



**'Bridging the gap between Apprentices Schemes and Traditional Qualifications  
within the United Arab Emirates'**

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## **Abstract**

This research evaluated the historical and socio-cultural dimensions between academia and vocationally driven qualifications with an emphasis on apprentice schemes within the UAE. Based on this, critical research was carried out to identify how the cultural dimensions of the UAE have shaped how individuals view learning and educational choices. Whilst it was evident that academia in the form of university education was part of the DNA of most UAE nationals, it was essential to quantify through this research as to whether apprentice schemes could synchronize with other learning choices to the indigenous population of the UAE. Based on this synopsis, the research explored and provided a critical insight that focused on, whether bridging the gap between academia and apprentice schemes could be achieved. Throughout this research, the historical educational values of the UAE population were uncovered to help understand the importance and symbolic nature of academic qualifications and how educational choices affected their internal and external socio-cultural standings. More importantly the research helped develop a themed model that required focus and engagement at the highest level. The themes held within this model are, learning, stigma and perception, branding, financial and institutional all of which interacted with each other whilst highlighting the tensions and resistance associated with changing a system that on the surface was not broken.

What was recognised throughout this research was that academia was the predominant educational stream, the literature supported areas such as how social classes will eventually play an integral part in the overall acceptance of apprentice schemes and vocational qualifications, which was further supported by the same perceptions and stigmas extracted from the qualitative data. Being a researcher, a Director of a Learning Academy and a resident of the UAE allowed reasonable access to governmental, semi-governmental, and private organizations which in turn helped to collect and examine meaningful qualitative data through a triangulation mechanism using a thematic approach-based questionnaires and semi-structured interviews, known as stage one and stage two from students, postgraduates, employees, organisational decision makers and governmental policy makers.

More importantly, recognition and funding were without doubt one of the key drivers make these schemes a success, without governmental support and associated accreditation bodies and the lack of transparent funding, such initiatives would fail.

## Acknowledgments

Back in November 2017 in a hotel conference room in Dubai surrounded by future DBA students, some of which have been able to complete their DBA whilst others dropped by the wayside, I recall many of us highlighting how quickly we could complete the DBA, and 4 years would be the maximum for most of us. These discussions still make me smile as to how unrealistic these dreams were based on the complexity, the challenges, the time required to research, placing family commitments on hold and last but no means least, the arrival of twin boys in April 2020 just at the start of the COVID-19 pandemic. The DBA is not for the faint heart, nor should it be entered into without knowing how tough the journey will be. However, by the grace of God and the inspirational words of some of my supervisors, I would not be here today writing this acknowledgment as part of the final stages of my submission.

My gratitude must reach out to Dr Hala Mansour, Dr Marcella Daye, and Dr Stavros Sindakis who all played an integral part in getting me through to the final submission. They, in their own style challenged my thinking in ways that you could never imagine. Their determination and mentoring are like second nature, 'hang in there Sami' were often the words used, 'you are almost there'. Thank you is all I can say as words do not provide enough justice to their support. Linked with this is of course the Northampton Business School, all tutors involved had mountains to climb with us all and quite often without ropes to help them. Their professionalism their knowledge their technical skills are overwhelming.

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Anyone considering embarking on the DBA journey, be aware, be conscious, be mindful, be tenacious, listen, listen to the supervisors, the professors the ones who have taken many people through this, then it will happen, happen just like a gift, get ready to unwrap the DBA gift, it is worth every minute, hour, week, month, and years.

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## List of abbreviations

HCT	Higher College of Technology
GCC	Gulf Corporation Council
DBA	Doctor of Business Administration
UAE	United Arab Emirates
BC	Before Christ
VET	Vocational Education Training
UK	United Kingdom
YTS	Youth Training Scheme
MA	Modern Apprentices
GNVQ	General National Vocational Qualification
G20	Group of 20
UNESCO	United Nations Educational, Scientific and Cultural Organization
OECD	The Organisation for Economic Co-operation and Development
MOE	Ministry of Education
ADVETI	The Abu Dhabi Vocational Education and Training Institute
GCSE	General Certificate of General Education
KHDA	Knowledge and Human Development Authority
NVQ	National Vocational Qualification
TA	Thematic Analysis
NIVE	National Institute for Vocational Education
ATI	ADNOC Technical Institute
ADNOC	Abu Dhabi National Oil Corporation
PI	Petroleum Institute
ACTVET	Abu Dhabi Centre for Technical and Vocational Education and Training
VETAC	Vocational Education and Training Awards Council
NQA	National Qualifications Authority
QAD	Qualifications Authority Dubai
TVET	Technical and Vocational Education and Training
AED	Arab Emirates Dirham
NOSS	National Occupational Skills and Standards

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## **1. Chapter One: Introduction and background**

### **1.1 Introduction**

This research provided a critical analysis of the UAE education system by delivering a deeper understanding of where apprentice schemes fit within an already well-established academic structure. Through an extensive literature review it was found that educational pathways such as apprentice schemes became catalysts towards providing alternative ways to learn new skills or create new career opportunities. Further to this, demands to develop vocational skills increased due to the 4<sup>th</sup> industrial revolution based around information technology, artificial intelligence, robotics, and other forms of disruptive educational mechanisms, all of which have an educational place now and, in the future, (Sakhapov and Absalyamova, 2018).

Furthermore, what the literature review indicated was that the 4<sup>th</sup> industrial revolution without doubt is having a significant impact on how these educational needs are delivered, which means countries such as the UAE will have to change their approach in relation to speed, agility and innovation to make a considerable impact on delivering a robust and fit for purpose education system (Hoque, 2019). Based on these requirements, this research has provided a deeper understanding of what government entities, individuals and organisations will need to implement and develop educational and personal development offerings that are compelling and seen as a forward-thinking proposition, with a longer-term goal that attracts all types of candidates based around academic or vocational education. These requirements have been validated using a robust data collection methodology that used a reliable source of data such as questionnaires and semi-structured interviews. From the outputs it became clear that the results provided a high degree of transparency as to whether there was a well-established and embedded vocational structure within the UAE. Finally, this transparency created a sense of reality as to what will be required to introduce apprenticeship schemes in the UAE, particularly with what is best described as an academic centric society (Görlich and Katznelson, 2018).

What surfaced from the literature was an increasing global demand for qualified and vocationally educated individuals, a that correlated with the global unemployment rates among 15-24 years which were recorded at more than 13% (OECD, 2017). Based on these figures and the literature a higher priority, specifically within the UAE, for learning and development opportunities needed to be linked with the country specific objectives around providing best fit educational choices that would facilitate talent attraction and retention of the best, employability, and the overall need to develop new skills and competencies.

## **1.2 Research value in context to the UAE**

What this research exposed was a disconnect between understanding how apprentice schemes and vocationally driven qualifications would add value within an already prominent academic centric system (Hawse and Wood, 2018). This disconnect was explored throughout this research with an overarching aim to better understand what would be required using a robust literature review that was contextualised and connected with data collected. This data included, linking historical values, societal impacts, and age-old traditions of apprentice schemes both globally and the UAE.

Based on the breadth and depth of this research, rich and meaningful outputs helped to unpack existing tensions and opportunities experienced during the planning and implementation of vocationally driven qualifications. These tensions included the internal and external impacts on the stakeholder groups such as public and private sector organisations, students, and career developing individuals. The literature, the stakeholder engagement and the methodology all played an integral part within this research that helped to unravel several challenges towards developing a meaningful apprenticeship model fit for purpose, especially in a country that has limited experience, resources, and access to subject matter experts within the vocational and apprentice arena.

What was noticeable throughout this research was the socio-economical inequalities which had, historically dominated the decision-making process of the UAE nationals. This inequality had been institutionally entrenched for many years where there had been a prominent leaning towards believing that any form of education outside of the academic sphere was inadequate that would not deliver the educational standards which they are currently use to. Furthermore, the overall attitude based around their socio-cultural standing does create a deeper attitudinal inadequacy amongst friends and families. Tight (2019) cites that these

attitudes already exist globally which are predominately based on university or higher education sectors portraying themselves as being elitist.

Based on the importance and value of apprentice schemes, the following research questions and objectives were developed that helped to provide clarity, remove assumptions, and understand the challenges that needed to be considered to help bridge the gap between academia and apprentice schemes within the UAE.

### 1.3 Research Questions

The research questions formed an integral part of this research and were developed to provoke answerable questions which included them being specific, significant, and implementable whilst challenging the current state of thinking within the UAE.

1. What difficulties will become visible and will need to be overcome to establish an apprentice scheme in the UAE?
2. What financial framework will need to be developed, for example, subsidies, employer, and governmental support, which will ensure fiscal longevity?
3. Will tutors need to be trained or equipped differently to deliver VET inclusive of apprentice schemes?

### 1.4 Research Objectives

As a responsible researcher, it was critical that clarity of the type of approach used along with an understanding of the objective of the research was always understood and underpinned the title of the research subject.

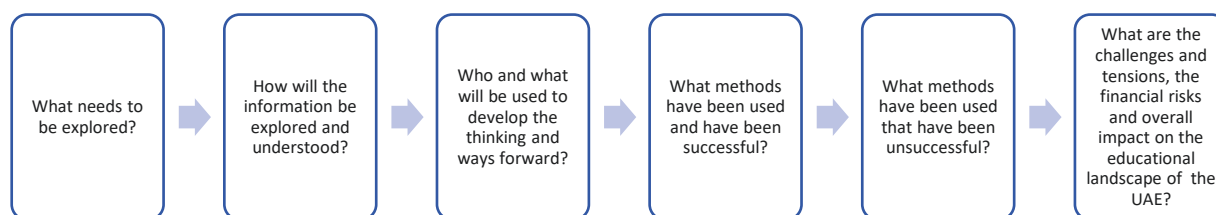


Figure 1. Research Objectives Model

The research objectives (1 – 5) were created based on the model above (Fig 1.) to provide a framework for the literature, the methodology and the overall conclusions and recommendations

1. Critically explore relevant literature on the principles and challenges associated with the implementation of vocational qualification routes.
2. Conduct interviews with UAE nationals to determine their perceptions, financial commitments, and requirements towards vocational types of qualifications.
3. Identify the parameters including fiscal challenges and specifications required for developing and implementing apprentice scheme frameworks for the UAE market.
4. From the data analysis, develop an understanding of the innovations and adaptations that will be required to effectively market apprentice schemes in the UAE.
5. Define the protocols and training required to develop a framework that will enable the implementation of apprentice schemes within the UAE.

### **1.5 Research Approach**

This research used a qualitative approach using mixed methods utilising questionnaires and semi-structured interviews built within a two-stage process. This method was best suited for this research which helped obtain the necessary information to answer the research questions and achieve the outcomes set out in the research objectives. Through this approach, participants from numerous backgrounds within their natural settings were recruited and thus were able to share their experiences and knowledge using specific and targeted questions that were based around the research objectives.

### **1.6 Significance of the study**

The overarching success of this research was to address the gaps in the literature with regards to understanding how apprentice schemes could become integrated within the educational offerings for the UAE nationals. More so, this study explored the critical dimensions associated with developing and implementing apprentice schemes in line with vocational qualification offerings which would then help bridge the gap that currently exists within an academic centric society. The overall significance of this study helped broaden the understanding around infrastructure, resource requirements and educational support that will be required to prepare graduates, employers, and employees to further their careers and learning needs.

What became apparent through this research was that the working environment has become an ever-changing landscape, the days of being secure in a job for life is now a distant memory, which means, a need to develop and have available educational choices outside of the standard academic routes, especially within the UAE is now required. This was further



supported through a critical analysis of the literature and data collected in Countries such as the UAE who have a transient workforce and an indigenous society that relies predominately on university education.

Through these dynamics an approach to think and act differently will need to be adopted where educational systems will need to be disrupted and challenged like never. This disruption without doubt will require strategies that align with the UAE vision around education, that overall redefines educational choices and become the catalyst to developing meaningful, practical, implementable fruitful qualification options.

## **1.7 Thesis structure**

The thesis features six chapters all of which provide a pathway to answering the aims and objectives.

### **1.7.1 Chapter One - Introduction**

Chapter one Introduces the subject providing a brief rational as to why the research topic was a valuable choice. Finally, the introduction provides a direct link towards understanding how and why the objectives of the research were developed and what key research questions needed to be asked.

### **1.7.2 Chapter Two – Literature review**

Chapter two focused purely on the literature review by introducing the concept of apprentice schemes and vocational qualifications, through which the historical context both globally and within the GCC are shared. As such, the literature review uncovered the differences in choices, models used globally and the qualification linkages between apprentice schemes and vocational routes, which helped to develop an understanding of the challenges numerous countries had faced during implementation. Furthermore, this chapter used a conceptual framework to link the theories and current knowledge together with an overall objective to understand and map out the actions required. The purpose of using the conceptual framework was to ensure the literature review uncovered critical information that helped develop questions for the data capture. Moreover, the conceptual framework helped to define the thinking process and set the scene for the approaches required to deliver the objectives of the research.

### **1.7.3 Chapter Three – Research Methodology**

Chapter three focused on the research methodology including the mechanism used to interpret the data. A qualitative research methodology was chosen with an interpretivist approach, based on the prominence of the human interactions required to collect the data. Questionnaires and semi-structured interviews known as stage 1 and stage 2 were used to bring the data to life using thematic analysis. Finally, this section introduces the ethical considerations that were used throughout the study, that established and ensured all processes and activities aligned with the ethical requirements.

### **1.7.4 Chapter Four – Research Findings (Stage 1)**

Chapter four provided an insight to the data captured using open ended questionnaires. These questionnaires were developed to interact with the experiential knowledge from a mixed audience, such as postgraduates, employees, employers, and those seeking to advance in their careers. The stage 1 data then became the prerequisite in preparation for stage 2 using quality and reliable feedback that helped develop the themes that required further exploration.

### **1.7.5 Chapter Five – Research Findings (Stage 2)**

Chapter five was the continuation of the development of the findings process, where the themes developed within stage 1 provided critical information that helped develop a robust semi-structured interview. The semi-structured interviews provided critical data and once synthesised with the stage 1 findings a clearer understanding of key themes were developed. This in turn helped to build a workable and implementable framework for the planning and implementation of apprentice schemes.

### **1.7.6 Chapter Six – Discussion and Conclusions**

Chapter six synchronized the contributions and learning that had taken place, based around the lessons learned from the research questions, the literature review, the methodology and the findings by creating a unique perspective of the challenges that lay ahead using a strategic map. This then established a platform that described the 'call to action' recommendations, the limitations experienced, the originality, and contributions to knowledge, including an insight to the personal learning journey that took place.

## 2. Chapter Two: Literature Review

### 2.1 Introduction

This literature review provided considerable information and a critical insight to apprentice schemes across the globe with a specific focus on the UAE that was required to contextualise the overall objectives of this research. Furthermore, this exploration included literature that had been gathered in and around the Gulf Corporation Council (GCC) nations which brought together best practices along with related experiences ( Chankseliani, Anuar, 2019). Based on this, a model was developed with focused themes (Fig 2.) that acted as catalysts to provide a systematic literature review. This in turn helped to provide a journey based around how and why apprenticeship models became an integral part of global socio-economic structures whilst understanding what challenges the UAE would face during the planning and implementation stages (Ryan and Lórinç, 2018). The model headings interconnect with relevant pieces of literature with an overarching aim that would develop an extensive understanding of the successes and challenges in and around apprentice schemes.

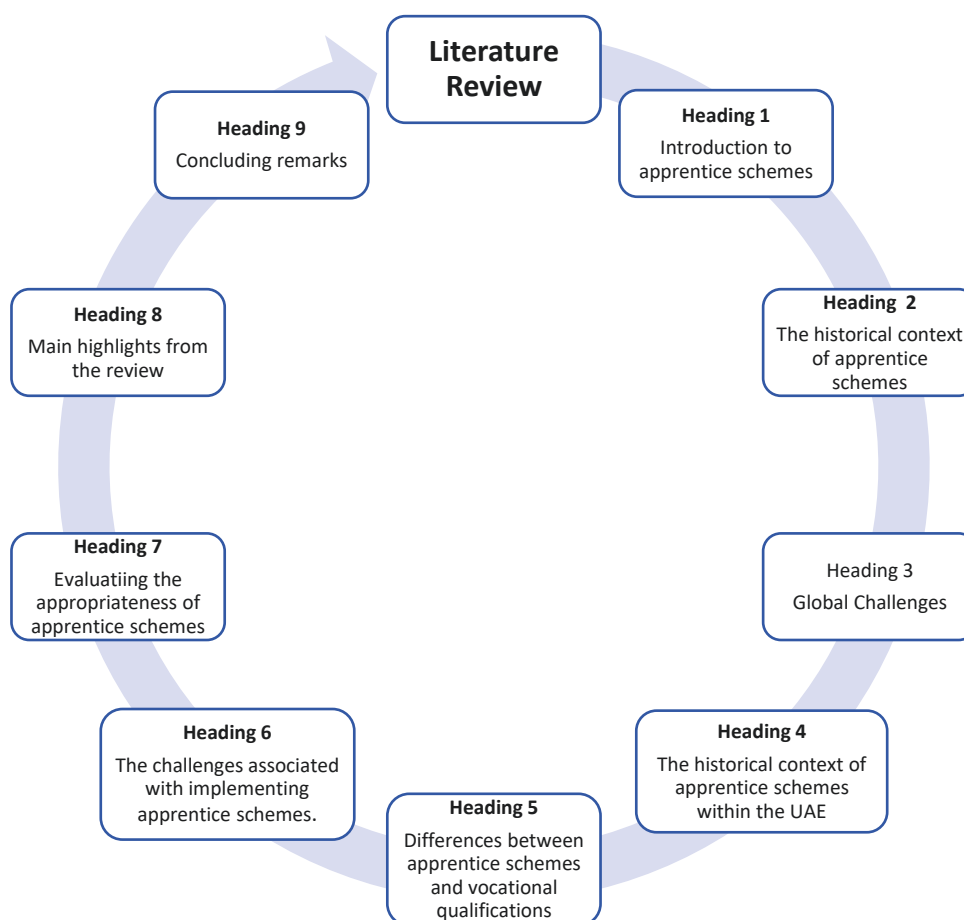


Figure 2. Literature Review Model

Throughout this literature review learning pathways have been highlighted as being critical to the overall success of apprentice schemes, not only as a learner but also as an implementer, in simple terms, these are individuals that are able to execute their jobs through developing higher levels of knowledge and skills whilst understanding the requirements needed to be job fit for what lays ahead (Smith, 2019). The challenges, in particular the demands coming from the 4<sup>th</sup> industrial revolution requires governments, private sector employers, educational institutes, both vocational and academic, to be prepared and ready to adapt for disruptive educational needs (Riyad *et al.*, 2020).

Xu (2018) mentioned that individuals and organisations will inevitably use technologies and digital domains to manage lives, which will inevitably become a digital world like never seen before.

Throughout this literature review, the researcher was now better placed and informed to understand the challenges and socio-cultural impacts associated with adopting apprentice schemes as core learning routes that would connect into the future job's architecture, which was supported by Aggarwal (2021) who highlighted new challenges are afoot, such as embracing digital opportunities that will feed the new millennials and will cater more to a wider generation of learners. Obviously, any qualification whether they are academically or vocational driven will always play an integral part in bridging the gap and embedding an effective futuristic apprentice scheme. However, contextualising this research, apprenticeships were limited within the UAE, therefore, to establish a workable benchmark it was appropriate to explore literature that looked at what other countries had experienced, which in turn helped support the objectives of this research (International Labour Organization, 2018). Hence, and as a starting point for this literature review it was important to understand the background and the historical roots that exist.

## **2.2 An introduction to apprentice schemes**

Many have either heard of, experienced, or have had exposure to training programmes such as apprenticeships and vocational education, both of which will be mentioned several times during this literature review. In simple terms, an apprenticeship is an enabler in most countries, for younger people to transition their educational learning's into a chosen career or work path within a skilled trade sector such as engineering (Markowitsch and Hefler, 2019). The apprentice develops knowledge and skills using a vocational qualification as a vehicle to accredit or qualify the apprenticeship whilst in the work environment, commonly known as

learning whilst on-the-job (Olagüe-Smithson, 2017). What has surfaced throughout this literature review is the global importance of apprenticeships and how they need to fit educational strategies and offerings of any country, specifically the UAE, and become a recognised learning experience against the backdrop of a well-established and prestigious academic network within the UAE.

### **2.3 The Historical Context (Global)**

The first recorded facts known then as the 'First Rift' categorised learning into two distinct dimensions, now known as academia and vocational learning, was present in ancient Greece around 350 BC (Zohair Husain and Costanza, 2017a). These two types of learning dimensions evolved from the teachings of Aristotle who implied that learning was not just about a learn by doing approach but also about how there should be a section of the community who are scholars commonly known as academics. This approach eventually developed and influenced a whole new approach to learning, which then started to develop qualified scholars and qualified craftsmen (Ryan, 2012).

As times moved on, Egypt and Babylon encourage training in craft skills to maintain enough craftsmen for their respective Countries. This training was then then developed into a code of practice known as the 'Code of Hammurabi' which is specifically mentioned in Human Capital Laws section: 188 and 189 (Schumann, 2017), which provided a platform for artisans to teach their crafts to future generations. In Rome and other ancient societies, these craftsmen originated from slavery but later due to the rise of the Roman Empire evolved and began developing their profiles using other learned or master craftsmen which maintained and uphold the standards of their trades. Schalk (2016) wrote a paper where these master craftsmen started to set the standards for the recruitment and training of the trainee craftsmen known as apprentices. These apprentices were the start of what we still experience today where the period of training lasted for four to seven years forming a contractual agreement between the employer and apprentices with an overarching objective to certify the apprentice as being a qualified Master artisan (Schalk *et al.*, 2016).

From these early descriptions of apprentices, vocational thinking progressed through the work of a German Professor of theology Martin Luther (Ozment and Witte, 2017), who was believed to be one of the first to drive vocational educational training (VET), which then became a natural link to the way training and teachings were provided.

The training provided differed from the traditional academic route as they were more structured, combining theory and practice relating to a particular profession which was clearly advocated and promoted by Professor Martin Luther (Lerman, 2017).

Professor Martin Luther stressed that both theory and practical education should work in harmony with communities where families could encourage and provide educational choices, which initially was based around keeping children in school to learn (Ozment and Witte, 2017). These historical characteristics implied that various learning solutions existed enabling the skill formation of an individual, known as the apprentice. This apprenticeship routine originally developed young boys to learn a tradecraft such as stonemasonry, blacksmithing, and carpentry (Grafe and Gelderblom, 2010). During training, the boys were fed and housed and were taught other life skills such as social and literacy skills all of which formed part of their daily learning routines, with an aim to become masters of their focused trade (Mirza-Davies, 2015). From the 19th-century onwards, education had developed a definitive split, whereby academia was the traditional route to learn, and vocational training including apprentice schemes, targeted learning needs focusing on the skills required for labour-intensive occupations, for example, construction, engineering, and manufacturing (Forster and Bol, 2018).

Through industrial reformation in the early 1980's and late 1990's, apprenticeships started to change and be redefined to accommodate the current needs of the labour markets. Because of these reformations, Lerman (2017) cited that the historical and traditional training mechanisms adopted at the early development phases of apprenticeships became diluted and began to have a negative impact within the education system creating a degree of uncertainty amongst those who were considering an apprenticeship, especially school leavers (Bolli *et al.*, 2018). As such it became clear that there was a correlation between unemployment and industrial revolutions, which then had a knock on affect towards educational choices. Fig 3 provides an example of the types of spikes in unemployment in the UK from 1971 onwards.



Figure 3. Unemployment Figures UK

United Kingdom (UK) Unemployment figures from 1971 to 2021 *Source: www.ONS.Gov.UK*

As the UK went into recession, youth unemployment became uncontrollable having a negative impact on families financially, this meant that parents were unable to support their children wanting to move into higher education, such as university education (Scharnhorst and Kammermann, 2020). Parents really had no choice but to explore different avenues that would encourage their children to work and gain knowledge and skills through different ways, hence apprentice schemes or VET routes became prevalent (Walden and Troeltsch, 2011).

During the 1960s and 1970s apprenticeships became employer-driven especially within engineering types of industries which were supported by government levies, these levies were offered to employers as financial incentives to recruit apprentices (Kuczera, Bastianic, Field, 2018). This incentive was short lived due to the demise of engineering manufacturing in the UK, whereby unemployment started to increase once again forcing UK government to launch various other apprentice programmes, which were first packaged as youth training schemes (YTS) and then Modern Apprenticeships (MA), all of which were still government funded (Gambin and Hogarth, 2015). One of the challenging aspects of the YTS scheme was the level of entry of young apprentices who were mainly chosen through their low academic abilities. This inevitably attracted various abilities of people from varied socially challenged backgrounds; however, from an employer's perspective it was a win-win scenario, whereby employers would gain easy access to government levies. These levies enabled employers to have a cost-neutral employee (OECD, 2017), who were employed without any commitment

or guarantee of employment after the training. The YTS programme started to have an adverse effect on the quality and employability of apprentices, thus developing a negative stigma around the overall educational value of apprentice schemes (Droy, Goodwin, O'Connor, 2019).

The YTS scheme was then replaced by the Modern Apprentice scheme (MA), which linked more with employers; the main difference was that the employer had more of a say as to how the programme was designed, thus becoming more bespoke to the needs of the employer and the industry sector (Gessler, 2019a). The MA programme extended further into capacity building through having accredited qualifications, through a gateway system, namely the General National Vocational Qualifications (GNVQs), which was designed to develop the skills and knowledge to further the learning and career development (Ehlers, 2018). These programs required the development of core skills and competencies in communication, numbers, and information technology and encouraged students to take responsibility for their learning under the guidance of a qualified assessor, internal, and external verifier (Ehlers, 2018). These constant reforms and re-branding of apprentice schemes pointed towards government policy inadequacies, which included unemployment, skill shortages, and social exclusion problems (Gessler, 2019a); these moves became the catalysts towards reforming apprentice schemes globally (Keep, 2015).

#### **2.4 Global Challenges**

The apprentice model has been in existence for several decades, albeit there have been numerous challenges along the way, including World Wars, economic downturns, and industrial revolutions, it still to date exists. Although several changes to the original model have been made there are strengthening efforts globally to provide a fit for purpose apprenticeship model (Chankseliani, Anuar, 2019C). To support this, Gessler (2019) unequivocally mentioned that the apprentice model no matter what form it takes, became a valuable commodity that supported the learning and development needs of the youth of tomorrow's world (Kashefpakdel *et al.*, 2018). What this means was that career and educational challenges had diluted localised demands, where globalisation had provided a platform for a more transient workforce. The meant that modern workforces around the globe were starting to equip themselves in readiness for future demands (Aggarwal and Aggarwal, 2021). These signs were a clear indication that the 4th industrial revolution had become embedded, (Verhoef *et al.*, 2019), where disruptive learning mechanisms were now



challenging traditional educational institutions, who clearly needed to reconsider their traditional models and adapt their current methods quickly (Fischer, 2014). As mentioned before, there was a requirement to develop highly capable workforces differently, which would include the use of artificial intelligence and digital learning mechanism. If this evidence was to be embraced, then a new learning agenda would need to be developed to establish better occupational choices technical skills (OECD, 2017).

What the literature review provided was an understanding that apprentice schemes were constantly evolving with changes that had clear distinctions from the original framework including the types of occupations being offered. What Chankseliani (2019) mentioned was the current trend towards offering apprentice schemes to sectors such as business and law, health and public service, and retail that includes customer services (Roberts, 2019). These trends had clearly been embraced by the G20 forum (Smith, 2019) who were a collective group of Countries focussing on the economics and financial well-being of countries, including the UK, Germany, Denmark, Australia, Egypt, and the United States, labour and employment Ministers met, where they declared that these actions were positive indicating that apprenticeships can be offered within any profession.

To validate this commitment, Lynch (2015) projected by 2021 Australia would offer more than 300,000 additional places for students which included technical qualifications such as process automation, logistics and management, and tech lab analytics using apprentice or pure vocational routes. Other countries were also developing apprenticeships inclusive of technical and vocational programs, such as India who have targeted 5 million young students through the apprenticeship mechanism by the end of 2020 (OECD, 2017). In contrast, some of the less developed countries such as Egypt and Saudi Arabia were reporting less than 20% of students taking vocational or apprentice routes, which lacked a macro insight into what will be required in the future, including becoming ready for employment.

What was now surfacing, especially with the rapidly and evolving global marketplace was that countries were now standing back and taking stock of learning and development initiatives including apprentice schemes. Fig 4 indicates that there were significant differences in the use of apprenticeships globally, although the UAE was not shown here, it currently sits within the same percentile as Japan and Italy at less than 1%

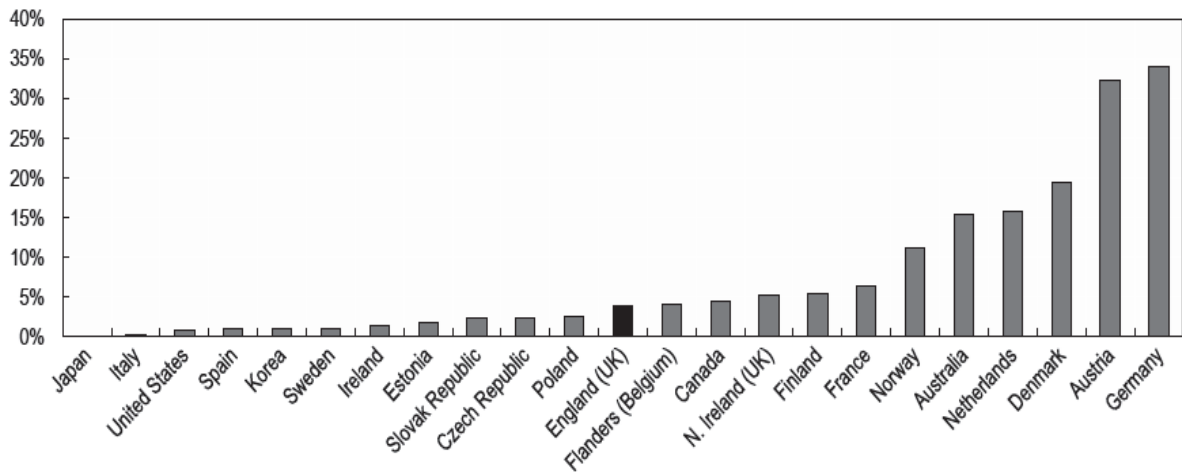


Figure 4. Use of Apprenticeships Globally

Source: OECD (2016), Survey of Adult Skills (PIAAC) (Database 2012, 2015), [www.oecd.org/skills/piaac/publicdataandanalysis/](http://www.oecd.org/skills/piaac/publicdataandanalysis/).

These rapid changes were now starting to be embraced, where apprentice schemes were being viewed as the answer towards bridging the skill gaps (Roberts, 2019). The G20 member states were becoming vocal enough to ensure that the development of apprentice schemes was deemed part of the long-term employment architecture and thus tasking governments across the globe to look and listen to some of the best initiatives (Smith, 2019). This employment architecture would place a considerable challenge for ministerial bodies who would now need to consider mandating apprentice schemes or at least provide a route that enables the unemployed to seek work and provide the employers to seek out qualified individuals (Odekon, 2015). Historically, the recruitment process for apprentice and VET programmes tended to focus on the lesser-educated individual who usually drops out of the academic route through a lack of ability or willingness Lester (2016) highlighted that vocational and apprentice schemes have become stigmatised and seen as inferior becoming more difficult to recruit for (Mallman and Lee, 2016). However, recent cross-country analysis proves that not every Country has stigma issues, for example Denmark ranked the highest in a sample of every 1000 recruited workers, 47% were apprentices. Whereas countries such as Egypt and India ranked the lowest, with less than 5% being recruited for apprentice schemes (Chankseliani, Anuar, 2019).

Denmark ranked the highest based on the leaving school to work culture, this meant that school leavers were encouraged to work and gain qualifications in tandem using models such as the apprentice scheme. These statistics are also being reflected positively in other Countries such as Italy and the Republic of Korea, where they are encouraging schools to

adopt vocational routes for the final school year linking education with apprentice schemes that then result in the mandating of apprenticeships in the form of a Law by 2022 (Markowitsch and Hefler, 2019). This does mean that from a global perspective that there are some positive signs, albeit there is still a huge amount of work to be done within the Arab nations. What the literature was uncovering was that a mandated push may be seen as an unlikely choice of many governments (McGrath and Frearson, 2016), rather than mandating apprentice schemes focus within the UAE as an example, bigger challenges are at the epicentre of the UAE culture. This challenge was based around how UAE nationals (Emiratis) have more of a preference towards traditional educational routes, including their own personal learning goals to constantly gain knowledge, therefore, to mandate and thus cascade such a policy into the public and private sector, may be challenging for the UAE (Jabeen, 2016). To support this, Fig 5 provided an insight to the level of demands for diploma, degree, and master’s programmes within the UAE until the end of 2016. With approximately 140,000 enrolments, which clearly places a high demand on the University administration system.

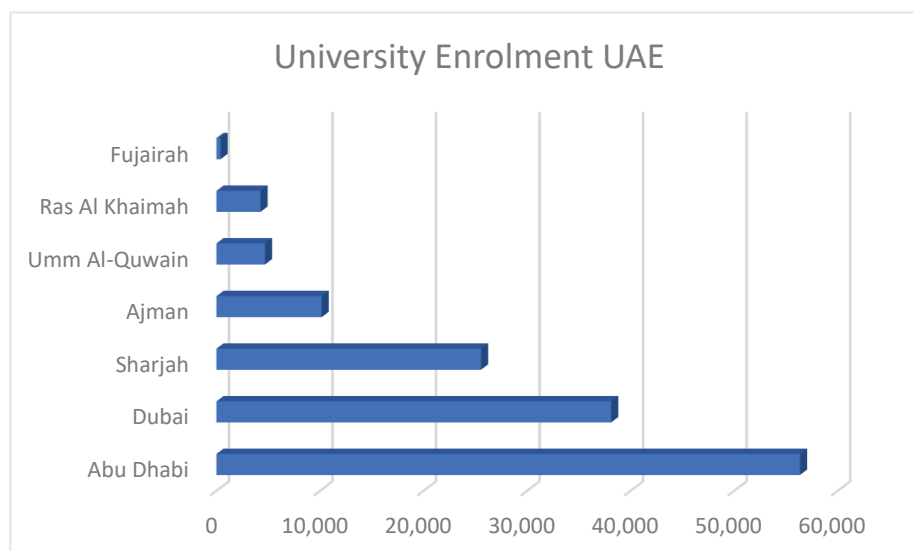


Figure 5. University Enrolment UAE

Source: Published by Statistic Research Department, Jun 1, 2017

More recently, there had been an introduction of a dual vocational training system, predominantly driven by Germany (Davoine and Deitmer, 2020). The system in basic terms redefines the vocational thought process, referred to as learning separation. Learning separation created a norm within people’s minds of what may be the best route to take regarding learning.

Young (2014) cites that this separation provided a vehicle for academic, institutional, and vocational learning pathways, and through this system, Germany was being ranked as one of the highest in vocational educational offerings, which solidified their belief that vocational education including apprentice schemes was a high value commodity (OECD, 2017). This process encouraged organizations and vocational institutes to provide both on the job and classroom-based training that has direct similarities to that of the original concept of how apprentice schemes were developed (Fuchs and Wiemann, 2018). Through this, the scheme had been re-branded as a dual education and vocational model, and was no longer known as an apprentice scheme, which maybe more palatable to those who have the 'apprenticeship' title as being a stigma on their societal position.

Overall, the G20 Countries have shifted their focus and developed specific agendas (Fig 6.) and strategies based around embedding apprentice schemes and how best to integrate them into their respective societies (György, 2020). However, what the literature indicated was the overall lack of commitment from the UAE in terms of how well the G20 Countries are working together but also how they are using each other's experiences to get the best apprenticeship scheme that is fit for their own Countries purpose (Kirton and Greene, 2015). Critically, such figures indicated that the impact the UAE nationals have on academic routes have a negative impact on other learning and educational routes, thus, their ability to divert their attention towards apprentice schemes seems challenging. Although this challenge was to date still valid, there was evidence to show that demands were changing; the youth and career-minded landscape of the UAE was becoming more diverse in its choices of learning and educational routes creating different demands on the academic infrastructure (Lukesch and Zwick, 2020). For example, UNESCO (2007), cites that school and university leavers were looking to align their pursued studies with the demands of private and public-sector bodies to ensure that they would translate academic learning into reality. More recently discussions had taken place as to how best to prepare the youth for future work (Hawse and Wood, 2018). The view was that most UAE nationals would not experience any work until the age of 22 years old – after their university education (Gallagher, 2019). As such, employers were finding it increasingly difficult and challenging where UAE Nationals would find it difficult to adapt to and could not always cope with the day-to-day work-life balance.

