

# Comparative Analysis Of Vocational Education In The UAE, Egypt, And The UK To Develop Proposals For UAE's Vocational Education

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## **Abstract:**

**Background:** Vocational education plays a crucial role in a knowledge-based economy by producing knowledgeable and qualified graduates who can meet both market demands and job requirements. While there are ongoing discussions and arguments about improving the application of vocational education, meaningful changes often take time. This study aims to compare the vocational education systems in the United Arab Emirates, the United Kingdom, and Egypt, analyzing each system's employability, strengths, flaws, and curricula. **Materials and Methods:** The research involves a comparative analysis of vocational education systems in the UAE, the UK, and Egypt, using various case studies. The study examines factors such as the population-to-enrollment ratio, youth employability, and the curricula of two representative vocational schools in each country. By evaluating patterns of similarities and differences in these cases, the research identifies key causal conditions necessary for effective outcomes in vocational education systems.

**Results:** The study focuses on different technical and vocational institutes in the UAE, the UK, and Egypt. It analyzes data related to each country's population, student enrollment in secondary vocational education, the percentage of young people participating in technical programs, and the youth labor force participation rate. The findings reveal that, despite variations in the implementation of vocational education across these countries, the results from the sampled vocational education institutes are largely consistent.

**Conclusion:** The research highlights the importance of improving vocational education in the UAE by developing high-quality curricula and regulations that are adaptable to the evolving fields of technology and artificial intelligence. Furthermore, it suggests leveraging the UAE's position as a global hub for technology to enhance vocational education outcomes.

**Key Word:** Vocational Education, Curriculum, Proposals, weaknesses, strengths, UAE, UK, Egypt

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## I. Introduction

Vocational education plays a critical role in preparing individuals for careers and contributing to a nation's economic prosperity. The UAE has prioritized education since its establishment in 1971, with a particular focus on vocational education starting in the 1980s. Despite efforts to enhance technical and vocational education and training (TVET) systems, the UAE faces challenges with a low adoption rate compared to developed countries. The need for highly skilled workers in various sectors remains pressing, especially as the country moves towards a knowledge-based economy.

The problem in the UAE's vocational education system lies in the gap between the theoretical and practical aspects of the curriculum. While vocational education is seen as a means to reduce youth unemployment and promote economic growth, many graduates still lack the necessary skills for the workforce. This study aims to analyze vocational education systems in the UAE, the UK, and Egypt to identify strengths and weaknesses, drawing lessons that can inform improvements in the UAE's system.

The research seeks to provide a comparative case study analysis of vocational education, focusing on the goals, curricula, and outcomes in the UAE, UK, and Egypt. By comparing these systems, the study aims to offer proposals for enhancing vocational education in the UAE, addressing issues like curriculum quality, student preparedness, and alignment with job market needs. The research will explore international best practices and tailor recommendations to the UAE's specific context.

Ultimately, this study is significant for the UAE as it strives to improve its vocational education system. By understanding the vocational education systems in the UK and Egypt, this research offers valuable insights into how the UAE can overcome its current challenges and create a more effective vocational education framework that meets the demands of a rapidly evolving job market.

## **II. Material And Methods**

This chapter outlines the methodology used to investigate vocational education across three countries: the UAE, UK, and Egypt. The approach is qualitative, focusing on comparative case studies to explore the strengths and challenges of vocational education in these nations. This chapter details the research design, location, duration, sampling methods, and data collection techniques employed to gain insights into vocational education practices. It also addresses the ethical considerations, limitations, and analysis methods applied in the study. By using secondary data from established organizations and case studies, the research aims to provide a comprehensive understanding of the vocational education systems in these countries and offer recommendations for improvement in the UAE context.

**Study Design:** This research adopts a qualitative research approach using a comparative case study design. It focuses on analyzing vocational education systems in the UAE, UK, and Egypt through secondary data, case studies, and documents. The approach allows for in-depth understanding of the context, policies, and implementation of vocational education in these countries, examining their strengths and weaknesses to propose improvements for the UAE.

**Study Location:** The study investigates vocational education in three countries: the UAE, the UK, and Egypt. These countries were selected based on their distinct characteristics, including the age of the country, population size, vocational education policies, and their relevance to the UAE's context.

**Study Duration:** The study does not involve empirical research or direct participant interaction but instead uses secondary data sources. The timeline for the study is dependent on data collection from documents, reports, and case studies, and will vary according to access to these materials.

**Sample size:** Sample size calculation is not required in this study as it uses qualitative data from case studies and secondary sources rather than statistical analysis. The focus is on gaining insights from diverse case studies that represent the vocational education systems in the selected countries.

**Sample size calculation:** The subjects of the study are vocational education institutions from the UAE, UK, and Egypt. These were selected through a purposive sampling method, based on the availability of case studies and data sources, including reports from organizations such as OECD and UNESCO-UNEVOC.

**Subjects & selection method:** The subjects of the study are vocational education institutions from the UAE, UK, and Egypt. These were selected through a purposive sampling method, based on the availability of case studies and data sources, including reports from organizations such as OECD and UNESCO-UNEVOC.

### **Inclusion criteria:**

Institutions that have documented vocational education programs, case studies, and relevant policies were included in the study. Only institutions with accessible secondary data on vocational education in the three countries were considered.

### **Exclusion criteria:**

Institutions without readily available case studies, data from secondary sources, or those not offering comprehensive vocational education programs were excluded. Additionally, any studies lacking clear documentation or reporting on relevant curriculum and policies were omitted.

### **Procedure methodology**

The research follows a case study analysis method, focusing on secondary data collected from various sources, including international organizations (OECD, UNESCO-UNEVOC) and academic articles. A comparative analysis of the case studies from the three countries is conducted to identify strengths, weaknesses, and lessons that can inform the UAE's vocational education system.

### **Statistical analysis**

Statistical analysis is not applied in this research due to its qualitative nature. Instead, the study uses a qualitative comparative case study analysis to assess and compare vocational education systems in the three countries. The focus is on understanding the educational practices and frameworks rather than on quantitative measurements.

### III. Result

The outcome of the comparative analytical procedure will be presented in this chapter. In addition to reflecting the research design that was proposed in the literature review, it should provide the answers to the research question which is: what can be learned from the vocational education systems in the three countries of the research in order to develop strong suggestions for the provision of vocational education in the UAE, that will help in shaping the main aim of the research. It should also be consistent with the study's objectives and show why it was necessary to perform the investigation in the first place. The findings are related to the review of the literature, particularly the conceptual framework.

The chapter will present the collected data and analyse them to extract their meaning, then the qualitative data analyses process to summarize the information to answer the research question, and finally results evaluation and interpretation will be in the discussion section.

#### Results and Data Analysis

##### Overview of Vocational Education

Technical and vocational education and training (TVET), according to the UNESCO (2015), is believed to include education, training, and skill development linked to a wide range of occupational domains, production, services, and livelihoods. TVET, which is a component of lifelong learning, can occur at the secondary, post-secondary, and tertiary levels and involves work-based learning, ongoing professional development, and training that could result in certifications. Additionally, a variety of options for skill development that are tailored to local and national settings are included in TVET. Integral elements of TVET include learning how to learn, the development of reading and numeracy abilities, transversal skills, and citizenship skills.

