

# Growing Trends of the Vocational Education in UAE

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**Abstract:** *With the view of augmenting the employability skills among the young Emiratis, the promotion of vocational education in United Arab Emirates (UAE) has been a priority concern for the government. In the current scenario, the UAE provides a gamut of educational services to all the male and female students at kindergarten and higher education level. The same has been aimed for vocational education as it is rendered as a necessity for acquiring a knowledge economy. Nonetheless, the rate of adoption of vocational training and education is relatively low in UAE and requires extensive research to identify the shortfalls and solutions for them. Therefore, the main goal of this paper is to investigate the need for growth of vocational education in UAE, the government initiatives and the challenges encountered by the sector in the current scenario. The research reveals that though the need for vocation education is recognized by the government, the sector is plagued by numerous challenges that hinder its growth and development. With the essential insights and recommendations, this paper will be useful for the UAE government to strategize and deploy approaches for accelerating vocation education among Emiratis and assist them in achieving desirable jobs for sustainable future.*

**Keywords:** Employability skills, government initiatives, United Arab Emirates, vocational education

## 1. Introduction

The United Arab Emirates (UAE) comprises of seven emirates with a total population of approximately 9.346 million (as found in 2013). It is therefore, the responsibility of the Government to ensure adequate development and growth of its Emiratis, for which education plays an efficacious role. Over the decades, the education sector in United Arab Emirates has acquired a prominent position among the key sectors of the region. The UAE government spends 24% of its expenditure on the education sector to facilitate the educational excellence for its citizens. The projected size of this sector is US\$7.31 billion, which is anticipated to further evolve with an upsurge of demand for more private and public schools [1]. Moreover, the UAE Government has shown substantial efforts in encouraging education through the promotion of private education providers in imparting knowledge among the students via establishing educational operations [2]. Both general and vocational education has been a primary concern for the UAE government and since its inception in 1971; it has worked in conveying education among all for the progression of the societies [2].

When considering the aspect of vocational education, which is imparting the practical knowledge among the students other than the throat learning, the governments of various countries believe that it is an essential sector in equipping the citizens with the necessary employability skills and competencies [3].

The Government has therefore, taken initiative in commencing strategies to encourage technical and vocational education training in the higher education sector of UAE. For the same purpose, Abu Dhabi Vocational Education and Training Institute (ADVETI) in 2007– Abu Dhabi was one such initiative taken by the Abu Dhabi Education Council (ADEC) and the largest Australian government vocational education provider – the Technical and Further Education Commission of New South Wales (known as TAFE NSW) to promote vocational education among all. The mission is to develop and deliver vocational

education and training designed for the citizens of the United Arab Emirates such that they can effectively perform in the UAE work force. However, there have been few researches in the UAE that have addressed the implementation, benefits and challenges encountered in the domain of vocational education. Therefore, the current study aims at assessing the need for growing and expanding the vocational education sector in UAE, and thereby evaluates the present success and challenges encountered in its operations.

## 2. Research Objectives

This review paper aims at fulfilling the following research objectives:

- 1) To assess the need for growth of vocational education in UAE
- 2) To analyze the recent initiatives undertaken in the vocational education sector in UAE.
- 3) To identify the challenges encountered by the vocational education sector in UAE.

## 3. Literature Review

### 3.1 The Vocational Education Sector in UAE

Technical education among the citizens of UAE is comparatively new. The first technical school, which taught the subjects of mechanical, electrical and building trades, was built in Sharjah in 1958 by the British Govt. In 1964 and 1969, such schools were recognized in Dubai and Ras al Khaima respectively. After independence in 1971, when UAE came into power, the general education was rigorously commenced. However, the vocational education was given proper attention only in the years of 1980s with the commencement of higher colleges of technology (HCT). This sector was instigated with the establishment of technical education at the secondary levels along with higher colleges of technology [3]. Vocational education has been regarded as a catalyst in extending the economic conditions, exterminating unemployment and poverty, providing skilled labor force and higher range of academically able students

[3]. As of now, there are 73 recognized higher education institutions in UAE out of which, 10 offer degree and vocational education and training (VET) programs. Altogether, these institutions offer 589 accredited tertiary programs. Some of the top vocational and technical institutes in the UAE are:

- 1) Abu Dhabi Vocational Education and Training Institute (ADVETI)
- 2) Higher Colleges of Technology (HCT)
- 3) Abu Dhabi Polytechnic (ADPoly)
- 4) The National Institute for Vocational Education (NIVE)
- 5) United Arab Emirates University
- 6) Fatima College for Health Sciences (FCHS)
- 7) Dubai Aerospace Enterprise University
- 8) Ajman University of Science and Technology