	<b>G20 ten agreed actions on quality apprenticeships (abbreviated titles)</b>	<b>Numbers of governments with high activity or detailed plans</b>
<b>1</b>	Established national goals to expand and improve apprenticeships	High
<b>2</b>	Raise quality of apprenticeships	Medium to high
<b>3</b>	Provide apprenticeships across the economy	Medium
<b>4</b>	Foster employer engagement	High
<b>5</b>	Safeguard worker rights and health	Medium to high
<b>6</b>	Raise awareness of apprenticeships	High
<b>7</b>	Improve access for disadvantaged people	Medium to high
<b>8</b>	Strengthen partnerships between employers and training providers	Medium to high
<b>9</b>	Upgrade and facilitate inclusions of informal apprenticeships into the formal economy	Medium amongst countries concerned
<b>10</b>	Expand apprenticeships globally	Medium

Figure 6. GCC Apprentice Development Agenda

Source: see <http://www.ilo.org/public/english/bureau/stat/isco/isco08/index.htm>

## 2.5 The Historical Context – UAE

The United Arab Emirates was officially established as a nation in 1971 with the alliance of six of the seven Emirates, Abu Dhabi, Dubai, Sharjah, Fujairah, Umm Al Quain, and Ajman. The seventh Emirate, Ras Al Khaimah, officially joined the alliance in 1972 (Alhebsi, Pettaway, Waller, 2015). Although the seven Emirates took some time to be established, educational services were available in the UAE before the existence of the country where home-schooling or learning was deemed legitimate. This cultural environment placed a strong emphasis on religious studies, which were Islamic studies through the acquisition of knowledge using local Islamic scholars. The Ministry of Education in the UAE highlights several distinct iterations of the educational development landscape. These are the Mutawa and Katateeb; the Educational Circles Semi-Organized Education, as well as the Modern Education System (Alhebsi, Pettaway, Waller, 2015). The Mutawa is the name used for the Imam, who was the sole source to teach young boys and girls the Holy Quran, the Hadith, which are prayers, and the teachings of the Prophet Mohammed (peace be unto him).

History stated that the Mutawa was the most learned man in the area whom people looked upon to lead them and teach them the right ways from an Islamic perspective. What was useful to understand, was that these teachings of the Mutawa were also based leadership in the form of the Great Man Theory (Madanchian *et al.*, 2016), where leadership was about being a leader that helped shape the future and how the Islamic teachings were realised into life and the challenges surrounding life. Alhebsi (2015) mentioned that the Mutawa was part of this theory where his knowledge and skills guided the younger people attending his teachings based on the experiences of the Prophet Mohammed (peace be upon him), as such, education and inspiration provided to the younger boys and girls became part of the duties of being a Mutawa (Alhebsi, Pettaway, Waller, 2015A). These teachings were usually provided within the home, whereas the Katateeb, normally from richer communities, were physical locations, like the primary schools of today. As time progressed, the next iteration was a natural follow-on from Mutawa and Katateeb; Educational Circles, which was the first introduction of the teacher-student, model where the transference of knowledge was provided (Bjerkaker, 2014). Initially, the teacher would be someone who was known to the community and from Saudi Arabia based on the local sheikh's knowledge and connections as an esteemed religious scholar with extensive knowledge of other areas such as reading and writing, and mathematics. Although education had started to transition from the traditional teachings of the Holy Quran via the Mutawa, there was a feeling that scholars had started to drift away from the heart of these origins and thus started to pull back using the semi-organized education iteration, which started in 1907. What was clear was religious schools were now being established whereby the first school "A'Taimiah Almahmoudiah School" was founded in 1907 in Sharjah (Alhebsi, Pettaway, Waller, 2015). The ruling Sheikh at that time was Sheikh Ali Almahmoudi who was not only visionary but also a believer in education especially wanting to combat illiteracy in the region. It was recorded that Sheikh Ali was the founding father of educational institutes in the Region including funding education for those who may not be able to pay. More schools started to open, especially after the British occupation, where local leaders started to understand the importance of education, which became a prerequisite when trading with literate people such as the British. Hence the final and most important iteration is what is now referred to as the modern education system. From this, schools were being built and education levels increased still with a solid background of Islamic studies. Once the UAE was finally formed and became seven Emirates, the

education systems became more accessible for many local communities, so much so that education became free for Emirati families and thus became a mandated policy for all 7 Emirates (Alhebsi, Pettaway, Waller, 2015).

One important piece of evidence surfaced from literature was that that Arab societies tend to lean towards status, their position in society, and their academic level of education (Alhebsi, Pettaway, Waller, 2015). What was also clear, was those students within the Arab nations, particularly in the UAE believed that it was the role of the tutor to impart their knowledge and experiences leaving the student with a minimal amount of work. This approach produced a passive and unresponsive attitude towards the learning environment, which inevitably created internal challenges amongst the faculty members. It was also believed that the higher the qualification the tutor had the better the teaching would be, which in turn created a learning environment of the tutor being the deliverer of study results, meaning, if the student failed it was then the tutor's fault. However, Tran (2013) challenged this learning mechanism especially with the younger generation, citing that globalisation and the developments within the technology sectors are dubbing down the belief that the tutor should be the fountain of all knowledge, albeit the student still embraced the respectful status of the tutor in and out of the classroom environment (Ridge, Kippels, Farah, 2017). In context, most Arab cultures started to embrace the Western style of learning which in the main was a constructive approach, still, the Arab culture embraced collaboration and enjoyed learning based on the construction of new knowledge (Chen and Bennett, 2012).

Considering these two paradigms, Tran (2013) recognised the fact that the Arab nations were seen to be changing their views on how the learning landscape was now being viewed.

Clearly, education had become the foundation of the UAE; every family played an integral part in ensuring their children were provided or are at least exposed to the best education throughout their learning life. Within the 7 Emirates of the UAE, government education is free to all UAE citizens (Ridge, Kippels and Farah, 2017), which provides access to all academic disciplines as being the bedrock of societal needs. However, to develop a culture of an academically driven society, a society that had little appetite for vocational education, a society that believed that the cycle of preparing its people for a career was purely based around gaining the highest academic qualification using traditional routes, such as colleges and universities, will need to change.

Due to the lack of knowledge and experiences within societies, this academic push resulted in a naïve and restrictive view of what vocational education can offer, resulting in a firmly entrenched mindset with the developing youth of the UAE (Ridge, Kippels and Farah, 2017). From this knowledge, the mid-1980s started to experience changes through the UAE Governments' educational initiatives by developing a vision that would begin cultivating UAE nationals towards professional and technical careers. This vision was driven by the global changes that require a different set of skills and preparedness for future developments. It was clear that the UAE had to start to wake up to the fact that there was a huge void appearing, which was translated into there being a lack of graduates wanting to take up studies in technical and engineering skills (Ridge, Kippels and Asad, 2017), Appendix 1 further supports this by recording the actual number of National Vocational graduates from 2015 to 2020 only recorded 2624. Interestingly, this void is still relevant even in today's employment market within the UAE.

Current trends surfacing from the UAE unemployment data indicate further concerns, concerns that highlight the depth of issues, albeit the 2020 figures are higher due to the economic issues developed from the COVID-19 crisis. These figures including the 2020 figures indicated that preparing people for different kinds of work was critical. Fig 7 indicates that the UAE unemployment rate was worse than ever, even during the 2008/2010 recession.

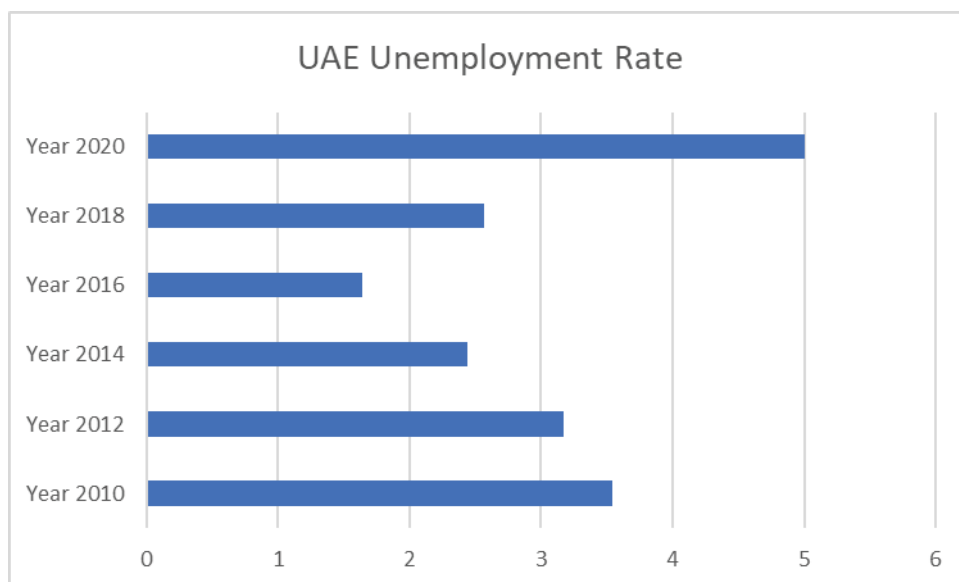


Figure 7. UAE Unemployment Figures

Source: [www.tradingeconomics.com](http://www.tradingeconomics.com) Central Bank of the United Arab Emirates



Unemployment figures in 2010, which was at the heart of the global crisis and recession reported a peak of 3.4% with a 9.5 million population whilst 2020 reported figures of 5% against a backdrop of over 11 million, in context these figures indicated that the employment market was getting tougher and more competitive, proving that societies would need to be better prepared, better educated and at best, fit for the job as the competition to fill certain roles would be high (Esposito and Elsholkamy, 2017). Not only do these figures challenge the availability of jobs and types of jobs but more importantly challenge the skills required for positions, which then extend towards the educational development opportunities, not only academically and vocationally, but more importantly how could apprenticeships become one of the key catalysts for societies to prepare better for the future (Zeffane and Kemp, 2019). Thought-provoking data such as this should direct employers, employees, universities, and institutions towards being able to initiate specific programmes that can vocationally prepare people for the future. This preparation was further exposed in the early 1990s, where Gallagher (2019) highlighted that whilst most public and private sector employers within the UAE relied on the expatriate workforce, the unemployment rate was increasing within the UAE National communities, especially within the youth. This meant firm action had to be taken to ensure UAE nationals were fit for purpose and be ready to work and potentially replace the expatriates in many managerial positions (Alhajeri, 2021). Based on this requirement, a vision to form the Higher College of Technology (HCT) came to life in 1988 and was created to promote vocational education whilst preparing graduating students for global and industrial needs (Elsholkamy, 2017).

The now over 20-year-old HCT consists of around 17 colleges with a community of around 23,000 students operating within most of the 7 Emirates, i.e. Abu Dhabi, Dubai, Sharjah, Ajman, Umm Al Quwain, Ras Al Khaimah, and Fujairah. From the creation of the HCT, Abu Dhabi established the Abu Dhabi Vocational Education and Training Institute (ADVETI) (Alhajeri, 2021). Their aim was slightly different from the HCT as ADVETI infiltrated its activities into schools to prepare students for career choices at an early stage in their education. What is now interesting about these two institutions, albeit they are separate entities, they work incredibly close and synchronise with each other to help students gain employment (Esposito and Elsholkamy, 2017). One of the main benefits of these two entities was that if a student cannot pass the entrance tests for HCT, ADVETI then takes that student through a different development route to gain the accepted standards required.

These activities, that use such institutes to direct students and school leavers towards developing skills and become attractive to employers, reflect on the overall performance of HCT and ADVETI who were outperforming UAE Universities for placing graduates into employment. The current figures supported this evidence by stating that 68% of students were placed into industry both private and public versus 50% of students from Universities tend to lean more towards public sector jobs (Alhajeri, 2021). However, these performances were not directly connected with vocational qualification routes, for example, of the 21,000 students enrolled with the HCT in 2019, 69% of females gained employment with a Bachelors level degree and 31% of males gained employment also with a Bachelors level degree (Ashour and Fatima, 2016). These figures distort the overall rationale of HCT as being a vocationally led organisation and thus was seen as sitting within the academic arena.

This lack of engagement further indicated that vocationally led or even forward-thinking organisations were still not engaged or at worse were not part of the overall vision of the UAE. Elsholkamy (2017) qualified this by mentioning that only 3% of UAE nationals showed any type of interest in vocational routes compared to a global average of 10%. These statistics were strong indicators towards the private and public sector employers not embracing or even understanding the value of apprentice schemes and vocational qualifications. It was clear that they needed to be further encouraged to develop the specific knowledge and value behind these strategic approaches. These approaches should be based purely on the understanding of what apprentice schemes look like whilst recognising the outputs, meaning the strength of the vocational qualification and its recognition globally. Through such a strategy, organisations could then encourage recruits without academic acumen or capacity, and prepare them for what lays ahead within the scope of business activities, where they will be fit and ready for the job candidates (Raven, 2011). Furthermore, the UAE had committed itself to produce 10 Emiratis with vocational skills for every university graduate in line with utilising the established vocational bodies such as HTC and ADVETI. It has yet to be seen how this commitment will be achieved other than through the aforementioned institutes who still have limited penetration. This clearly translated into a lack of deep awareness of how this commitment, including the recruitment mechanisms required will attract individuals and organisations towards any type of apprentice schemes or vocational qualification. However, there was a slight uniqueness about the UAE, that being the composition of the workforce, the

UAE has a transitional workforce, which includes the expatriate community versus the UAE National workforce (Fig 8.).

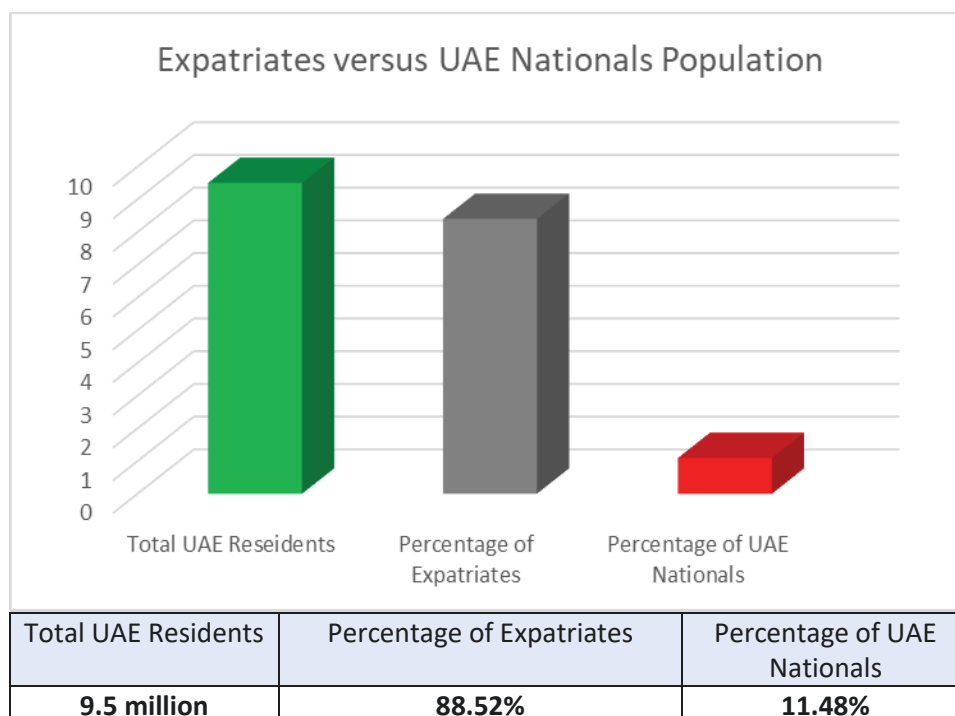


Figure 8. Expats versus UAE Nationals  
Source: Data from WAM January 2018

This data highlights that the UAE would not be in a position to support the vocational needs of the expatriate workforce, after all, most of the expatriates come from countries that already have apprentice schemes linked with vocational routines in place (Hoff *et al.*, 2021). This does mean, however, that vocational requirements of UAE National workforce will, need to consider a possible top-down approach rather than a bottom-up approach which is based on UAE nationals moving from Government positions based on their age or tenure to seek positions in private organizations where certain skills and knowledge will be required, this, in turn, would mean vocational choices and learning pathways would need to be developed to attract these types of individuals (Whiston *et al.*, 2017).

## 2.6 Differences between apprentice schemes and vocational qualifications

Vocational pathways have helped many individuals to build a lifelong learning portfolio based on what the world needs today with regards to job-specific skills and knowledge. The enabler for these learning pathways was to use VET learning frameworks (Moodie and Wheelahan, 2009), which are based on four dimensions describing the learning methodology required,

these are epistemological, teleological, hierarchical, and pragmatic (Avenier and Thomas, 2015).

Epistemology is a concept of producing knowledge and then being able to transfer that knowledge, which can be used while in the workplace. Teleological helps the learner prepare for their chosen vocation, which means being a job fit. Hierarchy uses the individuals' academic and educational levels for entry, thus aiming them towards the right occupation, and finally, pragmatic, which is a practical term used which helps understand the needs and arrangements for learning to occur. Hollander (2009) stated that with any framework, there should be some degree of flexibility whilst considering factors such as financial restrictions, global economies, and labour demands, which constantly change. Rojewski (2009) also suggests that any approach towards implementing VET must demonstrate clarity concerning the purpose of the programme, which in turn helps develop a set of standards or specifications through utilising, tried and tested models and theories (Gallacher, 2009). As described earlier in this review, VET is used as a vehicle where learning is an adopted mechanism whilst still in education or when in full-time employment to help enhance knowledge or career aspirations. The link between VET and apprenticeships is distinct and therefore they should not be confused with the overall structure and ethos of an apprentice scheme (Lawes, 2020).

Countries such as Austria, Germany, the United Kingdom, the United States of America, and Switzerland, place a high priority on motivating individuals towards vocational pathways as it promotes constant personal development (Pullen *et al.*, 2012). What the literature indicated was that vocational pathways are being embedded including apprentice schemes in their societies which helps to form a future learning choice whilst becoming rooted within their societies (Gambin and Hogarth, 2015). As mentioned by Wyman (2016), apprentice schemes, no matter how they are disguised, have been and should be viewed as a time-honoured arrangement between the apprentice, the learning organisation, and the employer.

Looking at the structure of apprentice schemes and vocational learning, there is a distinct separation between apprenticeships and vocational learning. Apprenticeships lean towards having a time range to finish the programme, which can be 2, 3, 4, and even 7 years, which prepared the individual for work. This preparation linked the transfer of skills and knowledge from a master artisan or a trainer that has the qualifications and experience that provided the

apprentice with a reliable mechanism to develop. Usually, the structure of the apprenticeship was through an employer, where they would send the apprentice to a college to develop theoretical skills for approximately one-third of the time. The other two-thirds of the time was then spent within the employer to develop and hone the theoretical skills through transferring this new knowledge into practical work-based applications (Chankseliani, Relly, 2015). This could be challenging from a resourcing perspective, especially when implementing apprentice schemes from the start.

## **2.7 The challenges associated with implementing apprentice schemes.**

There are several key areas associated with implementation, i.e., how apprentice schemes have developed, how and what should be used to evaluate the schemes, how to understand the returns on investments, and what attracts an individual to become an apprentice. These headlines will further help build a picture of the past, present, and future challenges associated with apprentice schemes (Aggarwal and Aggarwal, 2021).

### **2.7.1 Development of apprentice schemes – past and present**

One of the many challenges of apprentice schemes to date is that they tend to be only available to employees or future employees wanting to pursue a manual type of role, such as engineers and construction workers (Lerman, 2017). These challenges can be viewed as mindsets, misconceptions which have surfaced over time, creating confusion as to what the overall concept of an apprentice scheme consists of what Zhang (2013) mentions, no matter what the profession, there was still a degree of rigour and discipline required to complete an apprenticeship, which includes how knowledge and experiences are developed to then map against the related qualification. The qualifications are then mapped with academic standards or a qualification framework, which helps apprentices understand what the academic standard or equivalence is they are working at, which then translates into their qualifying level (Burgess and Thomson, 2019). To reinforce this information, Table 1 provides an Interpretation of the vocational levels versus the academic levels. Apprentice schemes have had to change in line with industrial and educational needs, for example, in the late sixties when apprentice schemes were the trend, the vocational level would be 3, which is the equivalent of achieving an academic 'A' level. However, as times changed and with the demise of manufacturing and the engineering industry, the vocational level would be in and around 2, which was the equivalent of achieving an academic 'GCSE.' This lowering of levels surfaced

due to the accessibility and easiness to join vocationally driven qualification schemes and a lack of belief in what apprentice schemes offer (Wolf, Weiger, Hammerschmidt, 2020).

By the 1980s the traditional apprentice model started to become obsolete or unworkable, hence the entrance of experiential learning and vocational qualifications which became the trend of the next few decades (Ryan, 2012). These trends started to become embedded to such an extent that well-established Countries such as the UK changed the laws at the school-leaving age level, i.e., 16 to 18 years of age, and mandated that no one person will leave full-time academic education until they reached the age of 18 (Wolf, Weiger, Hammerschmidt, 2020). This mandate was further developed in 2002 with the onset of National Vocational Qualifications (NVQ's) with a hope to change the overall architecture of the current Modern Apprentice schemes where assessments were based more on the structure of the NVQ rather than the traditional mix of on-the-job training and knowledge collection (Kuczera, Bastianic, Field, 2018). The challenge now is globally the way apprentice schemes are changing, no longer does one size fit all, whereby some change naturally while some changes are based on internal governmental policies (Cedefop, 2017). However, what the historical facts indicate irrespective of the changes was that funding, quality of candidates and employers (Keep, 2015), employers losing sight of what part to play, along with a complicated qualification and assessment mechanisms are creating the biggest impact on these schemes (Gambin and Hogarth, 2015). Steedman (2010 ) highlights that there are pockets of individuals that see an apprenticeship as a good option to learn; however, whilst other countries such as the UK dilute this opinion by showing low levels of engagement. In the next section, this engagement is explored further to help understand the overall impact of how countries and organisations are benefiting from implementing fit-for-purpose apprentice schemes.

Vocational Level	Description	Equivalency
1	Usually, Years 10 and 11 of secondary school. These are the first formal on the numbered system of qualifications	GCSE (grades D, E, F or G), Level 1 awards, and diplomas. Level 1 certificates, Level 1 National Vocational Qualification (NVQ)
2	Level 2 is the next step up from Level 1 and can also be achieved in Years 10 and 11.	GCSE (grades A*, A, B or C) Level 2 awards and diplomas Level 2 certificates Level 2 NVQ Intermediate apprenticeships
3	Level 3 indicates having a greater knowledge in a subject and is achieved in Years 12 and 13, or centres for further education.	A level (grades A, B, C, D or E) Advanced Subsidiary (AS) level Level 3 awards, diplomas, and certificates Advanced apprenticeships Access to higher education diploma International Baccalaureate diploma
4	Level 4 indicates a greater understanding and a higher level of learning than that gained through secondary education level. Level 4 acts as a good grounding between levels 3 and 5.	Higher national certificate (HNC) Level 4 awards Level 4 diplomas Level 4 certificates Higher apprenticeships
5	Level 5 demonstrates knowledge of a subject who goes beyond secondary education	Foundation degree Higher national diploma (HND) Level 5 awards, diplomas, and certificates

Table 1. Interpretation of the vocational levels versus academic

Authors own elaboration

### **2.7.2 Evaluating the appropriateness of apprentice schemes**

To evaluate an apprentice scheme as being appropriate, there are several parameters that would need to be considered, including how and what would be required to develop apprentice schemes, particularly within the UAE (Fisher, Perényi, Birdthistle, 2021).

Firstly, there will be a need to know how apprentice schemes are recognised across industry and commercial sectors both public and private. Recognition normally translates into equivalency of qualifications and experiential knowledge.

Secondly, the financials, which about knowing what the business model looks like, what investments would be required including returns of these investments, what up front and ongoing funding would be required including government support in the form of levies, if they exist.

Thirdly, understand the school leaver ratios, which measures the numbers of students joining vocational routes versus how many are going directly into an academic institute, such as a university. These demographics play a crucial part in the overall demographics of choice.

During this research, it has become clear that the initial development of apprentice schemes in, India, Indonesia, and Egypt focused purely on manual types of positions such as engineering and construction (Smith and Brennan-Kemmis, 2014). This replicates many global models where the coverage across industry sectors and occupational groups is patchy concerning the overall requirements for future employable positions, which have been highlighted as being a major focal point within the G20 countries developing apprentice schemes (Relations, 2016).

Such challenges have already been cascaded towards the G20 Countries who, as mentioned earlier, have committed to a series of actions to bring together best practices, and develop vocationally driven educational programmes such as apprentice schemes. As part of these action plans, indications show that apprenticeships need to be offered in a much broader range of occupations to cover the deficits of industry needs and other functional professions for example, managers, professional functions including marketing, finance, and human capital (Avis and Atkins, 2017). However, one of the main challenges that surfaced was the need to understand and then decide which occupational groups could be exposed to the apprentice regime, whether that is in their current form or whether adaptations should be



made. Based on current apprentice scheme offerings, further work will need to be done to develop functional positions to further expand the current offerings (Field, 2019), meaning the range of schemes will need to be much wider and broader. For those seeking to develop Country specific apprentice schemes, especially the UAE, should not be blinded sided by the benefits of what apprentice schemes could offer. This fact was based on the process to accredit and qualify against country specific standards being cumbersome, costly, and risky based on the internally processes and quality criterion required (Moore-Jones, 2015). What became evident was the initial availability of accredited apprentice schemes within the targeted G20 focus group, which equated to more than 40, which are held within 9 distinct occupational groups displaying a cross-section of occupations, ranging from managers, service, and sales, agriculture and fisheries, craft and trade-related, plant and machinery operators and professionals. Fig 9 provides a graphical overview of the penetration of the apprenticed occupations that are currently available within the G20 Countries.

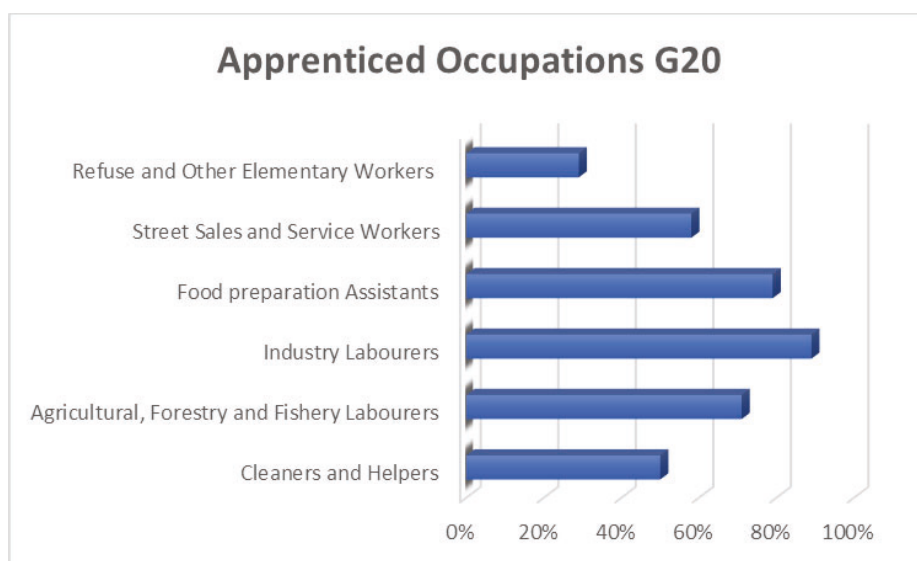


Figure 9. Apprenticed Occupations G20

Source: <http://www.ilo.org/public/english/bureau/stat/isco/isco08/index.htm>

Although the figures in Fig 9 does seem positive, Germany is clearly stands out where they provide more than 326 occupations, all of which are apprenticed, and indicates a mature vocational structure that overshadows the efforts of the rest of the world including the UAE. Furthermore, table 2 represents the occupational areas being developed for apprenticeships, where several countries are making progress, again Germany and the United States of America show distinct and progressive steps.

Area	Australia	Canada	Egypt	England	France	Germany	India	Indonesia	South Africa	Turkey	United States
Business and Administration	Major	Minor	Minor	Major	Major	Major	Minor	Major	Minor	Major	Minor
Production and Manufacturing	Medium	Major	Major	Major	Major	Major	Major	Major	Major	Major	Major
Civil Engineering	Medium	Major	Minor	Major	Major	Major	Minor	Major	Major	Major	Major
Electrical and Electronic Engineering and Information and communication Technology	Major	Major	Major	Average to Major	Major	Major	Minor	Major	Minor	Major	Minor
Engineering and Energy Process	Minor	Minor	-	Average	Major	Major	Average	Minor	Major	Major	
Health and Social Care	Medium	Minor	-	Average	Major	Major	Minor	Minor	Medium	-	Minor
Education and Culture	Minor	Minor	-	Major	Average	Major	Minor	Minor	-	-	Minor
Leisure, Travel and Tourism	Major	Average	Very Limited	Minor	Average	Major	Average	Major	Minor	Major	-
Agriculture, Food and Nutrition	Minor	Minor	Very Limited	Minor	Average	Major	Minor	Minor	Minor	Major	-
Media and Information	Minor	Minor	Very Limited	Minor	Major	Major	Minor	Minor	Medium	Major	Minor
Textile and Design	Minor	Minor	Average	Minor	Average	Major	Minor	Major	-	Major	
Mining and Natural Resources	Minor	Minor	Very Limited	Minor	Average	Major	Minor	Major	-	-	Minor

Table 2 Vocational Occupational Progress

Vocational Occupation Progress

Source: UNESCO-UNEVOC (2004): Hangzhou Declaration – Vocational Disciplines.

From both Fig 9 and Table 2, highlight plans that are clearly in place to develop workforces of the future using apprentice schemes and vocational routes within the G20 Countries, which clearly displays belief and value. However, what the current literature failed to uncover at this stage was how the UAE would catch up with the rest of the world, more importantly, whether apprentice schemes or vocational routes would be embraced with confidence and seen as a long-term fit within their internal educational landscape.

For those Countries that are not currently developing apprentice schemes such as Saudi Arabia, are also developing critical relationships to make their future become 'live.' For example, Saudi Arabia have forged key links with Ministries and Chambers of Commerce to ensure a pipeline of training providers are ready, Italy have created links with employers to develop pilot schemes and Mexico and India have developed apprenticeship boards to make a statement of intent for the future of apprentice schemes (Smith and Brennan-Kemmis, 2014).

Mohammed bin Rashid Al Maktoum, ruler of Dubai and vice president of the UAE, has already committed to a vision that will place 10 individuals into vocational routes for every university graduate. Although this is extremely visionary, there was limited research and evidence to prove otherwise. The visionary appetite clearly exists, however, the questions with a degree of certainty, are, how the UAE will develop and implement apprentice schemes and more importantly, does this appetite exist past the visionary discussions!

One of the starting points of evaluating readiness is pre-entry, meaning that research should use valid, robust, and reliable indicators to understand, align and benchmark the number of programmes being offered in less mature countries, such as Egypt and Saudi Arabia (Alanzi, 2020). This will help understand the learning and historical challenges for implementation, therefore it is of critical importance to contextualise the information for the UAE. Most importantly, funding and investment will be one of the most challenging areas of any organisation and government when it comes to the funding of the schemes (Muehlemann and Wolter, 2014). Apprentice schemes and vocational qualifications are no exception to this rule, which means that governments and training providers should explore how funding has developed over the decades that has helped support the needs of the employer, the apprentice, and the training body (Gambin and Hogarth, 2017).

Training levies were introduced and became the main conduit for organisations to get financial support, these levies, historically have been used to encourage employers to recruit, develop and retain apprentices (Field, 2019).

Funding mechanisms, such as levies were found in more than 60 countries across the globe, that were introduced to encourage employers to attract the best and develop the apprentice to a good standard (Hogarth *et al.*, 2014). Furthermore, it has been evidenced (Smith and Gagnon, 2013), that without such financial support or levy from the government, the employer will reduce the amount of training or at the worse stop it which can result in a 50% drop in apprentice schemes being stopped or at worse removed (Smith and Gagnon, 2013).

What the literature indicates is the significant burden placed on government bodies from a fiscal perspective based on the need to support or fully fund the amount of investment an organization will require (Gambin and Hogarth, 2017). Although the funding is important, but likewise to the return on investment which means that all costs associated with the planning, implementation, and actual running of the schemes come under a great deal of scrutiny. This challenge clearly links with the research objectives based around the overall significance of financial needs to establish a robust and long-lasting apprentice-type approach and system in the UAE.

### **2.7.3 Return on Investment of Apprentice Schemes**

From what has been written so far, it was becoming clearer that developing and then implementing apprentice schemes in the UAE have several significant challenges. Funding has already been mentioned, however, one of the biggest challenges for most organisations is cost benefit or return on the investment of the incumbent apprentice (Gambin and Hogarth, 2017). Organisations will predominantly consider several areas, first the actual direct costs such as salary and benefits and second, the costs of the training whether full time or part-time (Wenzelmann, Muehleemann, Pfeifer, 2017). Thirdly, there will be other associated costs such as purchasing equipment that are specific to the role and not forgetting enrolment and examination or institution fees (Muehleemann *et al.*, 2008). To understand this better, Muehleemann (2008) has indicated that organizations in Germany tend to look at the overall cost–benefit analysis or return on investment in a slightly different way, that being, they know there will be a net cost initially with any apprentice, however, they are willing to absorb these costs due to the second and third year bringing in higher yields of productivity due to the

apprentice spending more time on the job rather than at a training institute being trained. That said, one of the biggest challenges that most organizations face is the retention rate at the end of year one, where Jansen (2011) cites that most European companies such as Germany and Switzerland have a retention rate of around 50%. This rate is based on the apprentice completing the apprenticeship scheme in year one and then staying on for the second and third year (Kuczera, Bastianic, Field, 2018).

From this example, one of the focal area's is the ability to retain the apprentice after year one. Some reasons may be the overall motivation of the apprentice to complete, or at worse the apprentice scheme not delivering the initial expectations. Either way, the cost benefit analysis and return on investment must be taken into consideration, especially where there is limited government funding.

#### **2.7.4 New ways to learn through being an apprentice**

There are some contrasting viewpoints based around how people want to learn and develop, especially using an apprentice scheme or vocational qualification as the learning vehicle (Abdou, 2017). These viewpoints tend to be based around individual choice and the overall perception of how the learning will be delivered, which means, if the individual has a good perception and it fits in with their career and learning needs, they will then have a high level of engagement (Clarke and Polesel, 2013). However, if the apprentice schemes are marketed from a stakeholder's perspective, implying the scheme caters more towards the needs of the stakeholder, there will be a lesser chance of the individual wanting to learn and develop using the apprentice scheme (Cedefop, 2017). An important note to also consider is, COVID-19 there has been an increased demand on how schools, colleges and universities take learning towards a whole new dimension, blending learning through face to face and virtually has started to become the norm. This new dimension will clearly pave the way to renewing, reinventing, and totally redesigning how apprentice schemes could be offered to the millennials of today and tomorrow (Tamim, 2018). What this review indicated was the overall perception of apprentice schemes and vocational qualifications, best described as being distorted, meaning that the general view was that academia still takes precedent.

A very recent paper written by Niamh Foley for the House of Commons from the UK produced some hard facts stating that there is a clear decline on the uptake of apprentice schemes in the UK based on the recession, limited job opportunities, COVID-19 and government funding being massively reduced.

Level	Age	2019/2020	2020/2021	Change	% Change
<b>Intermediate Level</b>	Under 19	29,700	18,400	-11,300	-38%
	19 - 24	16,800	11,100	-5,700	-34%
	25+	18,500	11,900	-6,600	-36%
	<b>Total</b>	<b>65,000</b>	<b>41,500</b>	<b>-23,500</b>	<b>-36%</b>
<b>Advanced Level</b>	Under 19	25,000	17,500	-7,500	-30%
	19 - 24	27,600	22,200	-5,400	-20%
	25+	35,100	29,400	-5,700	-16%
	<b>Total</b>	<b>87,700</b>	<b>69,100</b>	<b>-18,600</b>	<b>-21%</b>
<b>Higher Level</b>	Under 19	3,400	2,800	-600	-18%
	19 - 24	13,900	13,400	-500	-4%
	25+	28,700	35,100	6,400	22%
	<b>Total</b>	<b>46,000</b>	<b>51,400</b>	<b>5,400</b>	<b>12%</b>
<b>All Apprenticeship Levels</b>	Under 19	58,100	38,800	-19,300	-33%
	19 - 24	58,300	46,700	-11,600	-20%
	25+	82,300	76,400	-5,900	-7%
	<b>Total</b>	<b>198,700</b>	<b>161,900</b>	<b>-36,700</b>	<b>-18%</b>

Figure 10. Apprenticeships and Traineeships Data

Source: DfE Apprenticeships and traineeships data

What Fig 10 indicates is that at almost every entry level and age group there are significant reductions in apprentice numbers, which is a clear indication of low levels of engagement and a lack of foresight to learn new skills and knowledge. However, there are examples where there was a high-profile stakeholder brand, such as Rolls Royce engineering apprenticeships, where there is an oversubscription (Gambin and Hogarth, 2015). This oversubscription was based on Rolls Royce's endeavour to displace the myth of apprenticeships being an invaluable commodity. They promote not only the scheme itself, but also how those apprentices with the capacity to learn and excel, can walk away with Degrees and Diplomas. This is an example of a fully engaged stakeholder and fully engaged apprentices that view these schemes as perfect learning and development choices (Lawes, 2020).