According to the OECD indicators (2022) many countries have created flexible routes from upper secondary curricula, including vocational ones, into higher education and the job market, as well as opportunities for switching between general and vocational curricula. In the OECD countries, 31% of 17-year-olds are enrolled in vocational upper secondary programs, compared to more than 50% of all 17-year-olds who are enrolled in general upper secondary programs. By age twenty, the majority of OECD countries had practically completed the transfer out of upper secondary education, and enrolment rates for general and vocational upper secondary education are both below 10%. (Appendix A-Table 1).

##### Vocational Education Overview Across the UK, the UAE, and Egypt – Data Collection

The data were gathered through several online case studies and open-source data from the three countries that were chosen for the research, as was previously indicated in the methodology chapter. However, it is worth indicating that there was a lack of complete data across those countries.

##### UK Vocational Education Overview

According to Twining (1999) the medieval guild system in England served as the foundation for vocational education. It governed apprentice training and set entry requirements for trades. This persisted from the eleventh century until Elizabeth I's reign, when the Statute of Artificers was passed in 1563. The principal London guilds, for instance, contributed to the establishment of the City and Guilds of London Institute in 1878, and the Worshipful Company of Goldsmiths now supports the British Jewellers Association in developing vocational standards for the sector. The data was collected from different online available resources.

##### UK Vocational Education Data

According to UNESCO-International Centre for Technical and Vocational Education and Training- UNEVOC (2002) the following key statistics have been indicated (Table 3):

| Key Statistics   | Numbers                                  | Percentage                     |
|--|--|--------------------------------|
| Total population   | 67.3 million                             | 11.4% aged between 15-24 years |
| Enrolment in secondary vocational education                            | 2.2 million                              | 50.4% females                  |
| Participation in technical and vocational programmes, 15–24-year-olds. | 1.7 million Males<br>1.8 million females | --                             |
| Labour force participation rate (% of total pop. ages 15+)             | --                                       | 62.5% (2021)                   |
| Labour force participation rate (% of total population ages 15-24)     | --                                       | 56.3% (2021)                   |

|                                  |    |              |
|----------------------------------|----|--------------|
| Vulnerable employment, total (%) | -- | 13.4% (2019) |
| Youth unemployment (%)           | -- | 10.5% (2019) |

**Table no 1:** UK Vocational Education and Labour Market Key Statistics (Source: Author)

To ensure that the acquired skills and knowledge are acknowledged across the country, the National Qualifications Framework (NQF) is the mechanism that formally records the credits granted to each level of learning achievement. The UK national qualification frameworks are:

FHEQ-the framework for higher education qualifications in England, Northern Ireland, and Wales

QCF-the qualifications and credit framework

NQF -the national qualifications framework

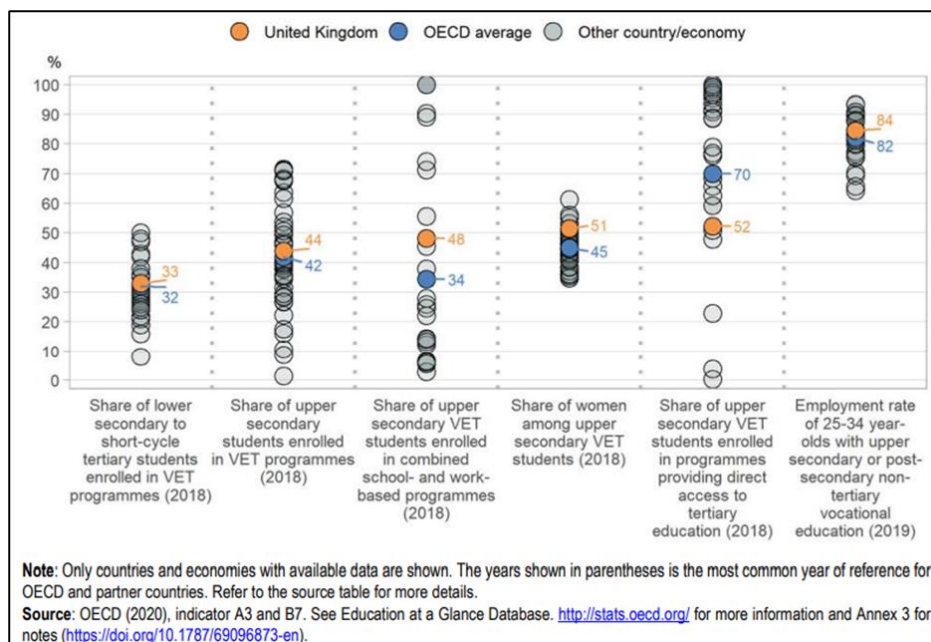
SCQF-the Scottish credit and qualifications framework

FQHEIS-the framework for qualifications of higher education institutions in Scotland

CQFW -the credit and qualifications framework for Wales

According to OECD-EAG (2020) the UK is one of the few countries of OECD where the cost of vocational programs per student (USD 8 978) is less than the cost of general ones (USD 13 429). Vocational education programs draw a wide variety of students, including those looking for credentials and technical skills to enter the workforce, adults looking to improve their employability by furthering their abilities, and students who may subsequently seek admission to higher education (OECD-EAG, 2020)

In the UK, 1:3 students in lower secondary through short-cycle postsecondary education are enrolled in a vocational education program, which is similar to the average across OECD nations. One of the few nations where vocational education can start in lower secondary is the UK. While the average for OECD countries is for 6% of vocational education students to be enrolled in lower secondary education, this number is 19% in the UK. In the majority of OECD countries, vocational education plays a significant role in upper secondary school. In the UK, the average number of upper secondary pupils participating in VET programs is 44%, which is slightly higher than the OECD average of 42%. (Figure 2).



**Table no 2:** Snapshot of vocational education in the UK (Source: OECD (2020), Indicator A3 and B7).

The number of certificates for regulated vocational and other qualifications that were issued in England from January to March of 2022 (the first quarter of 2022) is disclosed in this release.

During the first quarter of 2022 (January to March), several COVID-19 restrictions were lifted in England. According to the regulatory framework, modified vocational and other qualifications were nevertheless accepted.

The number of certificates granted for the majority of certification types increased in the first quarter of 2022 compared to the first quarter of 2021. The Other Vocational Qualifications certifications saw the biggest increases in the number of certificates awarded (from 65,135 certificates in the first quarter of 2021 to 139,685 certificates in the first quarter of 2022, a rise of 114%).

According to different authors and researchers the UK vocational education system have the following weaknesses:

According to Atkins and Flint (2015) in the UK, there is a prevalent concept that derives from a traditional viewpoint of the well-educated that vocational education, such as a National Vocational Qualification (NVQ) or Business and Technology Education Council (BTEC), is for those who are less intellectual.

British citizens' perception of the vocational education system. Therefore, employers look down upon people who claim to have a BTEC or NVQ as opposed to those who have completed A-levels or a postgraduate degree (Atkins and Flint, 2015).

The main flaws of vocational education in the UK are the complexity of the VET framework, the limited opportunities for apprentice career advancement, and the failure to recognize the diverse needs of students (Wolf, 2011).

The skill-based strategy appears ineffective when the failure of comprehensive career development is the real issue (Brockman et al., 2008).

Taking two different vocational institutes in the UK as case studies will be useful to enhance the research results. The following two institutes have been chosen.