In 2000, the Commission for Academic Accreditation (CAA) was established by the Ministry of Higher Education and Scientific Research (MOHESR) as an authoritative body to certify the authenticity of vocational institutes. Among others, the government recognized the National Qualifications Authority (NQA) in 2010 as a legal body responsible for determining the national academic standards for the education in UAE [4]. Abu Dhabi Government has played a prominent role in providing technical and vocational education among the emirates. The evidence of its efforts in promoting vocational training is visible in the Emirates Skills program initiated by the Abu Dhabi Center for Technical and Vocational Education and Training (ACTVET) as a host of the World Skills Competition in 2017 [5]. World Skills is a global organization that aims to encourage technical and vocational education and training together with the governments of various countries. Apart from imparting knowledge, the Caracal International Co. and ADVETI have shown their collaboration through an agreement to promote vocational training by appointing 40 nationals of the Vocational Education Development Center (VEDC, a subsidiary of ADVETI) graduates at its operations in advanced military industries. VEDC (as part of the ADVETI System) has also signed a memorandum with Etihad Airways, according to which, Etihad will sponsor its 20 students each year along with employment to the talented graduates. Which, Etihad will sponsor its 20 students each year along with employment to the talented graduates.

### 3.2 Female Education in UAE

The education among the Emirati females has witnessed an incredulous upsurge over the years, where the overall literacy rate was 90% in 2007. The government of UAE has promoted and encouraged the women into participating in educational programs, both at local and international universities. It has been reported that the rate with which women in UAE are pursuing higher education is highest among the other countries in the world [6]. Apart from higher and vocational education, the girls enrolling in schools of UAE have witnessed a rapid augmentation. In 2007/2008, 46% of national students graduating from international universities were women. Approximately 75% of students enrolled in the UAE University and 62% of the students in higher education are females. With a rate of 2.1% women dropouts from universities, the females are acquiring requisite education that is valuable in the job market [7].

Since the inception of ADVETI, it has been working to promote vocational education by offering a variety of courses to both males and females. The current number of student participating in vocational training courses at ADVETI is 2,234, where 883 are in Diploma courses and 891 in the foundation program. The total number of students graduating from ADVETI is 1957 at 30th May 2016. Also, around 74% of the students graduated since 2010 are employed at reputed organizations. The following Figure 1 shows the number of males and females who graduated from different vocational education programs.

### 3.3 The Need for Growth of Vocational Education in UAE

Vocational education is highly preferred by the employers who want their recruits to be equipped with the essential skills that can be exploited on their initial days of work. However, the gap of what is expected by the employers and what is instilled in the vocational institutions is quite large.

The Ministry of Education is accountable for taking decisions in the vocational education sector of the UAE. According to the Workforce Planning Study commenced by the Dubai International Academic City, the rate of student registration in the technical and vocational training institutes has been 1 to 3%, which is lower than the global average of 10%. On the other hand, the demand for higher skill force in the aviation, hospitality and other industries has been increasing incessantly. It has been revealed that there are apparent gaps pertaining to leadership and executive education. As professed by Dr. AyoubKazim, Managing Director of Dubai International Academic City, "Education is the foundation of UAE's long-term economic success" [8]. This commands a great need of extending the vocational education institutes among the citizens of UAE for imparting them with the desired skill set and competencies.

### 3.4 The Industries in UAE Demanding the Need of Vocational Education

The increasing population and globalization has contributed to the expansion of industries of varied sectors such as tourism, nuclear and power, steel and aluminum, oil and gas etc. in the UAE. Also, the hopes of acquiring knowledge-based sectors has amplified the need for vocational training and education. UAE's knowledge-based economy demands at least 10 graduates from every university with the essential vocational competencies [9].

The UAE travel and tourism industry has been anticipated to grow with 2.7% each year over the next decade. In 2014, it contributed 8.4% to the UAE's GDP, which is higher than that of financial and education sectors. When considering the job opportunities, it offers thousands of jobs which may be indirect or direct and in 2014, it employed a total of 518,000 individuals [10]. In a similar direction, UAE has been a key player in the energy sector, with high facilitations in natural gas marketed production, refinery capacity and crude oil reserves [11]. Also, the import and export of oil and gas has bloomed over the years, thus showing an upsurge in the employability. UAE will further witness growth in metal industry, wherein new construction and production projects

have been commenced to boost the role of UAE as the leading metal exporter. Therefore, with expanding infrastructure and growth in these sectors such as financial, tourism, energy, and metal, the job opportunities for young graduates have increased, which seek the essential employability skills.