What was clear, according to Lawes (2020), was the distinction between academia and apprentice schemes, those who are academically astute, will route themselves towards higher

education, such as colleges and universities, while those who are academically challenged will tend to be move towards apprentice schemes or vocational qualifications. This means that those gaining high grades at GCSE level will be directed more towards university especially by their parents and schools, whilst those achieving lower grades will use a vocational or apprenticeship route as a career choice as they see including their parents no other way to be educationally developed (Slack and Hughes, 2013). This research has already highlighted the stigma towards apprentice schemes as being the poor man of education; likewise, if the teachers are also encouraging this behaviour, the interest will inevitably poor. As in all cultures parents play an integral role in the early years of their children's education and career aspirations, and where there is a lack of information, assumptions will take precedence, although the teacher will tend to be the catalyst in these decisions, the parents will still steer their children towards what they feel is right (Dolan, 2012), for example, where parents have had positive experiences whilst attending university, they will tend to encourage their children to follow in their footsteps.

## **2.8 Main highlights from the review**

This literature review focused on nine specific headings that helped to focus on how apprentice schemes had developed over time whilst understanding what learning had taken place from the challenges, successes, and failure. From these headings several important aspects have surfaced.

### **2.8.1 History of apprentice schemes**

The apprenticeship system dates back as far as 350 BC, and still to date the challenge is having to constantly redevelop them to fit with either government initiatives and or socio-economical changes (Gessler, 2019). These changes have been proved to be, in the main country-specific, however, what the literature exposed was a continuous need to re-engineer these learning systems such as apprentice schemes that align with current and future trends, such as, the 4<sup>th</sup> industrial revolution. Overall, there were gaps in the literature around apprenticeship systems in the Middle East particularly in the GCC area. What was significant was that history and traditions have helped to pave the way to developing and redefining the apprenticeship model, which was a key learning point that the UAE could use.

Based on this, the literature started to provide experiential insights to support the UAE to develop an apprenticeship system that could synchronize with the current educational landscape of the UAE.

### **2.8.2 The evolution of apprentice schemes**

Over time, the foundational level of an apprentice scheme was a firmly entrenched routine, based around mixing theory and practise. Through evolution and several industrial revolutions apprentice schemes have had to adapt, where the initial apprentice schemes were delivered over a 7-year period, whereas as current durations are at a maximum of 3 years. Although various models have been adopted such as the Modern Apprentice scheme in the UK, the one system that started to create interest and being a game-changer was the dual vocational system that linked academia and vocational training. This system provided qualifications that could reach a larger audience providing Diploma levels as a first based (Gambin, 2012). However, the UAE educational system, in particular the universities, could view the dual system as a direct competitor that could influence students to move away from their institutions. Based on this insight it was prudent to further develop this research to understand how an apprenticeship model could infiltrate the UAE educational system.

### **2.8.3 How the global economy and industrial revolutions are playing a significant part in the evolution of apprentice schemes.**

Economic factors played a large part in the educational routines of trainees and apprentices, which included downscaling of training based on a lack of funds or government support. Apprentice schemes globally and historically have been impacted through these changes and have created a push and pull effect of whether the apprentice schemes are worth pursuing. However, what this literature review indicated was that industrial revolutions have had the biggest impact due to them leveraging on required, desired, and visionary changes globally. For example, the 4th industrial revolution is upon us, which meant organisations, institutes, universities, and individuals have had to look at the future industry and career development needs more closely. Translated, this does mean through some of the cited literature that changes are being made and being embraced at the same time. However, there was still limited evidence as to how the UAE would implement its Vision, which was to have 10 vocationally qualified individuals versus 1-degree students.



The literature also highlighted collaborations between the G20 countries, which are helping to change the overall image and uptake of apprentice schemes, this inevitably will mean that more apprenticeships will need to be made available globally (Kirton and Greene, 2015).

#### **2.8.4 Societal and cultural stigmas**

One of the biggest challenges this literature review highlighted was the societal and cultural stigma around vocationally driven qualifications and apprentice schemes. These stigmas existed through a lack of awareness, a lack of understanding and a range of assumptions based on the value of apprentice schemes. What had surfaced was the lack of foresight that apprentice schemes could offer some of the best learning and development opportunities, unfortunately this has been diluted over time through teachers in schools, and employers who often viewed apprentice schemes expensive and valueless. Furthermore, parents tended to have a one-dimensional view of vocationally driven qualifications, in particular parents from the UAE, a view that academic routes would provide better education, a better future, and a status of success within the family (Winch, Oancea, Orchard, 2015). These stigmas are firmly entrenched, and without doubt would be one of the major challenges to bridging the gap between apprentice schemes and academic qualifications.

#### **2.8.5 Access across various organisational disciplines**

Apprenticeships were initially developed for manual jobs such as mechanical and civil engineering. What was becoming clearer through literature was the need to expand the apprentice and vocational portfolio and develop a deeper offering around business and industry-specific disciplines such as leisure, finance, and human resources (Lerman, 2017). What the literature is indicated was to further promote the learning and development opportunities which linked with longer-term career development needs. Apprenticeships need to stretch across all disciplines where individuals can see a route to learn and develop a career within chosen discipline. Whilst apprenticeships are being viewed as vehicles to develop the manual types of roles, it was now clearer through this literature review that in the future apprenticeships will look very different.

### **2.8.6 Financial implications, from recruitment, training, and retention**

The financial implications have become much broader, which meant that developing an apprentice scheme no longer relies on government funding, but more so revolves around, marketing, qualification development, and the introduction of new disciplines, all of which come at a cost. Linked with this, it became even more evident that recruitment and retention have the biggest impact on costs, which means, as the recruitment costs increase so does the retention rates based on having to rehire creating unknown and less tangible returns on the investment. Also, and worth highlighting is that retention rates have a significant impact on the initial investments, based on an internal fear that the apprentice would become trained and qualified and then move onto better things outside of the originating organisation (Jansen and Meer, 2011).

### **2.8.7 Flaws or gaps in the existing knowledge**

Several concerns have surfaced during this literature review that would require the methodology to expose the true meaning and value of apprenticeships and the overall concept of what an apprenticeship can offer. This could be based around assumptions and limited knowledge of the parents, the potential recruits, or the employers. Such misunderstandings would need to be flushed out to enable this research to add value and contribute to the educational landscape of the UAE. Although existing knowledge around apprenticeships did exist, most of the experiences were mainly developed through European experiences, with a mixture of other global countries such as Australia, the United States of America, and India. However, because there was a lack of coverage in the GCC, the literature failed to provide the understanding required, in basic terms this meant there must be an informed and contextual understanding of what has worked and what has not worked when implementing apprentice schemes in the GCC. Therefore, this research needed to explore and gain insights at both a cultural level and what the future educational needs will be for the UAE. Finally, one further point that needed to be considered during the methodology phase was to further understand the visionary goals set by the UAE government concerning vocational routes including apprentice schemes. What was clear was that the outputs from this paper would, without doubt provide a valuable insight as to how this vision could be brought to life.

## **2.9 Conceptual Framework**

From developing a deeper understanding of the literature and the associated gaps, the conceptual framework (Table 3) was developed, which in turn provided the catalyst towards bringing the research questions to life. The conceptual framework provided the rationale behind this research using historical and up to date literature that facilitated a meaningful conclusion, and thus provided a link towards the next steps required in terms of the methodology and how the data that was captured to produce a gap analysis associated with the literature review (Adom, Hussein, Agyem, 2018).

The purpose of developing the conceptual framework was to reinforce robustness in terms of the thinking process was used and to justify the need for this research. This thought process helped to develop a contextualised overview of the past and current trends, whilst highlighting the preconceptions that had already been flushed out from the literature review. (Adom, Hussein Adu-Agyem, 2018). Furthermore, what this conceptual framework achieved was the route to defining how the subject was explored in line with the research questions and objectives, whilst defining a progressive step forward that brought together the theories and knowledge gained (Grant and Osanloo, 2015).

## **2.10 Construction of the framework**

Unlike theoretical frameworks, where a selected theory is required based on the research study (Camp, 2001), the conceptual framework relies predominately on the researcher to design and develop with an overarching process that synchronizes their thinking in and around their research questions and objectives (Fisher, Perényi, Birdthistle, 2021). The constructs of the framework were based around four critical dimensions, all of which played an important part in focusing on what the literature review indicated. The aims of these dimensions, which are derivatives of the research objectives and research questions, were to remove any pre-conceptions based on academia and apprenticed schemes that were already in existence.

### **Critical Dimensions:**

The critical dimensions were designed provoke questions that needed to be uncovered during the research, most importantly the dimensions within the framework helped to develop a critical understanding of what data would be needed to capture during the data collection process. The dimensions and related questions were:

#### **Critical dimension one:**

- Understand what has shaped apprentice schemes. The associated question was based around what key factors were extracted from the literature review

#### **Critical dimension two:**

- What has worked, what are the current trends and what has not worked. The associated question was around, what apprentice and vocational models exist

#### **Critical dimension three:**

- Understand the parameters and what could be the major blockages. The associated question explored what the challenges could be to implement apprentice schemes

#### **Critical dimension four:**

- What relationships will be required, who are the influencers and critical stakeholders. The associated question explored; the key decisions that will need to be made

To explain these dimensions further and their relationships, the four dimensions highlighted in table 3, 4, 5, 6 & 7, details the interconnecting information based firstly on the research topic and then secondly the research questions. To explain this better, the below provides an example of one of the dimensions mentioned (Latham, 2016).

### **2.10.1 Critical dimension 1 (example)**

The first question which was asked was based around apprentice schemes and how they have shaped or been redefined over time. What this question helped to uncover was being able to understand what had triggered the development of apprentice schemes and how they have been re-shaped based on socio-economical needs.

Following this question, the framework then directed the researcher's activity towards the literature to extract common themes and information that helped to develop these concepts.

Finally, the third part of the framework helped to progress the information that had been gathered into thought provoking questions for the data capture, such as:

- was there an appetite for the development of apprentice schemes within manual and non-manual labor occupations?
- What stigmas exist, how have they developed, what is the real reason as to why these stigmas exist.
- What appetite exists with government entities and other government funded institutions.

### **2.11 Conclusion**

What the literature review and conceptual framework underpinned was how these relationships were developed and then how the outputs facilitated the overall positioning and way forward, which meant the concepts to be applied and considered were in a better place to be understood. This then provided the choice of methodology that suited this research, the types of data required and expected findings including a reflection on the research using the discussion to be translated into recommendations and a conclusion.

Finally, the literature review set out the historical trends and successes in apprentice schemes and vocational education routines. It was clear from the literature that there has been a great deal of activity among various countries globally, some of which have had continuous success with a degree of alterations to the originating system, albeit others have floundered based on global or Country-specific recessions and a lack of governmental support, such as funding. What is becoming clear from the literature is the global appetite to use apprentice schemes linked with vocational qualifications exists, however this appetite is limited, based on current literature within GCC Countries inclusive of the UAE.

Based on this, it was prudent to develop this research further to help understand why these gaps were present and understand how apprentice schemes could be developed and aligned with what the Country needs. From the literature and the outputs provided via the conceptual framework, there was clearly a requirement to develop and align the academic structure with apprentice schemes and vocational qualifications with a joined-up approach that provides learning, development, and career opportunities for the people within the UAE. This academic alignment was critical to the overall success of creating a value proposition that engages people and organisations with an aim to become an integral part of the educational structure of the UAE.

## Conceptual Framework

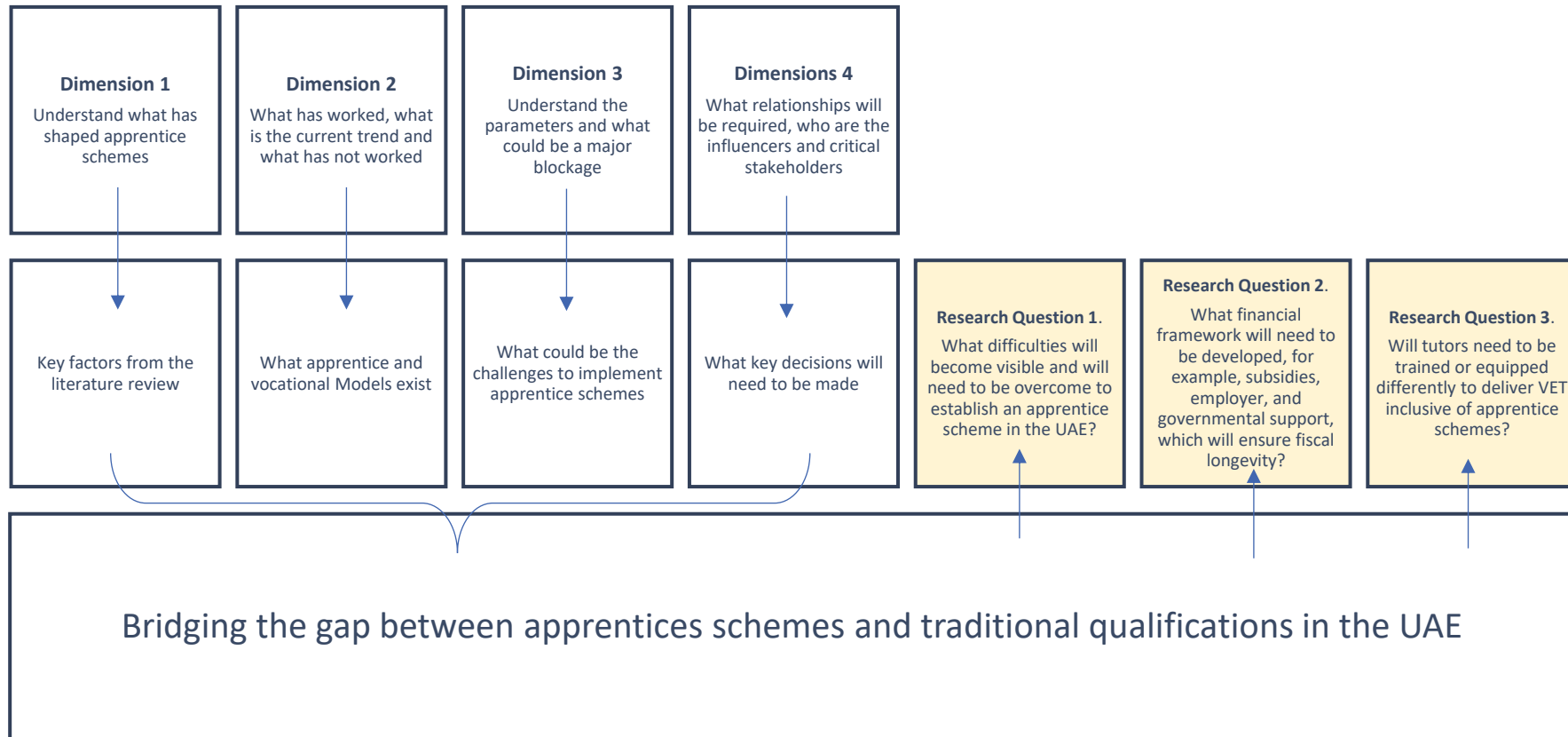


Table 3. Conceptual Framework  
Authors own elaboration

<b>Key Factors from the literature review</b> <i>(From Dimension 1)</i>	<b>What has helped shape apprentice schemes</b>	<b>What will need to be captured during the data collection</b>
<ul style="list-style-type: none"> <li>○ Apprenticeship concepts are deeply entrenched predominately within the western world.</li> <li>○ Country specific apprentice schemes have been centrally driven based on Government agendas.</li> <li>○ Apprenticeship models have changed over time based either on the economy or demographic need, where fit for purpose models have been developed.</li> <li>○ A belief in developing knowledge through sandwiching theory and practice has become more topical.</li> <li>○ Economic downturns severally effect these types of schemes; hence models have had to be redefined or newly developed.</li> <li>○ Stigmas exist even in well embedded societies associated with social, cultural, and historical misunderstandings.</li> <li>○ Future jobs agenda is not synchronised with global needs and changing career paths.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Diversification, moving with the times, albeit some of the moves must be economically driven.</li> <li>▪ Synchronised with career development, schools, and colleges.</li> <li>▪ Government agenda, most apprentice schemes are driven through an agenda linked with lifetime learning, support of the unemployed and industry.</li> <li>▪ Academia has started to link better with vocational routes, indicating a degree of acceptance.</li> <li>▪ Funding mechanisms have had to be re-shaped continuously to keep ahead of economical demands.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Appetite for the development of apprentice schemes within the manual and non-manual labour occupations.</li> <li>▪ What stigmas exist, how have the developed, what is the real reason as to why these exist.</li> <li>▪ What appetite exists with government entities and other government funded institutions.</li> </ul>

Table 4. Dimension 1  
Conceptual Framework Dimension 1  
Authors own elaboration



<b>What apprenticeship and vocational models exist</b> <i>(From Dimension 2)</i>	<b>What has worked, what is the current trend, and what has not worked</b>	<b>What will need to be captured during the data collection</b>
<ul style="list-style-type: none"> <li>○ Traditional apprenticeship models include 2,3,4-year duration linked with a vocational qualification.</li> <li>○ Traditional models are delivered in-house, i.e., within organisations.</li> <li>○ Hybrid models do exist especially within European countries and are usually linked with university degrees.</li> <li>○ Degree apprenticeships exist, but have yet to penetrate the market on mass, again these tend to be offered within European countries.</li> </ul>	<ul style="list-style-type: none"> <li>● Traditional models have worked overtime with country specific adjustments required.</li> <li>● Duration to complete the apprentice scheme has reduced over the decades, which has created a degree of inflexibility due to completion pressures.</li> <li>● Short term fixes such as the modern apprentice scheme and youth training scheme became a trend and then disappeared. Caution must be mentioned that short term fixes have no strategic value and can create the wrong impression and longer-term perceptions.</li> <li>● Currently some organisations and some training institutes are testing dual qualification and hybrid models, this current trend has yet to be tested.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Will a 'fit' for the UAE model need to be established based on the cultural and socio-economical needs.</li> <li>▪ What skills will be required to deliver, assess, and qualify the apprentice schemes that encapsulates value and professionalism.</li> </ul>

Table 5. Dimension 2  
Conceptual Framework Dimension 2  
Authors own elaboration

<b>What could be the challenges to implement apprentice schemes.</b> <i>(From Dimension 3)</i>	<b>Understand the parameters and what could be a major blockage.</b>	<b>What will need to be captured during the data collection</b>
<ul style="list-style-type: none"> <li>○ Overall internal acceptance of the value and longevity of the output experiences and qualifications.</li> <li>○ Current government policies, for example ministries and education authorities will need to be strategically aligned.</li> <li>○ Limited organisations willing to take the financial risk.</li> <li>○ Financial support in terms of levies or educational allowances.</li> <li>○ The stigma</li> </ul>	<ul style="list-style-type: none"> <li>● Can or will universities market comparisons to keep attracting the academically driven student to avoid slippage of student numbers, i.e., become more competitive.</li> <li>● Understand the institutional parameters, can government policies be redesigned, which will include a willingness to make this shift.</li> <li>● Develop an understanding of what stigma's exist along with knowing how these could be resolved.</li> <li>● Financials, what is currently available may not be enough, further financial incentives may be required.</li> </ul>	<ul style="list-style-type: none"> <li>▪ What is the current approval mechanism that helps develop vocational and or apprentice schemes. Is it too rigid, can it be adapted, will a new approach be required?</li> <li>▪ Does a financial support model exist and if so, is it 'fit for this purpose'?</li> </ul>

Table 6. Dimension 3  
Conceptual Framework Dimension 3  
Authors own elaboration

<b>What could be the decisions that may need to be made.</b> <i>(From Dimension 4)</i>	<b>What relationships will be required, who are the influencers and critical stakeholders.</b>	<b>What will need to be captured during the data collection</b>
<ul style="list-style-type: none"> <li>○ Will the development of apprentice schemes need to be a centralised activity, i.e., federal, or decentralised based on each of the Emirate’s desire to implement?</li> <li>○ Could training providers be nominated to develop the schemes, rather than the reliance on the training provider to come forward.</li> <li>○ Equalisation of the levels, there is some understanding, but a decision needs to be considered as to how this equivalency is displayed and marketed.</li> </ul>	<ul style="list-style-type: none"> <li>● Skills sector councils or chapters work in most countries that have apprentice schemes, again if these were to be developed, a decision needs to be considered as to whether these are centralised or decentralised. This will involve governments, semi-government bodies, universities, colleges, large to medium sized organisations to provide a solid cross-cultural representation.</li> <li>● The other critical relationship is with the Ministries, not just the Ministry of Education but also other Ministries that could influence, such as industry and commerce, environment, and climate change.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Will the schemes be centrally driven?</li> <li>▪ Will similar industry sectors share information to develop the competence models required.</li> <li>▪ What is the current equivalency model?</li> </ul>

Table 7. Dimension 4  
Conceptual Framework Dimension 4  
Authors own elaboration

### 3. Chapter Three: Research Methodology

In theory, the methodological approach is used to adopt techniques which best suits a process to identify and analyse information. In simple terms, it is the vehicle to help support and understand the research problem (Zalaghi and Khazaei, 2016). This chapter provided an insight to techniques that were adopted for the methodological research process, including the rationale and justification of the approaches used. The model below (Fig 11.) provides the key headlines used to support the justification and methodological techniques used.

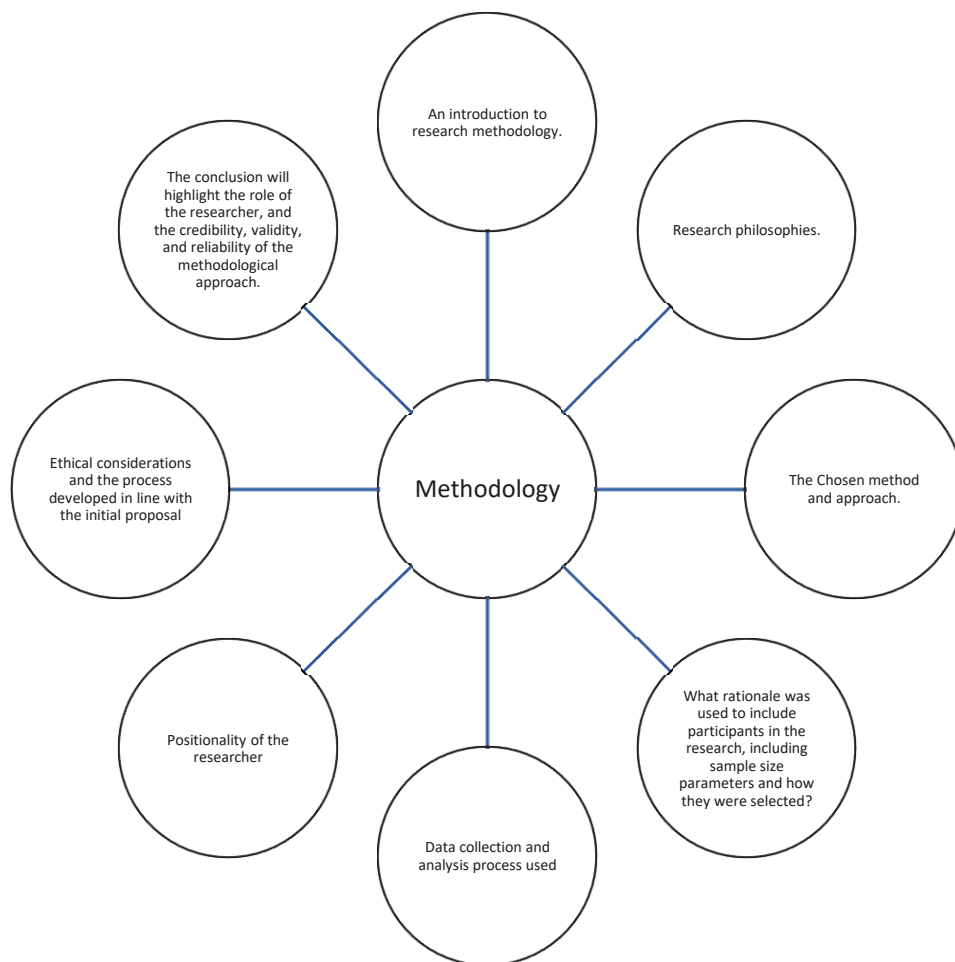


Figure 11. Methodology

### 3.1 Research Methodology

The foundational stages of developing a robust research methodology are based on the research onion (Saunders *et al.*, 2018). The research onion (Fig 12.) is justifiably named as being like an onion, which has layers that represents the research approaches. What the research onion provides is a rich and effective routine, which moves from the outer layer to the inner layer. The outer layer is the research philosophy which becomes a pivotal part of the research methodology and is the most important part to the researcher, which is about being able to articulate and display an understanding of reality. This understanding is then further developed in terms of how that knowledge has been developed, meaning, it is a set of beliefs based on reality (Bryman, 2014).

May (2011) cites that the researcher will need to define the type of knowledge required, by understanding this as a base activity the researcher will be in a better place to choose the ideal methodological approach, which will then help researcher navigate through the required layers.

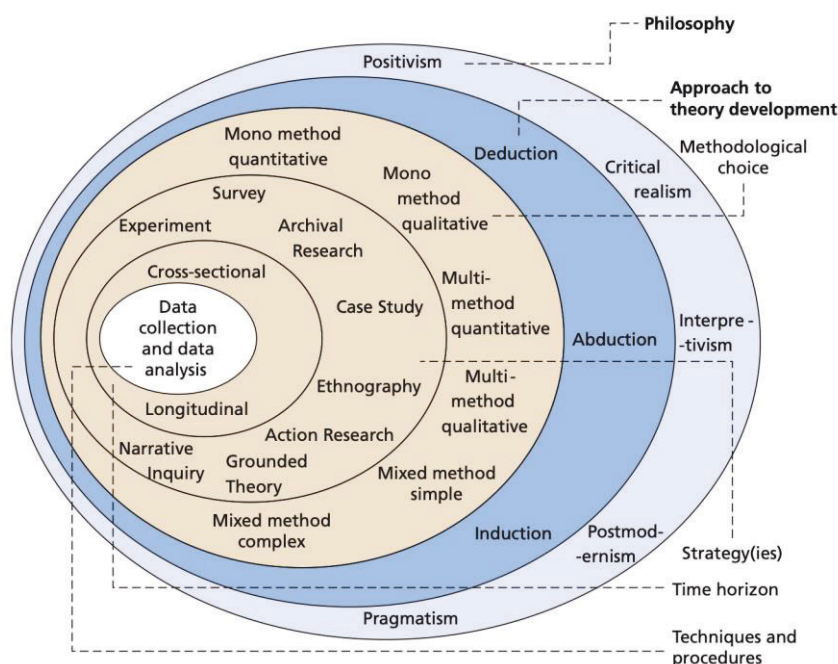


Figure 12. Research Onion

Source: ©2018 Mark Saunders, Philip Lewis, and Adrian Thornhill

Based on this theory, there are two main research philosophies that exist, both of which play significant roles in any research process:

1. **Ontology**, in simple terms, ontology allows the researcher to question, it mainly focuses on reality, for example the question could be, has anyone tried this before, which will help clear the perceptions of reality and how behaviours can impact these perceptions (Abdul Rehman and Alharthi, 2016).
2. **Epistemology** is swayed more towards science, which is the theory of getting the knowledge, it enables the researcher to search for knowledge and facts, something that can be proved using rigorous testing (Ratner, 2008).

Through these descriptions, several philosophical stances take the researcher through a process that will develop a deeper understanding and knowledge of the limitations of a research project. Choosing the correct philosophical stance provides a better way to gather meaningful data and help direct the researcher towards meaningful outputs.

The two most important articulations within ontology and epistemology are referred to as paradigm's, which are the beliefs (Abdul Rehman and Alharthi, 2016) based on:

Positivism, which considers reality does exist independently of humans; it is a very objective stance where statistics are predominantly used.

Interpretivism, is being able to interpret reality, as there is no single reality, meaning the experiences are subjective thus using meaning (qualitative) rather than raw data (quantitative) through interviews and observation.

From the description above paradigms, this research project used an interpretive approach, which as mentioned has no single reality of what people see, it helps dissect verbatim from discussions and of what is experienced, this means the researcher should socially interact, using mechanisms such as interviews.

In context, the research project explored academic and vocational experiences based on apprentice schemes. The literature review provided a plethora of examples from around the globe, which indicated the need for social interactions which was required to develop an understanding of what people had experienced (Myers, 2008). As mentioned, the research onion is the bedrock of an effective research project, the paradigms form part of the research

onion process that helps set the scene as to the type of research approach that should be used, i.e., quantitative, or qualitative, or mixed methods.

The qualitative approach enables the researcher to develop narratives using individual and group discussions where behaviours can be observed. As Hammarberg (2016) mentions, qualitative research helps the researcher immerse themselves into activities that connects with the research objectives. Furthermore, what qualitative research provides is an exploratory mechanism that supports, discovers, and understands the different experiential perspectives, using reality as a backdrop. This exploration then becomes the catalyst that uncovers opinions, including understanding historical and cultural contexts.

The quantitative approach has several facets, of the quantitative survey, which uses scientific sampling and tests the relationships between the variables. Experimental uses interventions to gather statistics and ex post facto that explores the 'after the event' synopsis. Quantitative researchers mainly test theories using numerical variables, they tend to be neutral and objective, especially when using structured mechanisms such as surveys with numerical outputs (Apuke, 2017).

Finally, there is the mixed-methods approach, which involves collecting both qualitative and quantitative data. The integration of these two approaches will, when used, provide the researcher with a deeper understanding of the problem. Although this approach has its place in the research arena, Terrell (2012) mentions that the mixed methods approach can often remove the bias of individual approaches, thus creating a triangulation of data. Some of which are based on checking the validity and accuracy of data sets and databases that can lead to using a better instrument for the research (Creswell, 2013).

Through the descriptions provided, the methodology used for this research was that of a qualitative approach using the interpretive paradigm based on the requirements of socially interaction and the understanding of experiences in and around apprentice and vocational learning routes (Agostinho, 2008). Because interpretivism can be subjective, a two-stage process for data collection was adopted, which incorporated questionnaires and semi-structured interviews.

The final part of the research methodology using the qualitative research approach was to understand what methodological choice of enquiry would need to be used. What this choice provides was the formation of a critical path that exposed insightful data, thus facilitating the

delivery of the objectives of this research project. These methodological choices of inquiry as cited by Creswell (2013) are usually sectioned into five main designs for collecting qualitative data:

- Ethnography encourages inquiry through studying patterns of behaviour whilst exploring culture and language (Fetterman, 2015).
- Narrative design of inquiry looks at individual experiences using stories based around their experiences and lives (Duque, 2009).
- The phenomenological design of inquiry requires people to share their experiences around a phenomenon using philosophy, which in turn exposes the experiences of individuals (Giorgi, A., 2016).
- Grounded theory design of inquiry helps develop theory from field experiences and the views of individuals (Pulla, 2016).
- The case study design of inquiry helps provide insightful discoveries from events, organizations, or individuals; meaning they are bound by time to help deliver the data over a pre-prescribed period (Hollweck, 2016).

These methodological designs of inquiry all have certain idiosyncrasies; hence, it was critical to choose the correct inquiry mechanism that helped to capture crucial information. For this research, the chosen design of inquiry was supported by the purpose of this study, which was to explore the gap between apprentice schemes and traditional qualifications within the United Arab Emirates. Overall, the intention was to develop a framework that would enable the implementation of apprentice schemes within the UAE. From this, a qualitative research methodology using phenomenology was used to extract experiences and social perceptions. Knowledge was then acquired to understand these perceptions using semi-structured interviews and questionnaires which engaged individual students, academic institutes, and organisations (Neuman, 2014).



### **3.2 Research Design**

Research design is associated with the types of evidence required to deliver the research objectives, as such approach chosen focused on collecting evidence based around individual experiences, people perspectives and the overall beliefs and attitudes that focused on the main theme of this research paper, which was, 'Bridging the gap between Apprentice Schemes and Traditional Qualifications within the United Arab Emirates' (Young, 2014).

For this research the approach used helped to provide a platform to interpret information gathered through selective semi-structure interviews and questionnaires. This approach then developed an understanding of the experiences and varying perspectives of the participants (Dennis, 2014). Furthermore this approach supported the provision of consistency and quality of the evidence presented which was of the highest standard which in turn helped to reduce inconsistencies of the data collected and findings (Holloway and Todres, 2009).

The information that was captured (Maguire and Delahunt, 2017) was based primarily on people's backgrounds, experiences, and knowledge, which helped the interpretation and understand the patterns and themes that surfaced from the data (Mohd-Yusof *et al.*, 2014). The patterns and themes that surfaced required a coding mechanism that was transparent, trustworthy and had sufficient measures in place to ensure all types of questions were not leading the participant. This also meant that confidentiality of participants was not compromised in connection with the researcher's ethical framework.

### **3.3 Data collection tools**

Data collection is best described as a process that helps to gather quality information that provides a platform that helps to develop the outcomes into a rich and robust research report. Data collection also plays an integral part in gathering the desired information with limited distortion (Finnegan, 2012). Based on this, the data collection phase should not be taken lightly; it is time-consuming, requires hard work and needs a great deal of patience.

There are two kinds of data that exist, primary and secondary (Ajayi, 2017). Primary data is commonly referred to as raw data that is collected from first-hand experiences and use methods such as, interviews and surveys, whereas secondary data is developed by someone else.

The most important point when using primary data is that factual and original data is used and should always be relevant to the research study. For this research, primary data was collected using questionnaires and semi-structured interviews, now known as stage 1 and stage 2, with a third stage included at the end of the process that developed a consolidated list of themes from stage 1 and 2.

### **3.4 The two-stage approach explained.**

Stage one used online questionnaires to collect the data (Appendices 2, 3, 4, 5, 6). The overall importance of using questionnaires was to encourage the opinions, experiences, and attitudes around the research subject. As Rowley (2014) mentions, questionnaires are ideal to capture facts, especially when using an interpretivist approach where selected participants are chosen based on their experience and value to what they bring. Based on this, the questionnaires were designed to explore the selected participant's experiences using five critical headlines, see below:

- Those who have had some experience in Vocational Education and Vocational Qualifications.
- Those having had or currently having experiences as an apprentice.
- Those that are academic postgraduate who is currently finding it difficult to secure a job.
- Those seeking to develop their careers in a different direction along with those seeking to enhance their current skills.
- Employers that have engaged in vocational types of training and apprentice types of programmes.

However, caution was taken whilst designing the questions, since there could be no assumptions made that every participant would have the same depth or breadth of knowledge and experiences, including the technical know-how around the subject matter. This meant that ethically and technically the selected participants would not be fazed by the terminology used.

Stage two focused on capturing data using semi-structured interviews to develop a richer understanding of the data, whilst ensuring the data collected was credible and dependable (Amankwaa, 2016).

Stage two was also a natural follow on from stage one (Appendices, 8, 9, 10) that used professional experts within the allocated subject area to explore their experience and knowledge about the research questions. This also helped to explore and contextualise the individual's experiences and perceptions around apprentice schemes and vocational qualifications. Which in turn helped to generate enough data to develop and consolidate a detailed summary in preparation for the findings of this research.

This double staged approach helped to create a clearer understanding as to how the themes were then developed into meaningful and workable solutions. Cope (2014) mentions that not only does the researcher experience the true value of the findings but also its efficacy and realism required to provide reliable solutions that would eventually be developed into implementable plans. One of the critical phases within stage 2 was the choice of the interviewee. It required keeping the newly generated themes in focus using specific subject matter experts and targeted questions.

Connected with these stages was the data collection, which was directly linked with the research questions, which meant that as much data had to be collected using a well-aligned sampling strategy. The main reason for having a sampling strategy is to understand that no one can sample the entire population (Sarstedt *et al.*, 2017). Based on this, the sampling strategy used a funnelled type of approach using the questionnaires as the initial source of data, which then connected to the semi-structured interviews as the final data collection method. The main aim was to take a cross-section of participants who would complete the questionnaire from sectors within academia and industry, these participants helped to provide views and experiences from a set of predetermined questions along with a selection of participants who had more of a strategic and macro type of experience for the semi-structured interviews, which in turn to answer the research questions of this research project. Two kinds of sampling techniques can be used, one is known as probability sampling, which is a random selection mechanism (Showkat and Parveen, 2017). This means that everybody will have an opportunity to be selected. However, probability sampling tends to be extremely time-consuming and a costly process.

The second technique is non-probability sampling, which is the reverse method of probability sampling. Here the participants are selected based on convenience or other selection criteria (Showkat and Parveen, 2017), which is the preferred sampling strategy used with qualitative

research and can help develop understandings about a problem or an under-researched project (Riyad *et al.*, 2020).

For this research project, the sampling technique used was non-probability sampling, it was cost-effective, and less time-consuming therefore was suited more towards qualitative research methods. To help contextualise this choice, Shaw and Chaudhuri (2021) highlights that such sampling techniques can be used to study the existing theoretical insights or develop new ones (Auerbach and Silverstein, 2003). There are four methods (Fig 13.) associated with the effective use of the non-probability technique, which helps funnel the researcher's efforts (Baker *et al.*, 2013).

