forms had been signed and permission sought from their parents.

STEP 6:

After this procedure, the students were placed in various companies both in the United Arab Emirates and Abroad. In the UAE, from the Dubai campus students were placed in industries in Abu Dhabi, Dubai, Sharjah and Ajman. A group of students were placed in companies abroad.

Table 2 gives the overview of student placements both in the UAE and abroad from all the IAT campuses in the United Arab Emirates. The table gives the statistics of the total number of students that completed their internship. It shows that a total of 562 young Emiratis, 438 male students and 124 female students,

successfully completed their internship in 2011. This shows that the students were quite motivated and at this moment in time, understood the importance of an Internship for their future.

Campus	No. Of students in internship training	UAE	Abroad
Abu Dhabi	86	34	52
Al Ain F C	124	124	0
Al Ain M C	71	30	41
Dubai	125	109	16
Fujairah	74	62	12
Ras Al Khaimah	82	69	13
Total	562	428	134

Table 2: Successful Internship Placement in the UAE and abroad in 2011

Campus	No. Of companies/ Branches	Student Placements
Abu Dhabi	5	34
Al Ain F C	25	124
Al Ain M C	10	30
Dubai	34	109
Fujairah	32	62
Ras Al Khaimah	15	69
Total	121	428

Table 3: Successful Internship Placement in UAE – 2011

Table 3 shows the number of students placed for their summer internship from all the IAT campuses, in various companies in the UAE. 121 companies in the UAE were involved in the internship Program. This confirms the importance of the internship program to the internship providers, as the industries today, look for trained personnel, or rather people who have the knowledge of work or at least some work experience that would ease the work of the employers.

The table also reveals that about 109 students from the Dubai campus were placed in 34 different companies in the UAE. The following table 4 gives the details of the number of student placements in each company along with the name of the company as taken from the IIT @ IAT Internship report 2011.

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

Dubai				
Yas Marina Circuit	Presidential Flight	Ajman Municipality & Planning Department	Ajman Police	Sheikh Khalifa Hospital
1	1	3	3	6
Federal Electricity & Water Authority (FEWA)	Sharjah Police Headquarters	Directorate of Town planning and Survey	Sharjah Civil Defense	General Authority of Youth Welfare and Sport Authority
3	4	6	5	5
Sharjah Media Corporation - Sharjah TV	Etisalat	Sharjah Electricity and water Authority (SEWA)	Sharjah Municipality	Al Rostamani Group - Suzuki
1	8	2	2	1
Abu Dhabi Islamic Bank - ADIB	Dubai Municipality	Dubai Civil Defense	Dubai Aluminum Company Limited ("DUBAL")	Dubai Media Incorporated
8	4	5	1	4
Emirates Airline	Department of Islamic affairs	Dubai Golf Club	Dubai Events & Promotions (Dubai Summer Surprises)	Al Wasl Asset Management Company
1	1	1	4	2
Emirates General Petroleum Corporation (Emarat)	ASWAQ	Mohammad Bin Rashid Housing Est.	Arabian Automobiles Company	Corys - Hepworth
3	10	2	1	5
Air Liquide	Al Futtaim Group - Al Futtaim Motors	Dubai Police	AWQAF & Minors Affairs Foundation	
1	3	1	1	

Table 4: Student placements in various companies from the Dubai Campus:

Table 4 gives the break down of student placement numbers in various companies in the UAE, for the Dubai campus, as it is the workplace of the researcher. All the 34 companies that participated in the internship program have been mentioned along with the number of students who did their internship in these companies.

5.3: Internship Supervision

The researcher supervised these students at their work place. On the first day of the internship two buses were arranged to drop the students to their destination. The researcher, who was the Internship Supervisor, accompanied the students and dropped them off at their destinations. Work supervisors at the industries then took over the group of students. Students commenced their internship training. Meetings were then arranged with the work supervisor and the HR Department of each company along with the students who were placed for their internship to check on their progress. These meetings were very fruitful as it brought to light what the students were actually doing during the internship period.

The explanation provided below will throw more light into the internship program that was conducted during the summer of 2011. Once the students were placed in companies the student interns were then supervised by the internship supervisors.

According to the vision of IAT, summer internship is an investment in ones self and ones own future. Summer internship programs are designed to help develop skills essential to specific industries or job types. Internship can be the perfect opportunity to expand ones knowledge outside of the classroom. The hands on real world experience that one encounters during an internship program enables a person to develop his potential and make key contacts for future networking. IAT students have utilized their internship to determine their interest level in certain career fields, get feedback from professionals regarding their strengths and weaknesses, and to further their education and expand their resume.

The IAT, Dubai campus students were placed in various companies in the UAE. A list of all these companies is provided on the blog <https://summerinternship2011.edublogs.org/> A visit to this blog gives you an insight into all that has taken place during the 8 weeks of summer internship 2011.

Since the researcher is involved with the Dubai campus, a look at table 5 shows that there was quite a big increase in the numbers with regards to student placements as well as the number of companies involved from the year 2008 – 2011. The number of companies increased from the mere 14 in 2008 to 34 in 2011 and the number of interns increased from 64 in 2008 to 125 in 2011. These figures highlight the importance of internship to both the stakeholders: the students and the industries.

Dubai	No. of placements	No. of companies
2008	64	14
2009	72	20
2010	87	21
2011	125	34

Table 5: No. of student placements and No. of companies involved at the Dubai Campus

5.4: Highlights of Internship experiences:

Provided below are the highlights of the internship experiences of students who were placed in various companies in the UAE and abroad.

ASWAAQ:

The community centers of ASWAAQ aim to become the number one shopping destination of the community and to equip the neighborhood with the right retail mix in order to compliment their needs by providing essential commodities and services such as: ATM services, Pharmacies, Beauty Salons, Laundry services, barbers, Banks and more.

Ten students were placed in three centers of Aswaaq in Nad Al Hammar, Al Mizhar and Al Warqa. The training coordinator for ASWAAQ had a detailed work plan designed for the student interns. Their internship began with an orientation session on day one, where in the students were explained about the rules and regulations at ASWAAQ. Students were also informed that they would have to present a power point presentation towards the end of their internship to share their experience at ASWAAQ.

The researcher visited them during their internship at all three outlets. It was a surprise visit coordinated by the training coordinator. It was noted that none of the students had been absent, during the internship period. The students were confident in their dealings with customers. The working ambience at ASWAAQ is something worth mentioning as it is mostly managed by young Emiratis as seen in Appendix 1; and that was a motivating factor for this present generation, to see their own involved in working.

The student interns, were busy involved in the roles assigned to them, serving the community and helping in their own way, gaining experience in running a

business. The reviews received from their work supervisors were that the students were motivated and willing to learn. The HR Manager of ASWAAQ was very pleased with the performance of the students and said that in the future too, the students were most welcome as the community where they served were happy with their services. Students received certificates on completion of their Internship at Aswaaq.

Dubai Media Incorporated (DMI):

Four students were placed for their internship at Dubai Media Incorporated. The training supervisor at DMI had designed a training plan for each student depending on his cluster and area of interest. The table explaining the department name and section for each student intern is mentioned in Appendix 2. The interns who were placed at the Dubai Media Incorporated (DMI) realized that it was a great company to work with; as there was a lot that they could learn. They also realized that there was no tolerance of any indiscipline in such a prestigious setting. The interns here were exposed to various communities and experienced the ethics of working with people of different cultures. One of the students Ahmed Hamza was placed along with the engineers in the outside broadcast (OB) section where they take all live shows to the satellite. Ahmed Hamza said that it was a great experience for him working with professionals and that he had really learnt a lot from the group.



Fig 3: Card samples made by student interns at DMI.

Dubai Municipality:

The training coordinator at Dubai Municipality facilitated 4 positions for the students. A site visit to Dubai Municipality exposed the researcher to the busy hub of Dubai. The students were usually not exposed to such busy places.

However, the 2 student interns who were placed in the IT Department of the Dubai Municipality reported that they liked the working ambience and were treated like young employees as seen in Appendix 3.

They said that they had to pay attention to all the work ethics including discipline and time management at the work place. The students were provided with practical experience that included visiting people at their homes along with the Dubai Municipality personnel, during installations.

General Authority of Youth Welfare and Sports, Sharjah:

The experience that the students gained at the General Authority of Youth Welfare and Sports also, known as the Sharjah Youth Centre (SYC) was rewarding. The students worked as young instructors as seen in Appendix 4, where they had the opportunity to train young minds. It was a thrill to see so many younger students being trained by the student interns. IAT students were involved in training the younger generation. They were a motivating force that got the other students from Sharjah to participate, according the Manager of SYC.

This was one place where the students did a superb job. Five students successfully completed their internship at this center. They had the opportunity to be young instructors who trained the younger students from Sharjah, both, how to use the computers as they were IT students, as well as how to fix Robots as they had learnt the same during their course work at school.

They also trained the youngsters to make models as they had been taught in their science labs at the IAT. Rashid Abdulla, one of the student interns said that they felt proud that they could share their expertise with the others and at the same time, practice what they had learnt at school. The Manager, in charge of the Sharjah Youth Center praised the students for their dedication and enthusiasm.

During their internship the students also worked on a project/model, which basically explained how to save electricity. The students demonstrated to the people who visited the Sharjah Youth Centre, how they should save electricity. They also demonstrated how the misuse of electricity would result in fewer resources for the future. This was indeed a community awareness program, which made people realize the wastage of water and electricity and that it was about time to start saving the resources.

The Sharjah Electricity and Water Authority (SEWA) are now in possession of the model that was created. This model is being circulated to all the schools in Sharjah to educate the community on its use. The interns at SYC said that speaking to all the visitors at SYC had filled them with enthusiasm and motivation to educate the people on saving valuable resources. It gave them a sense of confidence and joy as they could do something for the community said Saud Salah another student intern.

Directorate of Town Planning and Survey-Sharjah

The evaluation report of 8 student interns who were placed at The Directorate of Town Planning and Survey-Sharjah revealed that the students had done extremely well. The Directorate had many people visiting the premises for their daily jobs.

Ibrahim Ahmed, a student intern excelled in his dealings with the people. His work supervisor was pleased with his work and promoted him to another department. All the interns were punctual and followed the instructions given to them by their work supervisors according to the Director of Town Planning – Sharjah. Glimpses of the interns are shown in Appendix 5.

Etisalat:

Twelve students had the opportunity to do their internship at Etisalat after the selection process. 25 students applied for the same. However, after the recruitment process only 14 students were selected, out of which 12 students attended the orientation on day one. They were placed in many branches in Ajman, Dubai and Sharjah. The interns had to go through a thorough orientation on day one where they were explained all the rules and regulations that they had to follow. All 12 students attended the orientation on day one, but only 8 students continued with the internship due to personal unavoidable reasons.

Student interns faced a few problems by the end of the first week as they found it difficult to commute to the places where they were assigned for their internship. The internship supervisor then met up with the work placement supervisor and solved the problem amicably. Although these eight students faced difficulty commuting to and fro, they did not give up. They continued serving the community by the tasks allotted to them and this initiative gained them an excellent evaluation towards the end. It was later confirmed that the other 4 students dropped out from internship due to transportation and as they were placed in places far away from their homes.

The training plan required the students to take a daily site visit with Tamdeed group as seen in Appendix 6, to different locations and work there.

It was an exposure to people of different communities and a feel of real work situations. The students found it a bit tough but were enthusiastic enough to complete the task entrusted to them.

Emirates General Petroleum Corporation (Emarat):

Emarat is a great, comfortable company located just across Sheikh Zayed Road, in Dubai. The selected students were placed in positions as per their clusters in the engineering departments as shown in Appendix 7. This provided the student interns the opportunity to observe and learn the nature of the work.

In addition to that, the students got to know about functions of the Purchasing & stores department as student Abdul-Aziz Omar wrote in his logbook that his supervisor explained verbally about the operations of purchasing and stores, and also how the department worked. He said that he also explained some basic concepts of purchasing and stores, which familiarized him with, the different terminologies used in the same.

The working ambience was clean, beautiful, and green and from the very beginning the student interns understood what it takes to be organized. Students were exposed to people from all walks of life. They said that besides work ethics they learnt to work in a team, sharing ideas, discussing in groups, listening to the viewpoint of others and respecting one another.

Federal Electricity & Water Authority (FEWA):

FEWA is a federal organization, located in Al Zorah, Ajman. FEWA provided an amazing learning and practical experience about Reverse Osmosis phenomena in the water management department under the direct supervision of one of the

Engineers who taught the student interns about the basic functions of the water plant as seen in Appendix 8.