#### Lincoln University Technical College

| Category                               | Details  |
|--|--|
| Name of the school                     | Lincoln University Technical College   |
| School URL                             | <a href="https://www.lincolnutc.co.uk/">https://www.lincolnutc.co.uk/</a>  |
| Mission of the School (Career mission) | To make certain that every student acquires the knowledge and abilities needed to advance in their chosen careers, whether at a university or in the workplace.  |
| Curriculum overview (Vocational)       | Varies between GCSE, Cambridge National, A level, and BTEC vocational programs (that uses the competence-based qualification)  |
| Employability                          | The delivery of the college curriculum involves a sizable number of employer partners. Students get the chance to gain from educational opportunities based on actual industry experiences by collaborating with local businesses. |

**Table no 3:** Lincoln University Technical College (Source: Author)

#### Aytun Vocational College

| Category                               | Details   |
|--|---|
| Name of the school                     | Aytun Vocational College  |
| School URL                             | <a href="https://www.aytuncollege.com/">https://www.aytuncollege.com/</a>   |
| Mission of the School (Career mission) | To offer students the best possible instruction, support, knowledge, guidance, and advice in order for them to achieve their academic and professional objectives. By taking students and guide them through their learning process, taking them from learner to experienced candidate to trained professional to industry expert.                |
| Curriculum overview (Vocational)       | Various vocational awarding bodies: Highfield, Pearson, Edexcel (BTEC), City & Guilds   |
| Employability                          | Provide a variety of chances to promote and strengthen British values both within and outside of the classroom. Students will have the chance to explore and develop the values, knowledge, confidence, and skills necessary to prepare them for life in modern Britain and to effectively advance to employment through all of their activities. |

**Table no 4:** Aytun Vocational College (Source: Author)

#### Egypt Vocational Education overview

According to Wolf (2017) the Germans were the pioneers of constructing the base of vocational education and putting it into practice in Egypt. From the private primary school via the public training institutes of the several ministries to a distinct system of traditional vocational training, a highly complicated network of public and private educational institutions has grown. It is also distinguished by a high degree of complexity and heterogeneity, both of which are strongly related to Egypt's general system of vocational education and training. Vocational education and training has historically served as a second or third chance education for Egyptian students who failed to succeed in the academic system. The data was collected from different online available resources.

#### Egypt Vocational Education Data

According to UNESCO-International Centre for Technical and Vocational Education and Training- UNEVOC (2002) the following key statistics have been indicated (Table 6):

| Key Statistics   | Numbers       | Percentage                     |
|------------------|---------------|--------------------------------|
| Total population | 104.3 million | 16.7% aged between 15-24 years |

|  |  |              |
|--|--|--------------|
| Enrolment in secondary vocational education                            | 2 million                                    | 41% females  |
| Participation in technical and vocational programmes, 15–24-year-olds. | 9.1 million<br>Males<br>8 million<br>females | --           |
| Labour force participation rate (% of total pop. ages 15+)             | --   | 41.3% (2021) |
| Labour force participation rate (% of total population ages 15-24)     | --   | 21% (2021)   |
| Vulnerable employment, total (%)                                       | --   | 18% (2019)   |
| Youth unemployment (%)   | --   | 30.2% (2019) |

**Table no 5:** Egypt Vocational Education and Labour Market Key Statistics (Source: Author)

**Egypt National Qualification Frameworks are:**

NQF-The National Qualifications Framework

CS-A credit system (based on an outcomes-based approach)

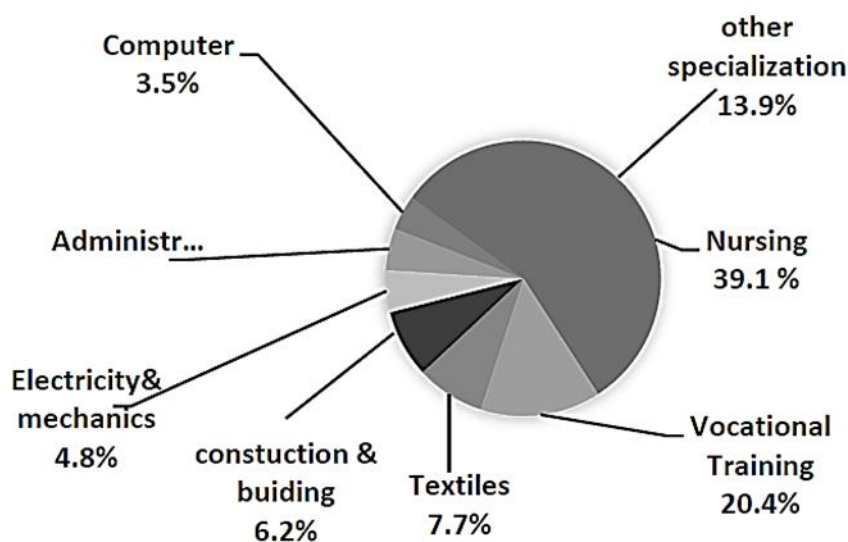
LD-Level descriptors (specified in terms of three domains of learning: Knowledge, Skills, and Competencies)

AP-Articulation pathways (still being developed)

NRQ-A National Register of Qualifications (not yet available but are expected in the next developments of the NQF)

RPL-A system for the recognising of prior learning (formal and informal learning) and transfer of credits (not fully operational as yet but work is being done in this regard)

According to CAPMAS, the Central Agency for Public Mobilization and Statistics (2022), there are 481 training institutes in the public sector, down from 487 in 2019-2020 by 1.2%. Among all educational disciplines, vocational education has a 20.4% share.



**Table no 6:** CAPMAS, Annual Bulletin of Education & Training Statistics in Governmental & Private Sectors Training institutions 2020-2021

Additionally, the number of vocational training centres operated by the Ministry of Social Solidarity decreased by 10.7% from 122 centres (9 systematic, 113 unsystematic) in 2019/2020 to 109 centres (4 systematic, 105 unsystematic) in 2020/21.

The number of systematic students at private vocational training facilities fell from 4791 in 2019/2020 to 2161 in 2020/21, a 54.9% fall. The Covid-19 pandemic-related closure of several training institutions is to blame for this decline.

According to Semlali and Angel-Urdinola (2012) the weaknesses of vocational education in Egypt are:

A large part of vocational education system is fragmented

Services are frequently supply-driven, with little coordination with labour market needs.

Low quality of teaching and training

Inadequate monitoring and evaluation of training program outcomes on the labour market.

Taking two different vocational institutes in Egypt as case studies will be useful to enhance the research results. The following two institutes have been chosen.