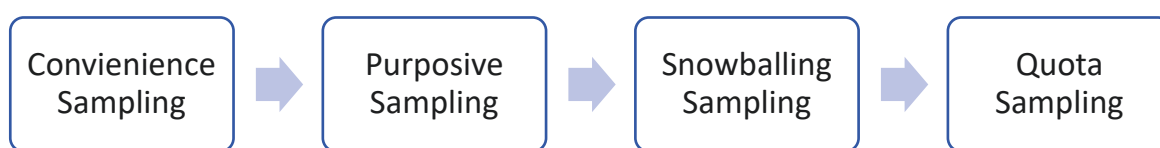


Figure 13. Sampling Techniques

Convenience sampling is where the researcher has a preference towards the participants. Snowballing sampling is like a referral system, where the researcher starts with people they know, they get referrals from others involved, and so on, hence the snowball effect. Quota-sampling uses an approach that pre-plans and specifies certain categories to sample (Naderifar, Goli, Ghaljaie, 2017). Finally, purposive sampling is a mechanism that is used to study and qualify national issues or certain specifics within education or teaching. Purposive sampling also uses the judgement and guidance of experts where required (Wu Suen, Huang, Lee, 2014), which was the chosen sampling method for this research.

### 3.5 Sample Size

One of the main issues a qualitative researcher will face is the sample size, therefore the skill of the qualitative researcher is to make informative decisions based on the ideal number of participants required and how to select participants, which is based on the research subject matter (Clarke and Braun, 2014). What also has an impact on this decision-making process is how the data will be collected, for example semi-structured interviews or questionnaires (Frels and Onwuegbuzie, 2013). Schwandt (2015) highlights one critical point for the qualitative researcher, which is not to generalise past the sample size, therefore, the process of identifying the most suitable sample size for this research was critical.

Sekaran (2006) mentions that having a sample of over 30 and below 200 is adequate, which directly correlated with the needs of this research project, for example 28 participants were targeted for the questionnaires. Furthermore, the emphasis was to ensure the data at some stage reached saturation, which also means the sample size should not be too small, and likewise should not be too large. The reasoning behind this is since a deep dive into the data captured would be impossible to manage, mainly due to the large quantities of data being gathered (Saunders *et al.*, 2018), hence the two-stage approach used helped to bridge any gaps simply whilst provided rich and credible data outputs.

To further support sampling sizes Creswell (2013), provides a guideline that uses a size category, for example, case studies should be in and around 3 to 5 case studies. Interviews, dependent on the method used, for example grounded theory should be no more than 20 interviews. Narratives based on the size should not exceed 2 and finally phenomenological research interviews no more than 30. This information guided the development towards using the most appropriate sampling strategy and formed an important facet of this research.

### **3.6 Thematic Analysis**

Based on the methodological approach of this research, thematic analysis (TA) was chosen. TA is long-standing and fundamental practise within qualitative research, which encompasses processes that help dissect, manage, and interpret the data that is collected (Clarke and Braun, 2014). Cited by Howell (2013), strategies that adopt TA will help the researcher gain a thorough insight and capture a plethora of complex data, whilst providing meanings through patterns that are identified through the required coding rigour (Clarke and Braun, 2014).

What made this approach ideal for this research was the overall focus on human experiences, which meant that the participants involved completed the questionnaires using their own perceptions and experiences and the interviewee dialogues were captured using their own words, meanings, and terminologies. This kept the flow and reality of what had been recorded, thus removing any perceived constraints or inconsistencies based on the participants mood or behaviour (Clarke and Braun, 2014).

However, using TA can be time consuming based on having to revisit the themes especially if the process does not provide the desired outcomes (Tuckett, 2005). To help contextualise the overall theory of TA there are six phases (Fig 14.) that helps prescribe the process and preparations required (Clarke and Braun, 2014).

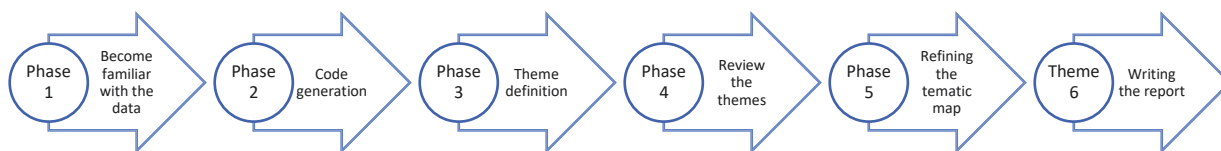


Figure 14. Thematic Analysis Process

### 3.7 Phase 1 – become familiar with the data.

The first phase was triggered via the collection of data from the questionnaires and laterally the semi-structured interviews, which meant that the researcher’s engagement with the data was of paramount importance. The engagement was about being confident to understand and read the transcripts in such a way that the initial impressions did not develop bias (refer to positionality in section 3.19). As mentioned, what can happen at this early stage is to enter this first phase with a bias view of the data collected, and therefore it was crucial even with knowledge of the subject not to be swayed with prior knowledge, pre-conceived thoughts, or personal experiences. This meant that the data needed to be explored in such a way that meanings and patterns were recorded in a non-bias manner, thus, were formed consistently and with thoroughness. As a final note, skipping or speed reading or being complacent at this early stage can be destructive especially with large amounts of data (Brooks and King, 2014).

### 3.8 Phase 2 – code generation.

Whichever coding is used, whether it is a manual mechanism or a software-based programme, such as the one used for this research NVivo (version 12), it is important to work systematically. This is about being true to the detail whilst giving a plentiful amount of time to develop the understandings (Brooks and King, 2014). The code generation phase is designed to help the researcher organise the data and then deploy the outputs towards answering the research questions. Through using this approach, the outputs became reliable and meaningful, where codes were developed towards the researchers aims. More

importantly at this is the stage that the researcher has an opportunity to keep developing or refining the codes during the coding process, see below (Ryan and Bernard, 2003).

- Code as many themes as possible, based on time and resource. This was done using headings and different colours within the system, appendix 16 provides an example using the information collected from the questionnaires. The coding process followed by recoding and merging different codes together. What was important was to highlight and headline these in such a way, that it was easy to look at the patterns. This helped to then create a picture of the critical information that was extracted.
- Keep the coding in context, large quantities of data may take the researcher off track, which means the quality can become diluted and overshadow the overall context of data captured. Based on this advice, it was useful to be as open minded as possible about the amount of the data that was being developed, as eventually, and as what happened with this data, patterns emerged organically.
- Code individual extracts of data, there will be data that will challenge and contradict each other, these need not be ignored as they will eventually be either be useful data sets or not. Basically, and in reality, what this meant is that all data no matter what should be used in the first instance as being important, no matter how challenging or controversial the data is being.

### **3.9 Phase 3 – theme definition.**

The data by now will have been translated into codes, which will invariably be a long list across the data sets. This phase in practice is a significant part, as it re-aligns the process providing a more focused analysis of the codes, which inevitably starts generating the themes. What is essential during this phase is to identify possible overlaps of the codes, translated this means codes that relate to each other. For this, a simple mapping technique where different colours are used with the labels for each code, including placing a description or title on them. Using this process, the visuals allow the researcher to identify different themes much easier. There, at times may be overlaps, usually the overlaps become sub themes of the main headline themes, in simple terms both tend to have a link or a connected relationship (Clarke and Braun, 2014). Finally, there may be situations where some codes do not have a place or are not potentially fitting into what is being researched. In most cases these can be discarded,

however, it is good practice to revisit these prior to deletion, hence it would be a good practice to have a 'miscellaneous' repository to keep these until required if at all. What this phase provides is strength of position to know the themes and sub themes, which will provide a sense of understanding, however, at this stage the process should be still fluid, which means the themes should not be seen as been fixed or definitive, they may still move as time moves on as more understanding surfaces.

### **3.10 Phase 4 – review the themes.**

Phase 4 starts to pull together the data in the context as to whether the themes are starting to make sense. This stage qualifies the understanding, the robustness and quantity of the data to support the themes. What was crucial at this stage was to adopt a two-staged type of approach, for example, Patton (2009) described this approach as a mechanism that will review and refine what has been gathered. The review stage looked at all of the data and how it produced themes with a view to keeping a watchful eye on any possible overlaps within the data. Finally the refine stage then merged the themes (Jugder, 2016). The main component of this phase was to get to a point where the themes started to fit together, which essentially started to tell a story about the data that had been collected. One important factor to highlight was, especially when reviewing the themes, was to ensure the information was coherent and distinctive (Vaismoradi *et al.*, 2016), which was where the software, NVivo (version 12) played a critical part and helped to produce rich and ready to use data outputs, (mohd. ishak and Abu Bakar, 2012).

### **3.11 Phase 5 – Refining the thematic map.**

Phase 5 was the final stage, which was the stage before writing the findings up into a report. Whatever had been collected from the first 4 steps of this process needed to be refined and presented in such a way that the reader could identify and understand what the themes were saying. Essentially, the report helped to present common threads that would eventually answer the research questions and objectives. What was important was that the content of the data was not paraphrased; it was more about highlighting the most salient points, points that provided interesting facts that navigated a way towards developing a robust set of next steps (Clarke and Braun, 2014).



### 3.12 Phase 6 – writing the report.

Phase 6 was the platform that captured the information from the first 5 phases, with an overall aim that provided a range of conclusive evidence based on the qualitative thematic analysis. The report outlined the complexity of the data that has been captured and themed in a clear and coherent way, which in turn guides and convinces the reader that a thorough and valid process had been adopted, in simple terms the report assisted the reader to visualise and analyse the data (Toerien and Wilkinson, 2004).

### 3.13 Theory versus the reality using the 6 phases

To reinforce the experiences gained throughout the 6 phases within the thematic analysis phases, the below table 8 provides practical insights based on the experiences.

Phases	Theory based comments	In Reality
<b>Phase 1</b> Becoming familiar with the data	<ul style="list-style-type: none"> <li>▪ Understand the data</li> <li>▪ Avoid bias</li> <li>▪ Be rigorous in the approach</li> <li>▪ Avoid skipping or speed reading</li> </ul>	<ul style="list-style-type: none"> <li>○ Try not to read the data in an ad hoc manner</li> <li>○ Wait until enough data has been captured or wait until all the data has come in</li> </ul>
<b>Phase 2</b> Code generation	<ul style="list-style-type: none"> <li>▪ Be systematic</li> <li>• Utilise the time effectively and don't rush</li> <li>• Code as many themes as possible</li> <li>• Contextualize the codes especially when there are large amounts of data</li> </ul>	<ul style="list-style-type: none"> <li>○ Initially when large amounts of codes are developed, it can be confusing.</li> <li>○ Once patterns immerge it becomes easier to understand how the data is then pulled towards the codes.</li> </ul>
<b>Phase 3</b> Theme definition	<ul style="list-style-type: none"> <li>▪ Codes start to be aligned with the themes</li> <li>▪ Revisit the themes</li> <li>▪ Only discard themes once a revisit has been done</li> </ul>	<ul style="list-style-type: none"> <li>○ Caution must be taken based on merging phase 2 and phase 3 together. This is highlighted to ensure that a systematic approach is always used and to ensure that the data is properly analysed.</li> <li>○ Do not shortcut the process</li> </ul>
<b>Phase 4</b> Review the themes	<ul style="list-style-type: none"> <li>▪ Refinement stage</li> <li>▪ Is there enough robust data to support the themes</li> <li>▪ The themes should essentially be the start of the story</li> </ul>	<ul style="list-style-type: none"> <li>○ This phase was one of the most enlightening stages, what it did was brought together the final themes whilst challenging the data collected.</li> </ul>

		<ul style="list-style-type: none"> <li>○ What really worked within this stage was being able to link the themes to the research objectives and understand that the phases were on track – like a ‘sense’ check</li> </ul>
<b>Phase 5</b> Refining the thematic map	<ul style="list-style-type: none"> <li>▪ Understand what the themes are now saying</li> <li>▪ Common threads towards the research questions and objectives</li> <li>▪ Sense check that the themes are robust and make sense</li> </ul>	<ul style="list-style-type: none"> <li>○ One of the main points to focus on in phase 5 was keep aligned and reminded of the research questions and objectives</li> <li>○ The reality check at this stage was to ensure that themes were making sense and were they really addressing the main points within the research questions and objectives.</li> </ul>
<b>Phase 6</b> Writing the report	<ul style="list-style-type: none"> <li>▪ Prove the data captured has been brought together in a robust and coherent manner</li> <li>▪ Convincing that the 5 phases have been systematically used</li> </ul>	<ul style="list-style-type: none"> <li>○ This phase was about critically looking at the data in such a way, that it would be presented in a format that told a story but likewise provided sufficient information to convince the reader that a systematic approach had been used.</li> </ul>

Table 8 Theory versus reality within the 6 stages

### 3.14 How to make thematic analysis work for this research

The key to making TA work is based on rigour, having clear objectives and to follow the 6-stage process with consistency (Holloway and Todres, 2009), this meant becoming familiar and versed with all the data. Being familiar was also about challenging the process, challenging the robustness, and challenging the trustworthiness, which helped to aligns and uphold the ethical considerations that have been committed to by the researcher. (Starks and Trinidad, 2008).

The methodological approach mentioned was that of an inductive approach which allowed the data to be developed into the themes. Through this approach, the knowledge and experiences within the UAE were uncovered which improved the overall understanding of the outputs from the questionnaires and semi-structured interviews, thus helped to develop the themes. This knowledge helped with the required rigor to read and re-read the transcripts

avoiding crucial details being missed. From this point onwards, the themes were then developed into codes that connected and aligned with the literature and objectives of the research.

### **3.15 Sampling approach**

To understand how the sampling strategy was developed it was useful as part of this introduction to provide clarity on what resources and subject matter experts were available that helped develop the data. Within the UAE a federal body known as the Vocational Education and Training Awards Council (VETAC) was set up, which is a supervisory and regulatory body at the Federal level, Federal level within the UAE is the highest governmental body, which means, if laws or regulations have been ratified at Federal level, then their decisions are final. VETAC was set up to manage and coordinate vocational, technical, and professional education and training sector in the UAE, under the auspices of National Qualifications Authority (NQA).

In Abu Dhabi, the Abu Dhabi Centre for Technical and Vocational Education and Training (ACTVET) is another body that is authorised to regulate technical, vocational, education and training (TVET) within the Emirate of Abu Dhabi. The Qualifications and Awards in Dubai (QAD) are one of the administrative arms of Knowledge and Human Development Authority (KHDA) who are responsible for regulating the technical and vocational education and training (TVET) sector, and to quality assure TVET qualifications in Dubai. QAD was established in 2014 who operates under the rules and regulations of the KHDA; with the NQA and VETAC as awarding bodies. These all work independently to validate qualifications using the UAE's own qualification framework that is linked with the national occupational skills and standards (NOSS). Based on this information the samples would be taken from 10 UAE institutions that work with VET (see the list below).

1. Higher Colleges of Technology (HCT)
2. National Institute for Vocational Education (NIVE)
3. ADNOC Technical Institute (ATI)
4. Petroleum Institute (PI)
5. Mohammed bin Rashid School of Government
6. Emirates Aviation University

7. Emirates Academy of Hospitality Management
8. Etisalat Academy
9. Abu Dhabi Centre for Technical and Vocational Education and Training (ACTVET)
10. Abu Dhabi Vocational Education and Training Institute (ADVETI)

These 10 institutions provide an overall indication that regulated qualifications and teaching are available, however, what this does indicate is the lack of a supply of qualifications, accredited institutions that spans across all the Emirates. Based on this synopsis, it became clear that there will be challenges to have a breadth of unified and regulated qualification across all the seven Emirates.

Built on this knowledge, it was prudent to engage with as many participants from these 10 institutions as possible, based on the institutions having knowledge and experiences in and around apprentice schemes and vocational qualifications.

This approach formed the basis of the recruitment drive where participants were targeted based on:

- Those who are considering joining an apprentice-based VET programme.
- Those are already engaged in an apprentice scheme.
- Current and post students and tutors within these institutions became the core of sampling strategy.

Although there were a minimal number of employers developing apprentice schemes or utilising the VET qualifications to attract employees within the UAE, this sampling approach still required this area to be explored and better understood. Their views and possible experiences even their limited knowledge of apprentice schemes was of paramount importance providing experiential insights to the routines of the schemes that were not available before. Below is the list of employers that were targeted as part of the sampling process.

1. Emirates Global Aluminium.
2. GEMS Schools.

Table 9 highlights the minimum number of participants that were targeted from each of the allocated institutions, with an additional 2 employers and employed apprentices recruited to take part in the questionnaire. What table 9 provides is a macro view of the distribution of participants, institutions, and employers.

Distribution Plan											
Institutes – x 10 allocated <i>(Based on the list on page 75)</i>										Employers x 2 allocated <i>(Based on the list on page 76)</i>	
1	2	3	4	5	6	7	8	9	10	1	2
Allocated Participants <i>(These are minimum requirements)</i>										Allocated Participants <i>(These are minimum requirements)</i>	
X 2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2	X2
Allocated Questionnaires										Allocated Questionnaires	
1			2			3			4	5	

Table 9. Distribution Plan

Based on this, the questionnaires (appendices 2, 3, 4, 5, 6) were divided into 5 different batches (Fig 15.), that allowed enough scope to extract the information required.

Category 1	Category 2	Category 3	Category 4	Category 5
<ul style="list-style-type: none"> <li>•Individuals (students and tutors) that have experience of VET programmes in the UAE</li> </ul>	<ul style="list-style-type: none"> <li>•Individuals (students and tutors) that have experience of apprentice schemes in the UAE</li> </ul>	<ul style="list-style-type: none"> <li>•Postgraduates looking to take their first career step.</li> </ul>	<ul style="list-style-type: none"> <li>•Individuals that are working and seeking educational advance</li> </ul>	<ul style="list-style-type: none"> <li>•Employers who have recently adopted VET or Apprentice schemes in the UAE.</li> </ul>

Figure 15. Questionnaire Categories

The questionnaires would then be analysed, which meant becoming familiar with the data, based on the 6 phased thematic approach. Thus, a minimum of 24 participants was required to take part in completing the questionnaire.

Once there was sufficient data gathered from the questionnaires the next phase was triggered that aimed at developing a data bank with codes and then themes through NVivo (version 12) software.

### **3.16 Intended analytical procedure.**

The data collected from both stages was verified through a rigorous process both during and after the questionnaires and semi-structured interviews were completed (Saunders, Lewis and Thornhill, 2009). Using the 6 stage TA process codes and then themes were developed from the questionnaires and were then further refined to develop the questions required for the semi-structure interviews. The overall intention was to build enough data in readiness for the findings report, conclusions, and recommendations. This process known within research is a posteriori type of approach, meant after the data had been captured, codes were produced from the outputs from both the questionnaires and semi-structured interviews (Yang and Gilbert, 2008).

Mentioned earlier, this process required a great deal of rigor in and around reading and re-reading of the outputs, this rigor helped to expose specific words; phrases or sentences, which then provided a platform to develop the codes that were required for the analysis. Below is the process that was followed.

- a. All data collected, was inputted using the computer software NVivo, which then aided the production of themes.
- b. Questionnaire and semi-structured interview outputs were themed to help with familiarisation of what had been captured.
- c. Codes were developed using the captured information and patterns from the questionnaire and semi-structured interviews, keeping the research questions and objectives always in focus.
- d. Mapping of the themes to help channel the information.
- e. Amalgamate both mapping exercises to help produce a write up and final summary of the findings.
- f. Quality test, throughout each of the stages, a quality process was adopted to ensure the data was not being distorted.

### 3.17 Ethical Approach

This section provides the ethical approach that was adopted both from a participants and researchers perspective, Fig 16 provides the sequence used that describes the implemented ethical approach.

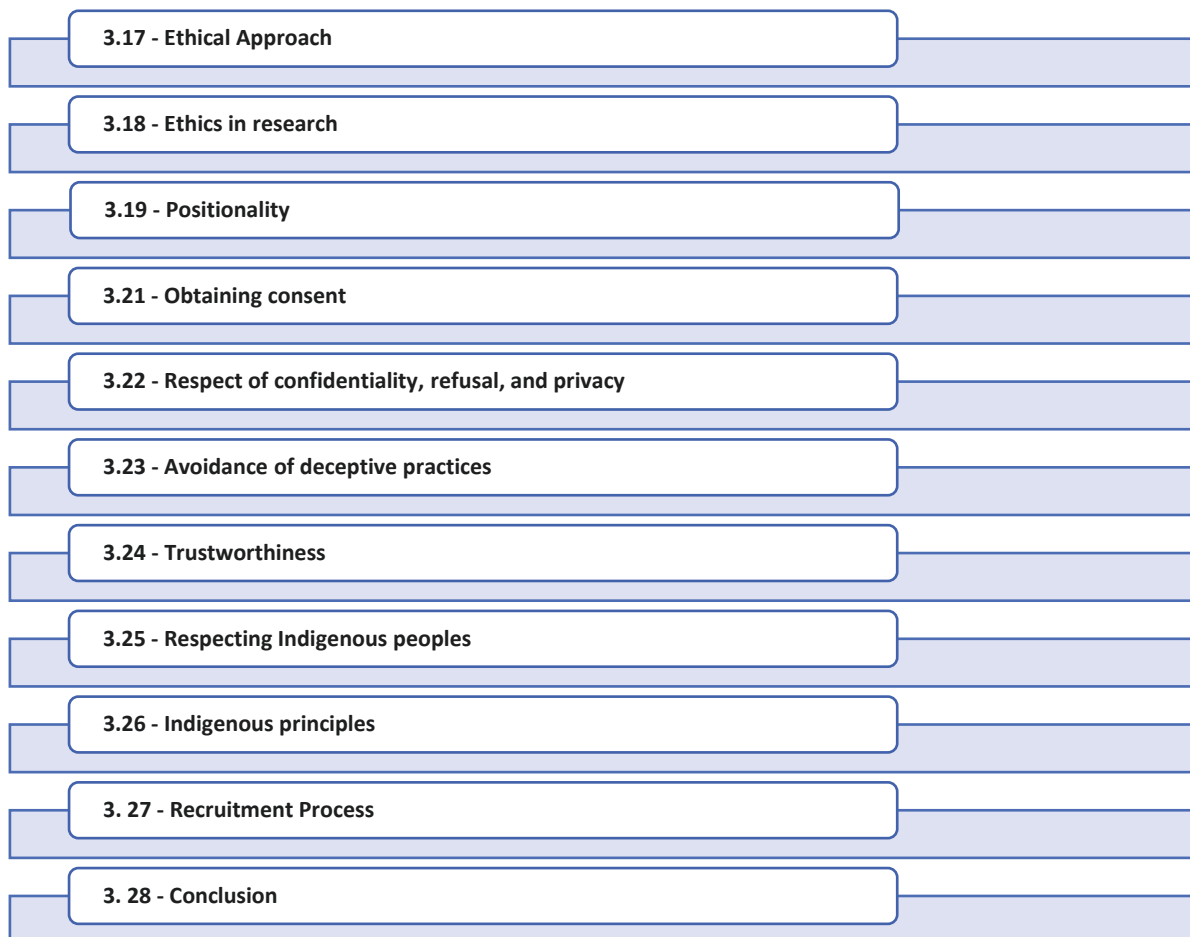


Figure 16. Ethical Approach

### **3.18 Ethics in research**

The ethical approach plays a vital part in protecting not only the researcher but also the participant. Miller (2013) mentioned that the principles of adhering to integrity, autonomy, confidentiality, respect, and beneficence held within the originating ethics approval for this research was a clear vindication of the researchers ethical positioning. Buchanan (2011) further exemplified this by mentioning that the ethical researcher must, wherever possible, minimise emotional harm due to the influence of historical events which at times could have some dark realities, albeit this was an extreme example. However, this had to be highlighted based some family traditions and historical and tribal experiences, known as critical consciousness. Laar (2014) described critical consciousness as being aware of something, that something may be the surroundings, or it may be about one's own self or feelings or experiences. This was highlighted to help the researcher and the participants to consciously reflect, be self-aware and be open minded about the process and outputs. Laar (2014) also mentioned that participants and the researcher have a right to be empowered enough to bring together the reality of what is being researched (Denzin and Giardina, 2007).

### **3.19 Positionality**

For the qualitative researcher, positionality can be influenced through the chosen subject. This influence is usually based around how the research is performed, which can be, the values the researcher has around the subject, the engagement with the participants, the data, how the data is analysed and how the findings are communicated (Shaw *et al.*, 2019). The rational and importance of positionality is to understand that the researchers experience and even country specific surroundings will have a degree of bias, albeit there are no right or wrongs ways to conduct research, it is imperative as a researcher that their own position and experiential knowledge is brought to the surface, which in turn vindicates a thorough ethical approach. In context the positionality for this research had to take a 3-dimensional approach see Fig 17.



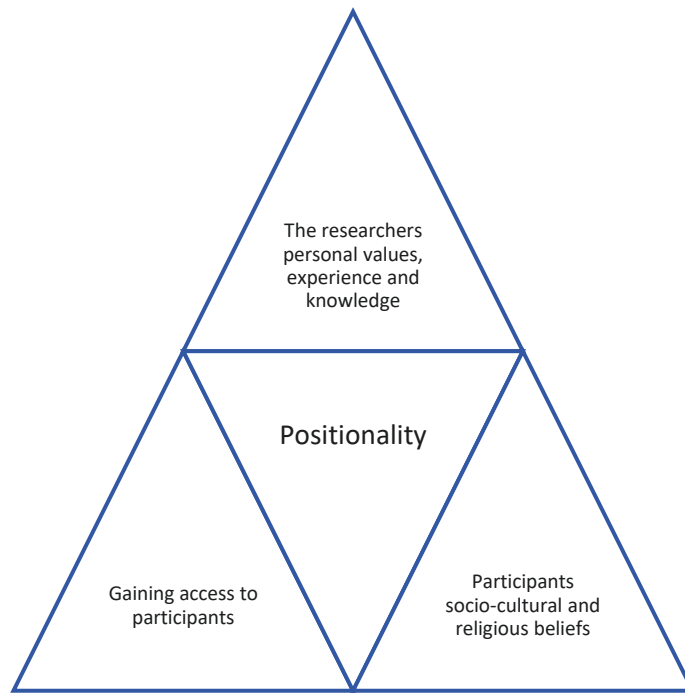


Figure 17. Positionality pyramid

### 3.19.1 Personal Values, experience, and knowledge

The first dimension towards describing the positionality of this research was to unearth one of the critical drivers that brought together this research, which was to cultivate and gain a deeper insight as to why apprentice schemes alongside vocational qualifications had not made an impact within the UAE as to what has been experienced elsewhere. Interestingly, one of the foundational elements for the researcher was based on personal experiences within the apprentice and vocational landscape, simply put, the researcher had been an apprentice back in the late 1970's and early 1980s where being an apprentice had as much value as that of being awarded a bachelor's degree, all of which played a valuable role within the literature review and of the methodology design. This dimension further supported the researchers' beliefs and values of seeing how these schemes would add real value to the educational landscape, thus reinforces the rationale as to why this research was needed. To support this experience more, the researcher has been operating for many years specifically inside the educational arena within the UAE.

Whilst there are positive and perhaps negative aspects to such experiences, based on this, the researcher did have a position of strength by understanding the positives and an understanding that the unspoken dynamics of how business is performed within the UAE.

Albeit this experiential bias could play a part in the analysis of data, this was put aside through using the approved ethical protocol that helped to reinforce the overall positioning of the research.

Based on the researchers encounters the following examples were experienced and are deemed as the unspoken dynamics within the region:

- Patience, no UAE National likes to be rushed or pushed into deciding
- Family values are always shared prior to the start of the discussion
- Allow space and time to think and answer questions
- Always show respect, there's no need to challenge their thinking or experiences as this is research that is being developed

### **3.19.2 Gaining access to participants**

Conducting this research started with having an understanding as to whom could be approached with ease and who may require a particular approach, this is commonly known as getting past the gatekeeper. Negotiating and understanding how to access certain individuals within this research required skill and an understanding as to the approach and the needs of the participant, which could be often seen as hierarchical, cultural, and religiously driven, including having and overall access, particularly with the recent COVID-19 protocols (Fobosi, 2019). Based on these challenges, and the targeted list of participant groups, it was imperative to pinpoint where the possible gatekeepers were situated within the institutions and organisations and to understand how they could open the gates for this research with ease (Riese, 2018). Which meant that access to individuals within institutions and organisations and gaining access to experts that may sit at a higher hierarchical level required a strategic approach.

For example, access to the questionnaire participants was gained through numerous search mechanisms such as using LinkedIn, networks via work colleagues and university alumni. Once participants were identified as being possible recruits to complete the questionnaires. A

process of hierarchical approaches was then used to ensure that permission was sought to recruit the individuals to participate, the mechanisms used were:

- Emails
- Connect via social media responses
- Telephone calls

To support these approach dimensions, two processes were followed, one process for the individual participants who would help to complete the questionnaires, these mainly belonged to institutions or organisations (Fig 18.), and the second process followed which was to recruit subject matter experts was for stage 2 of the process where interviews had to be initiated (Fig 19.).

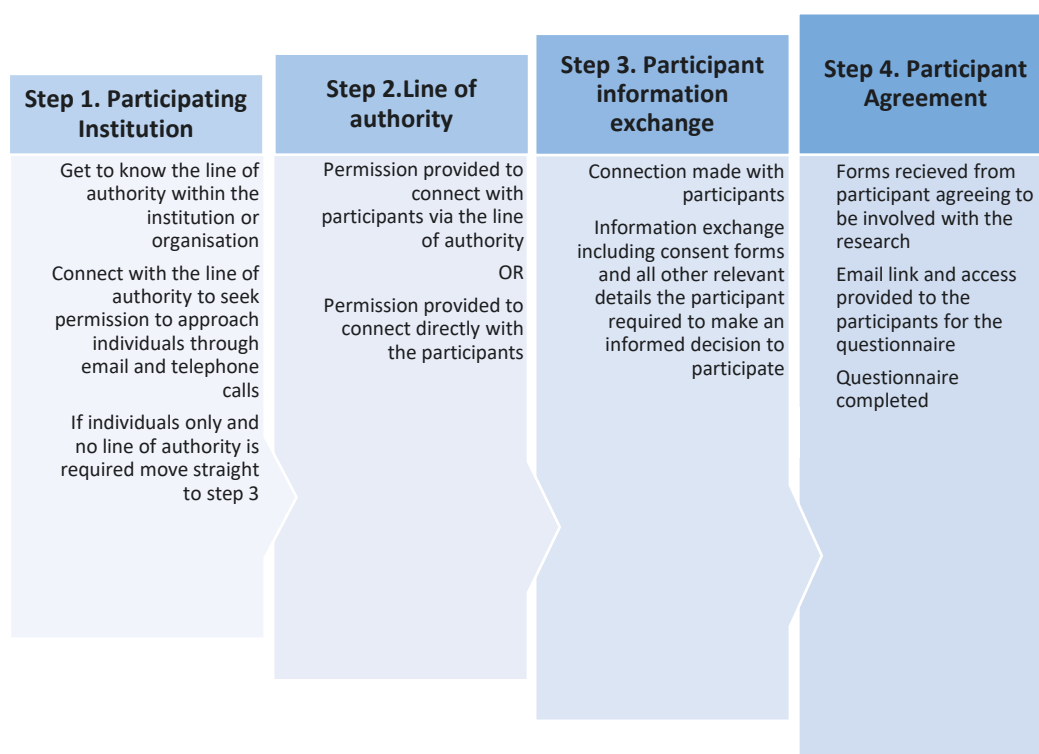


Figure 18. Participants invited to be involved in the questionnaire flow for consent

The second part of the access challenge was that of being able to connect with relevant experts who were deemed fit for the purpose for the interviews based on their experience and knowledge. What can be said, is that in most cases access can be gained if the researcher allows time, is patient and understands the participants hierarchical ranking not only within their organisation, but most importantly their family and historical background. The UAE is a closely knit society where most families or family names are known to many, which means that sensitivity of information and even sharing of dialogues to the wrong person can be somewhat damaging and destroy the ethical process totally.

For example, the second approach (Fig 19.) was adopted to avoid unnecessary problems or issues that may be faced when trying to connect and gain access to the individual.

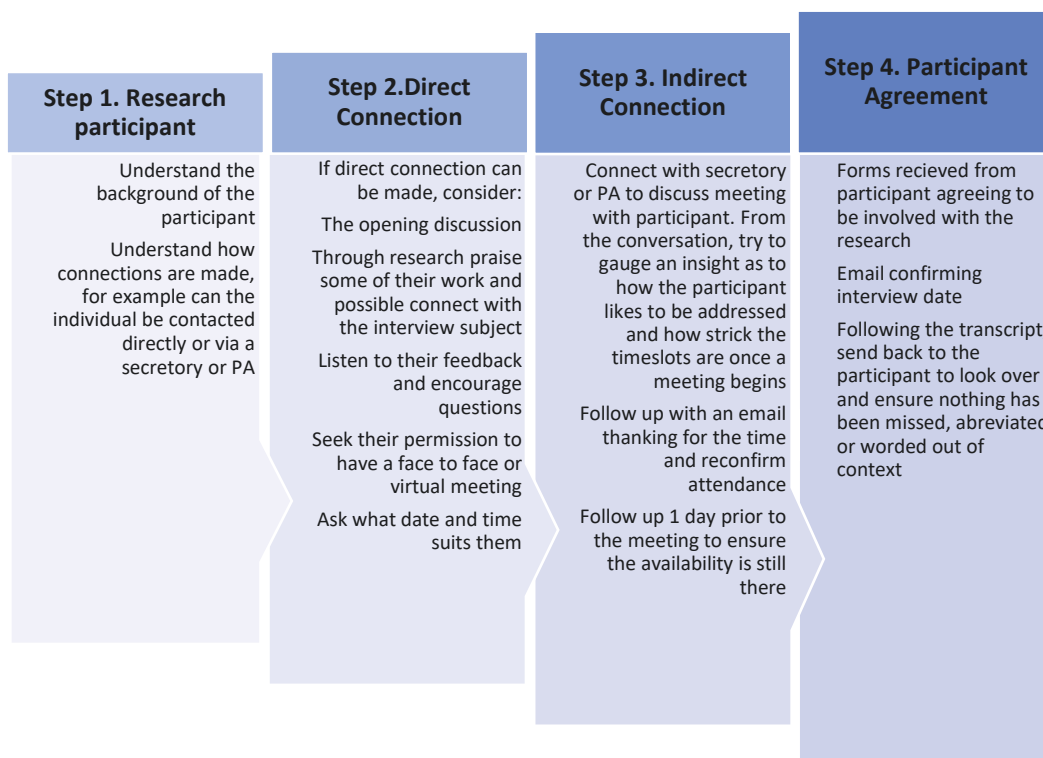


Figure 19. Participants being interviewed flow chart

### **3.19.3 Participants socio-cultural and religious beliefs**

Religion in many parts of the world plays a key role in shaping people's behaviours and attitudes (Zamani-Farahani and Musa, 2012). What this meant from a researcher's perspective was to understand that provisions whether they are large or small needed to be made. For example, and in context to this research, the ethical values, the religious values even to the extent of how pious a particular participant can all make a difference to the overall approach in ensuring that every participant was dealt with retrospective dignity. Placing this into perspective, the following were examples of what the researcher needed to be prepared for:

- Not recognising their faith, for example, a participant may greet you with the words, as-salamu alaykum, which is a standard Muslim greeting especially used in the Arabic world. If the person receiving this greeting and they answer by saying, wa-alaikum-salaam, there would be an instant recognition from the participant that they have been greeted back with dignity and that the individual recognised their faith.
- When female participants are involved, often the female will be covered by a hijab (head and face covering), again understanding these research parameters are important, especially if interviewing using virtual methods. The worse thing that can happen is asking the participant to turn on their camera, this would be viewed as being disrespectful whilst not proving no research had been done to understand the audience.
- Greeting and welcoming males is normal across the globe, shaking hands is still a greeting that can be used within the Arab nations, however, extending your hand to a female in the same way is seen as disrespectful and should not be done under any circumstance, unless the female extends her hand first – which is rare.

These were just a few examples of what was required as a basic understanding and positioning as a researcher in the UAE.

### 3.20 Obtaining consent

Obtaining ethical consent had a two-dimensional approach, firstly consent was required as part of the University of Northampton ethical approval process (appendix 7) and secondly approval had to be obtained from any participant involved in the data collection. From literature, it was evident that ethical problems could easily arise where there is no rigor, especially when there are human interactions whether that be face to face or virtually, participants must give their consent prior to starting the data collection process (Adomako, 2019). Based on this protocol the research followed as systematic mechanism (Fig 20.) that ensured all participants, including gaining the ethical approval from the University of Northampton. All of which were exposed to a rigorous routine, which included providing an insight to the research subject, what was required of the participant, what happens with the data, their confidentiality and being able to gain access to the participants (Petrova, Dewing, Camilleri, 2016).