Students from both, Engineering Science and Applied Engineering clusters benefitted and got the opportunity to obtain and use their knowledge perfectly. This experience allowed the students in presenting their skills to others, for example student Rashid Abdel Rahim from applied Engineering cluster fixed the PX pressure exchanger himself. The Engineer on duty was very proud of Rashid and he said he was surprised how fast this young man had picked up the job and had displayed a clear understanding of what he had learnt.

Al Rostamani Group – Suzuki:

Al Rostamani Group is recognized as a leading successful regional conglomerate with diverse commercial interests and core competencies in select sectors with a vision to be regarded as a responsible, reliable and respectable business conglomerate and to be the partner of choice for international and regional corporations, as stated by the Recruitment Manager during his speech to the students.

Majed Youssef Al Jallaf did his internship with Suzuki Technical Department, performing car services as seen in Appendix 9. Majed got a good evaluation from his direct site supervisor with regards to his performance as well as dealing with clients. He was also provided with hands on practical experience at the Suzuki Workshop.

Arabian Auto mobiles – Nissan:

Hamed Abdullah, Applied Engineering cluster student did his Internship at The Arabian Automobiles, Nissan showroom.

He was very happy and his supervisor was pleased with his work and commitment. Hamed worked in the garage, performing car services.

The working hours were from 8:00 am to 5:00 pm, six days a week. He did put in extra three hours everyday, but Hamed said he now understood why his father worked so many hours as those were the number of hours his father had to put in at the work place. At the beginning, he said that it made him angry as compared to working; sleep was bliss, especially during the summer vacation. But, as days passed by, he enjoyed learning, as he realized that by observing the others at work and doing things, there were a lot of benefits for his future.

The pictures in Appendix 10 show Hamed Abdullah having practical hands on training at the work place.

Mohammed Bin Rashid Housing Establishment:

Two students did their internship at Mohammed Bin Rashid Housing Establishment, Dubai. As per the internship coordinators statement, the students were punctual and disciplined and willing to learn.

They said that when it came to dealing with people or talking and explaining to them, the students did well and were very knowledgeable with their computer skills. Appendix 11 shows the students at their work place.

Dubai Aluminum Company Limited (DUBAL):

Only one student Ali Mohammed Essa Al Yasi was placed in Dubal for his internship. He was placed in the IT department. The officer in charge confirmed the attendance and punctuality of this student. There were more vacancies in Dubal, as Dubal is a very big company in the UAE.

However, these vacancies could not be filled as students faced difficulty commuting to and fro, due to lack of transportation.

Sharjah Municipality:

Two students had been placed in the transportation department at Sharjah Municipality. The details of the same have been explained in Appendix 12. The Head of the department confirmed their attendance and punctuality. He also suggested that we should implement this work experience, during their winter break too.

He added that the internship could also be made available at weekends if students were willing. This highlighted the importance of providing internship facility to students.

Students were taken on site visits during the internship period so they ended up receiving practical on site training.

Sharjah Police:

Three students were placed in the transportation department with the Sharjah Police. Students, who did their internship with the Transport Department of Sharjah Police, were happy and motivated to be young police officers. They felt a bit proud to be working there as people from their locality looked up to them.

One student who was placed in the IT Department finished his internship after working there for four weeks. Initially he was not too comfortable being placed in that department. However, after meeting up with the work placement officer at the Sharjah Police, he was shifted to another department where he could gain much more experience.

It was nice to note that the students needed more work given to them as they normally go through a strenuous schedule during their school days.

Al-Futtaim Group:

Established in the 1930s as a trading business, Al-Futtaim is one of the most progressive regional business houses headquartered in Dubai, United Arab Emirates as mentioned by the Emiratization Manager at Al Futtaim.

Three students had been placed in various branches of the Al Futtaim Group. The training coordinator scheduled a group meeting with this group.

A meeting with the branch managers helped clear out a few misconceptions that they had with regards to the internship program. One of the supervisors at the Lexus workshop reported that the student intern who was training under him was really willing to learn and told us how he had to open up a car and fix it by himself and which he did after watching how it was done. The picture provided in Appendix 14 shows the student assembling the parts of the same.

The feedback received was that students attended work regularly and showed commitment to their work ethics.

Sharjah Electricity and Water Authority SEWA:

After a careful recruitment process the students were selected to be placed in Sharjah water planning in different departments.

The Head Engineer at SEWA and the site supervisor were very pleased with the ATHS students, Hamad Abdulla and Abdul-Aziz. They stated that they were very dedicated and that they worked from 6:00 am to 1:00pm.

The students were trained in twelve different departments and they had site visits on a daily basis thus getting them to reach out to the community as observed in Appendix 14.

Dubai Civil Defense:

Five students were placed at Dubai Civil Defense for their internship. An officer at DCD was assigned to train and supervise the interns. Students were placed in different departments such as: printing, machinery, welding and mechanical workshops and kept moving in all departments.

Ghanim, an ICT student who was placed at DCD for his internship, designed the stickers that you see placed on police cars, fire trucks, rescue vehicles. A picture of the same is attached in Appendix 15. They were quite pleased with his job as he designed the stickers along with the full dimensions, color, wordings and numbers.

Dubai Civil Defense (DCD) personnel were impressed with the performance of the students and the knowledge they portrayed, and most of all their interest in learning. The students were presented with certificates from the HR Department, on the last day of their internship. Students also witnessed the day-to-day events that occur at DCD. They were exposed to the realities faced by the community at large. They were so taken up by the way DCD handles emergencies that they decided to start their careers at DCD.

Dubai Golf Club:

One of the students, Khalifa Suleiman was very committed and he travelled every day from Ajman to Dubai for his internship. His HR supervisor was very happy with his determination and commitment as seen in Appendix 16.

When questioned about his experience Khalifa said that he always wanted to have hands on experience and that he managed to get the same at Dubai Golf. Having been placed in the Engineering Department, he said that he could practice his AutoCAD, and Mechatronics too. Opening an air conditioner and reassembling was fun, he mentioned. He also added that he even had a chance to get a feel of the Carpentry section.

Air Liquide:

Yasser was one of the students who were very committed to the internship program. The location of the workplace where he was assigned to do his internship was very far in Jaffza, Jebel Ali - Dubai and, just to visit him, one needed proper authorization letters and special permission to enter the gates as things were under tight security.

When asked why he preferred to travel all that distance to Jaffza, Yasser said that he needed to know how to manage his time. He said that his brother travelled to Abu Dhabi, every day and he did not mind going to this company as it made him more responsible and independent.

Yasser's supervisor said that he was a dedicated young man who worked diligently, and besides other work ethics he learnt how to manage his time as seen in Appendix 17.

Cory's – Hepworth:

Hepworth PME was established in the UAE in 1974 with its head office in Dubai. The company manufactures PVC pipes and supplies the biggest range of British manufactured pipes and fittings, required by the water and drainage industry in

the Arabian Gulf, as mentioned by the Director of Cory's Hepworth, during one of his interviews.

The HR group manager interviewed 15 students and selected 5 students for their internship. The selected students joined Hepworth and were assigned a personal supervisor as seen in Appendix 18. He was very pleased with them and said that they were all eager to learn and punctual too. They rotated between the different sections of the factory. At the end of the internship-training period, the owner of the company met with the students to speak to them personally and motivate them for future endeavors.

ATHS-IAT, students received another positive comment from the HR group manager who said that the students were the best among all the trainees they had had so far. They termed them as the cream of student interns and accordingly, offered ten placements, 5 for grade 12 students and 5 for grade 11 students for the next academic year. According to the HR Manager the grade 12 students would receive training at their location for 2 weeks and then they would be sent to England for 2 weeks, for further training. Students were awarded certificates complementing them on their good work and commitment.

Sharjah Civil Defense:

Five students completed their internship at the Sharjah Civil Defense. They were provided with the experience of daily events at SCD, and how to reach out to the community during an emergency.

The HR manager provided us with brochures to encourage students to join the additional volunteer program that they offered for the next year. This initiative stresses that, as a stakeholder they value internships.

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Abu Dhabi Islamic Bank (ADIB):

ADIB hosted eight students to conduct their training requirements for the summer of 2011 in ADIB branches and in their Head office. Furthermore, they placed the students into the locations closer to their residences as advised.

ADIB conducted three orientation sessions for the students to brief them about ADIB before they started their training. A picture of the same is attached in Appendix 20.

Eight students joined in different branches across the city; the students worked in the customer service department, providing ATM cards, Club cards, and so on. The bank managers were very happy with the performance of the students. This endeavor gave our students a lot of experience in dealing with people and guiding them through filling of forms and showing them to the respective booths if they encountered problems.

Al Wasl Asset Management Company:

Al Wasl LLC, an asset management group was established by Dubai Real Estate Corporation, (DREC) to manage its operations. The group currently encompasses three subsidiaries including wasl properties, wasl hospitality and Dubai Golf to oversee its operations in the real estate and business sectors according to the Manager of Al Wasl Asset Management Company. Set up to strengthen the success of Dubai and to actively secure the growth objectives for the future, Wasl pursues a vision to value and be valued by stakeholders. It aims to achieve this by creating a legacy of trust and respect, by acting responsibly, and as a platform for innovation in asset management as cited in their website www.wasl.ae Two students successfully completed their internship with Al Wasl. During a site visit it was made known by the supervisors that the students were punctual, disciplined and willing to learn. The students were taken on site visits to see how the company officials work on site.

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Al Wasl Asset Management Company provided valuable experience to the interns, as it exposed them to the people from different walks of life and that taught them how to deal with people with respect and dignity. Details of the same are highlighted in Appendix 21.

Dubai Events & Promotions (Dubai Summer Surprises):

Four of the student interns worked diligently during the Dubai Summer Surprises, taking care of youngsters, guiding them, showing them around and assisting people in getting their tickets during the event.

Their supervisor was impressed by their performance. They worked six days a week from 10:00 am to 4:00 pm. The students were happy with their placement. Additionally they worked in the play area of Mudhesh city. Students got a lot of customer care experience as well.

Sharjah Media Corporation - Sharjah TV:

The Training Center, Manager selected two students to be trained at Sharjah TV and the office manager for the Sharjah TV director, was assigned as their supervisor. However, only one student completed his internship as the other intern had some personal problems and could not complete his internship. The student intern was efficient, dedicated and committed according to the work supervisor. He gained experience in managing an office.

Municipality & Planning Department – Ajman:

Three students were placed in the Information Technology department. Students reported to work everyday and were punctual, committed and dedicated

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themselves to their work. They did well in their training as per the evaluation received from the supervisors. Highlights of their experience are mentioned in Appendix 22.

Ajman Police Department:

Five students were placed in the institute of training. Only three students completed their period of training. They got training in technical department, IT department and administrative work as reported by the work supervisor.

Department of Islamic Affairs:

Training officer coordinated the opportunity in the engineering department for two students. Students gained a lot of experience in the same. They were disciplined and willing to learn as mentioned by their work supervisor and as shown in Appendix 23.

Khalifa Hospital:

Six students were placed in different departments such as Quality Department, Archives, and Finance Department and at Customer Services. We were informed that the students were quite motivated and helped make arrangements for an event held at Khalifa Hospital. This gave them experience in dealing with the community as shown in Appendix 24.

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Yas Marina Circuit – Abu Dhabi:

Omar Al Qamzi did his summer internship at Yas Marina Circuit. The link provided below provides an insight into his work experience.

<http://www.backstageyas.com>

According to the supervisor assigned Omar, did a great job during the internship period. He also presented a detailed logbook, which explained his daily experiences at the Yas Marina Circuit. Omar said that it was a prestigious issue for him to have completed his internship there.

Presidential Flight:

One of our students Khalifa Abdul Wahab decided to move to Abu Dhabi during the vacation and he asked to do his internship at the Presidential Flight.

The training program started from July 31st 2011 for four weeks. The first two weeks he was placed in the Quality Insurance Department and the other two weeks in the Line maintenance and Planning Departments.

The supervisor initiated external visits like visiting the Etihad, ADAT and GCAA and placement with an auditor to audit other sections. This gave Khalifa all the experience that he needed in various places.

EMIRATES AIRLINES:

Two students had been selected to do their industrial internship training with The Emirates Airlines Engineering and Operational department as shown in Appendix 25, but only one student could complete his internship as the other student had to give a retest for not doing well in his end of year exams.

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Saif was committed and completed his course successfully. According to the Shift Coordinator, Saif was praised for his smartness and commitment.

Dubai Police:

One student joined the summer training program at The Dubai Airport Department in the departure section. The student was very happy to be placed by Dubai Police at The Dubai Airport Terminal 1. They were so impressed by this student that they offered more positions for student interns for the next academic year.