**American University in Cairo-School of Continuing Education**

| Category                               | Details  |
|--|--|
| Name of the school                     | American University in Cairo-School of Continuing Education  |
| School URL                             | <a href="https://sce.aucegypt.edu/term/course-field-study/applied-vocational-studies">https://sce.aucegypt.edu/term/course-field-study/applied-vocational-studies</a>                    |
| Mission of the School (Career mission) | To become the premier provider of continuing education including vocational education in Egypt and worldwide in order to improve and transform the lives of students, lifelong learners. |
| Curriculum overview (Vocational)       | American System with credit hours & GPA system   |
| Employability                          | By expanding the University's resources to Egypt and beyond, we can increase our participants' employability and offer them lifelong learning opportunities.                             |

**Table no 6:** American University in Cairo-School of Continuing Education (Source: Author)

**SEKEM Vocational Training Centre**

| Category                               | Details  |
|--|--|
| Name of the school                     | SEKEM Vocational Training Centre   |
| School URL                             | <a href="https://www.sekem.com/en/cultural-life/vocational-training-center/">https://www.sekem.com/en/cultural-life/vocational-training-center/</a>                                      |
| Mission of the School (Career mission) | To become the premier provider of continuing education including vocational education in Egypt and worldwide in order to improve and transform the lives of students, lifelong learners. |
| Curriculum overview (Vocational)       | German VET system  |
| Employability                          | Young people receive skills from the Vocational Training Centre (VTC) that are required by the regional labour market.   |

**Table no 7:** SEKEM Vocational Training Centre (Source: Author)

**UAE Vocational Education Overview**

According to Owais et al. (2020) although smaller than in the UK, vocational education was established in the United Arab Emirates in 1988 with the creation of Higher Colleges of Technology. To "meet the needs of an economy which is expanding into buoyant areas such as tourism, construction, and real estate," extensive work has been done to extend, improve, and restructure the system. The UAE now has a much larger number of vocational education institutions. These institutions exist to generate graduates who are prepared for the employment market. Foreign language and computer training, engineering, banking, and finance are a few of the training areas that these institutions offer. The data was collected from different online available resources.

**UAE Vocational Education Data**

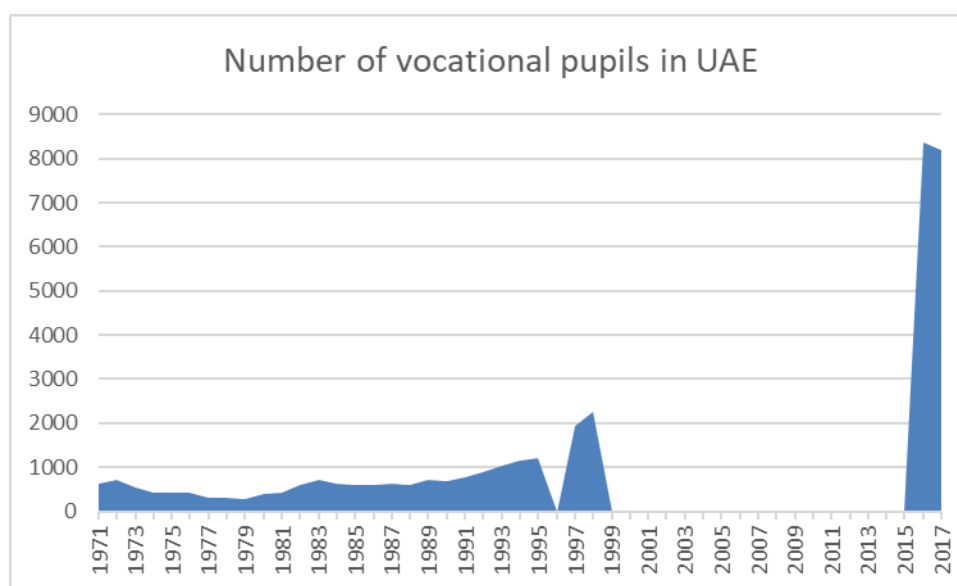
According to UNESCO-International Centre for Technical and Vocational Education and Training-UNEVOC (2002) the following key statistics have been indicated (Table 9):

| Key Statistics   | Numbers       | Percentage                     |
|--|---------------|--------------------------------|
| Total population   | 10 million    | 11.2% aged between 15-24 years |
| Enrolment in secondary vocational education                            | 10.4 thousand | 46.5% females                  |
| Participation in technical and vocational programmes, 15-24-year-olds. | --            | --                             |
| Labour force participation rate (% of total pop. ages 15+)             | --            | 76.4% (2021)                   |
| Labour force participation rate (% of total population ages 15-24)     | --            | 48.2% (2021)                   |
| Vulnerable employment, total (%)                                       | --            | 1.4% (2019)                    |
| Youth unemployment (%)   | --            | --                             |

**Table no 8:** UAE Vocational Education and Labour Market Key Statistics (Source: Author)

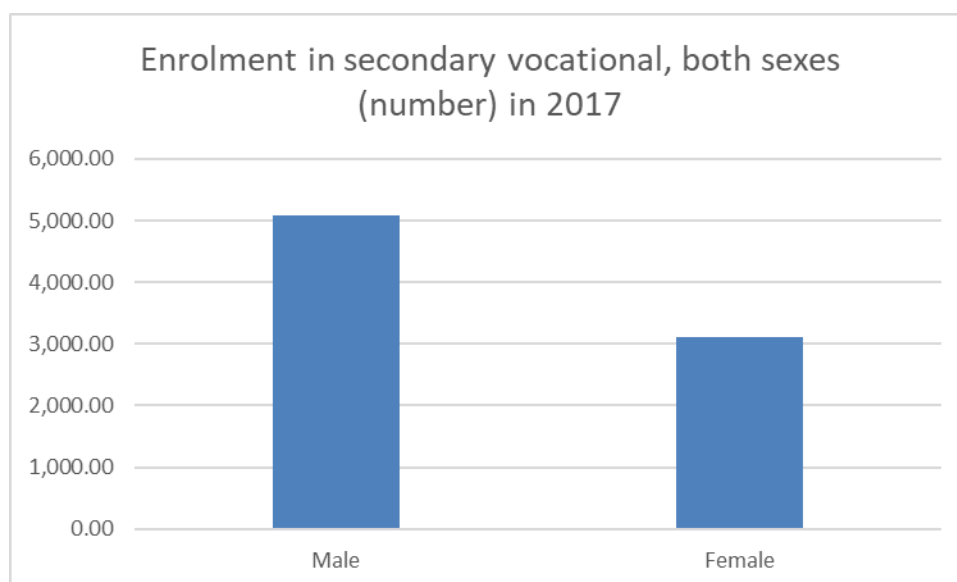
UAE National Qualification Framework QFEEmirates-The National Qualifications Framework for the UAE.

A chosen bar from the Unesco-Institute of Statistics' (2020) graph depicts the gradual increase in students enrolled in vocational education.



**Table no 9:** Number of Vocational Pupils in UAE (UNESCO Institute for Statistics [uis.unesco.org]. Data as of February 2020.)

Also, both genders enrolled in secondary vocational programs at a rate of about 8.2 thousand. who are females in 37.9% (Unevoc, 2017)



**Table no 10:** Enrolment in Secondary Vocational, Both Genders in 2017 (UNESCO-UNVOC [unevoc.unesco.org] 2017)

As vocational education is still somehow new to the UAE compared to other countries, for sure there are numerous challenges and weaknesses. However, unfortunately there is no one single study or research exposing those weaknesses or challenges. Yet, it is for the sake of this research is to mention some of the weaknesses from the research point of view and detail them in the comparative analysis section.

Taking two different vocational institutes in the UAE as case studies will be useful to enhance the research results. The following two institutes have been chosen.