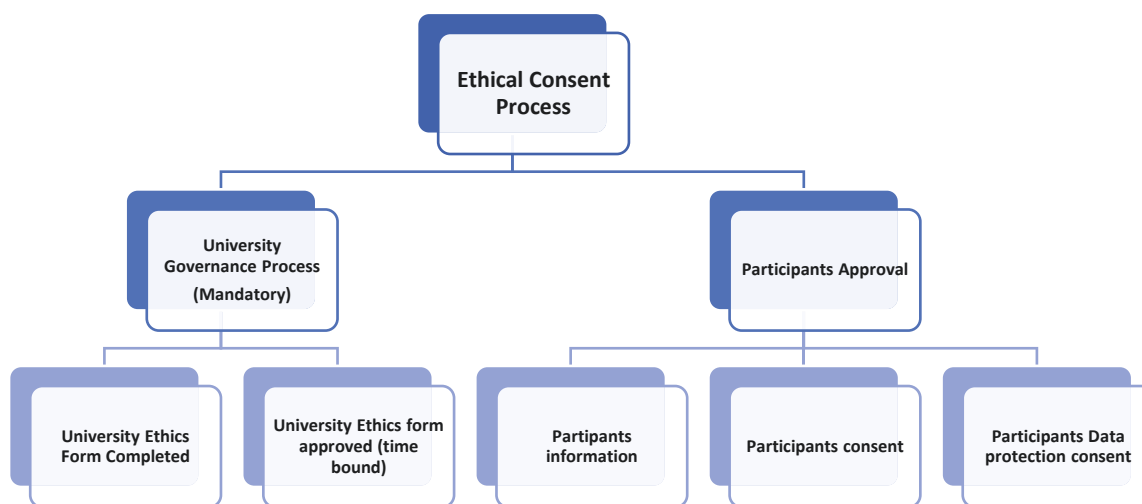


Figure 20. Ethical consent process

To further reinforce the process that was followed, appendices, 11, 12, 13, 14 and 15, provides evidential examples of the approvals and information that was provided to all participants, which included:

- participants consent form
- access to information
- invitation letter
- information relevant to the research
- data protection

The above, as mentioned, provided the foundational ethical rigor required by the University of Northampton, whilst ensuring that all participants felt secure in respect of the ethical approaches used during the entire process.

### **3.21 Respect of confidentiality, refusal, and privacy**

Confidentiality and privacy are a prerequisite of any ethical approach (Buchanan, 2011). The participants for this research were provided with a plethora of details to understand their choices and the inputs required. This meant they had a choice and a voice as to whether to participate or not. This choice was provided through the participant invitation letter and participants consent forms, both of which required a signature to move forward. The consent to participate forms also provided enough details for the participants to understand what they would be involved which included an open-ended opportunity to decide to participate or not. Non-participation meant that there was an assurance that no adverse consequences irrespective of what stage this was communicated would affect them.

### **3.22 Avoidance of deceptive practices**

Winterton (2008) cites that all researchers should write based on what they see and not what they assume. Any practice or approach that was deemed to deceive the participant or act against the ethical practices set by the University of Northampton should be minimized especially where human dignity was at stake. This also included the researchers background and experience which could be seen as bias or influential based. This was highlighted since the researcher had gathered a great deal of knowledge in the field of learning and education. As such the researcher for this paper can confirm that no influencing or practices that would steer organisations or participants towards providing unethical data.

### 3.23 Trustworthiness

For this research to be trustworthy, there needed to be a considered amount of transparency in the procedures and protocols used (Adomako, 2019). Graf (2017) cites that trustworthiness will provide confidence for the reader in terms of the data, its interpretation, and the methods used to collect the data. Furthermore, Polit (2010) highlighted the use of several criteria, which the researcher should follow to help reinforce trustworthiness, those being (Fig 21.).



Figure 21. Reinforcing Trustworthiness

#### 3.23.1 Credibility

Cited by Polit (2010) credibility is having confidence in the truth of the study and therefore the findings. Questions such as, “did the researcher engage with the participants enough to reduce any gaps in the data”?

#### 3.23.2 Dependability

Considers the stability of the data over time and the conditions of the study (Polit and Beck, 2010). In basic terms the researcher will use process logs and record activities over some time, as an example, dependability was often used within the medical field whilst observing patients’ conditions.

#### 3.23.3 Conformability

This can often be seen as the catalyst to prevent biases, notes or transcripts can be shared and viewed by peers, usually a qualitative researcher (Connelly, 2016).

#### 3.23.4 Transferability

Transferability can direct the findings towards other settings, however, as Amankwaa (2016) cites, the descriptive detail is crucial where the trustworthiness of the data being transferred, meaning what the destination and why.



### **3.23.5 Authenticity**

This basically makes a statement that the researcher had selected the most suitable people for the study which in essence indicates the researcher's link to triangulation (Schou *et al.*, 2011). To ensure this research had a measured amount of trustworthiness, the 2-stage approach was introduced to ensure there was credibility with the data being captured and subsequently an authenticity test known as stage two, which was based on using subject matter experts within this study.

### **3.24 Respecting Indigenous peoples**

This section was extremely relevant for this research paper purely because the data and participants were in the main from the UAE, which is also detailed in the positionality section 3.19. There clearly was a high degree of respect for the participants beliefs, historical values, and tribal differentials adopted. What the data capture avoided was the manifestation of participants believing they had not been treated in accordance with their origins, historical values, and societal idiosyncrasies. The list below provided a solid framework for the researcher that ensured this respect was channelled in connection with the required needs (Minter *et al.*, 2012).

### **3.25 Indigenous principles**

1. There must be recognition that there will be a great deal of diversity within the participants groups.
2. Tribal values and origins will exist, these may be intangible, but respect must still be recognised.
3. There will be knowledge shared that is based around traditional values and historical experiences, respect what is being said.
4. Where the participants are indigenous, respect that they want to be informed and understand why they are participating.
5. Where there could be an impact of the research on the indigenous society, the participants must feel that their comments will not disadvantage them in the future.
6. Outcomes of the research should be shared once approved.
7. Finally, guidelines on the ethical approach should be made readily available to all taking part.

### **3.26 Recruitment Process**

As mentioned in the sampling approach, the recruitment and engagement of participants in the research project were imperative, not only to help develop an understanding of the theme of the research but also to the flow of data and its overall credibility. The approach used and highlighted on page 74 to recruit participants was structured targeting students past and present, institutions, employers, and employees all of which had a degree of robust and rich experiences ( Table 9 – Distribution plan and Fig 15 – Questionnaire categories).

Each of the questionnaire participants there were invited knew exactly what commitment was required including providing an approval from their employer or institutional body if necessary. The process that was developed allowed enough time for each of the participants to complete the questionnaire, however, there were times where a minority of the participants did forget to log in. When this occurred, a gentle email reminder was sent and the remaining questionnaires were completed within the parameter set, which was 30 days from the date of issue. Once this stage was completed then the stage 2 approach was triggered, which meant that the gaps in the data provided enough information to target recruits for the interviews.

### **3.27 Conclusion**

The overall aim of what is best described as a well-defined ethical approach was to ensure that every aspect of perceived barriers or complications was covered. This started with the research principles, the process that required approval, through to ensuring every participant had access to enough information to make a consensual agreement. Furthermore, and to reiterate, whatever the research, the cultural and societal backgrounds must be respected, followed, and ethically embraced.

## 4. Chapter Four: Research Findings – Stage 1

### 4.1 Introduction

This chapter focuses on the findings of this research using data that was captured from stage 1 (Fig 22.) of the already mentioned two-stage process. From these outputs the next chapter, chapter 5 moves sequentially into stage 2 of the process which was a progressive stage from the data captured in stage 1.

The data from stage 1 was gathered using a qualitative mechanism, which supported the chosen interpretive approach using credible, rich, and trustworthy sources. This stage used a qualitative mechanism using open ended questionnaires, which helped to provide information around individual and organisational experiences. This meant that the outputs from this stage helped to extract enough data to provide themes and gaps that was then used in a more focused manner for stage 2. Based on this, this chapter purely focused on a review of the findings and the analysis from stage one of the data collected.

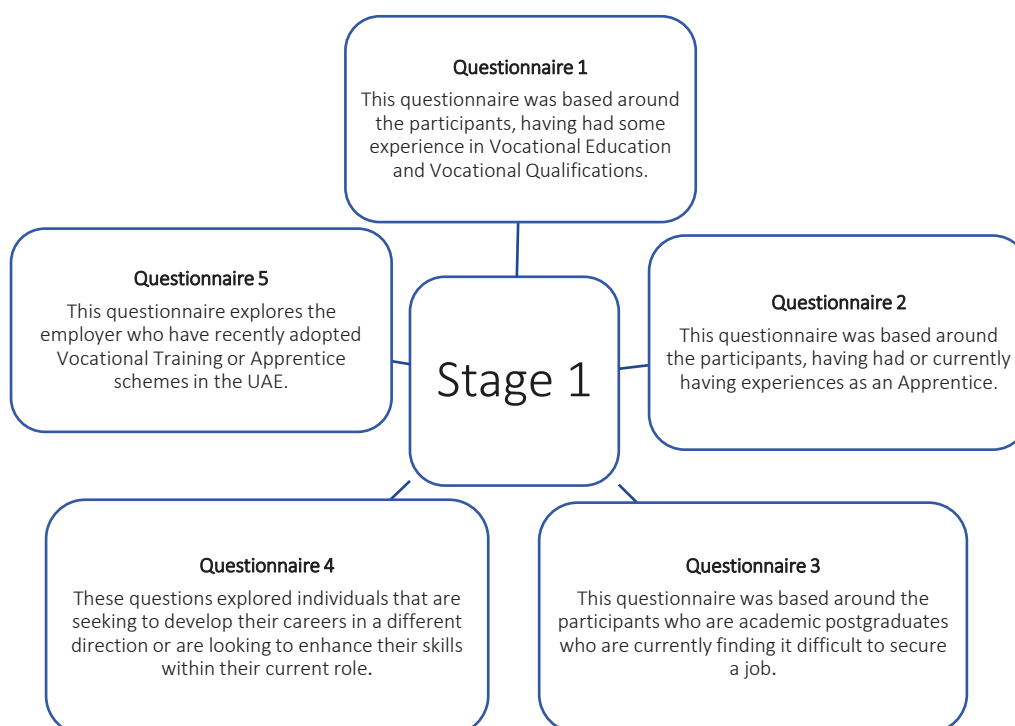


Figure 22. Research Findings Stage 1

## **4.2 Purpose**

The purpose of the research findings was to critically evaluate the relationship between academia and vocationally driven apprentice schemes

To capture the data effectively, background information in the form of using experiential knowledge from a chosen section of participants was used. Based on this, it was crucial to have an even distribution, which meant the questionnaires were targeted proportionately towards several individuals who had the required experiences, or at least had some exposure to what the questionnaire content explored.

Once this stage was completed, the capture and consolidation of the data was key, which meant that the findings were presented in a concise and compelling manner with an overarching objective to provide sufficient information to implement stage 2 of the data gathering process.

## **4.3 Findings and Analysis – Stage 1**

### **4.3.1 Introduction**

This section provides a critical insight to the data captured during stage 1 along with an analysis of what was believed to be rich and valuable data based. This value related to the outputs of the completed questionnaires that were collected from the recruited participants, which aimed towards the development of a deeper understanding around the main themes that were extracted.

### **4.3.2 Collecting the data**

A pivotal part of the data capture was being able to engage with the participants that were able to understand the rationale behind the research, whilst also being motivated enough to complete the questionnaire. The importance of this was to make sure that 'no show's' or a lack of interest would not disrupt the initial efforts made to recruit participants (Fig 19.). If this did happen, which in this case it did not, then another recruitment drive would need to be planned and administered. Based on this concern, specifics were provided around the research subject held within the consent form to engage the participants in such a way that they wanted to be involved and add value to this piece of research.

To explain the data collection process, Fig 23 emphasizes three key parts that were developed prior to the participants being able to access the data. The first stage highlights the importance of recruitment, the second part was the allocation of the questionnaire link, and the final part was the completion of the questionnaire. All these steps were completed before participants were able to access the data.

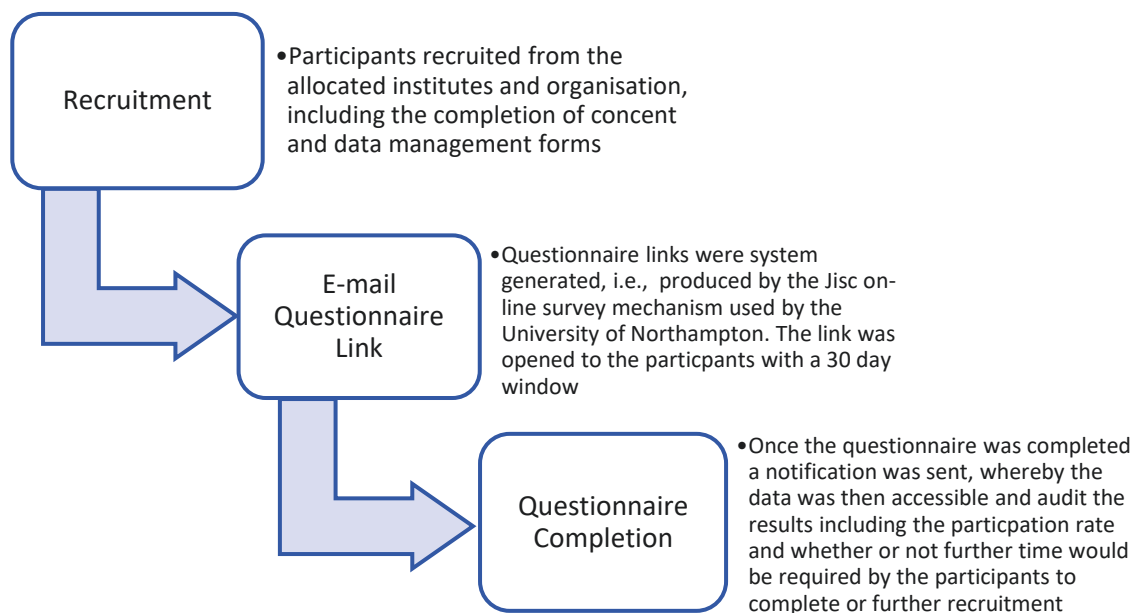


Figure 23. Stage 1 Process Flow

Once the questionnaire links were provided each of the participants had a 30-day window to complete their respective questionnaires, which were recorded and monitored regularly to ensure that the recruited participants were able to access the questionnaire but were also still motivation enough to complete and submit. Earlier within the methodological section, the number of targeted recruits needed to be 24 as a minimum which was a fair representative spread across all the questionnaires (Table 9). Fig 24 illustrates the overall participation rate per questionnaire, by questionnaire number and by percentage. As can be seen a maximum of 41 participated from a total of 63 that were recruited and invited to participate. The figure of 41 exceeded the minimum required, which in turn reflected in the overall reliability and richness of the captured data.

	Invited	Participated
Questionnaire 1	13	8
Questionnaire 2	14	9
Questionnaire 3	15	10
Questionnaire 4	9	6
Questionnaire 5	12	8

	% Participation
Questionnaire 1	62%
Questionnaire 2	64%
Questionnaire 3	67%
Questionnaire 4	67%
Questionnaire 5	67%

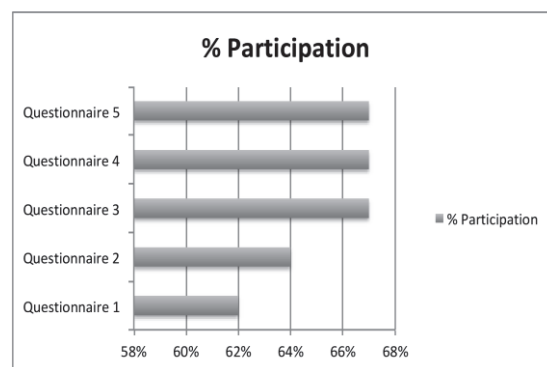
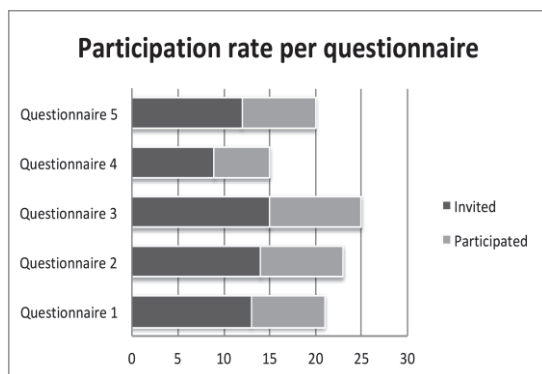


Figure 24. Data Collection

#### 4.3.3 The interpretation of the data

The preliminary part of the findings journey was to ensure sufficient data was available to analyse capturing a true reflection of the participant's experiences via the questionnaire outputs. The initial part of developing the interpretations from the completed questionnaires was to ensure that the data was screened in a consistent manner, whilst understanding what gaps were emerging in connection with the research objectives.

The NVivo software (version 12) used was ideally suited for this qualitative research. It facilitated the process of the responses to be uploaded and then developed into meaningful and presentable findings (Trigueros, Rivera and Rivera Trigueros, 2018). This part of the process was one of the most meaningful parts of this journey, after a great deal of preparation and research where real data started to emerge that helped navigate towards a robust discussion and conclusion.

Dollah (2017) highlighted that some of the drawbacks with using NVivo can be around time, time to learn and the overall understanding of the outputs. However, Dollah (2017) explains further that using NVivo for thematic analysis was the best option for a qualitative researcher.

As with any software, the system was only as good as the data and information that was being inputted (Dollah, Abduh and Rosmaladewi, 2017). To ensure a robust and consistent approach was used, two choices were at hand, one was where the completed questionnaires would be uploaded into the NVivo system as soon as they were received, or secondly the upload of all of the questionnaires would only take place once the deadline had been reached. For this research, the second option was chosen, as it was easier and more effective to track and understand whether enough data had started to emerge that would then trigger the analysis of the response and response rates.

Once all the questionnaire responses had been retrieved and uploaded into NVivo, efforts were then made to work through themes and repeated words that would be used in connection to the research objectives. Appendix 16 provides examples of how the data looked within NVivo (version 12).

From the outputs the following headings were established.

Mapping the themes against the research objectives (Table 10.)

Mapping the questionnaires against each theme (Table 11.)

Mapping the responses against each theme (Fig 25.)

Mapping the distribution of the questionnaires, originally mentioned in the methodology relevant to the participants, the abbreviations represent the organisation, and the number represents each participating individual. (Table 12. and 13.)

	Theme Headings	Research Objective (Number)
1	Career Builder	4
2	Marketing & awareness	2
3	Implementing the learning	4
4	Occupational Gaps	3
5	Perceptions of apprentice programs	2, 4
6	Stigmas associated with apprentice programs	3, 4
7	Will they stretch the learner	3, 4
8	Training providers and tutors	3, 4
9	What is needed to develop a framework fit for purpose in the UAE	2, 3, 5
10	Financial commitments	2, 5

Table 10. Themes against objectives

	Questionnaire 1	Questionnaire 2	Questionnaire 3	Questionnaire 4	Questionnaire 5
Theme					
Career Builder		✓	✓		
Marketing and awareness	✓	✓	✓	✓	✓
Implementing the learning	✓		✓		✓
Occupational gaps		✓		✓	✓
Perceptions of apprentice programs	✓		✓	✓	
Stigmas associated with apprentice programs	✓	✓	✓	✓	✓
Will they stretch the learner	✓	✓		✓	
Training providers and ti=utors	✓	✓			✓
What is needed to develop a framework	✓	✓	✓		
Financial commitments				✓	✓

Table 11. Questionnaire Mapping

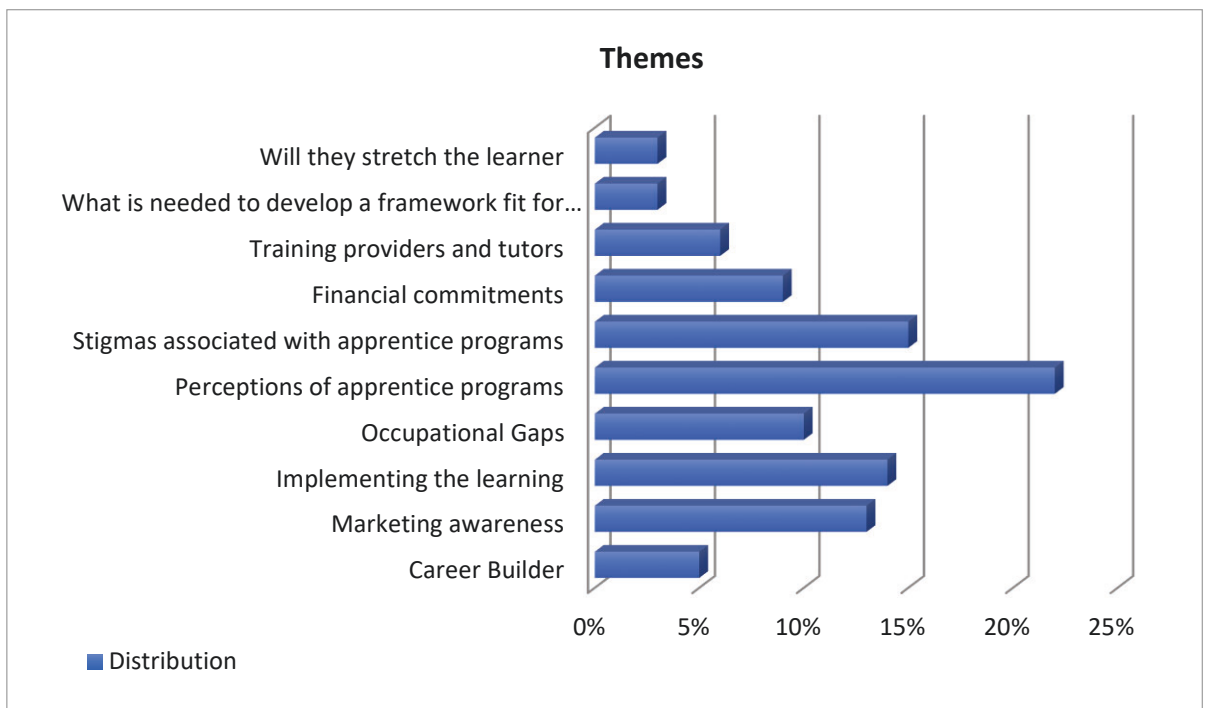


Figure 25. Theme Distribution



	Institution	Questionnaire Number	Participant Code	Participant Number
1	Higher Colleges of Technology (HCT)	1,2,3	HCT	HCT 1, 2, 3, 4, 5
2	National Institute for Vocational Education (NIVE)	1,2,3	NIVE	NIVE 6, 7
3	ADNOC Technical Institute (ATI)	1,2,3	ATI	ATI 8, 9
4	Petroleum Institute (PI)	1,2,3	PI	PI 10
5	Mohammed bin Rashid School of Government	1,2,3	MBR	MBR, 11, 12
6	Emirates Aviation University	1,2,3	EAU	EAU 13, 14,
7	Emirates Academy of Hospitality Management	1,2,3	EAH	EAH 15, 16
8	Etisalat Academy	1,2,3	EA	EA 17,18,19
9	Abu Dhabi Centre for Technical and Vocational Education and Training (ACTVET)	1,2,3	ACTVET	ACTVET 20, 21, 22, 23
10	Abu Dhabi Vocational Education and Training Institute (ADVETI)	1,2,3	ADVETI	ADVETI 24, 25, 26, 27

Table 12. Questionnaire mapping against institutions

1	Emirates Global Aluminium (Employer)	5	EGA	EGA 1, 2, 3, 4
	Emirates Global Aluminium (Apprentice employee)	4	EGAA	EGAA 5, 6, 7
2	GEMS Schools (Employer)	5	GEMS	GEMS 8, 9, 10, 11
	GEMS Schools (Apprentice employee)	4	GEMSA	GEMSA 12, 13, 14

Table 13. Questionnaire mapping against organizations

#### 4.3.4 Understanding the themes

The purpose of this section was to provide an insight into the 10 themes (Fig 25.) that were extracted from the questionnaire data using the participant's comments and what these comments were indicating linked with the research objectives and literature review.

#### 4.3.4.1 Meaning of Career Builder

From the literature review, governments, organisations, learning institutions, and individuals highlighted the need to have a clearer understanding of what career-building means. How people can develop themselves for future jobs is becoming a critical part when leaving school, even towards the age of retirement. From the questionnaires, common words and phrases used, see table 14, were taken directly from the participant’s answers. For this the codes were produced from the participants who shared their thoughts around career, using the participant prefixes from table 12 and 13.

<b>Career Builder Theme</b>	
Commonly used phrases or words contained within questionnaires 2, 3	
<b>Participant</b>	The employers who I am looking to be hired by do want qualifications and do want work experience
	The best will always get picked with the best qualifications
	I feel when in a job the vocational qualification would be far better as it has a hands-on approach, and you can learn whilst on the job
	Now companies are looking for qualifications and experience which is very tough
	I want to move jobs, and what employers are saying is that I need more experience and not qualifications
	I wanted to change my role within my current organization and noticed they were offering apprentice programs for engineers, so I applied
	Not having an academic education means failure (academically) and it would have made my job search even tougher.

Table 14. Career Builder Theme

The consensus from the above responses provided indications, that to build a stronger career portfolio, there was a need to gain some hands-on knowledge whether these experiences would be work-based or qualification-based, such as using apprentice schemes or vocational routes. What was concerning was the stigma that surrounded the vocational types of qualifications as to how career decisions would be made. However, there were small pockets of evidence that created belief and a sense of the value of using apprentice programs to build an experiential career.

#### **Graduate HCT<sub>1</sub> feedback**

Participant HCT<sub>1</sub> explained that career progression was not a top priority, however, there was an acceptance that a blended type of qualification that encompasses academia and vocationally focused learning would be an advantage.

*“At the moment this (career progression) does not concern me, as long as I can secure a job that’s the main. The employers who I am looking to be hired by do want qualifications and do want work experience also, so I think if I could get a good blend of both that would be good. I do not think academic will ever be bettered than any other qualification”.*

### **Employee EA<sub>18</sub> feedback**

Participant EA<sub>18</sub> provided a small insight into what individuals could experience as an apprentice. This participant had a desire to change roles and be retrained, but not through academic methods. Based on this need, the participant researched what was available and realised apprentice schemes were being delivered within their organisation. The participant researched how the apprentice scheme was structured and how it could be of benefit and deliver future career expectations.

*“I wanted to change my role within my current organisation and noticed they were offering apprentice programs for engineers, so I applied. I had done some homework in this area as I did not know much about apprenticeships, once I knew what the training was, I wanted to be part of it”.*

The above comments highlighted how using vocational types of qualifications as a career development tool was not a top priority. These comments also supported the qualification of research objective #3, which was based around how adaptations and innovative ideas would need to be considered to help overcome these perceptions. Albeit there was a lack of importance, there was an indication that work would need to be done to reinforce the value of vocationally driven qualifications whilst helping to build a more meaningful career map. Furthermore, what this feedback highlighted was the difficulties that would need to be considered when implementing apprentice schemes (research question #1), such as being able to convince people to utilise these types of qualifications to develop their careers whilst working and that academic routes are not always the answer, especially when considering career progression or career changes.

#### 4.3.4.2 Marketing and awareness

This theme captured the participants’ thoughts and understanding of what apprentice schemes mean and how what needs to be explored to have accessibility of information relating to types of apprenticeships and occupational choices. The branding, marketing and access to information all acted as catalysts to create an appetite to pursue these types of qualifications. Furthermore, the data collected provided a clearer understanding of how employers and government bodies need to help to bring apprentice schemes to life.

The significance of this theme and data was also reflected in the overall distribution, displaying an overall score of 13% (Fig 25.), which is the 4th highest percentile within these results (Table 15).

<b>Marketing and Awareness</b>	
Commonly used phrases or words contained within questionnaires 1, 2, 3, 4, 5	
<b>Participant</b>	More marketing more experts and more support from government bodies
	Educate families and kids at school earlier and before they finish school
	Use colleges and schools and universities more to spread the word
	I would encourage Human Resource Directorates that control the training to get on board and start understanding
	I did not need to search as my organisation already was offering, but when I was looking for research on the subject it was tough because no one had much of knowledge
	Not many people know what vocational is, they see it as purely on the job training and not a qualification
	Prepare tutors better Market the product better

Table 15. Marketing and Awareness Theme

Considering these responses, the overall feedback from participants highlighted areas such as the need for Government intervention, building a better awareness and educating the colleges and universities around the benefits of vocational qualifications.

#### **Graduate NIVE<sub>6</sub> feedback**

Participant NIVE<sub>6</sub> provided an insight into the difficulty of searching for providers. Providers mean those that have apprentice schemes or vocational qualifications as offerings or provide training related to these. The limitations create uncertainty and challenge the overall quality of delivery and longevity.

*“When I am searching for vocational qualifications including apprentice schemes, it was really difficult, there are not many providers in the UAE and when you find one, they are so difficult to deal with based on a lack of knowledge and understanding of choices they can give”.*

#### **Graduate ADVETI<sub>24</sub> feedback**

Participant ADVETI<sub>24</sub> in a very short explanation highlighted not only the importance but the existence of ‘stigma’ which is partly driven by a lack of knowledge and understanding.

*“The stigma is there, but I feel it is because there is not enough knowledge about vocational qualifications in the UAE!”.*

The above quotes reinforced and helped to reinforce the current challenges the participants experienced when searching for registered and quality training providers. These challenges were further intensified through the lack of knowledge based around types of apprentice schemes and vocational qualifications available. Considering this, a significant amount of work will need to be carried out to equip the government bodies such as the NQA, accredited training providers and designated tutors to be comfortable enough to communicate what is readily available. This evidence links perfectly with research question #3 which highlighted the importance of the required quality of the training provider which in turn formed an appetite to learn, based on how knowledge can be gained through apprenticeship schemes and vocational qualifications.

#### **4.3.4.3 Implementing the Learning**

It became evident that whatever learning was taking place in the modern world, there was a constant push towards capturing the benefits of blending theoretical knowledge with practical outcomes. For many, this was becoming an obvious route, still to date, specifically within the UAE, there are limited opportunities provided to help make this become reality other than the usual routes such as internships. The respondents provided some clear examples in table 16 around concerns and possible solutions. That said, implementing the learning theme was the 3rd highest percentile at 14%.

### Implementing Learning

Commonly used phrases or words contained within questionnaires 1, 3, 5	
<b>Participant</b>	I had to take the learning and prove to my line manager that I had implemented through various evidence
	What I have found is that I am able to learn on the go and able to translate my theory into work related scenarios
	I was able to implement learning from day one
	Because I am an engineer, much of my learning would be done on the job,
	I feel you should use teachers from a vocational background to deliver rather than academic tutors
	We knew our progress each time we had a learning task, so I was able to know if I was going to do good or bad or needed improvement
	My only concern is that I felt I could not fail unlike an academic examination

Table 16. Implementing Learning Theme

From the above comments, most of the participants understood the concept and importance of putting the theory into practice. For example, AT1<sub>8</sub> participant provided a great overview of their own experience and feelings.

#### **Employee AT1<sub>8</sub> feedback**

Participant AT1<sub>8</sub> indicated the importance of being able to put the learning into practice, especially using an apprentice scheme or vocational qualification to provide this.

*“This is the most advantageous method for vocational learning. When I was at University, I sometimes found it difficult to relate the theory into practical situations, with the vocational method I got the best of both worlds”.*

#### **Employee MBR<sub>11</sub> feedback**

Participant MBR<sub>11</sub> further supported the importance of personal hands-on experience, indicating that what has been learned in an academic environment should be practiced.

*“Without a doubt, I was able to implement learning from day one and was able to also relate what I was doing whilst developing. Some of the case studies I was given helped me implement certain things, things that I would not have been able to do normally”.*

One of the key areas within this research was the objectives #3 and #4, these objectives focused on what adaptations and limitations would be required to effectively embed an apprentice scheme within the UAE. What the above participants acknowledged was that vocational types of qualifications were being viewed as an advantageous and valuable

outcome from the perspective of learning by doing. Although some of the comments did support vocational learning, especially in the workplace, caution was highlighted based on the access of quality tutors, study types and occupational availability.

#### 4.3.4.4 Occupational Gaps

The term occupational gap was used where there was a belief that the current offerings, which meant the types of occupations and job families, needed to offer a wider range of choices. What this theme explored and subsequently uncovered, was the reality and scope of the types of offerings that was available whilst further understanding that the choices of learning and developing mechanisms had to be linked with vocational qualifications. Some of the example statements used by the participants are highlighted in table 17.

<b>Occupational Gaps</b>	
Commonly used phrases or words contained within questionnaires 2, 4, 5	
<i>participant</i>	Very few choices, I do not think many organizations are doing this
	More organizations should offer apprentice programs
	Some organizations offer vocational programs, but apprenticeship offerings are very rare and not usually provided.
	I cannot see many if any that offer programs in functional areas like accountancy and marketing and human resources
	I believe for any job, both vocational and apprenticeship offerings are required to succeed.
	Yes, I would like to have one in marketing especially around digital marketing
	I think an apprentice program is required for new graduates who are starting front office jobs such as customer service,

Table 17. Occupational Gaps Theme

The participants within this theme indicated that the choices were limited, which was either based on assumptive knowledge or based on their own experiences. This feedback presented a two-dimensional approach, meaning one dimension was based around what organisations offer, whereas the second dimension was based around the actual gaps, which translated into a lack of choice to support a breadth and depth of occupational development. The most positive aspect of this theme was the opportunity to create a psychological contract where delegates would connect to the programme that delivered their aspirational learning goals. Clearly this was a significant development that would present an opportunity to develop apprentice schemes. Because of this, it would be prudent to understand more about how

these gaps could be bridged using stage 2 of the data collection phase. To further support the above, the following are extracts from the participants.

#### ***Graduate HCT<sub>4</sub> feedback***

Participant HCT<sub>4</sub> explained the disconnection between what is really happening within organisations, and because there is no mandate or predetermined on the job training program, then organisations tend to do their own thing.

*“I think currently there is a missing element in organizations when it comes to vocational and apprenticeship offerings. Providing on-the-job training is not mandatory as you are expected to come and be equipped with the required knowledge and skills to excel in your career. Some organizations offer vocational programs, but apprenticeship offerings are very rare and not usually provided”.*

#### ***Graduate HCT<sub>5</sub> feedback***

Participant HCT<sub>5</sub> again supported vocational routes and apprentice schemes, especially when upskilling was required.

*“I believe for any job, both vocational and apprenticeship offerings are required to succeed. A lot of people choose to change career paths after being employed or decide they are not interested in working in their same field of study. Having the option of an apprentice program will make it easy for anyone to smoothly transition”.*

The above quotes linked with the research objective #4, which focused on innovation and adaptations whilst indicating that vocational types of qualifications are seen to be advantageous and would inevitably place knowledgeable and qualified people into the workplace. However, the challenges or mindsets still surfaced from this feedback, suggesting there was a lack of availability of programmes, including a limited scope of occupational types. Further to this was the fact that government entities and organisations needed to be better aligned, more creative and innovative in developing vocational pathways. What this did mean is that mindsets do need to be changed to help develop a learning journey palatable to all which will need to include academically minded individuals.



#### 4.3.4.5 Perceptions of Apprentices Schemes

In isolation, presenting the word ‘perception’ to the participants was asking them about what they understood and how they interpret what they know within a certain subject or field of expertise. Although not known at the time, this theme provided the biggest and most valuable data set from the participants with over 22% percentile, which helped to extract the richest and most valuable information to further develop these findings. The key thematic statements presented are presented in table 18.

<b>Perceptions of Apprentices Schemes</b>	
Commonly used phrases or words contained within questionnaires 1, 3, 4	
<b>Participant</b>	There is a lack of understanding. As a UAE National we have brought us with the idea that academic ways are best
	Vocational qualifications if available are a top up to work related knowledge and skills.
	Why be bothered with these, they mean nothing.
	It will become a shadow of my academic qualification
	The problem is the name vocational, if it were called something else that linked it with academic qualifications it would be better.
	When I looked for a vocational qualification, I asked my parents first, unfortunately they did not know about these and tried to persuade me no to take
	I feel academic qualifications will always take the top stage, vocational qualifications, of what I believe will not replace or come anywhere near to those you do at college or university.

Table 18. Perceptions of Apprentices Schemes Theme

Most of the feedback was based on individual perceptions of apprentice schemes and vocational qualifications. One of the concerning factors was based around how these qualifications or trainings are viewed, for example, most of the participants indicated that there was no comparison between academic and vocational qualifications. Because of this assumption they indicated that they would not commit to such qualifications, especially if they were seen as a detrimental factor that reduces the overall strength of academia and their own career development.

#### ***Employee EGAA<sub>5</sub> feedback***

Participant EGAA<sub>5</sub> had a good impression about the value of apprentice schemes; however, this positiveness turned into scepticism due to the challenges with regards to how the schemes would be embedded into the educational system of the UAE.

*“I believe that apprentice programs are great if they fulfil my education needs and give me the job that I need/want. Because in the UAE these are new ideas and am not sure if the education infrastructure is there”.*

#### **Employee EGAA<sub>6</sub> feedback**

What this Participant EGAA<sub>6</sub> alluded to was that they want choice and want to be able to have access to tutors that can share their experiences with.