However, the desired level of skills and competencies among the graduates required by the subject-specific industries is lacking. The emerging financial sectors and others require a workforce that is highly qualified with relevant education. A point of concern has been observed regarding the vocational training and courses, which reveals that the vocational education lacks at addressing the dynamic pace of such industries and therefore, demands acute attention. To fulfil the demands of the UAE industry, it is imperative to provide effective vocational education to the Emiratis for driving further growth.

### 3.5 Initiatives Taken to Encourage Vocational Education in UAE

The UAE government has initiated national strategy for TVET (technical and vocational education and training) (2011-2013) pertaining to encourage vocational education amongst the individuals. It emphasizes on developing student's skills and knowledge while motivating them to pursue higher education [12]. It strives for improving the quality of education for imparting educational values and ensuring the accessibility of education to all who seek for it. The strategy also aims as developing efficient workforce through a plan termed as 'Vision 2020'. The initiative here is to train the skilled workforce in the higher education institutes for equipping them with industry-based training.

UAE established the National Institute for Vocational Education in 2006, with a vision to develop a skilled work force as per the demands of the labour market comprising of employers, government, communities, and stakeholders. The objective of this organization is to provide customized and high quality vocational education as per the professional standards. To fulfill its objectives, TVET programs are organized for training the individuals with both theory and practical knowledge. In addition to this, the organization arranges work placement learning, which is mandatory to attend for 6-weeks [13]. This program instills real-life work experience among the students.

With an aim to instigate the process of skill development and diversify the economy, the Abu Dhabi Executive Council established Abu Dhabi Centre for Technical and Vocational Education and Training (ACTVET) in 2010 [14]. It plans strategic TVET policies in providing guidance and support to the Abu Dhabi public and private Technical and Vocational education institutes. It is also accountable for licensing trainers as per the criteria set by the UAE's local market. The goal of ACTVET is to generate skilled Emirati for the purposes of acquiring greater career opportunities and development. Its core functionalities are further listed below:

- 1) Formulating schemes for improving technical and vocational education.

- 2) Assist public and private institutions of UAE with respect to vocational training.
- 3) Licensing institutions providing vocational training in accordance with the standards.
- 4) Developing partnerships with institutions and companies for the betterment of all.

The Ministry of Education Strategy 2010-2020 implemented by the UAE government has the following major objectives:

- 1) Expanding primary and secondary education among all the citizens of UAE
- 2) Ensuring the accessibility of education at affordable prices while maintaining the quality of education
- 3) Developing a high quality of curriculum with qualified educational staff
- 4) Establish regular assessments on a federal level
- 5) Ensure that all the activities are performed in a timely and efficient manner

For ensuring the quality of the education in the public and private institutions, the Commission for Academic Accreditation (CAA) was established [15]. It licenses training programs and higher secondary institutions while ensuring the academic standards followed by them. It develops the policies and framework for the same and also provides distinct services to extend the quality of education. World Class Qualifications is one such framework that guides students in developing their skills for succeeding in the competitive knowledge-based job market.

In 2010, the UAE Government recognized and established the National Qualifications Authority (NQA). The purpose of NQA is to engender a system that evaluates high quality qualifications criteria for the nationals. This framework of national qualifications aims at the acquisition of knowledge economy. It further aims at constructing a UAE educational system/framework comprising of vocational training that motivates the economic progression with improvements in the labor market. NQA emphasizes on developing a quality assurance process of vocational education that provides desired outcomes to be exploited for meeting the economic and social progression needs. With this view, the authority is motivating the Emirati through trust building by implementing internationally-recognized vocational training system [16]. Later, vocational education and training awards commission (VETAC) was established to promote and handle all the facets of vocational education and training in UAE.

The most promising vocational training provider in the emirate is ADVETI (Abu Dhabi Vocational Education and Training Institute) as it provides education in seven domains, namely, travel and tourism, environment studies, logistics and engineering, business, design, IT and industrial technology. It operates in accordance with the standards provided by NQA while considering the skills set required by the job providers. In addition, ADVETI offers English language training to those with poor language skills.

### 3.6 The Challenges Encountered by the Vocational Education Sector in the UAE

As mentioned before, the rate of enrolment in the vocational institutes is only 1-3%, which is marginally lower than the global percentage. The challenge faced by the higher level education sector is the lack of people who are readily participating in TVET. The reason is that the employers appoint university graduates at higher salaries; therefore, the students prefer the degree courses instead of the vocational education [17]. There is a lack of national strategy that promotes TVET amongst the people, to make them aware about the wide-ranging benefits of vocational education. The cooperation between the stakeholders and TVET system is not satisfactory. Some of the challenges encountered by the higher level education sector in UAE are [18]: (As per the third objective, the challenges and issues met by the vocational education system have to be determined. This section covers some of such challenges. Therefore, it will be inappropriate to remove and replace them with government initiatives, as the government schemes have already been presented in the previous section.)