National Institute for vocational education-NIVE

| Category                               | Details   |
|--|---|
| Name of the school                     | National Institute for vocational education-NIVE  |
| School URL                             | <a href="http://www.nive.gov.ae/En/Default.aspx">http://www.nive.gov.ae/En/Default.aspx</a>   |
| Mission of the School (Career mission) | The goal of NIVE is to deliver world-class, flexible vocational education that is benchmarked against professional standards and meets the demands of stakeholders, including the UAE government, the local community, businesses, and citizens.                  |
| Curriculum overview (Vocational)       | UAE-NQA, Pearson BTEC-Programs, Highfield qualifications.   |
| Employability                          | The primary goal of NIVE is to create a highly trained, adaptable, and employable workforce that will meet the needs of the labour market now and in the future and will be the foundation for regional and global innovation, productivity, and competitiveness. |

**Table no 11:** National Institute for Vocational Education-NIVE (Source: Author)

Emirates Aviation University

| Category                               | Details  |
|--|--|
| Name of the school                     | Emirates Aviation University   |
| School URL                             | <a href="https://www.eau.ac.ae/en/programmes/foundation/extended-diploma/">https://www.eau.ac.ae/en/programmes/foundation/extended-diploma/</a>  |
| Mission of the School (Career mission) | To provide top-notch academic and practical educational programs that help students improve their critical, communicative, analytical, and creative thinking abilities in a supportive environment that encourages lifelong learning and helps them succeed in their jobs. |
| Curriculum overview (Vocational)       | Pearson BTEC-Programs (Pearson BTEC Level 3 Extended Diploma)  |
| Employability                          | To provide students with exceptional academic and practical educational opportunities that foster lifelong learning and success in the workplace while fostering the growth of their critical, communicative, analytical, and creative thinking abilities.                 |

**Table no 12:** Emirates Aviation University (Source: Author)

#### IV. Discussion

The results and data analysis of the previous section have highlighted the nature of vocational education in the UK, the UAE, and Egypt. Moreover, it shed light on the different challenges facing the vocational education on those three countries. This section proceeds to conduct a comparison between the three countries of the vocational education practices, and figures and in order to determine workable parameters for the development of vocational education in the UAE, to compare these practices and data to the generally acknowledged characteristics of vocational education. The comparative analysis will shed important light on the characteristics of VE in the three countries.

The aim of this section is to understand through conducting a comparison how UK, Egypt and UAE implement their vocational education system taking into consideration the demography, numbers of enrolments, labour force and careers related to vocational education, national qualification frameworks, and other statistical figures, in addition to comparing two of each technical and vocational institutes of each country. This section will focus on the similarities and differences between the three countries' vocational education systems and the lessons that the UAE can take away from them.

#### Demography, Vocational Education Enrolment, and Labour Force of Youth

Throughout the world, youth is considered the main power of any country's strategic planning and development. Looking at the total population of the UK which is approximately 67 million 11.4% of them aged between 15-24 years compared to Egypt with a huge population size that exceeds the 104 million of which 16.7% are youth, and the UAE with its small population number that is 10 million only 1.1 million aged between 15-24 years. Those youth can be the backbone of labour force for any country which will be an adds on to the economy and future plans.

Taking into consideration the age of 15 and above enrolment in vocational education in the three countries; the UK has 2.2 million, Egypt around 2 million, and the UAE as less as 10.5 thousand. Which is showing that almost an average of 25% of the youth been enrolled in both the UK and Egypt, and 1.04% of the UAE's youth enrolment of vocational education. This shows the gap in the enrolment of vocational education especially in the UAE.

The labour force is considered the main fed to the economy development of countries, youth labour force participation is 56.3% of total population in the UK, 48.2% in the UAE, and 41.3% in Egypt. That shows the importance of feeding the market with more qualified skilled graduates to enhance the economic cycle and future country's development plan.

### National Qualifications Framework

The mechanism that formally records the credits given to each level of learning attainment is called the National Qualifications Framework (NQF). The three countries share the same name of national qualification framework (NQF) each has its own regulators, curriculum, policies, and structure. However, in the UK and Egypt has different frameworks varies between the higher education framework, technical education framework, and vocational education framework. Unlike, the UAE that has only one qualification framework. And this can be a point to shed light on and discuss by thinking of varieties of qualifications frameworks.

### Weaknesses and Challenges of vocational education in UK, Egypt, and UAE

The UK vocational education weaknesses can be summarized into the cultural view to vocational education and the low look at those who are into the vocational field, which can be also one of the weaknesses in the UAE, as still the culture preferred the higher-education degrees over the vocational education. Inadequate monitoring and evaluation of training program outcomes on the labour market is a weakness point in both the UK and Egypt vocational education system. Also, it can be another weakness point in the UAE as well. The complexity of the vocational education system in the UK and the fragmented vocational education in Egypt can be a similar point, which doubttable to be a common in the UAE vocational education system.

### Selected Vocational Schools (cases) from UK, UAE, and Egypt

The samples that have been chosen was categorised under three themes: the school mission, curriculum overview, and employability. The six samples almost shared the same missions that varies between assuring that students will gain the necessary knowledge and skills, delivering a flexible vocational education that is benchmarked against professional standards, and providing practical educational programs helping students to improve their brainstorming and critical thinking. The curriculum varies between the British (BTEC, GCSE, City & Guilds, and Highfield), German curriculum (VET system), and the UAE NQA. However, it is noticed that the UK schools have variety in curriculum providers, unlike Egypt and the UAE. That shows the importance of the diversity of curriculum developers which will enhance the process of teaching and learning among vocational schools.

Finally, the school's employability was a part of school mission, which is similar among the schools' samples. All schools' aims of this sample, are to make sure that their vocational education graduates are ready for the job market with the best underpinning knowledge and skills, which will enhance the job market.

## V. Conclusion

This study presented a comparative analysis of vocational education in the UAE, the UK, and Egypt, offering insights into each country's approach to vocational education based on their economic plans and employment needs. The research identified strengths and weaknesses in vocational education, with a particular focus on the UAE, aiming to provide actionable proposals for enhancing its vocational education system. The key findings indicate that a comprehensive approach, incorporating industry-led curriculum design, strategic partnerships, and updated teaching methods, is essential for improving vocational education in the UAE.

The proposed recommendations for the UAE's vocational education system include creating a curriculum aligned with the labor market, enhancing the infrastructure of vocational institutions, and integrating international qualifications. Furthermore, there is a need for better collaboration between employers and educational institutions, development of flexible learning options such as online and blended learning, and a focus on short courses for skill acquisition. Additionally, recognizing prior learning and offering vocational education to people of determination are critical to fostering an inclusive, skilled workforce.

However, the research faced limitations, such as a lack of open-source data and challenges in finding well-referenced, unbiased studies in the field. To address these issues, future research should incorporate mixed methods, combining qualitative and quantitative approaches, and involve direct data collection from stakeholders in vocational education, including students, educators, and industry leaders. This would provide a more comprehensive and accurate understanding of the sector's needs and potential improvements.

## References

- [1]. Akaninwor, G. (2004). *Self Method As Applied To The Training Of Vocational And Technical Trainers*. Special Method Of Technology Instruction. Portharcourt: Wilson Publishing Company.
- [2]. Alaranta, M. (2006). Combining Theory-Testing And Theory-Building Analyses Of Case Study Data. *Ecis Proceedings*, 5(2), Pp. 169-175.
- [3]. Anaf, S., Sheppard, L., & Drummond, C. (2007). Combining Case Study Research And Systems Theory As A Heuristic Model. *Qualitative Health Research*, 17(10), Pp.1309- 1315.
- [4]. Anane, C.A., 2013. Competency Based Training: Quality Delivery For Technical And Vocational Education And Training (Tvet) Institutions. *Educational Research International*, 2(2), Pp.117-127.
- [5]. Anfara, V.A. Jr. And Mertz, N.T. (Eds). (2006). *Theoretical Frameworks In Qualitative Research*. Thousand Oaks, Ca: Sage.
- [6]. Anderson, C., 2010. Presenting And Evaluating Qualitative Research. *American Journal Of Pharmaceutical Education*, 74(8).