*“Unfortunately, they are not available (apprenticeships) everywhere and you are not always lucky to have someone who would dedicate their time to teach you and share their experiences with you”.*

From this feedback there was a clear disconnect and misunderstanding as to how the qualifications gained from being apprentice translates into recognisable academically gained qualifications, for example the research objective #5 indicates that there needs to be a clear set of protocols and a fit for purpose framework developed to implement apprentice schemes. Furthermore, this has been emphasised with a lack of good quality training companies and tutors that deliver vocational qualifications as highlighted in research question #3, This does generate further concerns based around acceptance and readiness to move forward with apprentice schemes.

#### **4.3.4.6 Stigmas associated with apprentice programs.**

As the second-highest percentile at 15% this theme explored what the participants had experienced with regards to apprentice schemes. Often there was confusion based around whether such schemes can add value, likewise the lack of quality information about product, meaning the apprentice schemes, this lack of clarity then translated into a person dismissing this route to learn. What was also highlighted was the social standing which pointed towards what people would think. Table 19 provides an overview of how the participants responded to the questionnaire.

### Stigmas associated with apprentice schemes

Commonly used phrases or words contained within questionnaires 1, 2, 3, 4, 5	
<b>Participant</b>	The stigma is there, but I feel it is because there is not enough knowledge about vocational qualifications in the UAE
	Yes, there is, but the is due to ignorance
	I felt a little embarrassed rather than been proud
	It is obvious that vocational qualifications are of a lower standard, otherwise Universities would be delivering them - right.
	I cannot imagine the Government Bodies accepting a vocationally qualified person against a solid academic like me.
	my friends are competitive and doubt they would be attracted to such a thing as vocational or apprentice schemes

Table 19. Stigmas Associated with Apprentice Schemes Theme

When working through the participant feedback, words such as attractiveness, ignorance, comparisons, and knowledge all formed part of the importance of understanding what was meant by stigma in connection with apprentice schemes. The importance of understanding what these stigmas were and how they would potentially be challenged or overcome was further explored during the phase 2 interviews. Below are some examples of the key statements from the participants.

#### **Employer GEMS<sub>10</sub> feedback**

Participant GEMS<sub>10</sub> provided a useful statement, based around the lack of understanding with regards to who has access to apprentice schemes and the assumption that such routes and qualifications are best suited to those who are academically challenged.

*“There is a big divide in understanding, this needs to be sorted out, many people do not understand and tend to say these, i.e., apprentice schemes are for those who have no qualifications or those who don't want to progress academically”.*

#### **Employer GEMS<sub>11</sub> feedback**

The underlying issues raised by participant GEMS<sub>11</sub> was that of knowledge and understanding and how employers would value an apprentice or vocational qualification. It can be said from this statement that a lack of in-depth knowledge acted as a catalyst to this mindset, which in a way started to unfold why this stigma is present.

*“I don't think private sector companies worry over this issue, i.e., the stigma attached to vocational types of qualifications. My feeling is that companies do not know what these*

*qualifications are and if they do, they have no value for them in my experience. I am not sure about apprentice schemes as we do not see many of them”.*

What was unique about the above comments was that they directly identify and link with the initial areas of concern mentioned in the research objectives #3 and #4, for example, the challenges that need to be considered and the adaptations required. To support this further, research question # 1 was based around how these challenges or difficulties can be overcome. What these quotes indicated was the need to help individuals and organisations understand what an apprentice scheme was and the relevant qualifications that would be gained from completing the apprenticeship.

#### **4.3.4.7 Will they stretch the learner?**

Learning and development within education was being able to understand how the learner will be stretched and where appropriate, how implementation of the learning in the workplace will take place. However, those from an academic background will often see this stretch as the amount and depth of theory in the form of knowledge they will gain. When asking this question, the learning dynamics was explored based on whether the participants would see the learning stretch from an academic status to that of a vocational status.

In essence this was asking whether and practical learning methods such as vocational learning would have the same impact as that of the theory provide by university professors. Table 20 helps to unravel these questions providing some example phrases used within the responses.

<b>Stretching the learner</b>	
Commonly used phrases or words contained within questionnaires 1, 2, 4	
<b>Participant</b>	Because I have experience in both, I feel you cannot compare as they are very different learning methods. Both ways stretch but in different way
	Because they are new - it is hard to say, in my experience the experiences are different. So, it is not a stretch just a different way of learning
	They stretch me but that is because I want to learn at work and get the best standard
	Sure, because the program, unlike classroom studies and such, will focus on my skill rather than on a variety of subject areas. On-the-job training is always a better idea.
	The training is better as it focuses the apprentice on accomplishing different tasks and then they are assessed against these. this means there is less time off the job, i.e., spent in classrooms
	Not many people know about apprentice programs within the UAE which creates a challenge for those with academic backgrounds.

Table 20. Stretching the Learner Theme

From the above example responses, there are two schools of thought that surface. One was a lack of understanding of how much knowledge would be gained through apprentice schemes and the connected qualifications and secondly, there was an element of knowing how to translate learning within the workplace, which in isolation could be a benefit towards developing a strategy towards helping students understand what this means in reality! To further support this element, below are some further examples.

### ***Graduate ACTVET<sub>20</sub> feedback***

A great example provided by participant ACTVET<sub>20</sub> indicating the benefits of vocational types of learning and indicating that even learning within an academic environment, there is room for implementing the new learning into practical situations.

*“This is the most advantageous method for vocational learning. When I was at University, I sometimes found it difficult to relate the theory into practical situations, with the vocational method I got the best of both worlds”.*

### ***Employee MBR<sub>11</sub> feedback***

Again, an example from participant MBR<sub>11</sub> was where they indicated the relationship between learning and the theory and thus being able to understand better through practicing.

*“Without a doubt, I was able to implement learning from day one and was able to also relate what I was doing and developing. Some of the case studies helped me implement certain things, things that I would not have been able to do normally”.*

The above feedback further supported the need to develop the right environment for learning which was highlighted in the research objective #5. Having the right learning environment will help with the implementation and embed newly learned skills, likewise this will provide learning foundation that will help connect the new knowledge and new skills to their job. These experiences also linked with the research objective #4 which focused on innovations and adaptations, again these to be explored further during stage 2. What has become clear from this feedback, especially considering what adaptations will be needed, was the need to be pragmatic and understand that a one size fits all will not work.

#### 4.3.4.8 Training providers and tutors

This theme aimed to understand the gaps in the types of training that was currently being made available, more importantly, the theme highlighted the importance of the range of needs required as a potential apprentice or vocational learners. Unlike academia, providers and tutors need to be versed with the competency frameworks and standards within the qualification, and clearly must have the knowledge and skillset to translate the theory into how these are used within the workplace. What was clear from this feedback and the literature, there must be a critical understanding of what meaningful and implementable programs will be required, which in turn would help to understanding the proficiency of tutors required and their availability across numerous occupations. The examples held within table 21 provided useful evidence to help with this understanding and what needs to be made available in the UAE.

Training providers and tutors	
Commonly used phrases or words contained within questionnaires 1, 2, 5	
	When I was searching for a vocational qualification, it was difficult, there are not many providers in the UAE
<i>participant</i>	To be honest my boss chose the best route and body as he knew best. But if I did not have him, I think it would be difficult to know who the best provider would be, this is an obvious gap
	More experts must be made available and less bureaucracy getting in touch with vocational bodies
	The only big difference between apprentice programs and academic ones was the access to experts both in work and those giving the teaching
	Some of the classroom methods were not that great, using the same tutor was also a little boring at times, his knowledge was good though
	The main problem is that vocational centres do not have the subject matter experts

Table 21. Training Providers and Tutors Theme

What had surfaced from this theme, was the participants current experiences, where the feedback indicated that there was a lack of subject matter experts available, which meant there were limited resources that are associated with apprentice schemes and vocational qualifications. Critically, the feedback provided examples of tutors who were being used for various subjects but did not have the in-depth knowledge required in all areas. This then linked with the lack of choice of training and delivery centres which clearly would create

further problems, especially with organisations that do not have either the resources or the time to spare for such teachings. Below are some further examples of this

#### ***Graduate EAU<sub>13</sub> feedback***

There are several critical dynamics mentioned by participant EAU<sub>13</sub> bureaucracy based around the accessibility of vocational bodies, losing interest in researching based on not been able to find what they are looking for, and finally knowing where to and how to find tutors, not just from a training perspective but also to get advice and direction.

*“More experts available and less bureaucracy getting in touch with vocational bodies which in the UAE is tough and puts you off trying to search even for tutors or providers”.*

#### ***Employer EAH<sub>15</sub> feedback***

Again, participant EAH<sub>15</sub> supports the above statement, the lack of ability to get hold of the right information and connect to people who know or have the knowledge to share was a big negative which does demotivate people trying to pursue these avenues.

*“Trying to find providers and tutors is difficult, I even tried on LinkedIn but with no success, how can anyone want to choose an apprentice program when simple things like this are so difficult”.*

Reflecting on the graduate and employee feedback, research question #3 provoked the issue of being able to equip tutors to deliver VET and apprentice schemes. What the participants indicated was the limited availability of quality tutors to deliver these qualifications, but also not having a wider scope of choice of accredited or licensed providers. This feedback created a challenge based on how to implement and embed apprentice schemes which was mentioned in the research objectives #3 and #4.

#### **4.3.4.9 What is needed to develop a framework?**

This theme produced limited feedback, however, based on what was collected, the framework development was still viewed as being a critical part to the overall understanding of what would be required to develop a robust apprentice scheme mechanism that eventually would need to be a fit for the purpose model that would work within the current or future educational strategy. A framework would be required to help understand the needs and develop a unique mechanism to implement apprentice schemes, which will be crucial to how

apprentice schemes and vocational qualifications are viewed from the eyes of the novice. The below table 22 comments are a few extracts from the participants.

<b>What is needed to develop a framework</b>	
<b>Participant</b>	Commonly used phrases or words contained within questionnaires 1, 2
	The problem is the name vocational or apprentice, if it were called something else that linked it with academic qualifications it would be better.
	If the ministry of education can recognize what we do vocationally it would be great
	Accreditation and recognition are good, especially in the UAE,
	I researched a lot into this area, and realized there are only a few offerings

Table 22. What is needed to Develop a Framework Theme

From the comments, there clearly was a need to develop an understanding as to what these programmes consist of, along with the sequence of the learning that takes place, including the range of outputs that would be available. This does mean that the accreditation and awarding bodies will need to play an integral part in presenting an equivalency framework that reflects directly with other models outside of the UAE. Some of the extracts from the participants clearly support this, see below comments.

### ***Graduate NIVE<sub>7</sub> feedback***

What participant NIVE<sub>7</sub> mentioned, including their own strength of conviction, was their overall confusion around how things were structured, especially within the ministries. For example, when attending or registering at a university, the amount of research available, was extensive, including how to enrol and being able to gain instant access to what courses match the individual needs. Unfortunately, this same experience was not evident with vocational qualifications, which created disengagement and a lack of understanding of where to go for such information.

*“I am not sure what the structure is or what frameworks are used, the feeling is that the ministry and governments have a lot to do in this area, there are bodies such as NQA, but I do not think anybody knows how things work thus creating a lot of confusions as to how we actually will learn”.* The above feedback provided clear evidence around the lack of transparent information as to who does what and where information can be accessed. Although there were some well-established organisations that held details on vocational



qualifications, the feedback indicated a blockage between potential students or organisations to access information. What research question #1 indicated was that these difficulties needed to be explored and understood to help define a mechanism that would establish an apprentice scheme. Furthermore, these types of challenges must be understood, especially the types of bureaucracy that will be faced when developing a fit for purpose apprentice scheme within the UAE (research objective #3).

#### 4.3.4.10 Financial Commitments

Availability and financial support will always be a priority when choosing an academic, apprentice scheme or vocational qualification. For example, questions will surface around how these schemes will be supported, how much will they cost and how will they fit with learning, development, and career aspirations. From this theme there was a need to understand how the financials would be viewed and whether this would be a concern for future implementation plans. Overall, there was a good response that equated to 9%. See table 23 below for examples of participants' headlines.

<b>Financial Commitments</b>	
Commonly used phrases or words contained within questionnaires 4, 5	
<b>Participant</b>	Thinking at a macro level, offering apprentice programs other than manual skill types of programs would be a huge benefit to the UAE, i.e., investment in these would see a significant return
	We are not mature enough to be able to evaluate the outputs, what can be said is the recruitment costs are high and trying to attract people using this program is very difficult
	We have had to put a new cost layer into the business to accommodate for trainers for the apprentices etc. This initial outlay was costly, however, now it has become part of the training budget
	We have already had over 20% attrition in the first year of apprentices and compared with normal recruitment it is double to that figure.
	Salary support and government support required
	Paying for assessors and trainers, because there are only a handful around, we have to pay a premium

Table 23. Financial Commitments Theme

It became clear that there would be several dimensions with regards to developing a robust financial model for the purpose of implementation. What the participants indicated, was that the employers, if having to add another cost layer within the business, especially in tight times where margins are being squeezed, there could be a great deal of pushback. To further

compound this, the limited access or availability of assessors and trainers would be an issue, which meant the employers would then be faced with another cost burden, thus potentially paying premium 3<sup>rd</sup> party rates.

#### ***Employer PI<sub>10</sub> feedback***

These new direct cost layers are a major concern, linked with this there was also a concern shown around attrition and the longevity of apprentices staying within the business. Participant PI<sub>10</sub> reinforces this with the below comments.

*“As explained, if we do not get government support then we run the risk of high costs, then we have to consider whether the program is worth moving forward with and embedding into the organization”.*

#### ***Employer GEMSA<sub>12</sub> feedback***

Financials will play a huge part in this arena which will require a huge amount of research and governmental support. Participant GEMSA<sub>12</sub> indicates the burdens employers already have and indicates without financial support these programs would not be easy to embed.

*‘There are real pressures on us as organizations already, and to then take on a scheme that has limited backing financially would be yet another burden on us, if there was support, then we would consider implementing apprentices.*

The above feedback indicated that the financial pressures as an individual organisation would be a huge burden, if no help is to be provided from a government or ministries, implementation would be almost impossible. These pressures helped quantify the need for financial transparency especially if there became a clear directive to embed apprentice schemes or vocational qualifications. This clarity will need to be developed around how apprentice schemes are to be funded and where this funding would come from, which was indicated within the research objective #3 and research question #2.

#### **4.3.5 Conclusion**

The purpose of stage 1 was to gain insights using the participants knowledge and experiences in and around apprentice schemes and vocational qualifications. Secondary to this was to understand the potential gaps in the data and to test the overall validity of what had been shared.

Based on this, stage 1 provided a clearer understanding of the challenges, these challenges linked perfectly with the research objectives and research questions where participants provided examples of concern, such as awareness and the overall stigma that currently existed, with additional examples that highlighted optimism around apprentice schemes and vocational qualifications.

Further to this, 3 headings from the stage 1 questionnaire data were developed that became catalysts for the stage 2 process, which were:

- Stigma
- Employer Adaptions
- Appetite

These headings were then used to recruit and focus purely getting the right subject matter experts for the semi-structure interview process.

## 5. Chapter Five: Research findings – Stage 2

### 5.1 Introduction

This chapter created a link with chapter 4 which aimed at providing critical insights into the questionnaire data captured during stage 1.

What figure fig 26 provides was the approach and process used during stage 2, which would be considered as an overall continuation of the findings chapter.

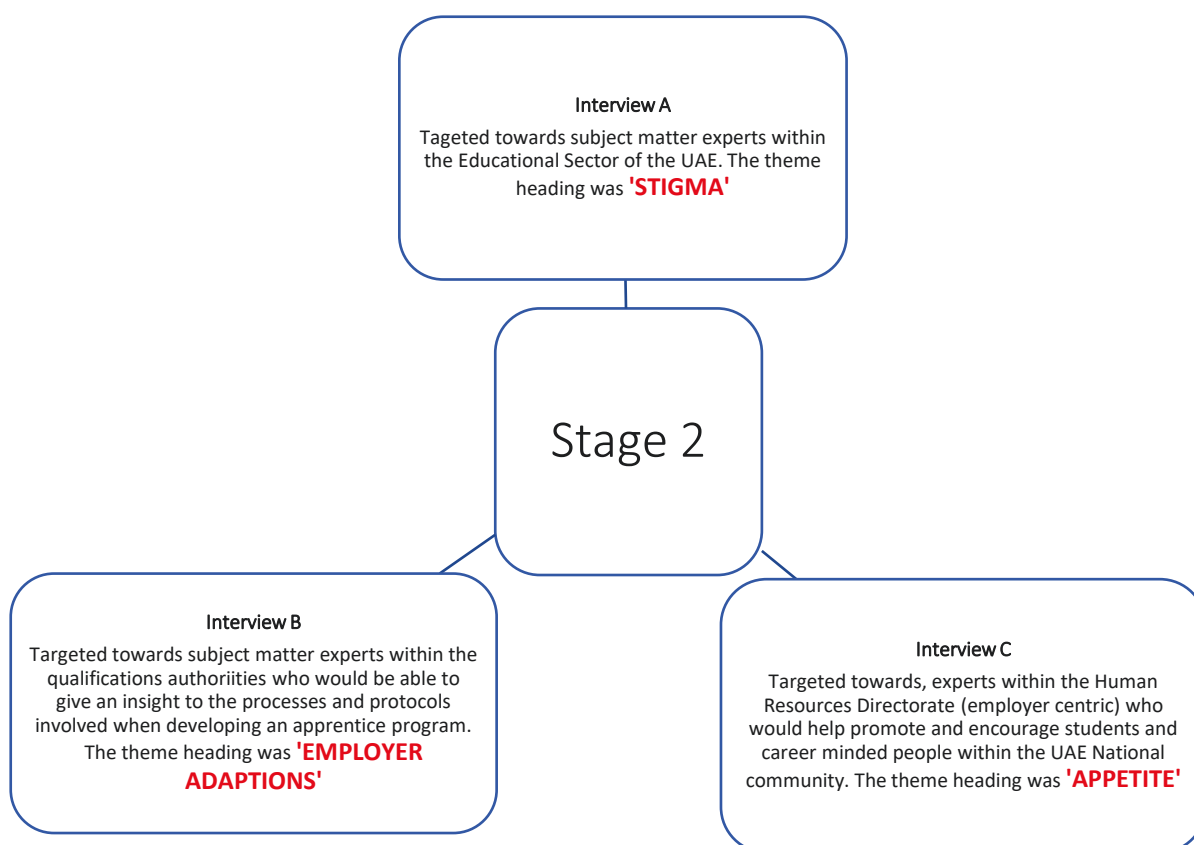


Figure 26. Research Findings Stage 2

The data that was captured within stage 1 was analysed to help develop headings, these headings were, stigma, employer adaption and appetite which became the method to help capture and explore what would be best described as the critical missing links to develop a robust and valid set of data for the final findings. As such the semi-structured interviews were then individually structured and targeted towards occupational, pre and post career and educational categories to further validate the outputs developed from stage 1.

## 5.2 Collecting the data (Stage 2)

This second stage clearly became an integral part of the data collection process towards capturing trustworthy and valid information. The stage 2 approach used the same ethos as was used in stage 1, which was to ensure there was an ethical and transparent process was used to engage participants in readiness for the interviews. Based on this, a final review of the stage 1 outputs was then aligned in readiness for the stage 2 process, which included 3 subject headings that required further exploration, as highlighted in Fig 27.

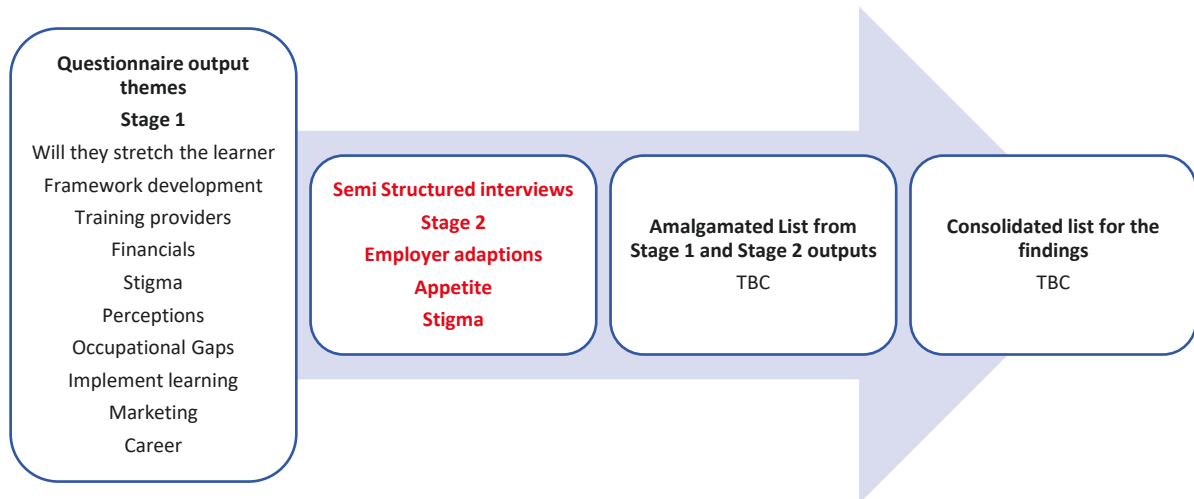


Figure 27. Captured Data, stage 1, and headlines for stage 2

## 5.3 Understanding the recruitment phase for Stage 2

Firstly, efforts were made to understand the type of organisation and the background of the individual that needed to be recruited. As mentioned, this recruitment was based on the 3 subject headings that were developed from the stage 1 process, which required a certain level of expertise along who could add value and provide experiential insights to this research and allocate sufficient time for the interview. The individual needed to be holding a leadership type of role who was of good standing and operating within the sphere of expertise that would help provide a richer and deeper insight to the allocated themes. The recruitment process and interpretation processes are shown in Figure 28.

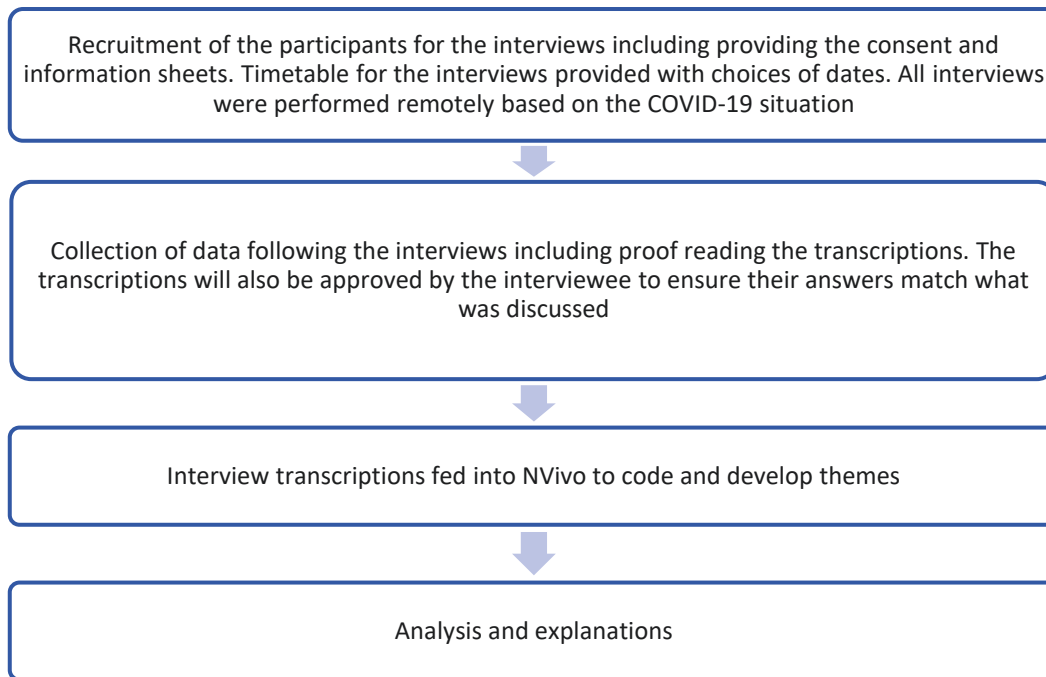


Figure 28. Recruitment and interpretation stages

Secondly, the verbatim collected was then transcribed from the semi-structured interviews and was screened in a trustworthy and robust manner. This meant that all the transcriptions that were developed were then sent back to the respective interviewee for verification and validation of the content.

Thirdly, once the transcriptions were validated and sent back to the researcher, they were then fed into the NVivo software for coding and theme creation.

As with stage 1, the same consistent process was followed for stage 2, which meant uploading the collected data into the NVivo system which ensured a consistent and robust mechanism was adhered to.

Finally, once the uploading of the interview documents was completed and the coding was finished, extracts from the data and overall analysis of what had been obtained, was ready to present. To avoid conflicts or compromises based on confidentiality, the data presented used a prefix letter to identify the interviewees rather than names.

## 5.4 Understanding the Stage 2 themes

This section provides an insight to the themes that were explored and exposed during the interviews. Furthermore, this information was then used to develop an overall synthesis of data from both stages.

### 5.4.1 Stage 2 Interviews

#### Interview 1 – Stigma theme

The purpose of targeting the educational sector was to explore the current vocational structures within the UAE and how these could potentially be adapted or enhanced to include apprentice schemes. This semi-structured interview covered 6 key questions (Appendix 8) which enabled the interviewer and the interviewee to create a meaningful discussion, which was to explore the headline theme ‘stigma’ (Fig 29.). The interviewee, for this section, was known as ‘A’, who has a strong background in the education sector within the UAE and has worked with awarding and accreditation bodies both regulated and non-regulated, with such credentials ‘A’ was ideally placed for this interview. The questions that were presented explored areas around the UAE educational vision and future landscape, implementing, and embedding apprentice schemes, appetite, and the assumptive stigma around vocationally led apprentice schemes. As an overview, Fig 29 provides insights to the depth of the responses to the interview questions. With high value responses placed against stigma, marketing and communications, government intervention and appetite.

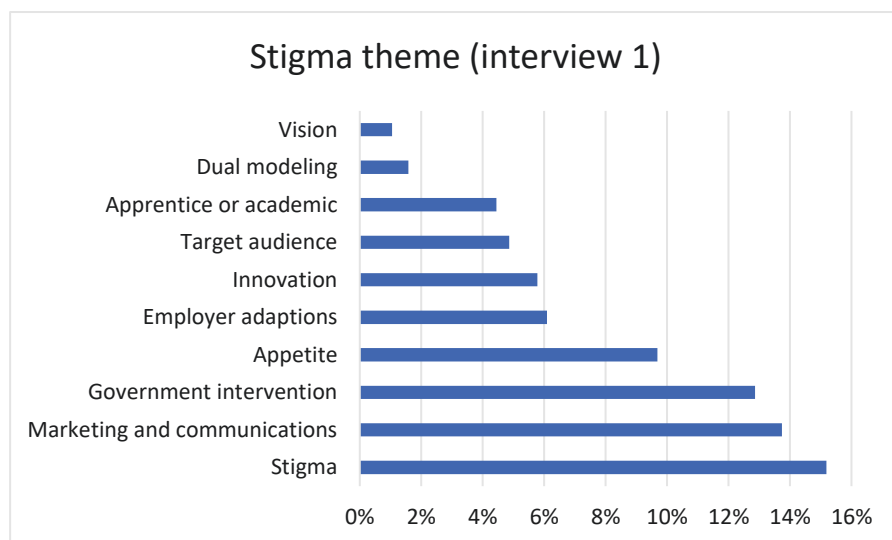


Figure 29. Stigma Theme

To further support these headlines the below comments were extracts from the interview.

### **Feedback ('A')**

In this example extract, 'A' described the need to brand these types of programs in a better way and make them more impactful and eye-catching. Further to this, it was clear from the discussion that people will connect better if they understand how and what they are benchmarked with. For example, global data should be used more effectively just as is the case when choosing a university.

*"I feel more work needs to be done about how the programs are branded and marketed, communication, benchmarking and connecting with people are all huge factors in this domain".*

### **Feedback ('A')**

What made this example pertinent for this research was the fact that an educational expert was stating how the process sat with regards to the bureaucracy, speed, and agility to then be able to implement. Doubts were even cast over the eagerness of going through such processes, which basically linked with overall value to the end user.

*"The educational bodies are not aligned and have very bureaucratic processes that would put off the best, it can take over one year to have one qualification approval and that's after many committees, etc. worthy as an end user – I don't know!"*

### **Feedback ('A')**

The next example was very powerful in the sense that it highlighted the issue around stigma and the reasons why 'A' felt it existed. Most importantly the comments steered more towards the culture that existed within the educational domains and perhaps why these stigmas do exist.

*"I feel, stigma is there, and that stigma is mainly based around culture and how the population, specifically the UAE Nationals perceive such qualifications along with how they will map their careers. Most people do not understand the term, vocational and whatever comes with it, e.g., apprentice schemes, and those that do believe in these tend to connect with labour-intensive occupations like construction and engineering".*



The strength of this interview was the overall honesty, 'A', certainly did not hold back when it came to challenging the rigid processes and cultural issues that will be faced with whilst considering designing and implementation of any type of vocational program.

To summarise, it became clear that there would be difficulties with regards to establishing apprentice schemes in the UAE, as indicated by research question #1. This feedback indicated that a huge amount of emphasis must be placed on how issues such as bureaucracy, how the vocational routes are perceived by the end user, and as importantly how the academic institutes and government entities need to be better engaged within the overall governance of the qualifications. Considering the research objectives, in particular research objective #3 which mentioned what parameters and challenges will be faced, it became clear that the integration of apprentice schemes into the current system will be a huge challenge.

#### **5.4.2 Stage 2 Interviews**

##### **Interview 2 – Employer adaptations theme**

The Human Resources Directorates serves numerous purposes, one of which is being a liaison point for employers within the private and the public sector. The importance of this interview was to gain an understanding of what private sector employers are taking into consideration with regards to future employment needs, inclusive of talent types, qualifications, experiences, and costs.

This interview, which was in English covering 4 key questions (Appendix 9) which enabled the interviewer and the interviewee to create a meaningful discussion and explore the themes set out in Fig 30. The interviewee, for this section, was known as 'K', who had a strong background within the industry and most recently became an advisor to the Human Resources Directorate in Sharjah, which is one of the 7 Emirates. 'K' has extensive knowledge in talent management and development both in the private and public sectors, therefore 'K' was able to cast an experienced light on the interview questions.

The information presented in Fig 30 provided insights to the depth of the responses to the questions. With high values placed against financials, employer adaptations and marketing and communications.

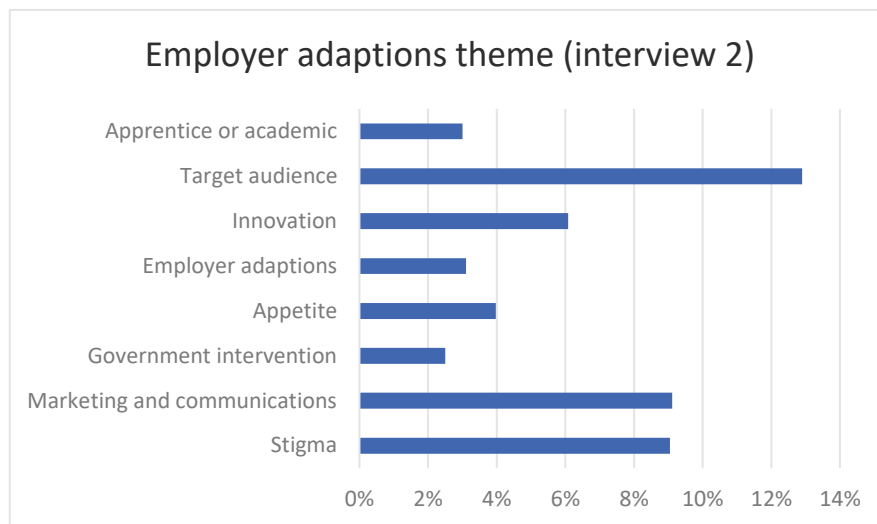


Figure 30. Employer Adaptions Theme

### **Feedback ('K')**

One of the initial questions was based around the challenges employers will face if they were to introduce an apprentice scheme, which included the perceived financial implications.

*“Costs have a significant impact on the way the private sector attracts and retain staff, most of the positions we try to attract are functional staff and I cannot see the relevance or a fit, after all, what I know is to be an apprentice you are best suited to engineering or construction”.*

With this response a lack of clarity was unearthed as to what could be offered in respect of apprentice schemes or functionally related vocational qualifications. What ‘K’ was intimating was that there was little use of offering such programmes based on an assumptive lack of fit with the needs of the private organisations within the UAE. One other important factor that was highlighted was how the financials, even access to paid scholarships could have a negative impact on how organisations would engage with the implementation of apprentice schemes, will create challenges in the future.

### **Feedback ('K')**

Whilst being questioned further, ‘K’ further expanded by stating the following:

*“I would say the challenges the private sectors face as a business is around financial support, they need to also understand what programs are available and the numbers that would potentially be involved”.*

Albeit there could be scope to develop these, ‘K’ still qualified the overall financial burden will been an issue.

This burden could be diluted or be viewed as a smaller concern if there was clarity provided based around what government, institutional and employer support will be given. The burning question was whether these schemes would be mandated? If this would be the case, then such mandates could be viewed in a negative way and would place unnecessary constraints on organisations that already have to align themselves with employing Emiratis as first choice candidates.

### ***Feedback ('K')***

The next question explored the 'fit' of such models, such as apprentice schemes, and vocational qualifications, not only from a functional perspective but also to understand the overall longevity and value. As the literature already highlighted, apprentice schemes have been reinvented many times, as such, would the UAE be ready to have a continuous development plan running alongside such schemes!

*"The main issue is based around understanding and how they would fit into with current talent or organizational structures. Most organizations already invest a great deal of money in developing staff, which equates to around AED 5M per annum".*

*"I feel the apprentice scheme could be not only a burden on these costs but also they could be one of those, flavours of the month, meaning does it have longevity".*

Here, 'K' questioned how private sector organisations would utilise and then fit such programs within their budget, for example, would they reallocate budgets or develop a model that allocates financials to apprentices! Or would organisations re-align their budgets that purely focus on learning and education streams such as vocational qualifications and apprentice schemes. One of the most interesting points shared was around longevity, 'K' mentioned how apprentice schemes have evolved in different countries and wondered whether the UAE has this kind of educational space to absorb these, again linking to a desire to become an apprentice whilst overcoming the stigma of the name.

### **Feedback ('K')**

This next example 'K' provided was around clarity and understanding about the marketplace, what 'K' mentioned was the challenges and risks towards implementing an apprentice scheme.

*"What I know and understand is that apprentice schemes have been successful in countries that have an established vocational base, mainly because they are already part of the government's mandates and part of the industrial and educational culture. The word apprentice or vocational is readily accepted and not many people do not know what they are outside of the UAE, on the contrary, the UAE people and governments lack that clarity, there are pockets of knowledge, but these are so rare that their voice would not be heard easily".*

This was a great example of the potential issues that would be faced, what 'K' mentioned that the UAE government would need to understand how to overcome the cultural stigma, and even the educational stigma to move forward. 'K' goes on to say that:

*"Targeting graduates could be troublesome based on their expectations and ambitions and of course salary, benefits, and career advancement expectations".*

The above comments further reinforced the fact that the UAE academic educational landscape was well-entrenched, therefore, to establish apprentice schemes with connectable vocational qualifications would be challenging, where there would be a definite need to produce something very special to overcome this. What became apparent, which was aligned with research objective #3 and research question #2 was that a great deal of focus and efforts would need to be made towards the financial impacts and what financial commitments will be required to start this journey. The findings from this interview raised further concerns about how such schemes will be funded both at an end user level and government level.

### 5.4.3 Stage 2 Interviews

#### Interview 3 – Appetite theme

The final interview targeted an individual from one of the qualification bodies within the UAE, either the National Qualifications Authority (NQA), the Abu Dhabi Vocational and Technical Institute (ADVETI), or the Knowledge and Human Development Authority (KHDA). The aim was to try and understand why apprentice schemes were at such a low level in the UAE and why vocational qualifications were challenging to develop, qualify and embed. The search availed access one of the key decision makers within the Knowledge and Human Development Authority, known as KHDA. The individual known as ‘T’ has a strong link within KHDA and the NQA. ‘T’ has extensive knowledge in and around National Occupational Skills and Standards (NOSS) therefore was able to clarify the challenges not just from a learner’s perspective but also from a provider’s perspective.

This interview covered 4 questions (Appendix 10) which enabled the interviewer and the interviewee to create a meaningful discussion to explore the themes set out in Fig 31.

The information presented in Fig 31 provides insights to the depth of the responses to the questions. With high values placed against employer adaptations, appetite, marketing and communications, stigma, and government intervention.