INTERNSHIP OPPORTUNITIES AND COMMUNITY SERVICE ABROAD:

ATHS Students were placed at the Company AEBT in Germany: Trapp Networks: The company Trapp Networks organized the training for 2 ATHS-IAT, students at the company AEBT in Germany. The 4 weeks program involved real work experiences at the renowned German engineering company AEBT (Railway Engineering).

Students received technical training at the company AEBT and visited places like the biggest railway museum located in Nuremberg, different companies like GVE Viehbeck which manufacture technical parts for trains, IMO, that produces renewable technologies and INA Schaeffler, which produces technical components for automobiles. Students had the opportunity to get acquainted with the community far out in Germany and share about their culture abroad.

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Internship in Ireland:

Three students had the opportunity to do their internship in Ireland. The ATHS delegation to the Republic of Ireland, with the partnership of Edgewater College, was for the duration of 4 weeks: starting from 01 - 07 - 2011 to 01 - 08 - 2011 in the city of Drogheda.

Achieved Goals: It improved the English language skills of the students by distributing them to 5 different academic levels. After the assessment test, and integrating them into specialized classes with other international students of different nationalities, it was found that the students had excelled. It also improved the students' life and personality skills such as time management and self - reliance by engaging them in public life in a different culture, as well as distributing them into separate housing with host families.

The Internship program was to increase awareness of the importance of technological and engineering studies through a series of theory lectures on the work skills, principles, and workshops in manual handling of engineering. In addition field visits to major industrial enterprises to observe the modern technologies and work methods of these institutions were organized after finding no possibility of implementing a practical work placement based on Irish Health & Safety laws.

France:

12 of the students successfully completed their internship in France.

Dassault Group (8 students): this group trained in number of Dassault factories. The students visited the company's factories and watched the phases of manufacture of military aircraft (The body of planes - electronics - and radars). The company gave the students a training program in some of their factories.

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Second: Nexter Group (4 students): this group trained in the different location in another factory. The students viewed the phases of the production tanks. The company gave the students a training program in some of their factories too. Students were back from their internship abroad with renewed vision and motivation.

Country	Number of companies	Students placed	Supervisor sent
South Korea	Emirates Nuclear Energy Corporation (ENEC)	25	2
Germany	GPDM, collaboration with AHK, Dubai	16	2
Germany	AEBT, collaboration with Trapp Networks	2	
France	Dassault AvATHSion	8	1
France	Nexter Group	4	
Ireland	Edgewater College	20	1
Canada	L Estrie International	13	2
Italy	Organized by Sheikh Mohamed bin Zayed Scholarship	3	0
Australia/Canada/NZ/US	Organized by ADEC	43	0
Total	9	134	8

Table 6: Student placements abroad.

Table 6 gives the placement details of students who did their internship abroad. Students were placed in companies in South Korea, Germany, France, Ireland, Canada, Italy, New Zealand, Australia and the United States of America. A group of 134 students from the UAE completed their internship successfully in these countries.

This initiative of internship providers from other companies highlights the fact that they understand the importance of these internships, which help them sell their company image worldwide.

Listed below are the names of all the companies that provided the Internship both in the UAE and Abroad.

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

1. ASWAQ
2. Dubai Media Incorporated
3. Dubai Municipality
4. General Authority of Youth Welfare and Sport Authority
5. Directorate of Town planning and Survey
6. Etisalat
7. Emirates General Petroleum Corporation (Emarat)
8. Federal Electricity & Water Authority (FEWA)
9. Al Rostamani Group – Suzuki
10. Arabian Automobiles Company
11. Mohammad Bin Rashid Housing Est.
12. Dubai Aluminum Company Limited ("DUBAL")
13. Sharjah Municipality
14. Sharjah Police Headquarters
15. Al Futtaim Group - Al Futtaim Motors
16. Sharjah Electricity and water Authority (SEWA)
17. Dubai Civil Defense
18. Dubai Golf Club
19. Air Liquide
20. Cory's - Hepworth
21. Sharjah Civil Defense
22. Abu Dhabi Islamic Bank - ADIB
23. Al Wasl Asset Management Company
24. Dubai Events & Promotions (Dubai Summer Surprises)
25. Sharjah Media Corporation - Sharjah TV
26. Municipality & Planning Department Ajman
27. Ajman Police
28. Department of Islamic affairs
29. Sheikh Khalifa Hospital
30. Yas Marina Circuit
31. Presidential Flight
32. Emirates Airline
33. Dassault Aviation
34. Germany
35. France

Table 7 gives a clear understanding of the companies/industries that were involved in this program.

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

Location	Company name	No of students	Placement provided	Company hosted student over the period
Abu Dhabi	Yas Marina Circuit	1	2	26 June 2011 - 26 July 2011
Abu Dhabi	Presidential Flight	1	1	01 Aug 2011 - 28 Aug 2011
Ajman	Ajman Municipality	3	3	03 July 2011 - 10 Aug 2011
Ajman	Ajman Police	3	6	26 June 2011 - 21 July 2011
Ajman	Sheikh Khalifa Hospital	6	6	26 June 2011 - 21 July 2011
Ajman	FEWA	3	3	26 June 2011 - 26 July 2011
Sharjah	SharjahPoliceHeadquarters	4	10	26 June 2011 - 26 July 2011
Sharjah	Town Planning-Sharjah	6	10	03 July 2011 - 26 July 2011
Sharjah	Sharjah Civil Defense	5	6	26 June 2011 - 28 July 2011
Sharjah	Sports Authority - Sharjah	5	5	27 June 2011 - 28 July 2011
Sharjah	Sharjah TV	1	2	03 July 2011 - 28 July 2011
Dxb, Shj, Ajman	Etisalat	8	12	26 June 2011 - 26 July 2011
Sharjah	SEWA	2	3	26 June 2011 - 28 July 2011
Sharjah	Sharjah Municipality	3	3	26 June 2011 - 28 July 2011
Dubai	AlRostamani Group Suzuki	1	2	26 June 2011 - 26 July 2011
(Sharjah,Dubai)	Abu Dhabi Islamic Bank -	8	8	03 July 2011 - 28 July 2011
Dubai	Dubai Municipality	4	4	10 July 2011 - 28 July 2011
Dubai	Dubai Civil Defense	5	6	4th July 2011 -28 July2011
Dubai	DUBAL	1	2	26 June 2011 - 26 July 2011
Dubai	Dubai Media Incorporated	4	7	26 July 2011 - 25 Aug 2011
Dubai	Emirates Airlines	1	2	03 July 2011 - 01 Aug 2011
Dubai	Dept. of Islamic affairs	1	3	10 July 2011 - 10 Aug 2011
Dubai	Dubai Golf Club	1	2	26 June 2011 - 27 July 2011
Dubai	Dubai Summer Surprises	4	4	26 June 2011 - 28 July 2011
Dubai	Wasl Asset Managementco	2	5	26 June 2011 - 25 July 2011
Dubai	Emarat	3	4	26 June 2011 - 26 July 2011
Dubai	ASWAQ	10	15	03 July 2011 - 28 July 2011
Dubai	Mohammad Bin RashidHsg	2	4	03 July 2011 - 28 July 2011
Dubai	Arabian Automobiles Comp	1	1	07 July 2011 - 28 July 2011
Dubai	Cory's - Hepworth	5	6	03 July 2011 - 28 July 2011
Dubai	Air Liquide	1	2	26 June 2001 - 27 July 2011
Dubai	Al Futtain Motors	3	3	03 July 2011 - 28 July 2011
South Korea	ENEC	2	2	09 July 2011 - 23 July 2011
France	Nexter Group	2	2	24 June 2011 - 16 July 2011
France	Dassault Aviation	2	2	24 June 2011 - 16 July 2011
Ireland	Edgewater College	3	3	03 July 2011 - 28 July 2011
Germany	GPDM	7	7	26 June 2011 - 26 July 2011
Companies	37	124	168	
Total No. Of student interns in the UAE		108		
Student interns abroad		16		
Total		124		

Table 8: Company overview:

Table 8 gives the break up of student placements with the actual dates of internship. It also shows that the number of placements provided by the companies was about 168 and the number of students who were placed for their internship was about 124, which means there were more vacancies for student interns.

This proves that more students could have been motivated to attend the Summer Internship 2011.

This is also a clear indication that there were vacancies for students who wished to do their internship, and students from other universities could have filled these vacancies if students from IAT, were not interested.

6: Data required for Analysis:

The data was collected during the academic year 2011- 2012, and it was collected from two different sources namely the student interns who were going through the internship program and the prospective businesses who were offering the internship program to the students.

Questionnaires were sent out to the students through the survey monkey. The students undergoing the internship training were the Grade 11 students who were enrolled with the Institute of Applied Technology and had to complete their summer internship as part of a requirement towards their graduation. These students had to go through the Industrial Internship Training called as IIT@IAT. These students were from various Applied Technology clusters such as Automation and Mechatronics, Engineering Science (ESC), Electrical Engineering (ATE) as well as Information and Computer Technology (ICT),

On completion of their internships these students would have another year to complete their graduation and join professional universities to pursue their degree study, who stood to benefit in getting trained as enthusiastic Emirati gentlemen, who had knowledge of the subject and were now being trained to be young employees by businesses in the UAE to aid in the Emiratization process.

To begin with, a survey was conducted to assess what the students had gained during the Internship period. The survey questionnaire was sent out to the entire grade 12 students who had completed their internships. This was to test the effectiveness of the program and to see whether all the objectives of IIT@IAT were met.

Additionally, most of the student interns had already been interviewed at their work place to find out what they had gained. One-one sharing of their experiences both in class and during an interview with the career counselor and the internship supervisor, who in this respect was the researcher, followed.

The data collected was then used for further analysis of the summer internship program.

6.1: Data Analysis and Findings:

To evaluate the effectiveness of the internship experience during the Industrial Internship Training and to see whether the students had benefitted from the program, a questionnaire with the statements highlighted in table 9 was sent out to the students and a similar questionnaire with about 15 questions was prepared for the company personnel, during their interview, to assess the students' performance during the internship period.

Var.	Statements	Mean Score	Std. Dev.
A1	Students learn work ethics	4.29	0.724
A2	Exercise team work	4.09	0.841
A3	Acquire problem solving techniques	4.15	0.748
A4	Develop administrative skills	4.07	0.684
A5	Shoulder responsibilities entrusted to them	4.12	0.748
A6	Get an insight into running a business	3.88	0.795
	Average Mean	4.10	

Table 9: Evaluation of students learning outcomes

It was seen that Students' assessment of the program was in line with the assessment of the work supervisors during the internship period, which shows that the goals and objectives of the program were met.

The industrial work placement supervisors assessed the students in areas such as

- a. Knowledge about the place of work
- b. Job understanding
- c. Performance at work
- d. Type of work
- e. Time Management skills

The evaluation gave an average score of 4.29, which is between good and excellent.

Table 10 gives us the statements that were asked in the questionnaire along with the mean scores.

Var.	Statements	Mean Score	Std. Dev.
B1	General understanding of the job	4.50	0.560
B2	Understanding the job requirements	4.52	0.547
B3	Performance at work	4.57	0.549
B4	Job accuracy and functionality	4.43	0.640
B5	Time Management at the work place	4.45	0.587
	Average Mean	4.49	

Table 10: Assessment by work supervisors during internship

The two scales in tables 9 and 10 were tested for their internal consistency. Results as shown in table 11 below, with regards to learning objectives against assessment done by supervisors, possess satisfactory outcomes with the Cronbach's value 'a' being above 0.6 as shown in table 11.

Constructs	No. Of Items	Cronbach's a
Learning Objectives	6	0.7775
Supervisors assessment	5	0.8127

Table 11: Analysis of Reliability

Cronbach's alpha	Internal consistency
$\alpha \geq .9$	Excellent
$.9 > \alpha \geq .8$	Good
$.8 > \alpha \geq .7$	Acceptable
$.7 > \alpha \geq .6$	Questionable
$.6 > \alpha \geq .5$	Poor
$.5 > \alpha$	Unacceptable

Table 12: Sample of Cronbach's alpha consistency

From the above analyses it is clear that IIT has been a success in meeting the objectives of exposing the students to the actual work place and exposing them to the work ethics and practices there as, a look at table 12 gives us the consistency results from unacceptable to excellent, which in this case are Acceptable. These results were drawn from the testimonies given by both the students as well as the industrial supervisors during the internship period.

7: Findings:

7.1: Type of Training received by Interns:

The student interns received training in various formats. Some of the formats are listed below.

1. On site training:
2. Office training
3. Work-shop training
4. Customer care training
5. On the job training with a specified supervisor

From the educational point of view, on the job training with a specified supervisor was ideal, as being young the students were bound to make mistakes; also, the feeling of being lost in a new place was another possibility. As a result it was advisable to have a supervisor at the work place, someone the students could go to if they had doubts or experienced some problems, as this would make it flexible for him to get acquainted to the place and thereby settle down at his job. This would also provide him with the real world experience. Although all the other types of training were beneficial, they were mostly acceptable to a traditional classroom setting.