- [7]. Atkins, L. And Flint, K. J. 2015. Nothing Changes: Perceptions Of Vocational Education In England. *International Journal Of Training Research*. 13(1), Pp.35-48.
- [8]. Bak, N. (2004). *Completing Your Thesis: A Practical Guide*. Pretoria: Van Schaik Publishers.
- [9]. Beauchamp, George A. *Curriculum Theory*. (2nd Ed.). Wilmette, Illinois: The Kagg Press, 1968.
- [10]. Bogdan, R. C., & Biklen, S. K. (2003). *Qualitative Research For Education: An Introduction To Theories And Methods* (4th Ed.). New York, Ny: Pearson Education Group.
- [11]. Borgatti, P.S., 1996. *Theoretical Framework And Concepts*.
- [12]. Bowen, G.A. 2006. 'Document Analysis As A Qualitative Research Method,' *Qualitative Research Journal*, 9(2), Pp. 27-40.
- [13]. Breen, R. (2005). Explaining Cross-National Variation In Youth Unemployment: Market And Institutional Factors. *European Sociological Review*, 21(2), Pp. 125-134.
- [14]. British-Council, *The Uk Skills System-An Introduction*. 2017.
- [15]. Brockman, M., Clarke, L. And Winch, C. 2008. Knowledge, Skills, Competence: European Divergences In Vocational Education And Training (Vet) - The English, German And Dutch Cases. *Oxford Review Of Education*. 34(5), Pp.547-567.
- [16]. Brown, B.L., 1998. *Applying Constructivism In Vocational And Career Education*. Information Series No. 378.
- [17]. C, Chapman And P. Sammons, "School Self-Evaluation For School Improvement: What Works And Why?", Cfbt Education Trust 2013. The Views And Opinions Expressed In This Publication Are Those Of The Authors And Do Not Necessarily Represent The Views Of Cfbt Education Trust.
- [18]. Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. Thousand Oaks, Ca: Sage Publications.
- [19]. Creswell, J.W. 2009. *Research Design: Qualitative, Quantitative And Mixed Method Approaches* (3rd Ed.) Los Angels: Sage Publications.
- [20]. Creswell, J. W. (2013). *Research Design: Qualitative, Quantitative, And Mixed Methods Approaches*. Sage Publications.
- [21]. Creswell, J. (2014), *Research Design: Qualitative, Quantitative And Mixed Methods Approaches*, 4th Ed., Sage Publications, Thousand Oaks, California
- [22]. Crotty, M. 1998. *The Foundations Of Social Research: Meaning And Perspective In The Research Process*. Thousands Oaks, Calif.: Sage Publications.
- [23]. De Vos, A. S., Strydom, H., Fouche, C. B., & Delport, C. S. L. (2011). *Research At Grass Roots: For The Social Sciences And Human Service Professions* (4th Ed.). Pretoria, South Africa: Van Schaik.
- [24]. Denzin, N. & Lincoln, Y. 2003. *Collecting & Interpreting Qualitative Materials*. Sage Publications.
- [25]. Dib, C. Z. (1988). Formal, Non-Formal And Informal Education: Concepts/Applicability. *Cooperative Networks In Physics Education* (Pp. 300-315). New York: American Institute Of Physics.
- [26]. Education-World-Forum, *Uk Technical And Vocational Skills System*. 2018.
- [27]. Egwelu, J. G. (1995). *The Development Of Vocational And Technical Education And Personnel Development*, Nigeria Journal Of Teacher Education, Published By The National Commission For Colleges Of Education, Kaduna, Pp. 199-208.
- [28]. Eichhorst, W., Rodríguez-Planas, N., Schmidl, R. And Zimmermann, K.F., 2013. *A Roadmap To Vocational Education And Training Systems Around The World*.
- [29]. Emirates, U.A., 2016. *Constitution Of 1971 With Amendments Through 2004*. Retrieved 9 5, 2016.
- [30]. Ernest, P. (1995). The One And The Many. In L. P. Steffe & J. Gale (Eds.), *Constructivism In Education* Pp. 459-486
- [31]. Finch, C.R. And J.R. Crunkilton, *Curriculum Development In Vocational And Technical Education. Planning, Content, And Implementation*. 1999: Eric.
- [32]. Franklin Bobbitt, *The Curriculum* (Boston: Houghton-Mifflin, 1918), 63.
- [33]. George, A. L., & Mckeown, T. J. (1985). Case Studies And Theories Of Organizational Decision Making. In R. F. Coulam & R. A. Smith (Eds.), *Advances In Information Processing In Organizations Vol. 2*, Pp. 21-58
- [34]. Gonzalez, G. C., Karoly, L. A., Constant, L., Salem, H., & Goldman, C. A. (2008). *Facing Human Capital Challenges Of The 21st Century: Education And Labor Market Initiatives In Lebanon, Oman, Qatar, And The United Arab Emirates*. Santa Monica, Ca: Rand Corporation.
- [35]. Goodrick, D. (2014). *Comparative Case Studies: Methodological Briefs-Impact Evaluation*. No. 9 (No. Innpub754). Unicef. Retrieved June, 23, 2017.
- [36]. Gordon, J. 2015. Glimpsing The Future In The Past: Vet In Europe. *European Journal Of Education*, 50 (4).
- [37]. Gregson, M., 2020. In Practice: The Importance Of Practitioner Research In Vocational Education. *Education Sciences*, 10(3), Pp.79.
- [38]. Gunnell, J.G., 1969. The Idea Of The Conceptual Framework: A Philosophical Critique. *Journal Of Comparative Administration*, 1(2), Pp.140-176.
- [39]. Gunz, H.P. And Peiperl, M., 2007. *Handbook Of Career Studies*. Sage Publications.
- [40]. Haggerty, K. D. (2004). Ethics Creep: Governing Social Science Research In The Name Of Ethics. *Qualitative Sociology*, 27(4), Pp. 391- 414.
- [41]. Hammadi, A.R.J.A., An Overview - Indicators Of The Vocational Education Sector In Uae. *International Journal Of Scientific & Engineering Research*, 2016. 7(6): Pp. 995-1001.
- [42]. Hanushek, E.A., Woessmann, L. & Zhang, L. 2011. *General Education, Vocational Education And Labour Market Outcomes Over The Life Cycle*. Working Paper 17504, Cambridge, Ma: National Bureau Of Economic Research.
- [43]. Held, V. (2006). *The Ethics Of Care: Personal, Political, And Global*. New York, Ny: Oxford University Press
- [44]. Helmy, I.A.F., 2017. Best Essay Award. *Economic Research Forum*
- [45]. Hermans, R., Et Al., The Impact Of Primary School Teachers' Educational Beliefs On The Classroom Use Of Computers. *Computers & Education*, 2008. 51(4): Pp. 1499-1509.
- [46]. Ilo (2004) Recommendation Concerning Human Resources Development: Education, Training And Lifelong Learning', (Geneva, Ilo).
- [47]. Ilo (2007). "School-To-Work Transition: Evidence From Egypt". *Employment Policy Papers*. International Labour Office. Switzerland
- [48]. Indicators, O.E.C.D., *Education At A Glance 2022*. Available From:
- [49]. [https://www.oecd-ilibrary.org/united-kingdom\\_e13f230-en.pdf?Itemid=%2fcontent%2fcomponent%2fee13f230-en&Mimetype=Pdf](https://www.oecd-ilibrary.org/united-kingdom_e13f230-en.pdf?Itemid=%2fcontent%2fcomponent%2fee13f230-en&Mimetype=Pdf) [Accessed 11 Oct. 2022].
- [50]. Ioannidis, J.P., 2007. Limitations Are Not Properly Acknowledged In The Scientific Literature. *Journal Of Clinical Epidemiology*, 60(4), Pp.324-329.
- [51]. İşsever, C., Adak, M. A., Ünlü A., Fidan M., And Taş M. (2005). *Mesleki Ve Teknik Eğitimin Tarihiçesi*, Devlet Kitapları Müdürlüğü, Ankara.
- [52]. Jessup, G. (1991), *Outcomes, Nvqs And The Emerging Model Of Education And Training*, Falmer, London.