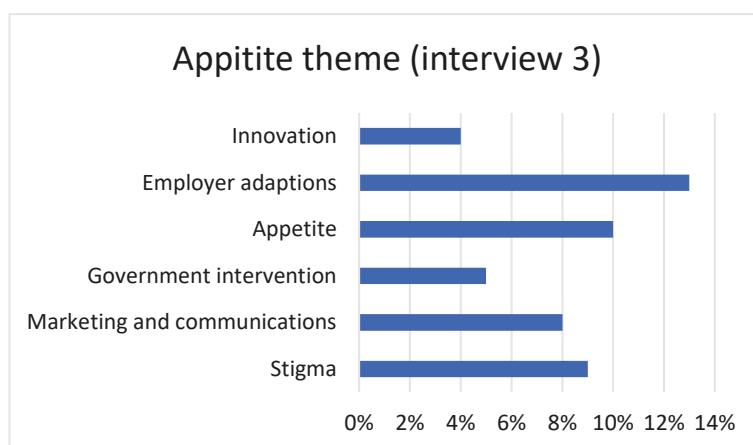


Figure 31. Appetite Theme

### **Feedback ('T')**

The purpose of this interview was to explore the reasons why the UAE had not fully embraced apprentice schemes or at worse, was not able to develop what was required to develop a scheme that could be seen as a fit for purpose model.

*“One of the big challenges we face is ownership of the process, funding as in financial stimulus packages and marketing support which also means representation from all of the 7 Emirates. Because of this, I feel it is not just the learner where the fault lays it is more about how and who provides the training and back up, with very few providers it limits us a lot, not only that, but this also means that it is then difficult to introduce new programs like apprentice schemes”.*

With this example, a degree of clarity started to appear, which highlighted the fact that the UAE does have a qualification body that can help drive apprentice schemes forward which already has enough knowledge to make things happen. However, the challenges are around who will do what, who will take responsibility and which providers have the ambition and financial stability to move apprentice schemes forward. 'T' was very clear by indicating that the infrastructure exists, but the challenges outweigh the benefits.

### **Feedback ('T')**

Following on with this line of questioning, 'T' was asked about how the culture and current academic status of the UAE would view such moves towards vocational pathways, with a focus on apprentice schemes.

*“We are proud of our academic institutions and believe we can hold our heads up high in this arena, especially with the strong networks of universities we have. This success has a positive and negative impact on our work at KHDA and the NQA, especially around the vocational route. The positive is that students have a desire to learn and do spend a lot of time and money to ensure they get the best education. The negative is that these same learners struggle with understanding the value of vocational qualifications, they seem to believe they are second degree and hold limited CV or career value”.*

Here, the cultural issues started to surface, i.e., apprenticeships, vocational or academia. The UAE nationals are proud of what they have in respect of the standard of universities and will find it difficult to allow this to be, in their view, diluted or cast aside by vocationally driven

qualifications. Students are seeking value for what they do, and the UAE wants to uphold its academic standing.

### **Feedback ('T')**

Closing this interview, 'T' was asked whether, there was a place, or room to develop a fit for purpose apprentice scheme.

*“There is room, however, the culture needs to change, the acceptance level of such qualifications and learning experiences needs to be accepted and most importantly the longer-term vision and value of these schemes need to be developed and cascaded to both the public and private sector. I admit, there is some work to be done at the ministry level where these schemes can become choices for students rather than add-on programs. My personal feeling is that once people see these as having value and see them as a career development and qualification-enhancing tool that enriches their current qualification standards, then and only then the culture will break”.*

From the above statements, it was beneficial and good to hear from an embedded expert who had believed that the cultural issues needed to be faced head-on, which was mentioned within research question #1, visibility and understanding would be critical to develop a robust mechanism, as was also highlighted in the research objectives #3 and #4.

One other reason shared by 'T' was that of the longer-term vision of the UAE, which was to produce vocationally qualified people, if this vision does have longevity, then this research should be considered. The UAE already knows of this vision with regards to vocational qualifications, however, the reality was that this has not yet been brought to life. The positives extracted from this interview session was that 'T' visualised the value and believed people would experience true value once these programs are packaged correctly and seen as a learning and development tool and career enhancer in longer term.

#### **5.4.4 Conclusion**

Reliability and trustworthiness have been one of the key factors behind having a two staged approach, stage 1 helped to develop a contextualised view of how individuals and organisations understood the vocational landscape and the overall fit within the UAE educational landscape, which then progressed further using the findings from stage 1.

Clarity of gaps appeared once the data had been analysed that helped to produce focused headings in readiness for the semi-structured interviews. This meant that the semi-structured interviews were focused using powerful and valuable outputs from stage 1 of the process that helped develop a greater understanding of the types of challenges that will be faced. To further enhance and understand these two sets of findings. The next section synthesized the findings with an overall objective to build a framework that would be developed into a meaningful discussion linked with the outputs of the literature review and research objectives with an overall end goal to answer the origins of this research paper.



## 5.5 Findings – Synthesis of Stage 1 and Stage 2

### 5.5.1 Introduction and purpose

The purpose of having two stages was to ensure enough data was collected to develop a meaningful and valuable research paper that added real value, whilst creating an understanding of what gaps would need to be bridged to further develop the apprentice scheme concept in the UAE. As such, this synthesis brought together the main themes that were extracted from stage 1 and 2, which will then be linked with the discussion section of this paper. This synthesis worked through the following headings (Fig 32.)

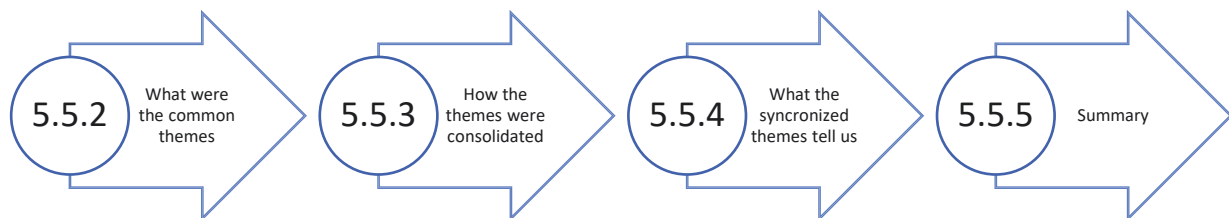


Figure 32. Synthesis Process

### 5.5.2 Common themes

One of the first phases of this synthesis was to understand what themes had been extrapolated from both stages, including the percentiles which in turn provided a visual of the common themes, including the highest and lowest responses that were recorded, which are displayed in Fig 33.

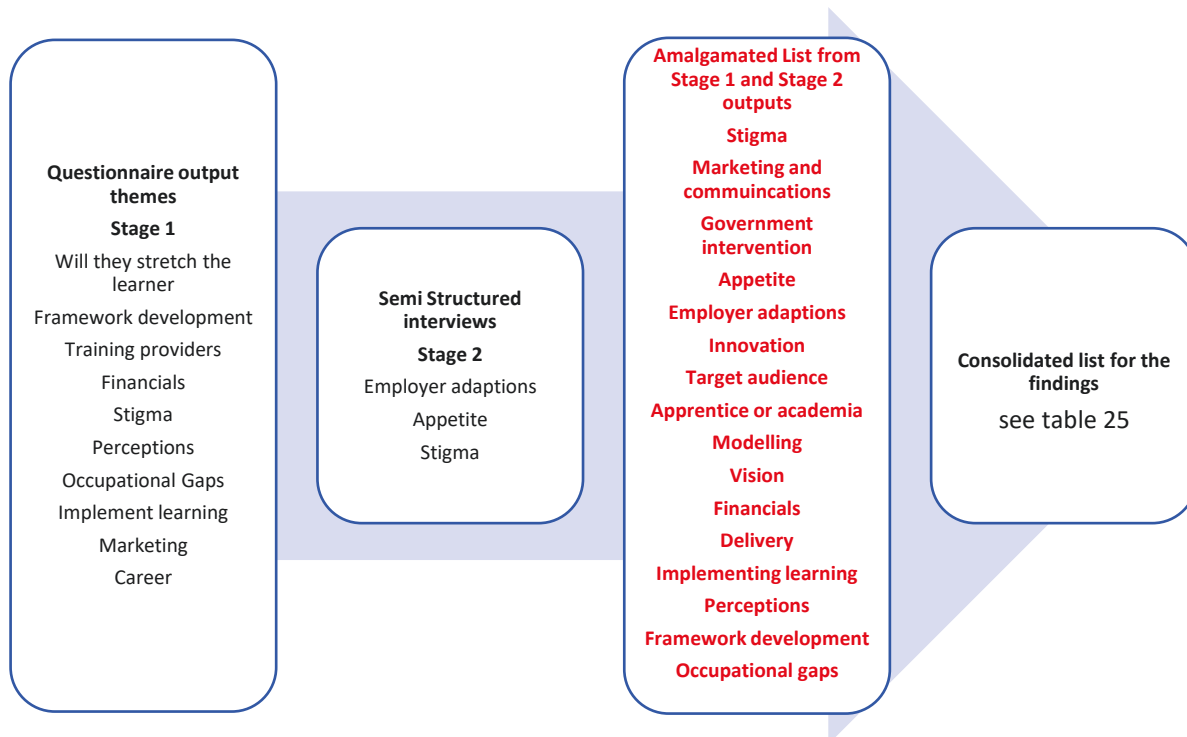


Figure 33. Data capture amalgamation of stage 1 and stage 2

For this exercise, 16 themes (Fig 33.) were developed based on the outputs from all the five questionnaires (stage 1) and the 3 semi-structured interviews (stage 2). Once the 16 themes were produced, an understanding of the bigger picture started to unfold that provided enough evidence to consolidate towards the next stages. Based on this, a consolidation of all the 16 themes exercise was adopted linking relatable themes. Based on this, table 24 provided 3 sets of data.

- A list of the 16 themes.
- A ranking list using the response frequency from both stages.
- A final ranking based on the consolidation of the themes.

The main aim of this exercise was to draw themes that had some form of correlation or relationship with others, for example stigma and perceptions worked hand in hand based on the outputs collected from stage 1 and stage 2, and so on. The only exception was the financial theme that became a stand-alone theme as there were no other interconnecting themes.

Themes	Ranking Level	Amalgamated Themes
Stigma	4	1
Marketing and Communications	1	2
Government Intervention	9	5
Appetite	5	2
Innovation	10	2
Apprentice versus Academic	7	5
Financials	5	3
Implementing Learning	3	4
Perceptions	2	1
Occupational Gaps	8	4
Employer Adaptions	12	No rank
Delivery	11	No rank
Target Audience	13	No rank
Dual Modelling	15	No rank
Vision	14	No rank
Framework Development	16	No rank

Table 24. Themes Amalgamated

### 5.5.3 Consolidating the themes

Establishing the list of themes was a first step towards consolidation, having the list of 16 themes enabled the rationalization of certain themes that had similar meanings or commonality. Through this, a concentrated and focused approach was used to produce a succinct set of themes that had connected and meaningful relationships and thus produced a set of ‘post-consolidation themes’ (Table 25.) which in turn helped to develop a rich discussion.

Post Consolidated Themes	Amalgamated Themes in order of priority
Stigma & Perceptions	1
Marketing and Communications & Appetite & innovation	2
Financials	3
Implementing Learning & Occupational Gaps	4
Apprentice versus Academic & government intervention	5

Table 25. Consolidated themes by order of rank

The themes that were brought together were:

- **Stigma and perceptions – linked with research objectives #2 and #4, (#1 in Table 25.)** were brought together as there was a definite fit for both to be developed as one theme, for example, the word stigma was often used to describe strong disapproval, which came from an individual's perception of a situation.
- **Marketing, communications, innovation, and appetite – linked with research objective #4 and research question #2, (#2 in Table 25.)** were also brought together as they all produced a strong relationship with each other, for example, marketing cannot be implemented well if the communication was below average, where appetite cannot be generated without providing a clear need and understanding of the product, including using new and innovative ideas, therefore appetite becomes the most fitting theme.
- **Implementing learning, delivery, and occupational gaps – linked with research objective #5 and research question #3, (#4 in Table 25.)** three themes were consolidated based on the implementation of learning, where the outputs were the ability to consistently deliver quality programmes. However, the caveat was to be able to deliver the learning, whilst providing access with regards to occupational types including access to subject matter experts
- **Apprentice routes versus academic routes, government interventions (#5 in table 25)** linked with research objective #2, #4, #5 and the research question #1. It became clear that there was a gap, this gap needed to be reduced using high level authorities such as governments, ministries, and all levels of learning institutions.
- **Financials (#3 in table 25)** linked with research objective #3 and research question #2.

All this information was based on the participants response rates from both the questionnaires and the semi-structured interviews.

#### **5.5.4 What the synchronised themes produced**

Bringing together the questionnaire and semi-structure interview information was to help develop a purposeful and meaningful insight as to how this research was now being brought to life. Developing and rationalising the themes was only part of the macro view of what was required to bridge the gap between academia and apprentice schemes in the UAE.

Based on this, a critical analysis of the six post consolidated themes was carried out that helped to contextualise and link with the findings, the research objectives, the research questions, and the literature review, all of which facilitated a platform that strategized the discussion and conclusion of this research paper.

The information below provides a sequence of the reviews based on a critical insight of the post consolidated themes.

#### **5.5.4.1 Implementing learning, delivery, and occupational gaps**

This new theme represents three areas:

- how learning is to be implemented.
- how the learning is to be delivered.
- and what occupational gaps exist.

What had surfaced from a positive perspective was the fact that there was a definite appetite to implement the theory that had been learned within the workplace. However, the challenges coming from the data indicated that the delivery and the occupational gaps, which means the choice of programs were either non-existent or lacked depth. These created challenges based around the lack of resources to deliver functional types of learning, especially in areas where there are new demands or new qualifications required will be limited. To further put this into context, there was evidence that a definite need to cover other types of occupations, since apprentice schemes globally already have a strong connection with manual types of jobs. This created a real challenge and void in the offerings which would inevitably lead to issues around attracting functionally based occupations to use apprentice schemes.

#### **5.5.4.2 Stigma and perceptions**

Stigma and the overall perception of apprentice schemes and vocational programs does exist, which had been evidenced many times throughout this research. Examples such as a lack of learning opportunities, comparisons with academia, overall value to the career minded individual, and recognition of what the qualifications truly means to user and organisation. These examples generate perceptions and stigma that need to be explained whilst offering solutions. Also, the feedback suggested that family culture played a significant part in how these programs are being perceived especially when choosing the type of occupation and qualifications were needed for their own or children's future. These perceptions acted as a

catalyst in people's minds based on a lack of understanding and a lack of what is believed to be a true value to the individual.

#### **5.5.4.3 Marketing, communications, innovation, and appetite**

This theme linked closely with how apprentice schemes and vocational programs were being perceived in the UAE, which had been supported with comments based around clarity and various differentials such as, what was an apprentice scheme and how do they compare to other more favourable academic qualifications. What became clear from the feedback was a need for the UAE to develop a marketing and communications strategy that helped remove the assumptions where the information helped to provide awareness and clarity in, and around vocational qualifications was readily available. Because of this, there was an overall lack of clarity that helped individuals make educational choices, which meant that a robust mechanism that creates an appetite and attract UAE Nationals would need to be of paramount importance. This will require some detailed thinking as to how best these schemes can be marketed using the most up to date and innovative ways

#### **5.5.4.4 Financials**

The financial challenges covered a broad spectrum of interpretation, in respect of, what these financial challenges would be for the students and the employers. From a student's point of view, there seemed to be a lack of clarity of what fees would be paid by the ministries or governments and what kind of support would be provided outside of these two entities. Likewise, as an employer the financials were being seen as either an additional cost burden or an additional investment, an investment employers viewed as an additional resource that would be required to implement and deliver apprentice schemes. The evidence indicated the need to understand how apprentice schemes would be supported or funded now and, in the future, for example, would the UAE government provide financial assistance especially if the apprentice schemes were to be mandated, and likewise would the employer be provided with support to fund vocational awards connected with the apprentice schemes. This area was clearly one of the biggest challenges to overcome, where further research would be deemed as appropriate to understand the real financial impacts and implications.

#### **5.5.4.5 Apprentice routes versus Academic routes, and government intervention**

Several key issues have been extracted from the feedback:

- firstly, participants were concerned over equivalency and how they will be recognised within the workplace.
- secondly, the overall value of being an apprentice.
- thirdly, how this experience sits within their career path.
- fourthly, how would potential apprentices 'break' through the cultural stigma with their families and friends if they wanted to progress towards this route.

What the feedback indicated was that academic qualifications hold a great deal of power and presence within society and the corporate world especially within the UAE. This in essence has developed a degree of uncertainty as to whether apprentice schemes or vocationally driven qualifications would ever hold the same status. Based on this evidence, the UAE ministries would be required to intervene at the highest possible level, where a new type of research would need to be sponsored to understand this landscape better. Overall, the ownership to make this happen lays firmly with the government bodies and associated entities.

#### **5.5.5 Summary**

Throughout the analysis, synchronization, and post consolidation phases, it became evident that the two-stage approach was the best approach. Overall, the consolidated themes became catalysts towards developing not only meaningful outputs but more importantly creating links towards the development of a robust discussion section, which in turn helped to provide a way forward based on the theme of this research, i.e., bridging the gap between apprentice schemes and traditional qualifications in the UAE. Finally, the biggest value and impact on this research so far was the post consolidated themes. They have been succinctly and effectively developed to provide data that was robust and rich, which in turn provided a unique implementable strategy, not only for the UAE but also for other countries who have similar visions around the implementation of apprentice schemes and vocational qualifications. What became evident from these themes was the depth and breadth of information generated which started a new pathway to being a valuable commodity and a progressive way forward.

## 6. Chapter Six: Discussion and Conclusion

This final chapter binds this research together and synthesises critical details to move forward.

The contents of this chapter (Fig 34.) consist of:

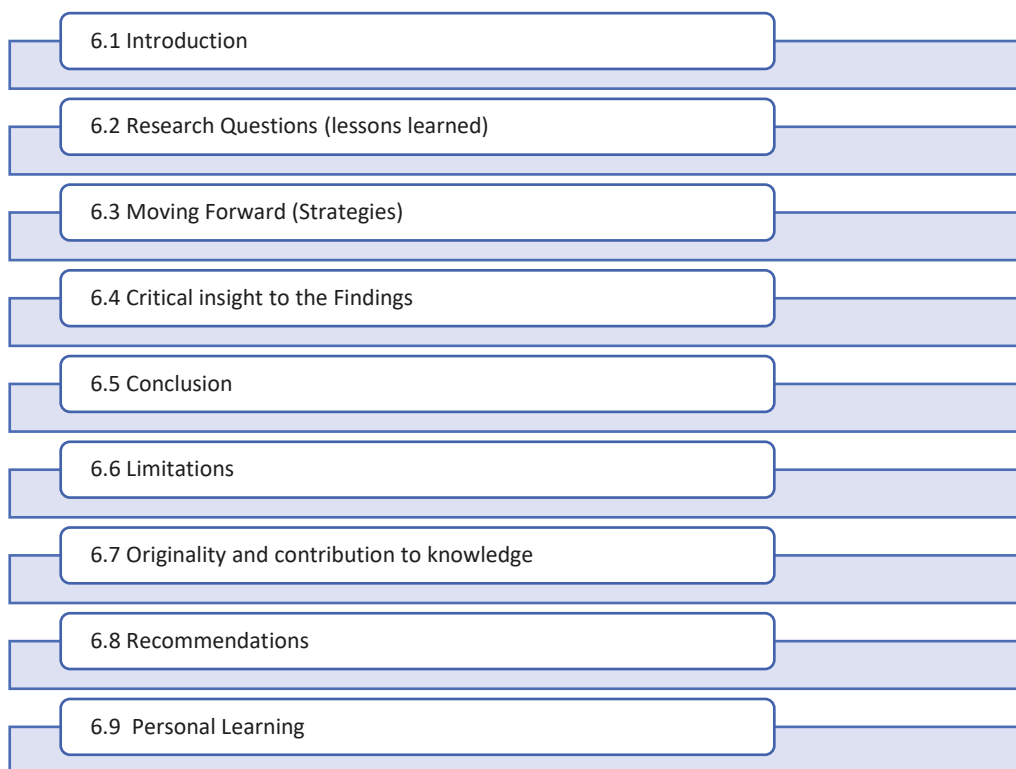


Figure 34. Discussion and Conclusion Flow

### 6.1 Introduction

The initial introduction to this thesis emphasised that the employment landscape globally was changing rapidly (Chesters and Cuervo, 2019). These changes would require individuals to be better prepared through utilising the best educational mechanisms, whether through an academic, vocational, or apprentice route. Literature supported the challenges that lay ahead, predominately focusing on the 4<sup>th</sup> industrial revolution, which mentioned critical areas in learning and development and talent movement globally would have significant repercussions on societies that are not ready. Further to this, new research not only supported these challenges but also introduced the 5<sup>th</sup> industrial revolution, which had been an output from the changes brought by the COVIC-19 crises. These changes supported the very idea of working and learning differently and challenge organisations and institutions to re-think their internal methodologies (Kumar Pandey, 2020). Based on these, It was been recognised through this research that the UAE would need to consider its educational position,



specifically based on what gaps exist within the academic and apprentice types of schemes with an overarching aim to see if these gaps could be bridged and meet future needs (Aggarwal and Aggarwal, 2021).

The literature provided an insightful global and historical viewpoint of the development of apprentice schemes including their fit within the economic and educational landscape within the UAE (Gessler, 2019a). However, what was recognised throughout the literature review was an indication that apprentice schemes were at an extremely low level within UAE. This viewpoint was further amplified through firmly entrenched cultural views and the historical dominance of academic institutes and academic types of qualifications from within the UAE. Base on this evidence it was pertinent to address and understand what barriers existed with a view to develop a sustainable way forward (Whiston *et al.*, 2017).

Surveys were performed remotely using on-line questionnaires and semi-structured interviews focused on exploring the knowledge of subject matter experts, were performed face to face and virtually. These experts were recruited based on their work experience and qualification experiences in both academic and vocational settings, along with employers who also had these experiences. These important factors acted as catalysts to help provide critical details that would provide an understanding of the challenges and to help answer the objectives and research questions of this research.

## **6.2 Research questions revisited**

For this section, the three-research question were reviewed from a 'lesson learned' perspective and aligned with this discussion. To support this section, references were also drawn from the conceptual framework (Table 3.) where the three research questions were embedded.

### **6.2.1 Research Question 1.**

*“What difficulties will become visible and what will need to be overcome to establish an apprentice scheme in the UAE?”*

For this question, it was useful to really understand the depth of the challenge, which was initially embedded within the conceptual framework using the 4 dimensions. As a reminder, these dimensions helped to illustrate the challenges and difficulties that may be held within the research questions. This research question was part of dimension 1, 2, 3 and 4 (Table 4, 5, 6 and 7.) where challenges such as, appetite from the educational and industry sector

required exploring. Issues such as fit for purpose models and ministerial approvals all helped to develop the required data to answer this question. Based on the thoroughness of the data collection process, and the final post consolidated themes that subsequently were developed into five key strategies (Fig 35.) This research question helped to extract various commonalities that provided a way forward and answer this research question, for example, difficulties in terms of how culture, communication, stigma, a lack of awareness or understanding of what apprenticeships are and finally, how a mature and fully entrenched academic system is clearly influencing progression in this area.

### **6.2.2 Research Question 2.**

*“What financial framework will need to be developed, for example, subsidies, employer, and governmental support, which will ensure fiscal longevity”?*

This research question was part of dimension 1 and dimension 2 within the conceptual framework (Table 4 and Table 5.), where financial support questions were explored. For example, what types of funding mechanisms will be required and then, how can these examples be used within the UAE. From the literature there are many countries globally that are applying financial stimulus packages in the form of levies or training funds. However, due to the lack of contextualised data, specifically around how funding could be provided and who will be the responsible stakeholder, there is a need to develop more research in this area. Clearly, there is sufficient information to reinforce this research question as being valid and valuable, however, and based on the global benchmarks, it is appropriate to present from further research, a financial framework that is the best fit for the UAE.

### **6.2.3 Research Question 3.**

*“Will tutors need to be trained or equipped differently to deliver VET inclusive of apprentice schemes”?*

This research question helped to provoke and understand whether there will be different skills sets required to deliver and assess these programmes. Held within dimension 2 of the conceptual framework, an understanding through the literature review was required. Based on the outputs of the literature review, the findings and the five key strategies (Fig 35.), the answers that were becoming clear was that trainers, assessors and institutes will need to develop a robust mechanism that provides the necessary tools to deliver what is required. Clearly what the findings indicated was a lack of vocational skill sets from tutor and a low

number of institutes operating in this arena. What this research question provoked was not only an insight, but an understanding that this would need to be an agenda item to develop meaningful, accredited, and subject matter experts across all disciplines to fulfil this necessity.

### 6.3 Moving forward

To move forward, the overall aim was to present and develop a holistic and pragmatic discussion that would not only change mindsets, but also generate a powerful understanding of what needs to be taken into consideration when wanting to initiate or embed new educational programmes, such as apprentice schemes and vocational qualifications. Furthermore, each of the strategies developed provides a connection with the objectives of this research paper, highlighting success or further research that may be required.

The below summary titles are direct derivatives from the post consolidated themes, that has developed a critical look as to how these themes can be moved forward. These themes have been titled as 'strategies' (Fig 35.) where key findings have been critically translated into meaningful transcriptions. In brief the strategies are.



Figure 35. Strategies

### 6.3.1 Learning strategy

The original themes were, *implementing learning, delivery, and occupational gaps*. Early indications highlighted the gaps in the types of occupations that are already creating issues globally, along with understanding what would be required to embed apprentice schemes from a learners and tutor's perspective whilst delivering an effective learning mechanism that adds value.

Implementing learning, its delivery, and understanding the occupational gaps (Dinavence, 2021) is clearly of paramount importance to this research. This importance is further amplified by the vision of the UAE, which is to provide access to vocational qualification routes such as apprentice schemes within the next 10 years. The literature review clearly mentioned that the global economy is changing at such a pace, countries must consider offering apprentice schemes or as a minimum should engage in vocationally focused qualifications (Kirton and Greene, 2015). Furthermore, Lerman (2017) also mentioned the importance of providing access to apprentice schemes across numerous functional disciplines, which must become a learning and development agenda item of any country wanting to provide choices to its national population. This means there must be less focus on manual types of vocational qualifications, and more emphasis should be based around functional occupations, especially in the UAE where the demand would be greater. Taking these factors into account, the data collected created an understanding of the complexities and gaps that currently exists, which indicated a lack lustre approach in utilising different learning mechanisms such as apprentice schemes for its own national population (Zeffane and Kemp, 2019). The current approaches being utilised to use other learning mechanisms also displays a lack of connection between the higher education institutes and the qualification authorities. Having limited choices or reduced learning alternatives will be problematic for those looking for alternative ways to develop themselves, other than using universities as their only route, which is not a realistic option for every UAE National (Trowler, 2010) The feedback also unearthed issues that must be addressed concerning the qualification type and career development opportunities within a chosen occupational group.

Developing these occupational groups will be a challenge for any country, especially with new entrants, new entrants being those who have limited or no experience in apprentice schemes or vocational qualifications. This does mean there has to be a clear understanding of the occupational groups and the needs of the UAE will be critical to implementing this strategy

and its overall success (Attard Tonna and Calleja, 2018). Unfortunately, based on the qualification and accreditation development process being so clumsy and bureaucratically difficult, there will inevitably be huge challenges, these challenges can either be accepted, or discarded. However, based on the need to offer other learning choices, the UAE will need to accept that providing choice of learning and career developed are required (Zeffane and Kemp, 2019). As an example, the current qualification development process can take approximately 12 months to gain approval, this concern is further magnified by the mandates of the NQA who ask for representation from each of the Emirates to be involved in the development of a qualification. This can be a big issue amongst competitors who would need to share information, which in their view is problematic based on giving the competitors the edge. Once developed, this qualification then becomes the property of the NQA and Ministry of Education, whilst this is standard practice for many awarding bodies, this could be seen as an issue to those organisations who have invested time and money to develop a qualification.

When implementing this strategy, the overall purpose of apprentice schemes and vocational qualifications will need to synchronize with not only the vision of the UAE, more importantly, how will they sit within the context of the universities and college networks who already dominate the academic educational landscape of the UAE. Dismore (2014), further supports this recommended learning strategy by stating that achievers in established apprentice scheme countries still have an affiliation towards higher levels of education such as universities, which can be, if implemented, seen a win-win opportunity within the UAE based on the learning and cultural stigma that exists (Scharnhorst and Kammermann, 2020). One of the many positive's insights highlighted by the participants was that they wanted to understand and realise the value they were giving back to their respective organisations. This indicates that employees want to contribute to the overall success of their organisation, through higher levels of performance being produced from the implementation of their learning. Most participants indicated a desire to understand their learning progress whilst progressing through the vocational qualification or the apprentice scheme, which meant they wanted to have better access to subject matter experts to gain clarity as to how they develop and learn more. However, gaining this access will be a huge challenge based on the limited numbers of subject matter experts and a limited number of registered providers within the UAE (Muehlemann and Wolter, 2014). Until this is fixed, there will be issues especially if the portfolio of occupational programs is to be expanded, which will create an even bigger

challenge to increase the available number of subject matter experts and providers. From this learning strategy the macro level overview considered how the educational landscape, both academic and vocational can be re-defined which can create a lifelong learning and career choice starting at an earlier age. The interpretation of an early age is high school students who are about to make their career and learning choices for the future. Finally, there must be an engagement strategy developed where the Ministry of Education and employers to develop an easily accessible portfolio of programs for all types of learners and all learning providers, whether they are academic institutes or vocational, which, based on this research should no longer matter when considering the implementation of this strategy to learn.

### **6.3.2 Stigma strategy**

Initially the original themes were, *stigma and perceptions*, these were recognised as been some of the most challenging themes. This challenge was based on how apprentice schemes would be destigmatised in the UAE, whilst aligning with other academic qualifications.

Stigma and the overall perceptions of any type of learning and education methods outside of the confines of a university, particularly within the UAE have constantly been perceived as a problem area. In the literature, Claxton (2014) used a statistic from the UK which stated that 70% of post-school-age students opt for an academic route, such as mainstream universities. Whilst only 5% progressed towards an apprentice scheme or other types of vocational qualification. Albeit there is no figure to report from the UAE, it can be assumed that most of post-school-age students would opt for an academic route, where much less than the 5% quoted in the UK would opt for vocational education (Markowitsch and Hefler, 2019). Furthermore, the literature review provided numerous examples of how apprentice schemes were initially developed and then became the DNA of many European countries, albeit the apprentice schemes dominated manual types of occupations, there were examples used within the G20 countries where adaptations to other functional areas were being explored (Gessler, 2019b).

This challenge will be present within the UAE, as the findings directed tensions around the assumptive portrayals that people have concerning the differences between taking an academic qualification versus that of a vocational qualification. These differences are somewhat exaggerated based on a lack of knowledge, where even the participants mentioned that any type of vocational route would carry a stigma (Kuczera, Bastianić and Field, 2018).

This viewpoint is further exaggerated through the belief that apprentice schemes and vocational qualifications only target those that have a low academic capacity or those who are less fortunate financially to pursue university study. This mindset links towards the way parents perceive certain educational choices, they have had and still to date have a huge influence on the way their children are educated, Dolan (2012) supports this by citing those parents will pursue tried and tested methods linked positive experiences rather than the unknown. For the parents in the UAE and the children growing up will tend to explore the common practice rather than experiment. Based on the unknown and as the feedback suggests, universities tend to dominate the way the UAE families use their intuitions towards educational and career development (Gunn, 2015).

One area that could be considered based on its fit, is the use of a hybrid system like the one used in Germany where dual qualifications are awarded. A dual qualification can be a mix and blend of vocational and academic types of learning, that can be delivered through a university or college. What this could do is, develop meaningful university relationships alongside the business community, thus helping parents and students connect with the prestige and quality of the qualification and secondly connect with industry to help award and provide career paths including apprentice schemes within specific functions (Ball, 2005). However, this type of initiative would need the Ministry of Education and the awarding bodies to support and sponsor. Without this, the overall implementation would hit a major block, remembering the UAE has been institutionally driven for several years developing prestigious university brands and links with global universities, therefore such a route would be questionable as to whether such a strategy would be agreed, especially without the backing of the ministry.

### **6.3.3 Branding strategy**

The original themes were, *marketing, communications, innovation, and appetite*, which are subject areas of great importance in the modern world. Overall, this strategy needed to consider how to generate or develop an appetite that would link with how apprentice schemes would be embraced by the end user, whilst understanding the market dynamics of the UAE and how best to penetrate the academic landscape that overall, compliments both types of qualifications. There has been a great deal of discussion in the literature and the analytics in this research as to how apprentice schemes and vocational qualifications need to reach out to the end user population and to better brand these initiatives (Kashefpakdel *et al.*, 2018). To develop the apprentice scheme brand there would need to be a robust

communication strategy developed, which would encompass activities such as understanding the best approach to developing awareness, whilst creating a student appetite. The literature review exposed certain mechanisms that are being used to raise awareness and develop the brand. For example, using established case studies, that highlight development and implementation successes, in particular ones within the G20. Rewizorski (2018) mentioned that a charter had been signed to commit to the development of apprentice schemes, this charter not only included manual types of occupations but also ones that were functionally driven, for example, management and logistics.

That said, a gap appeared quickly especially when it came to the UAE, there was no emphasis to reach out to the Arab nations, which created a void in developing a meaningful marketing strategy. To further support this, Forstenlechner (2011) indicated that any form of understanding, and mandate could be met with a degree of cynicism, already the literature had indicated that the high levels of students moving towards universities and the need to have a degree would have huge implications from an intake and registration perspective.

A solid marketing awareness campaign should not be entered into lightly unless the UAE was willing to invest and adapt current educational frameworks. The research objective #4 provokes the thought process around innovation and adaptations for marketing, in essence this means there will be a need to explore how students would benefit and realise the added value such schemes have on their learning and career aspirations. Further to this they need to see the connection with what they learn versus the linkages to traditional qualifications such as bachelor's degrees (Winch, Oancea, Orchard, 2015).

What was clearly evidenced was the well-embedded countries who have gained credibility by connecting into schools (Muijs, 2015), here they ensure that clarity was created around choice and what lays ahead of the school leaver. This linked with what the parents and teachers believe in was of paramount importance, children and students look up to their mentors, who in the main are their family member.

A robust and well-connected branding strategy targeting parents, teachers, and students will, without doubt, remove any bias or unnecessary perceptions, with an overarching objective to remove the perception that would be best described as the 'poor man's educational arm. The overall characteristics of developing a robust branding strategy was to ensure there was a shared and understood vision and end goal (Lawes, 2020). Clearly an appetite must be



developed whilst a transparent line into the relevant stakeholders was developed whilst sharing the visions and overall aims. Translated, this meant that this strategy would need to focus on helping people understand that apprentice schemes and vocational qualifications do hold the same status of those produced by other academic routes.

#### **6.3.4 Financial strategy**

This strategy explored the *financials* and how they will be considered from a students' and an investor's perspective, which includes the employer, the employee, the learner, government entities such as ministries and accredited training institutions.

The financial support mechanism for any type of educational program, whether they are scholarships, internships, or government levies, all have an impact on whether these types of programmes will succeed or fail. The findings have indicated a lack of clarity as to what will be paid by the student, by the employer, or even what support will be provided by the government. This financial lack of clarity created uncertainty, which cascaded into withdrawal or disengagement, especially when trying to understand the financial impacts (Jansen and Meer, 2011). Developing these concerns further, the findings exposed recruitment and retention issues where employers were conscious that the recruitment process would need to be channelled differently, this would of course create an extra cost burden on the organisation who are already concerned about returns on investments such as these schemes. What was also highlighted was the retention rates, meaning that several of the apprentices within the UAE did not see longevity, which meant the return on investment would be challenged again creating a further concern for any finance manager.

Tenopir (2010) links this commonality of return on investment, mentioning that the first year of any type of learning investment will be the most challenging year. Having looked at this differently, cost absorption would need to be always kept in sight as the second and third year without doubt pay dividends if the apprentices are retained. One of the other, and perhaps major facets of this financial discussion was the overall support and funding mechanism from the government, from the literature it was mentioned that numerous financial models have been tried, tested, failed, and re-invented (Muehlemann and Wolter, 2014). These models consist of partial funding models, a levy-based funding model and quota system funding model which is currently being tested in the UK. The quota system model was where organisations contribute a certain percentage to the government based on their profits, in

return, the organisations can gain access to training support such as apprentice schemes and other types of occupational training (Gandy and Mulhearn, 2020). To further qualify this, Gessler (2019) cited that where financial support was either not there or was removed or reduced, so does the commitment of the student and organisation. Because of this, there would be the need to develop not only a robust financial framework but one that has longevity and fits in the way the UAE government will need support. This means there will be a requirement for further research into the funding and financial models based on the hypothesis that the UAE will adopt apprentice schemes.

### **6.3.5 Institutional strategy**

This strategy aimed to develop a better understanding in and around *appetite for apprentice schemes, vocational qualifications, and government interventions*, which was based on the findings of this research. The key question that had been flushed out from this research was, can or would the academic institutes embrace these needs or position themselves to develop a fit for purpose model that suits both academia and vocational needs!