Fig 3 gives the details of the survey that was conducted to find out about the students experiences. The graph explains that majority of the students had progressed academically. About 80 percent of the students had a mentor at the work place. Almost all the students said that they had received enough information about internships before they started their internship as the program was discussed in class. 70 percent of the students had received a work plan before they began their internship. All the students mentioned that they had signed the written memorandum before the internship.

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The graph also displays that only about 80 percent of the students had received an evaluation from the work supervisors. 65 percent of the students said that they were placed in companies as per their clusters.

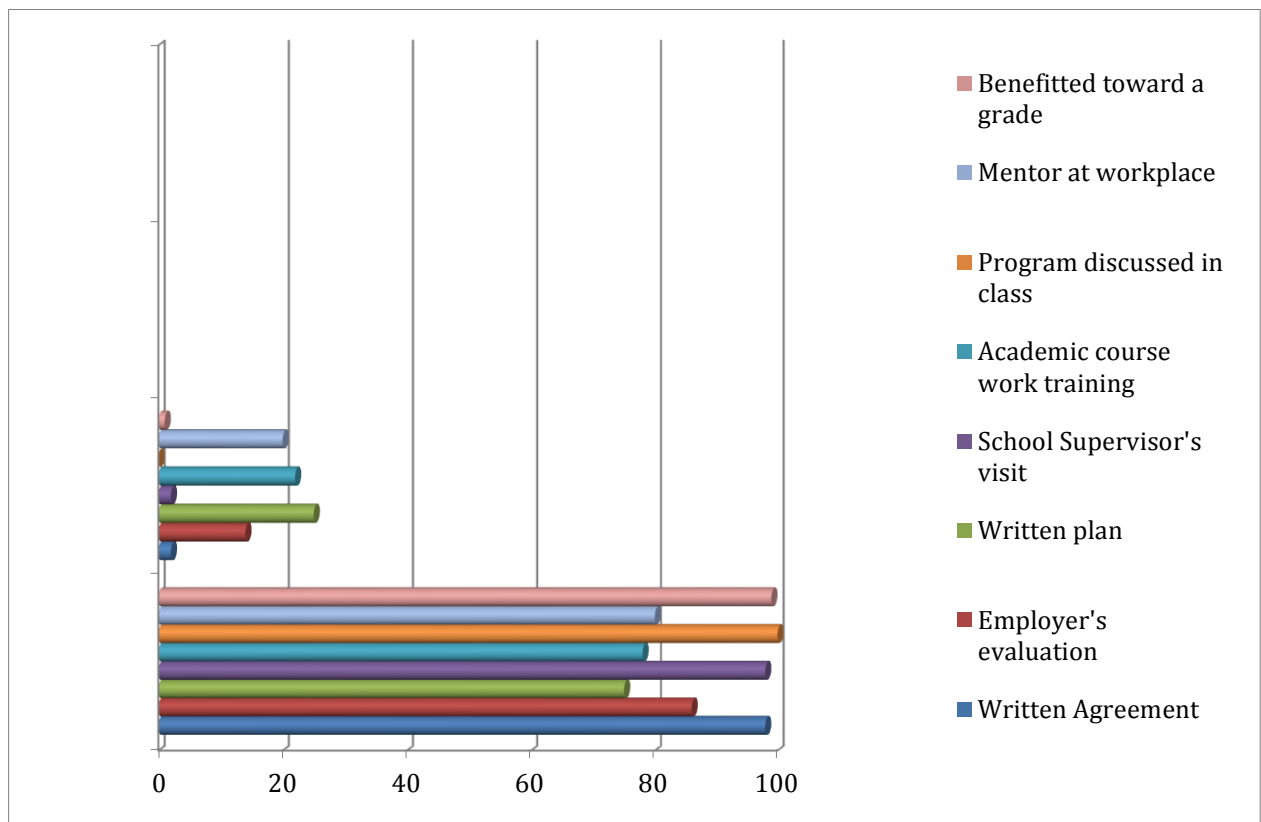


Fig 3: Survey conducted to check on the experiences of students.

7.2: The Internship Experience- was it beneficial or a waste of time?

A vast majority of the students, nearly about 88 percent of the students, felt that their internship experience was indeed one where they learnt a lot of the work place. However, 12 percent of the students termed it as a waste of time.

85 percent of the student interns said that they could now make important decisions for their future. 74 percent of the interns were confident enough to decide what type of company they wanted to work for: a private firm or a government firm. 25 percent of the students said that they had decided to start working as soon as they graduated from IAT, as the internship had opened doors for their careers. 75 percent of the interns said that the internship experience had helped them secure full time employment after their final graduation as they had managed to find sponsors who would sponsor their further studies and also employ them in the future.

80 percent of the students voiced that above all things they had learnt how to manage their time, and how to follow work ethics. They said they were now able to feel what their parents went through when they went to work. The internship experience made them more responsible and confident giving them a new renewed vision to work and study.

However, about 7 % of the interns also mentioned that they did not receive any formal training and that was very unfortunate for the students as it proved that the companies were not prepared with the adequate training facilities.

7.3: Comparison of Internship placements from 2008 – 2011.

A look at the tables below indicates that there has been a considerable increase in the number of student placements from the years 2008 – 2011 according to the statistics taken from IIT@IAT report of 2011. Table 13, table 14, table 15 and table 16, give the student placements for the years 2008, 2009, 2010 and 2011, respectively.

Campus	no companies	no placements
Abu Dhabi ⁶	7	54
Al Ain	12	45
Dubai	14	64
Fujairah	13	31
Ras Al Khaimah	15	44
Total	55	237

Table 13: Total Internship Placements in 2008 in all campuses:

Campus	no companies	no placements
Abu Dhabi ⁴	9	77
Al Ain	7	45
Dubai ⁵	20	72
Fujairah	12	26
Ras Al Khaimah	12	29
Total	60	249

Table 14: Total Internship Placements in 2009 in all campuses:

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Campus	no companies	no placements
Abu Dhabi	6	57
Al Ain	7	35
Dubai	21	87
Fujairah	21	52
Ras Al Khaimah	20	86
Total	75	317

Table 15: Total Internship Placement in 2010 in all campuses:

Campus	no companies	no placements
Abu Dhabi	9	86
Al Ain FC	25	124
Al Ain MC	11	71
Dubai	34	125
Fujairah	34	74
Ras Al Khaimah	17	82
Total	130	562

Table 16: Total Internship Placement in 2011 in all campuses:

The graph below gives the comparative details of student placements from the year 2008 to 2011 in all the IAT campuses. There has been a tremendous increase from 237 students being placed in 2008 to 562 students being placed in 2011. It has almost doubled the number of student interns as displayed in fig 4.

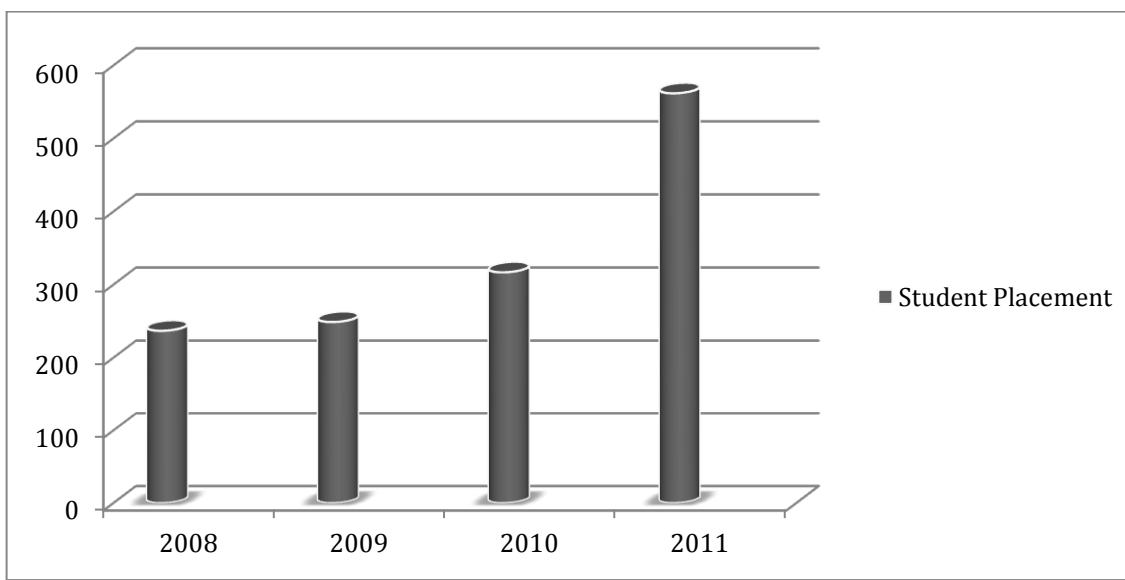


Fig 4: Comparative details of student placements from 2008 – 2011.

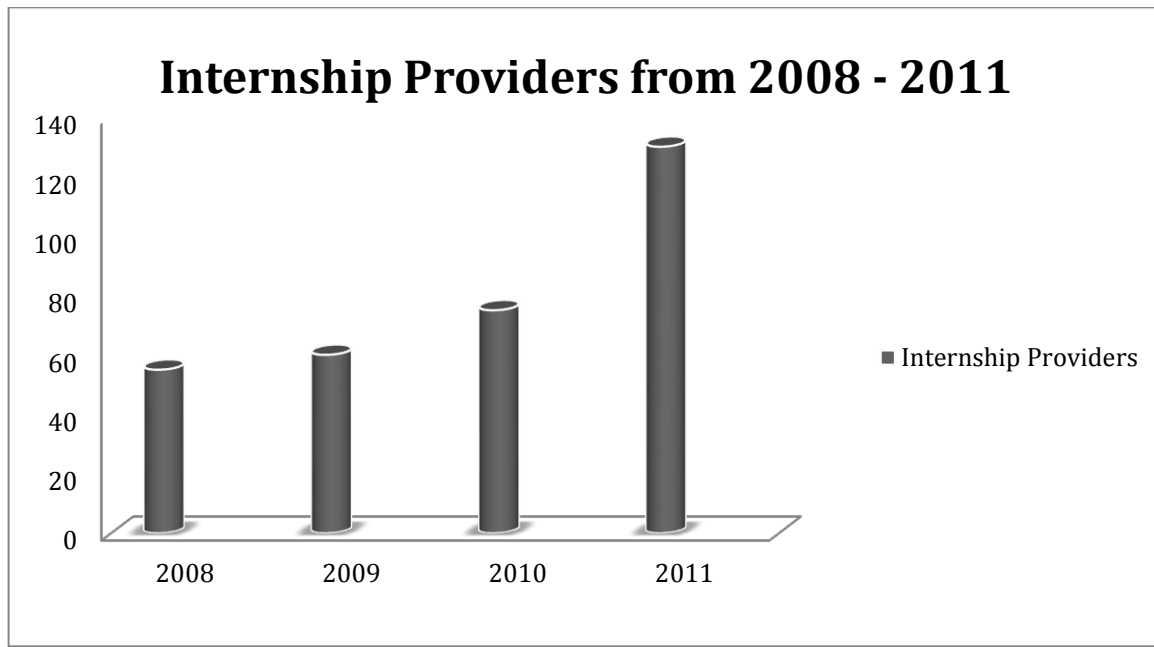


Fig 5: Comparative details of student placements from 2008 – 2011.

The graph in fig 5, shows that the number of internship providers in all the IAT Campuses, from 2008 – 2011, increased from 50 companies to 130 companies, and, are now involved in the internship program providing the internship training to these students.

8. Conclusions:

An Internship program such as the Industrial Internship Training @ IAT has added value to the academic curriculum. The experiences shared by students and all that they have learnt during the internship program complement their academic studies at school. These two learning processes give more credence to their technical background and their aptitude to do a job, which will increase their chances of getting secured jobs once they graduate from school. This is what the employers are looking for in employees today, before recruiting them.

The IIT@IAT is a unique program as it prepares the students from grade 11; no other institution caters to providing such a program at this age. It has fulfilled the objectives of the Institute by enriching the student interns with rich practical experiences and turning them into capable, independent individuals as seen in the assessments provided by both the students as well as the companies that hosted them and who are prominent stake holders in this research.

Evidence from this research has also given a lot of insight into all that the students have acquired. They have acquired a lot of Intellectual skills, professional skills, social skills as well as work ethics according to the assessment done by the work supervisors, which proves that the objectives of the program were met.