- 1) Increasing demand and globalization
- 2) Lack of quality education
- 3) Distance education
- 4) Inadequate teacher education
- 5) Aligning graduates with the labour market
- 6) Social inequalities
- 7) Mistrust among people about college education

Also, economic, political, academic and administrative are the major factors that affect the higher education [19]. Most of the private institutions were established in UAE after 2005, where the foreign universities have set their hold in UAE with the motive of expansion. However, most of the universities offer narrow range of courses that can be easily established at lower prices. Several such institutes have failed to fulfill their recruitment targets. George Mason University in Ras al Khaimah had to close its operations as only 180 undergraduates enrolled in the time span of 3 years. The similar statistics have been noticed in other universities as well, such as Michigan State University which managed to acquire only 85 undergraduates in 1 year, Rochester Institute of Technology with 50 students and Murdoch University with 30% decrease in its student enrollment population. Institutions are finding it hard to acquire high percentage of students even after reducing their tuition fees [20]. One of the reasons of this low rate is that the students prefer studying in countries like US, UK and Australia.

As revealed by ADVETI, only 3% of post-secondary graduates have shown interest in vocational training programs [21]. Also, considering the statistics in Figure 2 and 3, the total number of graduates from ADVETI have decreased from 2013-14 (306 graduates) to 2014-15 (285 graduates).

The most popular reason behind this enrolment rate is a 'general lack of interest' of the students for technical education [21]. The higher salaries offered to those with university degrees are a probable reason due to which the enrolment in vocational programs is low. Also, as mentioned above, the skills imparted among the individuals in

vocational education is unable to meet the criteria set by the industries. Thus, requiring intervention of the educational authorities in setting industry-specific vocational training. Therefore, a more rigorous efforts must be applied by the government to raise the bar of vocational education.

### 3.7 Recommendations for improving Vocational Education in UAE

Though the need of vocational education has been recognized by all (government, students and industries) in UAE, where several initiatives have been taken to promote real-skills training, the scope of improvement always exist. As identified in the current research, there are several challenges encountered that hinders the path of vocational education progression. One such challenge is that the employability skills desired by the companies as per the specific job requirements differ from what is imparted among the students. Considering this concern, the study recommends the following:

- 1) Ensure all programs are offered are approved by Ministry of Higher Education & Scientific Research UAE and under the guidelines of NQA, UAE.
- 2) The vocational institutes and industrial experts must collaborate with each other, in not only hiring the graduates but equipping them with real-skills.
- 3) The course or syllabus offered by the vocational institutes must be regularly revised/updated as per the dynamic needs of the industries.
- 4) The industrial experts must be allowed participation in the process of developing revised syllabus.

## 4. Conclusion

The review on the growing trends of the vocational education sector in UAE makes it evident that, the government of UAE has recognized the dire need of promoting vocational education among its Emiratis. To meet the requirements of the employers in distinct industries, the young Emiratis must have employability skills and technical knowledge, which is imparted through vocational training. For this purpose, the government of UAE has taken several initiatives such as the establishment of National Institute for Vocational Education and Abu Dhabi Centre for Technical and Vocational Education and Training (ACTVET), undertaking national strategies and formulating frameworks. Nonetheless, the challenges encountered by the vocational education sector in UAE are immense. Among these issues are increasing demand and globalization, lack of quality education, inadequate teacher education and social inequalities. Also, the students do not feel the need for participating in vocational training programs as they are able to land a job after their graduation. The number of students graduating from vocational training programs has decreased in certain colleges such as Fatima College for Health Sciences (FCHS) and Abu Dhabi Vocational Education and Training Institute (ADVETI). It has already been established that the employers of distinct industries demands the workforce with the essential employability skills, thus making vocational education furthermore significant. To rectify the situation, it is relevant to improve the perception of students regarding the vocational and technical trainings.

Therefore, apart from developing strategies to spread awareness among the people, there is an imperative requirement to make alterations within the vocational education system to enhance its quality and retain more students. The present study has recommended a course or syllabus revision in the vocational education that addresses the specific industrial skills. However, investigating the folds of appropriate curriculum in this regards is out of the scope of the current research. Therefore further study can be commenced that explores course revision to be offered in the vocational training programs.

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