- [53]. Jonsson, N. (2016). Australian Qualifications Framework: Supporting Mobility. Paper Presented At The Faubai Conference 2016, Brazil.
- [54]. Kelemen, M.L. And Rumens, N. (2011), "Organizational Paradigms And Management Research", An Introduction To Critical Management Research. Sage Publications, London, Pp. 1-16
- [55]. Klein, J. T. (1999). Mapping Interdisciplinary Studies, Washington, D.C.: Association Of American Colleges And Universities.
- [56]. Knowledge-And-Human-Development-Authority-Dubai. Technical And Vocational Education And Training (Tvet). 2020; Available From: <https://www.khda.gov.ae/en/tvet>. [Accessed 2 Oct. 2022].
- [57]. Knoll, M., The Project Method: Its Vocational Education Origin And International Development. *Journal Of Industrial Teacher Education*, 1997. 34(3): Pp. 59-80.
- [58]. Korber, M., 2019. Does Vocational Education Give A Labour Market Advantage Over The Whole Career? A Comparison Of The United Kingdom And Switzerland. *Social Inclusion*, 7(3), Pp.202-223
- [59]. Krapp, S., 1999. The Educational And Vocational Training System In Egypt: Development, Structure, Problems. *International Journal Of Sociology*, 29(1), Pp.66-96.
- [60]. Lynch, R.L., 1997. Designing Vocational And Technical Teacher Education For The 21st Century: Implications From The Reform Literature.
- [61]. Maduka, B. C. (1980). Vocational Education: An Asset To Our National Economy, *Vocational Education*, 1 (1) Pp. 21-26.
- [62]. Mcgrath, S., & Lugg, R. (2012). Knowing And Doing Vocational Education And Training Reform: Evidence, Learning And The Policy Process. *International Journal Of Educational Development*2, 32(5), Pp. 696–708.
- [63]. Mcgregor, S. L. (2007). Decade Review 1997-2006. *International Journal Of Consumer Studies*, 31(1), Pp. 2-18.
- [64]. Mcgregor, S. L. (2008). Ideological Maps Of Consumer Education, *International Journal Of Consumer Studies*, 29(5), Pp. 437-447.
- [65]. Miles, M. B. & Huberman, A. M. (1984) *Qualitative Data Analysis: A Sourcebook Of New Methods* (London, Sage).
- [66]. Gunnell, J.G., 1969. The Idea Of The Conceptual Framework: A Philosophical Critique. *Journal Of Comparative Administration*, 1(2), Pp.140-176
- [67]. Miles, M. B., & Huberman, A. M. (1994). *Qualitative Data Analysis: An Expanded Sourcebook* (2nd Ed.). Thousand Oaks, Ca: Sage.
- [68]. Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative Data Analysis: A Methods Sourcebook* (3rd Ed.). Thousand Oaks, Ca: Sage.
- [69]. Moore, D.R., Cheng, M.I. And Dainty, A.R., 2002. Competence, Competency And Competencies: Performance Assessment In Organisations. *Work Study*.
- [70]. Mouton, J. (2001). *How To Succeed In Your Master's And Doctoral Studies: A South African Guide And Resource Book*. Pretoria: Van Schaik.
- [71]. Müller, W., & Gangl, M. (Eds.). (2003). *Transitions From Education To Work In Europe: The Integration Of Youth Into Eu Labour Markets*. Oxford: Oxford University Press.
- [72]. Myers, M. D. (2009). *Qualitative Research In Business And Management*. London, Uk: Sage.
- [73]. National-Qualifications-Authority-Uae. Tvet In The Uae. 2019; Available From: [http://www.qualifications.ae/about\\_us](http://www.qualifications.ae/about_us) [Accessed 2 Oct. 2022]
- [74]. National Statistics & Other Qualifications Available From:
- [75]. <https://www.gov.uk/government/statistics/vocational-and-other-qualifications-quarterly-january-to-march-2022> [Accessed 15 Oct. 2022]
- [76]. Oecd/Eurostat/Uis (2022). See Source Section For More Information And Annex 3 For Notes ([https://www.oecd.org/education/education-at-a-glance/eag2022\\_x3-b.pdf](https://www.oecd.org/education/education-at-a-glance/eag2022_x3-b.pdf)). [Accessed 2 Oct. 2022]
- [77]. Olaitan, S. O. (1995). The Future Of Vocational And Technical Education In Nigeria. Conceptual Issues On Social And Economic Implications Of Vocational And Technical Education In Nigeria, Ununze, Research And Publications Unit, Federal College Of Education (Technical).
- [78]. Oranu, R. N. (1992). Vocational Education And Manpower Development, *Vocational/Technical Education Manpower Development Nva* Pp. 1-4.
- [79]. Orb, A., Eisenhauer, L. And Wynaden, D., 2001. Ethics In Qualitative Research. *Journal Of Nursing Scholarship*, 33(1), Pp.93-96.
- [80]. Orum, A. M., Feagin, J. R., & Sjoberg, G. (1991). Introduction: The Nature Of The Case Study. In J. R. Feagin, A. M. Orum, & G. Sjoberg (Eds.), *A Case For The Case Study* Pp. 1–26
- [81]. Osula, E. C. (2004). *Foundations Of Vocational Education*. Enugu., Nigeria Cheston Agency Limited.
- [82]. Owais, A., Alabidi, S., Hatamleh, Z. And Hussein, E., 2020. Technical And Vocational Education And Training In The Uae. *International Journal Of Emerging Technologies In Learning (Ijet)*, 15(13), Pp.264-288.
- [83]. Owen, W.B. (1912). Sir Sidney Lee (Ed.). *Dictionary Of National Biography – William Ford Robinson Stanley*. Second Supplement. Vol. Iii (Neil-Young). London: Smith, Elder & Co. Pp. 393–394.
- [84]. Papadakis, S., Zaranis, N., And M. Kalogiannakis, Parental Involvement And Attitudes Towards Young Greek Children's Mobile Usage.
- [85]. Page, R. And Hillage, J., 2006. Vocational Education And Training In The Uk: Strategies To Overcome Skill Gaps In The Workforce
- [86]. Patton, Michael Q. (2002). *Qualitative Research And Evaluation Methods* (3rd Ed.). Thousand Oaks, Ca: Sage
- [87]. Perren, L., & Ram, M. (2004). Case-Study Method In Small Business And Entrepreneurial Research: Mapping Boundaries And Perspectives. *International Small Business Journal*, 22(1), Pp. 83–101.
- [88]. Phillips, D. C. 1995. "The Good, The Bad, And The Ugly: The Many Faces Of Constructivism." *Educational Researcher* 24 (7): Pp. 5–12.
- [89]. Prasad, P. (2005). *Crafting Qualitative Research: Working In The Postpositivist Traditions*. New York: M. E. Sharpe, Inc.
- [90]. Prosser, C.A., 2013. Prosser's Sixteen Theorems On Vocational Education: A Basis For Vocational Philosophy.
- [91]. Raven, J., 2011. Emirating The Education Sector In The Uae: Contextualization And Challenges. *Education, Business And Society: Contemporary Middle Eastern Issues*.
- [92]. Rayan, E.O., 2012. The Partnership Between Eu-Egypt In Tvet Reform Programme And Its Impact On Egyptian Furniture And Wooden Products Exports.
- [93]. Revision Of The 2011 Revised Recommendation Concerning Tve, Nd Available From:
- [94]. [https://unesdoc.unesco.org/ark:/48223/pf0000234137\\_eng](https://unesdoc.unesco.org/ark:/48223/pf0000234137_eng) [Accessed 11 Oct. 2022]
- [95]. Rycus, J.S. And Hughes, R.C., 2000. What Is Competency-Based Inservice Training. Institute For Human Services,
- [96]. Seidman, Irving (1998). *Interviewing As Qualitative Research: A Guide For Researchers In Education And The Social Sciences*. New York: Teachers College Press.
- [97]. Semlali, A. And Angel-Urdinola, D.F., 2012. Public Employment Services And Publicly Provided Almps In Egypt.
- [98]. Singh, Y.K., 2006. *Fundamental Of Research Methodology And Statistics*. New Age International.