However, the areas where the students have to work and be a little more cautious are with regards to time and punctuality along with commitment at the work place. Additionally, students will have to be more fluent in speaking the English Language. Furthermore, students will have to be instructed and taught how to write a daily log, before they are sent out to the workplace. This finding will help the internship providers to get more student interns and work with them on the above factors to make the IIT@IAT, an excellent internship program.

8.1: Recommendations:

It is important as we plan to provide all students a work-based learning experience that we keep clear, three guiding principles in mind:

1. career exploration to improve students' understanding of the working world and show them a range of potential careers;
2. structured work-based learning that reinforces teaching of employability, technical, core-academic and critical thinking skills; and
3. business / workplace mentors who provide support and guidance to help young people adjust to adult workplace practices, norms, rules and expectations.
4. Internships should be for any student who wished to get work experience, without differentiation.

Successful work-based learning programs will not only help youngsters but also benefit private employers. It calls for a major mind-set change for educators, business/industry and community leaders. Setting standards for internship programs will establish for administrators, faculty, and staff a set of benchmarks that identify what a quality internship program on a college campus should be. This move should be initiated to have a quality internship program.

APPENDIX 1:

6.4: Highlights of Internship experiences:

Provided below are the highlights of the internship experiences of students who were placed in various companies in the UAE and abroad.

ASWAAQ:

The community centers of ASWAAQ aim to become the number one shopping destination of the community and to equip the neighborhood with the right retail mix in order to compliment their needs by providing essential commodities and services such as: ATM services, Pharmacies, Beauty Salons, Laundry services, barbers, Banks and more.



Ten students were placed in three centers of Aswaaq - Nad Al Hammar, Al Mizhar and Al Warqa.

The training coordinator for ASWAAQ had a detailed work plan designed for the student interns. Their internship began with an orientation session on day one,

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where in the students were explained about the rules and regulations at ASWAAQ. Students were also informed that they would have to present a power point presentation towards the end of their internship to share their experience at ASWAAQ.

The researcher visited them during their internship at all three outlets. It was a surprise visit coordinated by the training coordinator.

It was noted that none of the students had been absent, during the internship period. The students were confident in their dealings with customers. The working ambience at ASWAAQ was something worth mentioning. Mostly the young Emiratis ran it and that was a motivating factor for this present generation, to see their own involved in working. The student interns, were busy involved in the roles assigned to them, serving the community and helping in their own way, gaining experience in running a business.

The reviews received from their work supervisors were that the students were motivated and willing to learn. The HR Manager of ASWAAQ was very pleased with the performance of the students and said that in the future too, the students were most welcome as the community where they served were happy with their services. Students received certificates of completion of Internship.

APPENDIX 2:

Dubai Media Incorporated (DMI):

Four students were placed for their internship at Dubai Media Incorporated. The training supervisor at DMI had designed a training plan for each student depending on his cluster and area of interest. The table below explains the department name and Section for each student intern.

Table 7:

Student Name	Cluster	Department	Section
Ahmad Hamza Ahmad	ES	Technology	OB
Mohamed Saeed Khaled	ICT	Technology	IT
Essa Husain Moosa	ICT	Technology	New Media
Abdulrazaq Abdulrahman	ES	Technology	Broadcast

The interns who were placed at the Dubai Media Incorporated (DMI) realized that it was a great company to work with, with heavy security. They also realized that there was no tolerance of any indiscipline in such a prestigious setting. The interns here were exposed to various communities and experienced the ethics of working with people of different cultures. One of the students Ahmed Hamza was placed along with the engineers in the outside broadcast (OB) section where they take all live shows to the satellite. “It was a great experience working with the group and learning so much “, said Ahmed Hamza.

Picture 2: Card samples made by student interns at DMI.



APPENDIX 3:

DUBAI MUNICIPALITY:

The training coordinator at Dubai Municipality facilitated 4 positions for the students. A site visit to Dubai Municipality exposed the researcher to the busy hub of Dubai. The students were usually not exposed to such busy places. However, the 2 student interns who were placed in the IT Department of the Dubai Municipality reported that they liked the working ambience and were treated like young employees. They said that they had to pay attention to all the work ethics including discipline and time management at the work place. The students were provided with practical experience that included visiting people at their homes along with the Dubai Municipality personnel, during installations.



Students seen working in the IT department, with their supervisors assisting them.

APPENDIX 4:

General Authority of Youth Welfare and Sports, Sharjah:

The experience that the students gained at The General Authority of Youth Welfare and Sports also known as the Sharjah Youth Centre (SYC) was rewarding. The students worked as young instructors, where they had the opportunity to train young minds. It was a thrill to see so many younger students being trained by the student interns. IAT students were training the younger generation. It was really nice to see them guiding these youngsters. Spending their time training and teaching the younger generation was commendable.



This was one place where our students really did a superb job. Five students successfully completed their internship at this center. They had the opportunity to be young instructors who trained the younger students from Sharjah, both, how to use the computers as they were IT students, as well as how to fix Robots as they had learnt the same during their course work at school. They also trained the youngsters to make models as they had been taught in their science labs at the IAT. “We’re really happy teaching these kids as we are practicing what we have learnt”, said Rashid Abdulla a student intern at SYC. The Manager, in charge of the Sharjah Youth Center praised the students for their dedication and enthusiasm.

During their internship the students also worked on a project/model, which basically explained how to save electricity. The students demonstrated to the people who visited the Sharjah Youth Centre, how they should save electricity. They also demonstrated how the misuse of electricity would result in fewer resources for the future. This was indeed a community awareness program, which made people realize the wastage of water and electricity and that it was about time to start saving the resources.

The Sharjah Electricity and Water Authority (SEWA) are now in possession of the model that was created. This model is being circulated to all the schools in Sharjah to educate the community on its use. "Speaking to all the visitors at SYC, has filled us with enthusiasm and motivation to educate the people on saving valuable resources. We fill confident at this moment that we can contribute in our little way to save electricity", said Saud Salah another intern at the Sharjah Youth Centre.

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

APPENDIX 5:

Directorate of Town Planning and Survey-Sharjah

The evaluation report of Student interns at The Directorate of Town Planning and Survey-Sharjah revealed that the students had done extremely well. The Directorate had many people visiting the premises for their daily jobs. Ibrahim Ahmed, a student intern excelled in his dealings with the people. His work supervisor was pleased with his work and promoted him to another department.



STUDENT INTERNS SEEN WORKING WITH GREAT ZEAL AND DEDICATION IN SERVING THE COMMUNITY AT DTPS - SHARJAH.



FELICITATION OF STUDENT INTERNS AT DIRECTORATE OF SHARJAH TOWN PLANNING

Appendix 6:

Etisalat:

Twelve students had the opportunity to do their internship at Etisalat after the selection process. 25 students applied for the same. However, after the recruitment process 14 students were selected, out of which 12 students completed their internship successfully. They were placed in many branches in Ajman, Dubai and Sharjah. The interns had to go through a thorough orientation on day one where they were explained all the rules and regulations that they had to follow. All 14 students attended the orientation on day one, but only 12 students continued with the internship due to personal unavoidable reasons.

Student interns faced a few hiccups by the end of the first week as they found it little difficult to commute to the places where they were assigned for their internship. The internship supervisor then met up with the work placement supervisor and solved the problem amicably. Although the students faced difficulty commuting to and fro, they did not give up. They continued serving the community by the tasks allotted to them.

The training plan required the students to take a daily site visit with tamdeed group to the locations and work there thus exposing them to people of different communities, and experiencing real work situations. The students found it a bit tough but were enthusiastic enough to complete the task entrusted to them.



APPENDIX 7:

Emirates General Petroleum Corporation (Emarat):



Students who did their internship at Emarat – Dubai

Emarat is a great comfortable company located just across Sheikh Zayed Road in Dubai. The selected students were placed in positions as per their clusters in the engineering departments. This provided the student interns the opportunity to observe and learn the nature of the work.

In addition to that, the students got to know about functions of the Purchasing & stores department as student Abdul-Aziz Omar wrote in his logbook: “My supervisor explained verbally about the operations of Purchasing & stores & how this department works. Also, he explained some basic concepts of purchasing & stores. Now I am familiar with the different terminologies used in purchasing & stores & what is the complete purchasing cycle”.

The working ambience was clean, beautiful, and green and from the very beginning the student interns understood what it takes to be organized. The atmosphere at the work place was excellent. Students were thrilled and liked the work place as they were exposed to people from all walks of life. They said besides work ethics they learnt what it is to work as a team, sharing ideas, discussing in groups, listening to the viewpoint of others and respecting one another.

APPENDIX 8:

Federal Electricity & Water Authority (FEWA):

FEWA is a federal organization, located in Al Zorah – Ajman. FEWA provided an amazing learning and practical experience about Reverse Osmosis phenomena in the water management department under the direct supervision of one of the Engineer's who taught the student interns about the basic functions of the water plant. Students from both clusters Engineering Science and Applied Engineering benefited and got the opportunity to obtain and use their knowledge perfectly.



This experience allowed some students in presenting their skills to others, for example student Rashid Abdel Rahim from applied Engineering cluster fixed the PX pressure exchanger himself. The Engineer on duty was very proud of Rashid and he said he was surprised how fast this young man had picked up the job and had displayed a clear understanding of what he had learnt.

APPENDIX 9:

Al Rostamani Group – Suzuki:

“Al Rostamani Group is recognized as a leading successful regional conglomerate with diverse commercial interests and core competencies in select sectors. The vision of Al Rostamani Group, is to be regarded as a responsible, reliable and respectable business conglomerate and to be the partner of choice for international and regional corporations”, as mentioned by the Manager during his speech to the students.

Majed Youssef Al Jallaf did his internship with Suzuki Technical Department performing car services. Majed got a good evaluation from his direct site supervisor with regards to his

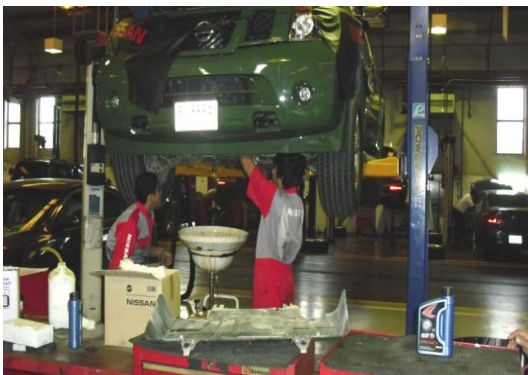
performance as well as dealing with clients. He was also provided with hands on practical experience at the Suzuki Workshop.



APPENDIX 10:

Arabian Auto mobiles – Nissan:

Hamed Abdullah, Applied Engineering cluster student did his Internship at The Arabian Automobiles – Nissan showroom. He was very happy and his supervisor was pleased with his work and commitment. Hamed worked in the garage performing car services. The working hours were from 8:00 am to 5:00 pm, six days a week. He did put in extra hours but as Hamed says, “I, now understand why my father works so many hours. Those are the hours he is required to put in at his work place. At the beginning, it made me angry as compared to working; sleep is bliss, especially during my summer vacation. But, as days passed by, I enjoyed learning, I realized that by observing the others at work and doing things myself, there were a lot of benefits for my future”.



The pictures show Hamed Abdullah having practical hands on training making him more experienced.



APPENDIX 11:

Mohammed Bin Rashid Housing Establishment:

Two students did their internship at Mohammed Bin Rashid Housing Establishment, Dubai. As per the internship coordinator's statement, the students were punctual and disciplined and willing to learn.



The students are seen preparing their schedule for site visits

They said that when it came to dealing with people or talking and explaining to them, our students did well and were very knowledgeable with their computer skills.

Dubai Aluminum Company Limited (DUBAL):

Only one student was placed in Dubal for his internship. He was Ali Mohammed Essa Al Yasi who completed his internship successfully. Al Yasi had been placed in the IT department.



The officer in charge confirmed the attendance and punctuality of this student. There were more vacancies in Dubal, as Dubal is a very big company in the UAE. However, we could not fill in these vacancies as students faced difficulty commuting to and fro, due to lack of transportation.

APPENDIX 12:

Sharjah Municipality:

Two of our students had been placed in the transportation department at Sharjah Municipality. The Head of the department confirmed their attendance and punctuality. He also suggested that we should implement this work experience, during their winter break too. He added that the internship could also be made available at weekends if students were willing. This highlighted the importance of providing internship facility to students.

Students were taken on site visits during the internship period. So, they received practical on site training.

Students successfully completed their internship at Sharjah Municipality.



Students seen working in the workshop at Sharjah Municipality.

APPENDIX 13:

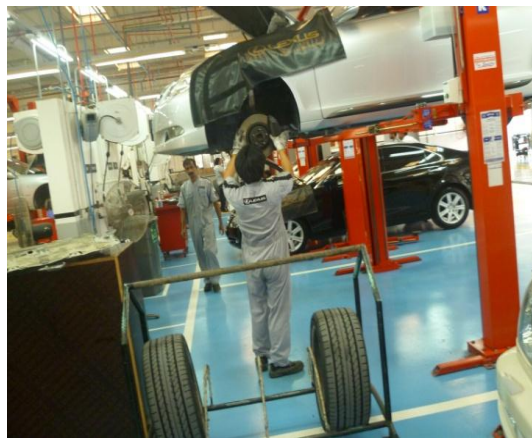
SHARJAH POLICE: Three students were placed in the transportation department with the Sharjah Police. Students, who did their internship with the Transport Department of Sharjah Police, were happy and motivated to be young police officers. They felt a bit proud to be working there as people from their locality looked up to them.

One student who was placed in the IT Department finished his internship after working there for four weeks. Initially he was not too comfortable being placed in that department. However, after meeting up with the work placement officer at the Sharjah Police, he was shifted to another department where he could gain much more experience. It was nice to note that the students needed more work given to them as they normally go through a strenuous schedule during their school days.

Al-Futtaim Group:

“Established in the 1930s as a trading business, Al-Futtaim is one of the most progressive regional business houses headquartered in Dubai, United Arab Emirates” as mentioned by the Emiratization Manager at Al – Futtaim.

Three students had been placed in various branches of the Al Futtaim Group. The training coordinator scheduled a group meeting with this group. One of the supervisors at the Lexus workshop reported that the student intern who was training under him was really willing to learn and told



us how he had to open up a car and fix it by himself and which he did after watching how it was done. The picture provided shows the student assembling the parts of the same. We were informed that, students attended work regularly and showed commitment to their work ethics.

APPENDIX 14:

Sharjah Electricity and Water Authority SEWA:

After a careful recruitment process the students were selected to be placed in SEWA, in different departments.

The Head Engineer at SEWA and the site supervisor were very pleased with ATHS students: Hamad Abdulla and Abdul-Aziz. They stated that they were very dedicated and that they worked from 6:00 am to 1:00pm. The students were trained in twelve different departments and they had site visits on a daily basis thus getting them to reach out to the community.



Hamad and Abdul-Aziz during one of their site visit with the SEWA officials.

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APPENDIX 15:

Dubai Civil Defense: For the fourth consecutive year, the students were placed at Dubai Civil Defense for their internship. Five students joined the summer internship there. An officer at DCD was assigned to train and supervise the interns. Students were placed in different departments such as: printing, machinery, welding and mechanical workshops and kept moving in all departments.

Ghanim, an ICT student who was placed at DCD for his internship, designed the stickers that you see placed on police cars, fire trucks, rescue vehicles. They were quite pleased with his job as he designed the stickers along with the full dimensions, color, wordings and numbers.



The stickers designed by Ghanim



STUDENTS BEING VISITED AT THEIR WORKPLACE – DUBAI CIVIL DEFENSE

Dubai Civil Defense – DCD, were impressed with the performance of the students and the knowledge they portrayed, and most of all their interest in learning. The students were presented with certificates from the HR Department, on the last day of their internship. Students also witnessed the day-to-day events that occur at DCD. They were exposed to the realities faced by the community at large. They were so taken up by the way DCD handles emergencies that they have decided to start their careers at DCD.

APPENDIX 16:

Dubai Golf Club:

One of the students, Khalifa Suleiman was very committed and he travelled every day from Ajman to Dubai for his internship. His HR supervisor was very happy with his determination and commitment. When questioned about his experience

Khalifa said, “ I always wanted to have hands on experience and I managed to get the same at Dubai Golf. Having been placed in the Engineering Department, I could practice my AutoCAD, and Mechatronics too. Opening an air conditioner and reassembling it was fun. I even had a chance to get a feel of the Carpentry section”.



Hands on experience provided by Dubai Golf Club

APPENDIX 17:

AIR LIQUIDE:

Yasser was one of the students who was very committed to the internship program. The location of the workplace where he was assigned to do his internship was very far in Jaffza, in Jebel Ali - Dubai and, just to visit him, one needed proper authorization and special permission to enter the gates as things were under tight security.



When asked why he preferred to travel all that distance to Jaffza Yasser said that he needed to know how to manage his time. He said his brother travelled to Abu Dhabi, every day and he did not mind going to this company as it made him more responsible and independent.

Yasser's supervisor said that he was a dedicated young man who worked diligently, and besides other work ethics he learnt how to manage his time.

APPENDIX 18:

Cory's – Hepworth: Hepworth PME was established in the UAE in 1974 with its head office in Dubai. The company manufactures PVC pipes and supplies the biggest range of British manufactured pipes and fittings, required by the water and drainage industry in the Arabian Gulf, as mentioned by the Director of Cory's Hepworth, during one of his interviews.

The HR group manager interviewed 15 students out of which 5 students were selected for their internship. Five students joined Hepworth and were assigned a personal supervisor. He was very pleased with them since they were all eager to learn and very punctual too. They rotated between the different sections of the factory. At the end of the internship-training, period the owner of the company met with the students to speak to them personally and motivate them for future endeavors.



ATHS-IAT, students received another positive comment from the HR group manager who said that the students were the best among all the trainees they had had so far. They termed them as the cream and accordingly offered ten placements, 5 for grade 12 students and 5 for grade 11 students for the next academic year. According to the HR Manager the grade 12 students would receive training at their location for 2 weeks and then they would be sent to England for 2 weeks, for further training. Students were awarded certificates complementing them on their good work and commitment.

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

APPENDIX 19:

SHARJAH CIVIL DEFENSE:

HR manager provided us with brochures to encourage students to join the additional volunteer program that they offered for the next academic year.



Students seen working at Sharjah Civil Defense along with their supervisor.

APPENDIX 20:

ABUDHABI ISLAMIC BANK (ADIB):

ADIB hosted eight of our students to conduct their training requirements for the summer of 2011 in ADIB branches and in their Head office. Furthermore, they placed the students into the locations closer to their residences as advised.

ADIB conducted three orientation sessions for the students to brief them about ADIB before they started their training.



Eight students joined in different branches across the city; the students worked in the customer service department, providing ATM cards, Club cards, etc. The managers were very happy with the performance of the students. This endeavor gave our students a lot of experience in dealing with people and guiding them through filling of forms and showing them to the respective booths if they encountered problems.

APPENDIX 21:

Al Wasl Asset Management Company:

Al Wasl LLC an asset management group was established by Dubai Real Estate Corporation, (DREC) to manage its operations. The group currently encompasses three subsidiaries including wasl properties, wasl hospitality and Dubai Golf to oversee its operations in the real estate and business sectors according to the Manager of Al Wasl Asset Management Company. Set up to strengthen Dubai's Success and to actively secure it's growth objectives for the future, wasl pursues a vision to value and be valued by stakeholders. It aims to achieve this by creating a legacy of trust and respect, by acting responsibly, and as a platform for innovation in asset management as cited in their website www.wasl.ae

Two of our students successfully completed their internship with Al Wasl. During a site visit it was made known to the supervisors that the students were punctual, disciplined and willing to learn. The students were taken on site visits to see how the company officials function. Al Wasl Asset Management Company provided valuable experience to the interns, as it exposed them to the people from different walks of life and that taught them how to deal with people with respect and dignity.

Dubai Events & Promotions (Dubai Summer Surprises):

Four of the student interns worked diligently during the Dubai Summer Surprises, taking care of youngsters, guiding them, showing them around and assisting people in getting their tickets during the event. Their supervisor was very pleased with them. They worked six days a week from 10:00 am to 4:00 pm.

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

The students were happy with their placement. Additionally they worked in the play area of Mudhesh city. Students got a lot of customer care experience as well.

APPENDIX 22:

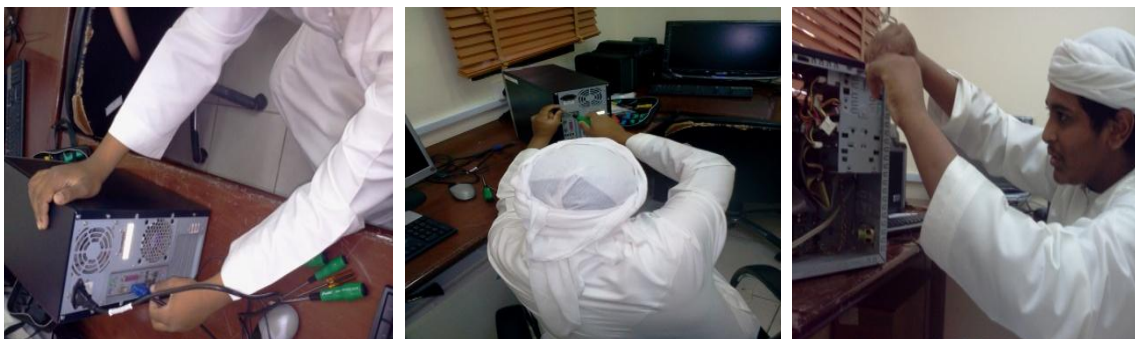
Sharjah Media Corporation - Sharjah TV:

The Training Center Manager selected two of our students to be trained at Sharjah TV and the office manager for the Sharjah TV director, was assigned as their supervisor.

One of our students Mohammed completed the training period as an assistant in the director's office.

Municipality & Planning Department – Ajman:

Three students were placed in the Information Technology department. Students reported to work everyday and were punctual, committed and dedicated themselves to their work. They did well in their training as per the evaluation received from the supervisors.



Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

APPENDIX 23:

Ajman Police Department:

Five students were placed in the institute of training. Only three students completed their period of training. They got training in technical department, IT department and administrative work. Captain Nasser Obaid coordinated the internship in AJPD.

Department of Islamic Affairs:

Training officer coordinated the opportunity in the engineering department for two students.



**Rashid Mudafer, during his internship at Department of Islamic Affairs-
Dubai**

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

APPENDIX 24:

Khalifa Hospital:

Six students were placed in different departments such as Quality Department, Archives, and Finance Department and at Customer Services. Ms. Ayesha Karam informed us that some of the students were quite motivated and helped make arrangements for an event held at Khalifa Hospital. This gave them experience in dealing with the community.



STUDENTS AS SEEN WORKING IN VARIOUS DEPARTMENTS AT THE KHALIFA HOSPITAL

APPENDIX 25:

EMIRATES AIRLINES:

Two students had been selected to do their industrial internship training with The Emirates Airlines Engineering and Operational department.

Saif was committed and completed his course successfully. According to the Shift Coordinator Saif was praised for his smartness and commitment.



Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

APPENDIX 26: List of students (Name, ID, Campus, and Section) who successfully completed their Internship through IIT@IAT.

No.	Student ID	Student Name	Section
1	1021090028	Mohamed Habib Darwish	11 - 13
2	1021090155	Mohammed Ayoob	11 - 09
3	1021090167	Omar Ibrahim Saleh	11 - 03
4	1021090143	Fahad Khalifa Saif Salem Alsawad	11 - 01
5	1021090023	Rashid Ali Abdullah Mohammad	11 - 02
6	1021090202	Adnan Jaffar Abdulla Mohammad Hassan	11 - 02
7	1021090033	Ali Abdulatif Ali Ahmed Al Jalaf	11 - 02
8	1021090065	Mohamed Abdul Salam Mohamed Aldhufir	11 - 08
9	1021090189	Yasser Ali Yousuf Abdulla	11 - 09
10	1021090233	Mohamed Kamal Awadh Naser Salem	11 - 01
11	1021090127	Abdulrahman Ahmed Shihab Abdulla Shihab	11 - 10
12	1021090018	Marwan Ahmed Ali Abdullah Abdelrahman	11 - 02
13	1021090068	Abdulla Khalid Ibrahim Mohammed AL Awadhi	11 - 01
14	1021090260	Mohammed Jasem Khair Mohd Albalooshi	11 - 09
15	1021080102	Humaid Ali Humaid Juma Alshamsi	11 - 11
16	1021090031	Ibrahim Mohamed Ibrahim Ali	11 - 14
17	1021090112	Hussain Mohd Maki	11 - 02
18	1021090262	Rashed Tariq Juma Rashed Saif	11 - 02
19	1021090025	Majed Yousif Al Jallaf	11 - 06
20	1021090291	Hamed Abdulla Hamed Abdulla	11 - 10
21	1021090001	Hassan Ahmed Hassan Ahmed	11 - 02
22	1021090220	Marwan Ismail Salim Mohammed	11 - 14
23	1021090284	Majed Juma Ali	11 - 14
24	1021090122	Mohammed Ali Bilal Ali	11 - 10
25	1021090231	Abdulrahman Ahmad Khadim Hassan	11 - 14
26	1021090192	Ali Mohamed Abdulla Ahmed Abdul Rahman	11 - 07
27	1021090035	Suhail Saeed Humaid Saeed Salem	11 - 07
28	1021090245	Saeed Bakhit Saeed Bakhit	11 - 07