- [99]. Stake R. *The Art Of Case Study Research*. Thousand Oaks: Sage; 1995. Strauss A, Corbin J. *Basics Of Qualitative Research*. 2nd Ed. Thousand Oaks: Sage; 1998.
- [100]. Stake, R. E. (2000). Case Studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook Of Qualitative Research* (Pp. 435-454). Thousand Oaks, Ca: Sage
- [101]. Stake, R. E. (2005). Qualitative Case Studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage Handbook Of Qualitative Research* (3rd Ed.) Pp. 443-466
- [102]. Stake, R. E. (2008). Qualitative Case Studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *Strategies Of Qualitative Inquiry* 3rd Ed., Pp. 119-150
- [103]. Swan, M., 2012. Vocational Education Must Not Be Neglected. In *The National*.
- [104]. The-Editors-Of-Encyclopaedia-Britannica. Technical Education. 1998; Available From: <https://www.britannica.com/topic/technical-education>. [Accessed 4 Oct. 2022]
- [105]. Thomas, M.O. And C. Vela, *Computers In The Primary Classroom: Barriers To Effective Use*. International Group For The Psychology Of Mathematics Education, 2003. 4: Pp. 347-354.
- [106]. Todaro, M. (1995). University Of Oldenburg. Retrieved March 22, 2015.
- [107]. Tripathi, K. And Agrawal, M., 2014. Competency Based Management In Organizational. *Global Journal Of Finance And Management*, 6(4), Pp.349-356.
- [108]. Twining, J., 1999. Vocational Education And Training In The United Kingdom.
- [109]. Uae's-Governmental-Portal. Technical And Vocational Education In The Uae. 2022; Available From: <https://uae/en/information-and-services/education/technical-and-vocational-education>. [Accessed 2 Oct. 2022]
- [110]. Unesco, Proposal For The Revision Of The 2001 Revised Recommendation Concerning Technical And Vocational Education. 2015, Unesco Paris.
- [111]. Unesco. 2011 Education For All Global Monitoring Report The Hidden Crisis: Armed Conflict And Education. Unesco; Oxford University Press.
- [112]. Undie, S.B. And Ewuru, A.A., 2012. Globalization As A Curriculum Theory For Vocational And Technical Education In Nigeria. *African Journal Of Educational Research And Administration*, 5(3), Pp.1-5.
- [113]. Unesco-Institute Of Statistics, 2020 Available From: [www.uis.unesco.org](http://www.uis.unesco.org) [Accessed 11 Oct. 2022]
- [114]. Unesco-Unevoc, 2017 Available From: <https://unevoc.unesco.org/home/> [Accessed 21 Oct. 2022]
- [115]. Unesco-Unevoc, Tvet Country Profile 2022 Available From:
- [116]. <https://unevoc.unesco.org/home/tvet+country+profiles> [Accessed 11 Oct. 2022]
- [117]. Unevoc.Unesco. What Is Tvet? 2006; Available From:
- [118]. <https://unevoc.unesco.org/home/more%20about%20what%20is%20tvet>. [Accessed 11 Oct. 2022]
- [119]. University Of Melbourne. Reviewing The Literature: A Critical Review. 2013 Retrieved From: [http://services.unimelb.edu.au/academicsskills/all\\_resources/writing-resources](http://services.unimelb.edu.au/academicsskills/all_resources/writing-resources) [Accessed 11 Oct. 2022]
- [120]. Unterbrunner, H., 1987. *Technical And Vocational Education And Training: United Arab Emirates - (Mission)*
- [121]. Verma, A.P., 2020. Emergence Of Vocational Education : A Historical Perspective
- [122]. Walia, R. 2015. A Saga Of Qualitative Research. *Social Crimonol*, 5(2), Pp. 124
- [123]. Wilkins, S., 2002. Human Resource Development Through Vocational Education In The United Arab Emirates: The Case Of Dubai Polytechnic. *Journal Of Vocational Education And Training*, 54(1), Pp.5-26.
- [124]. Williamson, B., 1987. *Education And Social Change In Egypt And Turkey: A Study In Historical Sociology*. Springer.
- [125]. Winch, C. (2000) *Education, Work And Social Capital: Towards A New Conception Of Vocational Education*. London: Routledge.
- [126]. Winch, C., 2013. The Attractiveness Of Tvet. Revisiting Global Trends In Tvet: Reflections On Theory And Practice, Pp.86-122.
- [127]. Wahba, M., 2013. Competence Standards For Technical And Vocational Education And Training Tvet. Retrieved On, 28(11)
- [128]. Wolf, A. (2002) *Does Education Matter? Myths About Education And Economic Growth* London: Penguin.
- [129]. Wolf, A., 2011. *Review Of Vocational Education*. London: Dfe.
- [130]. Wolf, S., 2017. International Technical And Vocational Education And Training (Tvet) Transfer Project–Theoretical-Practical Experiences Of Workplace Training With The Workforce In The Egyptian Construction Industry. In *Vocational Education And Training In Times Of Economic Crisis* Pp. 439-459
- [131]. Wolf, S., 2017. Past Meets Present–The History Of The German Vocational Education And Training Model As A Reflection Frame To The Prospect Of The Egyptian Model. *Social Dimension And Participation In Vocational Education And Training*, Pp.89.
- [132]. Yauch, C. A., & Steudel, H. J. (2003). Complementary Use Of Qualitative And Quantitative Cultural Assessment Methods, *Organizational Research Methods*, 6(4), Pp. 465-481.
- [133]. Yin, R.K. (2009), *Case Study Research: Design And Methods*, 4th Edn, Sage Publications, Thousand Oaks, California.
- [134]. Zais, R.S. (1976). *Curriculum: Principles And Foundations*, New York: Harper And Row Publishers Inc.