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

29	1021090011	Abdulla Khalil Talib Abdulla Jafar	11 - 07
30	1021090017	Abdullah Saleh Jumah Abulrahman	11 - 01
31	1021090169	Mohamed Ismail Ibrahim Hussain	11 - 04
32	1021090056	Yousuf Kadhém Mohammad Saeed	11 - 07
33	1021090915	Rashed Mohammad Mudhafar Mohammad	11 - 05
34	1021090274	Fahad Ali Mohamed Abdalla Abdelkarim	11 - 11
35	1021090111	Hassan Mohamed Hassan Obaid Al Zeraif	11 - 11
36	1021090134	Salem Yaqoob Mohamed A Alhammadi	11 - 12
37	1021090036	Ibrahim Abdelkarim Ismail Ibrahim	11 - 14
38	1021090171	Salim Mohamed Salim Almukhaini	11 - 14
39	1021090286	Mohamed Hassan Jasim Mohamed Murad	11 - 14
40	1021090087	Mohammed Ahmad Amin Abdulla	11 - 07
41	1021090096	Hamdan Yousif Ahmed Mohamed Ahmadi	11 - 03
42	1021090021	Mayed Ahmad Hassan Mohammad	11 - 08
43	1021090138	Hamad Mohd Ahmad Mohd	11 - 08
44	1021090142	Ghanim Bakhit Saeed Bakhit	11 - 04
45	1021090201	Khalifa Sulaiman Ali Sulaiman Alshehhi	11 - 10
46	1021090198	Ahmad Hamza Ahmad Mohd	11 - 02
47	1021090204	Mohamed Saeed Khaled Ahmed	11 - 02
48	1021090225	Essa Husain Moosa M.A.Al Moosa	11 - 04
49	1021090234	Abdulrazzaq Abdulrahman Abdulrazzaq	11 - 05
50	1021090162	Masood Mohd Ali Abdulrahman	11 - 05
51	1021090208	Adel Abdulkarim Mohd Abdulrahim	11 - 08
52	1021090084	Majid Obaid Mohammed	11 - 13
53	1021090053	Abdulla Mohamed Abdulrahman Mohamed	11 - 15
54	1021090145	Ahmed Jassim Hassan Haji Hassan	11 - 06
55	1021090060	Abdalla Salim Ahmed Abdalla Ibrahim	11 - 05
56	1021090042	Khalid Jihad Rashid Saif Juma	11 - 07
57	1021090027	Khalid Zubair A.Razaq Alsiddiq Alobeidli	11 - 05
58	1021090072	Ali Mohammed Essa Al Yasi	11 - 09
59	AT1000198	Essa Essa Ahmed	10 - 09
60	AT1000203	Sultan Ismail Ahmed	10 - 04
61	AT1000121	Suhail Abdulaziz Al Ali	10 - 01

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

62	1021090134	Abdalla Omar Mohamed Dawoud	11 - 03
63	1021090002	Abdulaziz Omar Saood Abdulaziz	11 - 12
64	1021090190	Ali Hassan Abdulla	11 - 02
65	1021090113	Mohammed Ismail Mohd Hassan Al Hattawi	11 - 09
66	1021090139	Saif Saqer Sultan Al Suwaidi	11 - 13
67	1021090074	Saif Sultan Mohamed Sultan Almuheiri	11 - 05
68	1021090187	Tariq Abdulla Gharib	11 - 04
69	1021090010	Nawaf Yousif Abdalla Ali Loughani	11 - 06
70	1021090034	Ali Yousif Hussain Mohamed	11 - 06
71	1021090949	Essa Saleh Mohamed Abdulla Saleh	11 - 07
72	1021090224	Mohamed Ghanim Eisa Ghulom Jafar	11 - 11
73	1021090059	Sultan Ishaq Ibrahim Hussain	11 - 04
74	1021090052	Khalifa Ali Mousa Murad	11 - 05
75	1021090106	Omar Ali Ahmed Ali Hassan Khamis	11 - 10
76	1021090229	Omran Abdalla Hassan	11 - 15
77	1021090181	Abdulrahman Abdulla Jamaan Qumman	11 - 14
78	1021090043	Rashid Abdel Rahim Abdel Rahim Hamad	11 - 10
79	1021090915	Shaheen Ali Shaheen Mohammed Altaher	11 - 03
80	1021090076	Rashid Abdalla Ali Yousif Al Ali	11 - 14
81	1021090003	Khalifa Ali Saleh Yousif	11 - 09
82	1021090057	Saud Salah Omar Abdalla	11 - 01
83	1021090037	Faisal Tariq Al Buraimi	11 - 05
84	1021090039	Abdulla Abdul-Aziz Abdulrahman AlShamsi	11 - 02
85	1021090179	Ahmed Mohamed Ahmed Husain Al Ali	11 - 03
86	1021090004	Abdulrahman Abdulla Ahmad Abdulla	11 - 05
87	1021090184	Abdulla Omar Mohamed Abdulrahman Alali	11 - 05
88	1021090152	Hamad Abdelsalam Abdelrahman F.Binfaris	11 - 07
89	1021090066	Essa Mohd Essa Abdulla	11 - 10
90	1021090276	Mohammed Ali Abdulla Mohammed Alsaeedi	11 - 11
91	AT1001706	Waleed Khaled kalender Al Mazmi	10 - 02
92	1021090082	Abdulhamid Mohammad Abbas	11 - 01
93	1021090241	Khalid Jamal Bilal Humaid	11 - 12
94	1021090085	Abdulla Mahmoud Abdulrahman Ahmad	11 - 05

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

95	1021090054	Hamed Abduljalil Mohammad Ahmad Kabital	11 - 06
96	1021090123	Saif Mohamed Abdul Rahman Mohamed	11 - 10
97	1021090055	Khalifa Khalid Mahmood	11 - 01
98	1021090177	Hamad Mohammed Kareem Bahadur Murad	11 - 01
99	1021090029	Saeed Abdulla Salem Ali Alnuaimi	11 - 04
100	1021090041	Abdulrahman Ahmed Habeeb Al Ghareeb	11 - 04
101	1021090062	Abdulrazaq Abdulla A.Razaq A. Alawadhi	11 - 04
102	1021090271	Abdul-Aziz Mohammed Abdulrazaq	11 - 01
103	1021090088	Mohammad Humaid Abdulla H R Bin Kalli	11 - 02
104	1021080197	Ahmed Mohammed Saeed Sultan Al Kindi	11 - 09
105	1021080118	Mohamed Ahmed Mohamed Salim	11 - 10
106	1021090073	Mohammed Mahmood Mohammed Alhelbi	11 - 03
107	1021090205	Khalifa Abdulwahab A. M. Abdulla	11 - 04
108	1021090275	Hamad Ahmed Salim Alshaiba Almuheiri	11 - 14
109	1021090128	Abdel Aziz Waleed Abdulla M.H.Rashid	11 - 08
110	1021090080	Abdul-Aziz Hassan Ahmed Alhousani	11 - 06
111	1021090081	Sultan Majid Mohamed Mahmoud Hassan	11 - 08
112	1021090153	Abdelrahman Khalid Abdelrahman A.Abdalla	11 - 02
113	1021090248	Abdalla Mohamed Abdelrahman Ahmed	11 - 05
114	1021090219	Abdalla Ahmed Mohamed Dadi Ali	11 - 08
115	1021090247	Mohamed Youssef Mahmoud Husain	11 - 05
116	1021090249	Khalid Ali Mohamed Abdel Rahim	11 - 14
117	1021090223	Rashid Mohamed Rashid I.S.Alkhalayal	11 - 03
118	1021090048	Hamad Ahmed Khalil Mirza Alshamsi	11 - 07
119	1021090104	Saif Abdel Salam Saif Mohamed Amin	11 - 07
120	1021090137	Hassan Ali Ahmed Abdalla Alkhouri	11 - 07
121	1021090236	Mohamed Ahmed Mohamed Ali	11 - 15
122	1021090227	Ali Jassim Jafar	11 - 15
123	1021090257	Abdulla Ali Ghanim Ghanim	11 - 04
124	1021090015	Omar Salem Rashed Trais Alqamzi	11 - 06

APPENDIX 27:

Internship Procedure and Application

Internship Procedure



APPENDIX 28:

Student Application Form for Internship

(for Grade 11 Students only)

IIT@IAT	Term			
Personal Details	Name			
	Student ID			
	Section			
	Date of Birth		(Format: mm/dd/yyyy)	
Address	Street		Area	
	Emirate		P.O. Box	
Contact Information	House telephone		Fax	
	Mobile		E-mail	
Academic Information	Campus	<input type="checkbox"/> Abu Dhabi <input type="checkbox"/> Al Ain <input type="checkbox"/> Dubai <input type="checkbox"/> Fujairah <input type="checkbox"/> Ras Al Khaimah		
	Career Cluster	<input type="checkbox"/> Engineering Science <input type="checkbox"/> Applied Engineering <input type="checkbox"/> Information & Communication Technology (ICT) <input type="checkbox"/> Health Science & Technology		

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

Parent / Guardian Information	Name		
	Emirate		
	P.O. Box		
	Telephone		
	Mobile		
Internship Location preferences	Option 1	<input type="checkbox"/> Abu Dhabi <input type="checkbox"/> Dubai <input type="checkbox"/> Al Ain <input type="checkbox"/> Ras Al Khaimah <input type="checkbox"/> Fujairah <input type="checkbox"/> Sharjah <input type="checkbox"/> Ajman <input type="checkbox"/> Umm Al Quwain	<input type="checkbox"/> Company: <hr/> <input type="checkbox"/> Contact Person: (if you have one) <hr/> <input type="checkbox"/> Contact Number: <hr/>
	Option 2	<input type="checkbox"/> Abu Dhabi <input type="checkbox"/> Dubai <input type="checkbox"/> Al Ain <input type="checkbox"/> Ras Al Khaimah <input type="checkbox"/> Fujairah <input type="checkbox"/> Sharjah <input type="checkbox"/> Ajman <input type="checkbox"/> Umm Al Quwain	<input type="checkbox"/> Company: <hr/> <input type="checkbox"/> Contact Person: (if you have one) <hr/> <input type="checkbox"/> Contact Number: <hr/>
Please tick your preferred Emirate and company.			
Student Signature & Date			
Parent/Guardian Signature & Date			

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

APPENDIX 29:

<div>Place a recent photo here</div>	Abu Dhabi- XXXXX street	Tel: 02-xxxxxxx Mobile: 050- xxxxxxx Fax: 02-xxxxxxx E-mail: xxxxx@iat.ac.ae
<div>Student Name</div>		
<div>Career Objectives</div>	To establish a career in XXXXXX	
<div>Education</div>	<div>Current School Enrolment</div> <div>20XX-Present XXXX -Institute of Applied Technology</div> <div>Currently fulfilling the course requirements towards a Secondary Certificate in Applied Technology</div>	
<div>Courses</div>	List courses related to your major area of study	
	<ul style="list-style-type: none">• Mechatronics Technology• Electro-Pneumatics• xxxxxxxxxxxxxx	<ul style="list-style-type: none">• CNC Machinery• xxxxxxxxxxxxxx• xxxxxxxxxxxxxx
<div>Skills</div>	Using action words to maximize the impact; describe how your background and strengths would make you a strong candidate for the position you are seeking. This section should be concise, contain action words, and should sell your most marketable experiences and abilities.	
	<div>Computer/Programming Skills</div> <ul style="list-style-type: none">• List software here (e.g. MS Word)• AutoCAD 2D, XXXXXXXXXXXXX <div>Communication Skills</div> <ul style="list-style-type: none">• Competent in oral and written XXXXX• Fluency in XXXX technical writing <div>Organization Skills</div> <ul style="list-style-type: none">• XXXXXXXXXXXXXXXXXXXX• XXXXXXXXXXXXXXXXXXXX <div>Interpersonal Skills</div> <ul style="list-style-type: none">• Efficient, self-motivated, xxxxxx• Can work independently and in groups <div>Other Skills</div> <ul style="list-style-type: none">• XXXXXXXXXXXXXXXXXXXX• XXXXXXXXXXXXXXXXXXXX	

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

Experience

List all you previous/current work experience

19XX–20XX (Company Name)

Job Title (e.g. IT Assistant)

Participated in the data collection for XXXXXXX.

Participated in XXXXXXXXXXXXXXXXXXXX.

Honours and Awards

Distinguished student of the year- XXXXX.

Distinguished Student grant by XXXXXXXXXXXXXXX.

Certificate of XXXXXXXX.

Accomplishments

Academic Accomplishments

- "XXXXXXXX", 20XX
- "XXXXXXXX" 2003 Pa

Other Accomplishments

- XXXXXXXXXXXXXXXXXXXX
- XXXXXXXXXXXXXXXXXXXX

Association Membership

XXXX student chapter

Faculty of XXXXX- Student Counsel

XXXXXXXXXXXXX

Interests

Computers, Reading, Programming, Swimming, etc.

References

Dr. XXXXXX XXXXXX (Academic Advisor)

Department of XXXXXX

Faculty of XXXXX

Institute of Applied Technology

Tel: XXXXXXX

Fax: XXXXXXX

E-mail: XXXXXX@iat.ac.ae

Dr. XXXXXX XXXXXX

Department of XXXXXX

Faculty of XXXXX

Institute of Applied Technology

Tel: XXXXXXX

Fax: XXXXXXX

E-mail: XXXXXX@iat.ac.ae

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

APPENDIX 30:

SUPERVISOR'S ASSESSMENT OF STUDENT PERFORMANCE:

Company			Branch/Location		
Department			Student's First Name		
Work Supervisor			Student's Family Name		
Assessment Date			Job Title		
Period	From		To		

Student Performance	Poor	Fair	Good	Very Good	Excellent	Comment
Intellectual Skills						
Learning / Understanding						
Critical Thinking						
Problem Solving						
Flexibility						
Decision Making (Leadership)						
Professional Skills						
Knowledge						
Organization						
Output / Productivity						
Creativity						
Written Communication						
Oral Communication						
Computer / Technical Skills						
Social Skills						
Interpersonal						
Initiative						
Reliability						
Level of Professionalism						

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

Student Performance	Poor	Fair	Good	Very Good	Excellent	Comment			
Work Ethics									
Attendance/Punctuality									
Time Management									
Following Directions									
Appropriately Attire									
Self-motivation									
Credibility/Trustworthiness									
Work Standards									
Overall Assessment of Student									
Strengths:									
Weaknesses and Suggestions for Improvement:									
Other Comments and/or Suggestions:									
Would you be interested in hiring students from IAT in the future?						Yes		No	
Would you consider hiring this student should your company have any vacancies in the future?						Yes		No	
How many students do you plan to take next year for the Industrial Internship Training (IIT@IAT)?									
Do you require any specific skills of students for next year?									
How did you like the Internship Training organization by IAT? Suggestions?									
Date		Supervisor Signature							
Date		Student Signature							

APPENDIX 31:



IIT Memorandum For the **Industrial Internship Training (IIT@IAT)**

Between the
Institute of Applied Technology
Represented by (VICE PRINCIPAL),
Abovementioned as "Institute"

And

(Student's Name)
Abovementioned as "Student"

The Student, Parent/Guardian and Institute agree on the following responsibilities
for the duration of the student's internship:

from **(starting date)** to **(ending date)**
in **(company name, location)**.

I, the Internship Student, agree to:

1. Perform to the best of my ability those tasks assigned by my training supervisor which are related to my learning objectives and the responsibilities of the position.
2. Follow all the rules, regulations, and normal requirements of the internship provider organization (Company).
3. Fulfill the IIT Memorandum under the direction of an Institute advisor, and consult as needed with my Institute for guidance and evaluation.
4. Notify the Vice Principal or the assigned person of any changes I need to make in the internship assignment or of any concerns that may develop during the placement.

I, the Parent/Guardian, agree:

1. To allow my son to participate at the internship training program within the above mentioned company during the above mentioned period.
2. To arrange for transportation.
3. Failure to complete the internship assignment shall result in a deduction of 2 months stipend beginning of next academic year and no SANaD hours will be counted.

The Institute (Internship Supervisor), will provide the following:

1. Maintain communication and act as a liaison between the student and the internship partner organization.
2. Assist the student and internship partner in resolving any issues or concerns that may arise.
3. Assess the student's placement and the internship partner's satisfaction with the learning experience.
4. Upon successful completion of the internship assignment, students shall receive 30 hours SANaD (for 4 weeks) and the payment of stipend.

Date, Signature
STUDENT

Date, Signature
PARENT/GUARDIAN

Date, Signature
INSTITUTE

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

APPENDIX 32:

1. ASWAQ
2. Dubai Media Incorporated
3. Dubai Municipality
4. General Authority of Youth Welfare and Sport Authority
5. Directorate of Town planning and Survey
6. Etisalat
7. Emirates General Petroleum Corporation (Emarat)
8. Federal Electricity & Water Authority (FEWA)
9. Al Rostamani Group – Suzuki
10. Arabian Automobiles Company
11. Mohammad Bin Rashid Housing Est.
12. Dubai Aluminum Company Limited ("DUBAL")
13. Sharjah Municipality
14. Sharjah Police Headquarters
15. Al Futtaim Group - Al Futtaim Motors
16. Sharjah Electricity and water Authority (SEWA)
17. Dubai Civil Defense
18. Dubai Golf Club
19. Air Liquide
20. Cory's - Hepworth
21. Sharjah Civil Defense
22. Abu Dhabi Islamic Bank - ADIB
23. Al Wasl Asset Management Company
24. Dubai Events & Promotions (Dubai Summer Surprises)
25. Sharjah Media Corporation - Sharjah TV
26. Municipality & Planning Department Ajman
27. Ajman Police
28. Department of Islamic affairs
29. Sheikh Khalifa Hospital
30. Yas Marina Circuit
31. Presidential Flight
32. Emirates Airline
33. Dassault Aviation
34. Germany
35. France

Table 9 gives a clear understanding of the companies/industries that were involved in this program.

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

References:

Alseddiqi, M., et al (2009). An Improved Employability Skills Model and its Compliance Through Vocational Educational System in Bahrain. The International Journal of Learning, 16 (9). pp. 699-718. ISSN 1447-9494.

Beckett, H. (2006). All good practice. *People Management*, 12(5), 38–40.

Bergeson, T., et al (2008). Washington State Worksite Learning Manual. Office of Superintendent of Public Instruction (OSPI) publication. Olympia, WA 98504-7200

Bradshaw, K., et al (2004). 'Special Education in the UAE: Anxieties, Attitudes and Aspirations', *International Journal of Special Education*, Volume 19, Issue (1), 49-55

Canales, J., et al (2009). Focus Work based learning in California: Opportunities and Models for Expansion, James Irvine Foundation, WestEd.

Coco, M. (2000). Internships: a try before you buy arrangement. *Advanced Management Journal* 65(2): 41-3, 47.

Cooper, R. (1997). Applying emotional intelligence in the workplace, Training & Development, Vol. 51, No 12, pp 31 – 38.

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

Copa, H. & Wolff, J. (2002). *New Designs for Career and Technical Education at the Secondary and Postsecondary Levels*. Paper presented at the Association for Career and Technical Education Conference, December 15, 2001, New Orleans, LA. www.nccte.org.

Curtin, P. (2004) *Employability skills for the future*, Australia: NCVER.

Dacre, L. & Sewell, P. (2007). The key to employability: developing a practical model of graduate employability. *Education and Training Journal*, 49(8/9), p.p. 605-619.

Denzin, K. (1989). *Interpretive Interactionism*, Newbury Park, Sage

Dewey, J. (1916). *Democracy and Education*. New York, NY: The Free Press.

Flack, M. (1997). *Work Based Learning*, MDS-1110. Berkeley, CA: NCRVE.

Foster, D (2006). Reflection of a Careers Adviser, Phoenix. *The Journal of the Association of Graduate Careers Advisory Services*, No 117 (Summer), pp 5-6.

Gaad, E. (2010). *Inclusive Education in the Middle East*. New York: Routledge

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

Gault, J., et al (2000). Undergraduate business internships and career success: Are they related? *Journal of Marketing Education*, 22(1), 45–53.

Hamilton, A. & Hamilton, S. (1997) Learning well at work: Choices for quality, Washington: National School to Work Office.

Hamilton, M & Hamilton, F (1997a). Learning well at work: Choices for quality. Washington, D.C.: National School-to-Work Office.

Hamilton, M & Hamilton, F. (1997b). When is work a learning experience? *Phi Delta Kappan* 78 (9), 682-689.

Harvey, L., et al (1997). Graduates' Work: Organizational change and students' attributes. Centre for Research into Quality, University of Central England, Birmingham.

Hillage, J & Pollard, E. (1998). Employability: Developing a Framework for Policy Analysis. Research Brief No 85. London, Department for Education and Employment. <http://education.gov.uk/publications/eOrderingDownload/RBX04-05.pdf> [accessed 23 March' 2011]

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

Hinchcliffe, R. (2001), *Nice Work (If You Can Get It): Graduate Employability in the Arts and Humanities*. The Developing Learning Organizations Project Consultation Document.

Hoerner, J. (1996). *Work-Based Learning: The New Paradigm*. A presentation paper. Virginia Tech University, Blacksburg, VA.

Hoerner, J. & Wehrley, J. (1995). *Work-Based Learning: The Key to School-to-Work*. Westerville, OK. Glencoe/McGraw-Hill.

Kearns, P. (2001) *Generic Skills for the New Economy-review of research*, Australia: NCVER.

Luecking, R & Fabian, E. (2000). Paid internships and employment success for youth in transition. *Career Development for Exceptional Children*, 23(2), 205-221.

Ministry of Education, (2010). *School for All General Rules for Provision of Special Education Program and Services (Public and Private School)*, 1st Ed. UAE.

Miller, R., et al (2007). Required Internship Programs in Marketing: Benefits, Challenges and Determinants of Fit. *Marketing Education Review*, Volume 17, Number 2.

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

Modrakee, M. (2005). *Vocational education development in a work-based learning programme*, Victoria University.

National Association of Colleges and Employers, (2005). *NACE Experiential Education Survey Executive Summary*. Bethlehem, PA: Author. Retrieved March 21, 2008 from http://www.nacweb.org/info_public/surveys.htm#experiential.

Paris, K. (1994). *A leadership model for planning and implementing change*. Madison, WI: Center on Education and Work, University of Wisconsin-Madison.

Richardson, L. (1994). Writing: a method of inquiry in N. Denzin and Y. Lincoln (eds), *Handbook of Qualitative Research*, Thousand Oaks, CA, Sage.

Stasz, C & Kaganoff, T. (1997). *Learning how to learn at work: Lessons from three high school programs*, National Center for Research in Vocational Education, Berkeley, CA

Stasz, C. (1997). *Designing Classrooms that Work: Conception and Pilot Study*. Santa Monica, CA: RAND.

Stasz, C. (1999). Assessing the quality of Vocational Education in Schools: Independent Advisory Panel Meeting, CA: NAVE.

Stasz, C., et al (1994). Integrating Academic and Vocational Education: A Review of the Literature, 1987–1992. *Journal of Vocational Education Research* 19 (2): 25–72.

Steinberg, A. (1997a). Making schoolwork more like real work: Exemplary school-to-work programs show promise for more purposeful and engaged learning. *The Harvard Education Letter* 13 (2), 1-6.

Stom, A. (1996). Coordinating School and Work Based Learning: Powerful Partnerships for School-to-Careers Success. The American Vocational Association, Alexandria, VA 22314.

Swail, S. (2000). *School-to-Work & the SAT*. A Report to the National School-to-Work Office. Washington, DC: U.S. Department of Education.

Swail, S., et al (2001). *Students Speak: Work & Learning as College Preparation*. A Report to the National School-to-Work Office. Washington, DC: U.S. Department of Education.

Taylor, S. (1988). Effects of college internships on individual participants. *Journal of Applied Psychology*, 73, 393–401.

Analyzing the Industrial Internship Training practices at the Institute of Applied Technology: In affiliation with the three stake holders: students, institute and industries

Urquiola, M., et al (1997). School to work, college and career. MDS-1144. Berkeley, CA: NCRVE.

https: www.iit@iat student report/september2011

<http://www.bing.com/search?FORM=IEFM1&q=rationale+for+work+based+learning>

<http://www.ncrel.org/sdrs/areas/issues/envrnmnt/stw/sw0stw94.htm>

<http://www.ncrel.org/sdrs/areas/issues/envrnmnt/stw/sw3swopp.htm>

http://www.ncset.org/publications/issue/NCSETIssueBrief_2.2.pdf

<http://www.uaeinteract.com/german/news/default.asp?ID=170>

<http://yearbook.uaeinteract.com/updates.php?lang=ENG&cat=24&art=44>

<https://summerinternship2011.edublogs.org/>