The institutional strategy completed the five critical discussion areas which predominately focuses on how and what needs to be developed to assist the implementation of a robust academic and vocational system that deliver a fit-for-purpose apprentice scheme within the UAE (Newton and buzzeo, 2015). The involvement of students and organizations within the feedback and that of the literature provided sufficient examples of the complexity and decision-making hierarchy, that was best described as institutional challenges. These challenges that were highlighted in the research objective #3, was where protocols needed to be understood linked with the associated challenges, for example, the interview outputs from one of the qualification bodies indicated how tough a journey this would be, where full stakeholder commitment is required.

Historically, the UAE has built its educational structure through hard work and a commitment to quality, hence a high proportion of students find their learning pathways moving towards university education. This, as the literature mentions, comes at a price as most UAE students and career-minded individuals place the highest possible value on academic qualifications and somewhat dismiss, based on a lack of knowledge the value of vocationally driven qualifications. Gessler (2019) helped to develop this distinction further by highlighting that any country who had the willingness and commitment internally would see the value of

apprenticeships, however, the challenges from within the UAE are two dimensional, firstly the employer and student need to have a higher regard for these qualifications and secondly the institutional framework, which comprises of universities and educational bodies need to make the process of development, funding and ease of access much better to then embrace and eventually bridge the gap between academia and apprentice schemes.

#### **6.4 Critical insight to the Findings**

Throughout this research, there had been a clear demonstration of a multi-dimensional and a basic lack of understanding within the UAE around how learning was becoming more disruptive and how the education was now having to transform and be more innovative globally. These multi-dimensional facets, headlined as strategies shown in Figure 30. are, learning, stigma, branding, financials, and institutional which have been developed from the data analysis and findings that has empowered this research to understand what the key priorities would be, based on embedding apprentice schemes in the UAE.

What this research was able to uncover was an appreciation of how the appetite of learning has evolved over many decades whilst highlighting the influence and preference academia has on the UAE culture socio-economic landscape, which reduces the overall acceptance and impact of vocationally focused qualifications such as apprentice schemes. To realize what changes will need to be made and to implement and embed apprentice schemes, activities within the educational framework will need to focus on substantial reforms in relation to the internal and institutional protocols. The current education system needs to be taken through reforms that helps and supports the UAE citizens to have or at least develop their own learning choice, including variations in the method of study. This will inevitably come with challenges as socio-cultural acceptance will be a prerequisite, including parent alignment. What was clear from this research was the fact that these challenges are real and would need to be faced up to especially how the employment market was changing, with higher demands on 'ready now' candidates. If the UAE keeps its status quo and does nothing, there was perhaps an argument that no one would feel or see any differences, in the eyes of the UAE nationals, nothing is broken, so why fix it.

The literature review provided a historical pathway of apprenticeships and vocational qualifications that helped support the overall rationale and lessons learned during development and implementation stages. Although the history was predominately based

around global experiences outside of the UAE, it is believed that the overall context and issues within the UAE remained the same, such as connecting apprenticeship schemes with manual types of occupations that are based around engineering and construction (Bursnall *et al.*, 2017), again this would need to be considered as an integral part of developing apprentice schemes.

Countries such as Germany and the UK continuously experienced a need to re-define the apprenticeship model a practice that was usually driven by changes in the economic climate, especially where the industry was shifting or downsizing or where unemployment started to rise. These shifts helped progress and developed apprentice schemes towards modern-day working practices, albeit they were still seen as the poor man's qualification or route to getting a job (Chankseliani, Anuar, 2019.). These changes became catalysts for organisations and governments to look at other ways to re-define apprentice schemes, where Chankseliani (2019) cited those changes were also being driven towards developing apprentice schemes that focused more on business, law, and the service sector, likewise there has been a surge in developing better links with industry rather than having government centric programmes. A current example of this was the UK 'trailblazer apprentice' scheme, which was employer driven, employer branded, and employer owned. All of which indicated the flexibilities governments and industries do have and embrace, something the UAE may want to consider (Newton and buzzeo, 2015).

Such actions have been seen as positive and progressive steps, where even the G20 Countries have started to consider how they could also embrace these changes. The issue remains, that countries that did not have the in-depth experiences were not seen to embrace these positive steps, for example, the UAE and other GCC Countries, who to date still have a preference to learn and develop new knowledge through more traditional academic routes. One further input held within this literature review and perhaps the most prevalent, is that of the dual qualification route, currently been tested in Germany (Hesser and Hesser, 2018). These offerings could be a consideration for the UAE since they provide academic access, including the practical aspects of learning, but more importantly, they have become a high-value commodity for Germany and now the UK and are still viewed as being a modern style apprentice scheme. However, it was fair to point out that this research was to also help provoke quality discussions with the relevant bodies, whether they are ministerial or

institutional, to ensure there is a necessity or a deep need to develop these schemes now and in the future (Borokhovski, Pickup, Tamim, 2021).

This research utilised the mixed methods methodology approach and was used to interrogate parts of the population that developed an understanding of the vocational education landscape in the UAE and how well integrated, if at all, were vocational qualifications and apprentice schemes. After questioning 41 participants using the questionnaires and semi-structured interviews, it became clear that the vocational stigma inclusive of apprenticeships were being perceived as being something that the less academically minded individual would only pursue. These misunderstandings shrouded the overall value of what an apprenticeship could offer, not only from an individual's perspective but also from an organisational perspective. The participants throughout the questionnaire and semi-structured interview process added great value in developing the understanding, not only just through their perceptions but also through behavioural elements which surfaced, such as the types of emotions people will experience when making important career choices routed through education. What was apparent from their feedback was a lack of clarity of what apprentice schemes consisted of, more so how to access them, what the occupational choices were, and of course their overall learning career development value. In contrast, there was a degree of scepticism based on career value and how these qualifications would enhance their longer-term career paths.

One of the biggest issues highlighted by the participants was that of stigma within their social surroundings, this in the main came from parents lacking understanding, to that of friends and even siblings not supporting such qualifications as they believed there was no educational standing or comparison to those attained at a university (Tight, 2020). What these findings confirmed was that these perceptions and characteristics need to be challenged. However, there also needs to be some caution placed on what can be implemented and realistically what should be left alone, for example, the question is, can the ministerial processes or protocols be changed to help resolve the gaps identified? Can the public entities work well with the private sector to develop the real needs of industry to develop vocationally qualified employees?

From the questionnaire data, stage 2 stage was introduced that helped refine the feedback from stage one. More importantly, this stage helped to reinforce the general appreciation and

understanding around the lack of awareness with apprentice schemes and vocational qualifications. What stage 2 also exposed was the mistrust of the system that establishes a qualification, for example, the process and protocols were questioned to such an extent it became quite apparent that to embed an apprentice scheme and synchronise it with the higher educational activities would be difficult and potentially somewhat cumbersome, if at all unrealistic.

The rationale behind using a stage two-approach was to make sure the trustworthiness and credibility of the feedback from the questionnaires could be tested to such an extent that the information either synchronised and supported each other or flushed out further dynamics that could have been missed (Polit and Beck, 2010).

The critical test was to see how well aligned both sets of participants were with the subject and how both sets of feedback could contribute to delivering the research objectives. Albeit the thoughts and experiences were similar, some challenging areas could be problematic based on this research being fulfilled. This problematic area was focusing on the educational landscape and the socio-cultural environment within the UAE that lacks flexibility in its governance and potential to change.

In support Dougherty (2019) highlights the criticality of such changes, mentioning that there must be a neoliberal approach adopted, where governance and hierarchy must look inwardly and consider how they can overcome these institutional problems. Without this, the very thought of universities accepting a degree type apprenticeship could be difficult, if possible, this also means that whilst socio-cultural stigmas keep manifesting, and no one is willing to move the notion forward that vocationally driven qualifications including apprentice schemes add real human capital value, there will be limited progress.

The preamble to this chapter started by indicating that the employment landscape was changing, employers are exploring different ways to attract talent and how this talent brings new skills and knowledge. This means that institutionalised governments who lack the foresight to embrace other types of learning mechanisms and fail to help their indigenous population to rise to the talent acquisition specialists will be left behind. The UAE has a superb history of being the leading country in many aspects, this does mean, and based on the contents of this research, there is scope and a hope that apprenticeship schemes can become that bridge between academic scholars and vocational scholars having the same meaning.

## **6.5 Conclusion**

This research set out to explore and understand the perceptions that existed between apprentice schemes and vocational qualification routes and traditionally delivered qualifications usually associated with colleges and universities in the UAE. Apprenticeship schemes use a historically bound concept by integrating the practical aspects of learning whilst synchronising the theory that predominately links with occupational skills and standards using international benchmarks (Zohair Husain and Costanza, 2017b).

What has become clear from this research is the overall fragility of vocational types of programmes, in particularly apprentice schemes. Supporting this, Chankseliani (2019) mentions that this fragility is born through a reliance on employers to engage whilst knowing there will be a very low response from individuals based on the perceived lack of academic standing of such schemes, which has become a prominent learning and development factor within a society in the UAE, that clearly has an embedded academically centric society.

From this research, the question may be asked as to whether the UAE has gone beyond this need, which already has a well-established, robust, and modern approach to education at all levels, which includes strong links with many of the top universities globally. Although there are certain challenges, challenges that may not be easy to overcome, the evidence indicates that there is still a space for these types of learning and development routes. Hence the necessity to explore whether the thoughts and perceptions could be bridged through the contents of this paper.

## **6.6 Limitations of the research**

There were two main contributory factors based around the limitations, one of which was the financials. In basic terms, there was limited and restrictive information available within the UAE. Although this information was sparse the foundational elements were at hand, although what this did indicate was that a more in-depth financial study must be initiated to further understand the financial aspects of apprentice schemes and vocational qualifications.

Secondly, there was a lack of contextualised literature available from the UAE including the wider GCC countries in terms of understanding apprenticeship models and frameworks. This limitation or distraction was treated as a positive, which meant that the data not only needed to support the overall objectives of the research but also provided sufficient, credible, and reliable research that would then help bridge the literature gap for future researchers.

## 6.7 Originality and contribution to knowledge

This work provided a contextualised and fresh insight for the UAE as to how vocational learning mechanisms needed to be thoroughly understood in relation to how the indigenous population prefers to learn and develop. It was clear from the current literature that there had been a limited number of studies connected with understanding how vocational types of qualifications, can be integrated, and become part of the educational offerings within the UAE, however, nothing focusing on apprenticeships has yet emerged, Thus, this study has helped to uncover the emotions and perhaps what would be best described as a snobbish type of attitude towards less academic routes.

What was evident was the ever changing and evolving cycle of how education had become disrupted globally, where learning needs and choices were having to be re-visited and adjusted. These adjustments were now focusing on not only the learners needs but also the needs of the educational institutes where they also have had to change their own business models to pitch for position and keep their ranking and student numbers.

This impact has yet to be experienced within the UAE due to the high level of academic places made available and its overall social standing within communities. However, with the world changing at a fast pace, and an industrial revolution that was disrupting how learning was being approached and how the education system was connecting with future jobs. These impacts have recently surface based on how the COVID-19 pandemic has changed the way people operate and learn. Adjustments has already been made through on-line learning, virtual qualifications and degree workshops being delivered on-line. All of which are exposing the learning to the differing dimensions that are now available for learning and career development. Been provocative, it could be viewed that all students, all learners are now ready to look at new ways to advance their knowledge and skills, perhaps this could be an appropriate time for the UAE to consider these new ways in relation to developing apprentice schemes (Bernard *et al.*, 2020).

Obviously, tensions existed, which included the bureaucratic mechanism amongst Ministries and approving bodies. The historical and tribal culture of the UAE creates another dimension to this bureaucracy, which meant no matter how powerful a proposition was, the overall decision-making authority would need to adopt a top-down approach rather than a bottom-up approach. This meant, no matter how well engaged or how well the apprentice schemes



are marketed and branded, without the buy in of the Ministries and approving authorities, the programmes would fail.

Furthermore, what surface throughout this research was the overall sense of stakeholder buy with regards to apprentice schemes, this lack of buy in was driven by the limited amount of understanding and a lack of desire to explore what could be of great benefit to individuals and organisations, specifically in the UAE. However, this would come at a price, that price being the potential dilution of an already strong academic status and the career value of being an apprentice perceived by families, all of which add challenges to an already difficult proposition to bridge or at least reduce the gap between academia and apprentice schemes.

## 6.8 Recommendations

The purpose of this section was to develop what is best described as a 'call to action' from the research that has been conducted. Actions, based on priorities, relationships, policy development and further research have been introduced, which have taken into consideration the gaps in the literature and the overall conclusions. To define these action points, the following model has been developed progress these recommendations into conclusive actions. Fig 36 provides a route to the next phase of this research.

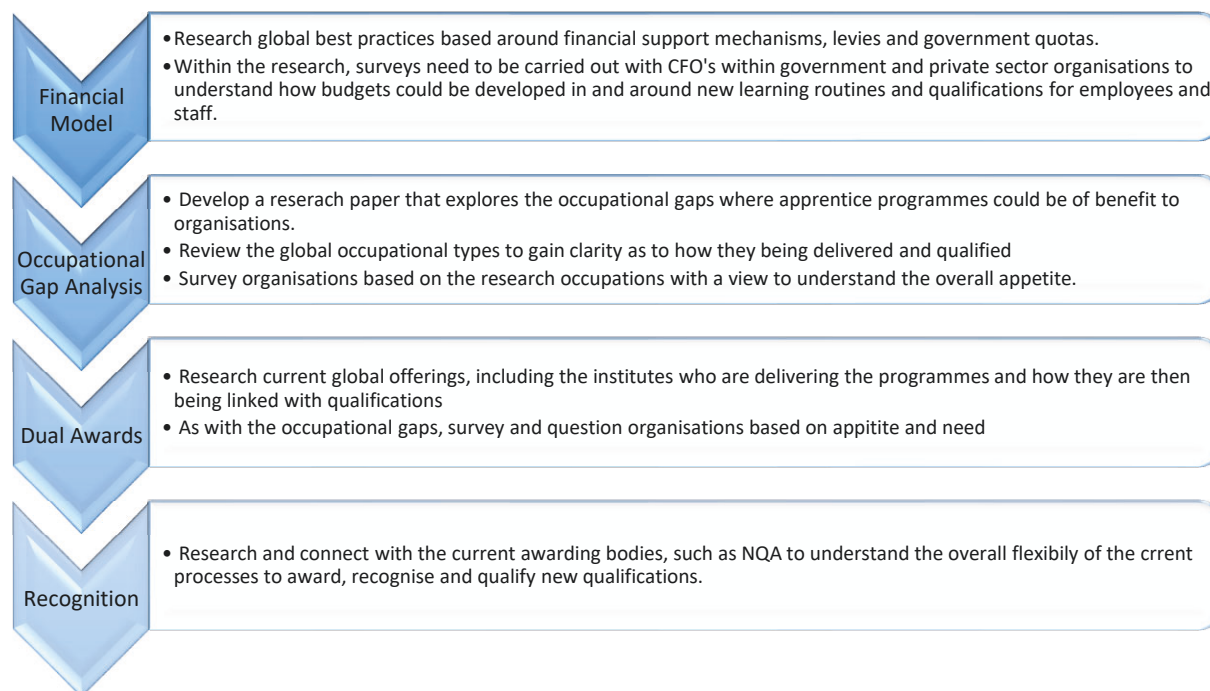


Figure 36. The Way Forward

There clearly was a need to research and study the feasibility of building and implementing an apprentice model specific to the UAE. Fig 36 provides a basic overview of what needs to happen next. The specific areas highlighted should be foundational to progress this research further, firstly the financial elements and how such schemes can be supported federally and then throughout the seven Emirates. Funding and the fit for purpose financial model will play a significant part in moving this research forward, which would allow public and private organisations to engage without concerned about being committed the idea. Secondly, occupational types need to be examined, this will again play an important part of the overall development and implementation, once employers and employees realise there would be a choice across occupations, the stigma of apprenticeships would be reduced. Thirdly, and

connected with the second priority was that of understanding how a dual type of scheme could be introduced or developed in line with the best fit and need of the UAE, this specifically would provide a required link with academia and would help with the overall final engagement in the future. Finally, recognition was where research needs to take place with regards to seeing how barriers around processes can either be removed or reduced. This level of work would require time and perhaps the help of some influencers to support the research. In addition, and supplementary to these priorities was that of training providers and quality assured trainers, whilst a great deal of effort and investment would be required to develop the ideal model. Access to the best trainers, and training organisations would be required. This work would inevitably link with how an organisation can register its interest and then develop a robust internal process which in turn does not become overburdened with the current bureaucratic structure that would impede progression in this area.

## **6.9 Personal Learning**

The research was approached with a very open mind as to how it could potentially progress and add value to an ever-evolving country such as the UAE. Having been an apprentice back in the late 1980's, the understanding and belief was that apprentice schemes have worked in the past. However, this experiential learning was based in a country that already had a well embedded vocational learning system and not of one that was at an embryonic stage such as the UAE. From this, the learning that took place during this research presented facts and evidence that one size will not fit all, the UAE is unique, and which is already offering many challenges based around cultural awareness, an academically driven society and a country that does want to be the best at developing leaders. Initially the literature associated with the UAE was sparse and somewhat challenging, especially when trying to contextualise the research subject, however, as time moved on, and through the interactions during the data capture clarity around the subject. This newly learned knowledge helped and started to form a greater breadth and depth around understand the subject and the parameters of what could or could not be implementable.

On a personal level, determination, being open to critique to deliver the best, being patient and being mindful that this work should make an impact and add value, all had an effect as to this final submission. It has been a fascinating journey, but a journey that has just started, now is the time to look forward to working on and delivering further research related to this study.

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## Appendices

### Appendix 1 – National Vocational Qualifications statistics (UAE specific)

National Vocational Qualifications	2015	2016	2017	2018	2019	2020	Grand Total
Advanced Diploma in Accounting					11		11
Advanced Diploma in Environment, Health and Safety		9	23	9	6		47
Advanced Diploma in Environmental Health and Safety		8	14	7	25		54
Advanced Diploma in Logistics and Management		2	14	1			17
Advanced Diploma in Project Management		7	9	4	12		32
Certificate 2 in Retail Operations		5	29	50	22	16	122
Certificate 3 in Engineering Technology					9		9
Certificate 3 in Engineering Technology Maintenance						8	8
Certificate 3 in Environmental Health and Safety						12	12
Certificate 3 in Office Administration		13	11				24
Certificate 3 in Retail Operations				3	3		6
Certificate 4 in Accounting		20	52	83	49	10	214
Certificate 4 in Business Administration		64	73	69	27		233
Certificate 4 in Business Administration.						1	1
Certificate 4 in Customer Service.						33	33
Certificate 4 in Electrical Engineering Technology					1	9	10
Certificate 4 in Engineering Technology Electrical Maintenance		1	2	18	23	1	45
Certificate 4 in Engineering Technology Mechanical Maintenance		50	150	119	78	1	398
Certificate 4 in Environment, Health and Safety					32	1	33
Certificate 4 in Environmental Health and Safety		29	92	110	115	14	360
Certificate 4 in Human Resources	1		1	1			3
Certificate 4 in Information Technology (Networking)		10	12				22
Certificate 4 in Logistics and Management		4	3	11	12		30
Certificate 4 in Mechanical Engineering Technology					17	10	27
Certificate 4 in Oil and Gas Process Operation					13		13
Certificate 4 in Project Management		12	32	26	44	8	122
Certificate 4 in Retail Operations				15	8		23
Certificate 4 in Technical Laboratory Analytics					69		69
Diploma in Accounting		4	13	9		5	31
Diploma in Business Administration		13	13	29	21		76
Diploma in Business Administration.				6	2	10	18
Diploma in Electrical Engineering Technology				1		104	105
Diploma in Electronics Engineering Technology						53	53
Diploma in Engineering Technology Electrical Maintenance				15	1		16
Diploma in Engineering Technology Mechanical Maintenance		11	31	53	14		109
Diploma in Environment, Health and Safety		1	5	8	15		29
Diploma in Environmental Health and Safety		10	20	13	8		51
Diploma in Human Resources				3		2	5
Diploma in Logistics and Management		4	4	1	16		25
Diploma in Mechanical Engineering Technology				8	3	85	96
Diploma in Project Management		3	4	18	7		32
<b>Grand Total</b>	<b>1</b>	<b>280</b>	<b>607</b>	<b>690</b>	<b>663</b>	<b>383</b>	<b>2624</b>

Registered Education and Training Providers (RTPs)	2015	2016	2017	2018	2019	2020	Grand Total
Abu Dhabi Vocational Education & Training Institute - ADVETI		262	589	602	627	378	2458
Al Khawarzmi Training Solutions L.L.C	1	3	6	23	11		44
Arab Experts Institute For Training & Consultation						2	2
MTMKN Training Institute				8	11		19
Quattro Training Centre LLC				21		1	22
The Source For Human Resources Consultancy		1		23	9	2	35
UAE Academy - Sole Proprietorship L.L.C.		14	12	13	5		44
<b>Grand Total</b>	<b>1</b>	<b>280</b>	<b>607</b>	<b>690</b>	<b>663</b>	<b>383</b>	<b>2624</b>



## Appendix 2 – Survey Questionnaire (Stage 1)

### Questionnaire 1

These questions are based around you as the participant, having had some experience in vocational education and vocational qualifications.

1. What are your views with regards to vocational qualifications being equivalent to that of academic qualifications?
2. Why did you chose vocational education rather than chose a more traditional academic route?
3. Literature indicates that there are some stigma's attached to vocational qualifications, such as family and peer pressures, why would you think this would be the case, did you experience such pressures
4. Vocational qualifications is fairly new in the UAE, some would say that they do not stretch the student enough in comparison to traditional academic qualifications, what was your experience in this area?
5. Implementation of any learning is always difficult, especially where tangible results are required. The key benefits of Vocational qualifications is the ability to relate the learning and thus be able to implement in the workplace, do you have a specific example of being able to do demonstrate this?
6. Recognition, accreditation and alignment with international standards are key to any qualification type, describe how the affiliated bodies associated with your vocational qualification attracted you, and who were they?
7. In your experience, how and why would you recommend a friend or family member to take up vocational qualifications above more traditional qualifications?
8. Research indicates that there is lack of understanding with regards to the difference between vocational qualifications and those of academic status, in your view could this be true, what could be done to bridge such a gap if it exists!

## Appendix 3 – Survey Questionnaires (Stage 1)

### Questionnaire 2

These questions are based around you as the participant, having had or currently having experiences as an apprentice.

1. What attracted you to be part of the apprentice program?
2. When choosing the apprentice program, did you compare the structure with other methods of study for example learning on the job, please provide any examples you may have?
3. Any learning routine requires a solid foundation of experienced tutors, using your experience during the apprentice program, were you confident that the teaching methods and learning outcomes were managed well from a tutor perspective
4. The learning that took place during your apprentice program, was it sufficient to help you implement and relate to workplace scenarios with ease? Provide examples
5. Based on your experience within the apprentice program, was the structure and learning methods stretching enough in comparison to the usual academic route. Provide examples of the learning gaps or experiential gaps that would have made this program better!
6. When searching for your apprentice program, did you find there were enough choices to make a decision, i.e., subject or industry specific programs to study, If not, which areas did you feel lacked choice or were inadequately represented?
7. From the learning that took place during the apprenticeship, were you able to track your progress or were able to understand your learning gaps to help you develop and progress to a successful completion
8. Research indicates that there is lack of understanding with regards to the difference between vocational qualifications and those of academic status, in your view could this be a true reflection of your experience! What could be done to bridge such a gap if it exists.

## Appendix 4 – Survey Questionnaire (Stage 1)

### Questionnaire 3

These questions are based around you as the participant and being an academic postgraduate who is currently finding it difficult to secure a job.

1. What are your views with regards to vocational qualifications being equivalent to that of academic qualifications?
2. Why would you chose vocational education rather than choosing a more traditional academic roue
3. In your experience, do public and private organisations have a readiness to accept the validity of vocational qualifications, in particular apprentice programs to be used as a vehicle for career advancement?
4. Apprentice programmes are relatively new in the UAE, how would you describe the views of organisations based on your initial job searches!
5. Qualifications help people advance and develop functional experiences, if you were to discuss your ideas around being an apprentice or taking a vocational qualification, what responses do you think you would get from:
  - Your friends!
  - Your family!
  - Your previous academic institute
6. Do you believe that an apprentice program will speed up your future chances of getting work within your chosen industry or specialist functional area! Describe your thoughts from a positive perspective. Describe your thoughts from a concerned perspective!

## **Appendix 5 – Survey Questionnaire (Stage 1)**

### **Questionnaire 4**

These questions explore individuals that are seeking to develop their careers in a different direction or are looking to enhance their skills within their current role.

1. Would you consider using an apprentice program to help you re-train, i.e. change your career path! Describe your rationale as to why you would either consider this route or not?
2. Which specialist or functional job routines have no vocational or apprenticeship offerings within the UAE?
3. In question 2, you are asked about gaps in the current offerings, if these were made available, would you then take up an apprentice program, and if so why!
4. Thinking at a macro level, which apprentice programs other than manual skills types of programs would be a huge benefit to the UAE, i.e., investment in these would see a significant return!
5. What would prevent you from using apprentice programs or vocational qualifications as a means to develop your future careers prospects, explain in brief, why this would be the case?

## **Appendix 6 – Survey Questionnaire (Stage 1)**

### **Questionnaire 5**

This set of questions explores you as the employer who have recently adopted vocational training or apprentice schemes in the UAE

1. Have you been able to evaluate the cost benefits of implementing apprentice programs within your organisation, provide a basic example of how these looks?
2. Have efficiencies been recognized through developing apprentices within your organization in comparison to other traditional methods of training and development?
3. When reviewing the apprentice programs, in your view, are there any learning or experiential gaps that need urgent attention, explain and describe these gaps?
4. What challenges are you still facing with the implementation of the apprentice program. Explain what these challenges are or were! Were these challenges evident prior to launching the apprentice program
5. What are the financial challenges you have faced. Were these initially evident! Did they surface during the program or after! Can these financial challenges be overcome and how!
6. Based on the answer to question 5, would you keep working with the apprentice program or would you look at alternative routes, explain your rationale?
7. Have you found that the calibre of individuals seeking apprentice programs is higher than your normal intake or lower based on academic capacity and learning capacity, use examples you have experienced within your organization?

## Appendix 7 – Ethics approval

### Ethics ETH1819-0142: Mr Sami Handley (Medium risk)

Date	25 Apr 2019
Researcher	Mr Sami Handley
Student ID	17420255
Project	Bridging the gap between Apprentice Schemes and Traditional Qualifications within the United Arab Emirates'
Faculty	Business and Law
Division	Human Resource Management and Organisational Behaviour

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### Ethics application

#### Project details

##### Title of proposed research project

Bridging the gap between Apprentice Schemes and Traditional Qualifications within the United Arab Emirates'

#### Researchers

[Mr Sami Handley](#)

#### Researcher biography

20 years diversified and multi-cultural experience in Human Resources Management, Strategic HR planning, Organisational Development & Effectiveness, Change Management, Transformational Processes, Talent Management and Employee Engagement; Driving core HR processes such as retention targets, demographics of people place and mix, people equity levels, succession pools at all levels and the ability to empower Line Management support including internal and external stakeholders.

Project managed People Planning and Organisational Design Strategies to attract and retain individuals from various sectors and cultures with a long-term strategic view to deliver and directly connect to the Corporate Vision; Delivery of high-level Mission, Vision and Values seminars to reinforce the development of long-term people strategies of the business.

Possess sound pragmatic and commercial background, which has been gained through direct experiences in, developing Performance Management tools at all levels, including Senior Talent Management and Coaching, developing and deploying Employee Engagement Strategies, Organisational Design and restructuring of large businesses including mergers, with a skill to project manage most large medium and small projects driven by the annual corporate business plan.

I am now working as the Director of an Academy that is building various programs including vocational qualifications for the waste, resource and environmental industry

#### Project outline

The aim of this research project is to assess the implementation of apprentice schemes within the UAE. This will be assessed using the grounded theory methodological approach.

##### Objectives

1. Critically explore relevant literature on the principles and challenges associated with the implementation of vocational qualification routes.
2. Conduct interviews with UAE Nationals to determine their perceptions and requirements towards vocational types of qualifications.

3. Identify bespoke parameters and specifications required for developing and implementing apprentice scheme frameworks for the UAE market.
4. From the data analysis, develop an understanding of the innovations and adaptations that will be required to effectively market apprentice schemes in the UAE.
5. Define the protocols required to develop a framework that will enable the implementation of apprentice schemes within the UAE.

The Research Questions to be explored are:

1. What are the fundamental challenges faced when trying to implement an apprentice scheme in the UAE?
2. What are the parameters of an apprentice scheme in the UAE?
3. What will be the required approaches towards apprentice schemes that will be required both in industry and commerce to gain acceptance and credibility within the UAE?
4. What will the financial commitments look like, for example, subsidies, employer and governmental support, which will ensure fiscal longevity.
5. What training measures are required to equip tutors in academic institutions to deliver VET inclusive of apprentice schemes?

The Research methodology will use the constructivist approach, which will enable continuous collection of data through the relationships developed (Charmaz, 2006). Through these relationships, the researcher, with the help of the participants' views/ responses will be able to expose meanings towards reality; the constructivist approach is considered appropriate for this research as it will help develop the theory especially where there is limited data available (Hallberg, 2006). According to Charmaz (2012), this approach provides a strong medium for critical enquiry whilst being flexible enough to develop further questions.

Primary data will be collected using interviews as this is an appropriate mechanism to help explore and attain data around the social constructs and is the most natural method available to the qualitative researcher (Dörnyei 2010). The interview outputs will help develop 'a posteriori', which are codes emerging from data and thus placed into a template analysis (King, 2012). This will help provide robust data segmentation using samples of individuals (please see section 5.4 for discussion on sample size) (Madill, 2000). I will use participants that have had some kind of experience with academic and vocational qualifications throughout the UAE to gather data that can help develop the intended outcomes. The sampling strategy is to understand that no one can sample the entire population. The whole focus with sampling using interviews is to take a portion or a part of the population to collect data to help answer the research questions using non-probability sampling which is cost effective and less time consuming therefore suited towards qualitative research methods (Morse, 2007). Using the non-probability method can be a challenge for any qualitative researcher because enough data needs to be generated to provide the required outputs; hence, using the constructivist approach, data can still be collected until the desired output is discovered, thus easing this challenge. The sample size and criteria to be used will be from 10 institutions that work with VET within the UAE and therefore it would be prudent to start with pre, current and post students of these institutions. It is therefore feasible and workable to target a minimum of 5 participants from each of the outlined batches below from each of the 10 institutions. Thus, a total of 200 participants are anticipated to be recruited for this research.

Batch 1. Individuals that have experience of VET within the UAE

Batch 2. Individuals that have experience of apprentice schemes within the UAE

Batch 3. Post graduates looking to take their first career step

Batch 4. Individuals that are working and seeking educational advance

**If your research fieldwork takes place outside of the UK, please state the location.**

**Region**

United Arab Emirates

**Country**

United Arab Emirates

---

**Start date of proposed activities**

18 Oct 2018

**Anticipated end date of proposed activities**

30 Nov 2019

**What kind of approval are you applying for?** Full approval

**If you have indicated that you are applying for approval in principle or phased approval, please explain why.**

**Ethical risk**

**Does the project have funding?** No

**Does the project require approval from an external organisation?**

No

**Does the project involve consultation or engagement with people?**

Yes

**Does the project involve or relate to a biomedical or clinical trial or intervention?**

No

**Does the project involve any work with genetically modified organisms or materials?**

No

**Does your project involve access to, or use of, material which could be classified as security sensitive?**

No

**Is the project likely to pose any challenges in relation to intellectual property rights or be sensitive in terms of commercial/operational activities of partner organisations?**

No

**If yes, please outline any strategies to mitigate these concerns.**

**Is there a realistic risk that research funding or activities may cause reputational damage to the University of Northampton?** No

**If yes, you must upload proof of approval from the University's Director of Research, Impact and Enterprise before submitting a research application.**

**Ethics training**



**Have you completed the compulsory online module 'Research Ethics: Good Research Practice'?**

Yes

**Have you completed the optional online module 'Research with Human Subjects'? Yes**

**Have you completed the compulsory online course 'Becoming an Ethical Researcher'?**

**Have you completed the optional online course 'Research Ethics in Practice'?**

**Are you familiar with the University of Northampton's current ethics code and procedures? Yes**

**Please indicate any relevant professional or disciplinary guidelines/codes/regulations for research that have been used in developing this application. None**

### **Vulnerable participants**

**Does the project involve vulnerable participants?**

No

**If yes, please indicate category below**

**Does the project involve participants in the following categories?**

**Please provide details of enhanced ethical procedures to safeguard these participants.**

**Will transcribers or translators be employed in the research?**

No

**Will carers, parents, teachers or other parties be present during the research?**

No

**If yes, please outline how the confidentiality of the participants will be upheld.**

### **Information and participation**

**How will you obtain permission to access the research setting and research participants?**

Consent forms will be used with all participants - see attached form I will also seek the permission and access from the relevant organisations, i.e. the targeted 10 organisations to ensure they are aware of the research. The consent form for access will be used with these also.

**Please upload evidence of communication with, or consent from, participating organisations.**

**How will you sample and recruit participants?**

There are 10 institutions that work with VET within the UAE and therefore it would be prudent to start with pre, current and post students of these institutions. It is therefore feasible and workable to target a minimum of 5 participants from each of the outlined batches below from each of the 10 institutions.

Thus, a total of 200 participants are anticipated to be recruited for this research.

Batch 1. Individuals that have experience of VET within the UAE

Batch 2. Individuals that have experience of apprentice schemes within the UAE

Batch 3. Post graduates looking to take their first career step

Batch 4. Individuals that are working and seeking educational advance

Participants will be informed of their participation via email, the researcher will provide specific dates, times and location within this email providing a choice to the participant of location based on their own circumstances. If the researcher fails to connect with any of the participants within a 14 day period, a new participant will be recruited

**How will you inform your participants about your research aims and methods?** Through the participant information sheet - see attached

**Please upload your participant information sheets/invitation letters.**

**How will you ensure that all participants give informed and ongoing consent to participate in the research? If relevant please comment on measures taken to work with participants with diverse capacities to consent.**

Once recruited, participants will still have the choice to participate and be reminded of the research project

**Please upload your participant consent forms.**

**Will the project involve the use of incentives?**

No

**Please describe the incentives and outline any strategies to mitigate ethical issues relating to the use of incentives.**

**Please describe any measures to enable research participants to withdraw from the research project during data collection.**

Participants will always be made aware of the sensitiveness of information and the confidentiality of data at all times. The researcher will also make the participants aware that they can withdraw at any time during the interview process, once the interview is completed they will have 20 working days to withdraw their contributions.

**At what point after data collection will participants be unable to request withdrawal of their data and how will this be communicated to them?**

There is a freedom of choice, however, once the themes have been established there will be limited choice to request removal, which means and as mentioned earlier, the participant can remove their data within 20 working days of the interview date. Participants who ask for a copy of the transcripts will be able to have access following a formal request via email to the researcher, this request will be processed and provided within a 60 day period.

## **Method**

**Does the project necessitate physical contact with participants, administering substances or an invasive procedure (e.g. blood samples)?** No

**Does the project involve any deceptive or covert research practices (e.g. research which takes place without the knowledge of the participants)?**

No

**If yes, please provide a rationale for the covert research and explain how potential harm arising will be mitigated.**

**Is there a realistic risk that the project will cause physical or psychological distress or discomfort to others?** No

**What measures will you take to avoid causing distress, emotional/psychological harm or physical harm during your research? Comment in particular on research topics that may be sensitive or controversial.**

One research question - below could cause some emotions based on trying to extract information around challenges. Some participants may not want to provide exact details or specific examples of challenges. To avoid this the nature of confidentiality will be re-established to reinforce how protective the researcher will be with the information.

What are the fundamental challenges faced when trying to implement an apprentice scheme in the UAE?

The next question below may infer that the participants have to disclose personal experiences. This still can be allowed, however, names of tutors will not be allowed.

What training measures are required to equip tutors in academic institutions to deliver VET inclusive of apprentice schemes?

**Please provide interview/survey questions or equivalent research materials.**

**How will you ensure that participants' rights to anonymity are respected?** Yes and this has been highlighted as part of the participant consent form

**What is your strategy in the event of issues of concern or evidence of past, present or probable harm or malpractice arising during research?**

During the process of collecting data there will be adequate focus on issues surrounding harm to individuals and institutions in respect to potential damage caused by evidence and examples. To ensure such data is highlighted and eradicated at source the following process will be adopted: The collected qualitative data is verified through a rigorous analytical process both during and after the interviews take place (Saunders 2009). As such the analytical process will be driven using descriptive text via observation and the interview outputs.

The intention to build data in readiness for analysis and interpretation the following process will be adopted:

Develop priori themes from the research questions.

Interview information to be transcribed to help with familiarisation of the outputs.

Coding using relevant information and patterns from the transcriptions keeping the priori themes and research questions always in focus.

Template development, once the coding and themes have been identified the template can then be developed.

Complete the template to help produce a write up and final summary of the findings.

Quality test, throughout each of the stages, a quality process will be adopted to ensure the data is not being distorted and is not sensitive or damaging

**How will this process be explained to participants?**

This will form part of the briefing sessions during recruitment pre and post

**Data collection and sharing**

**Please upload a data management plan outlining how personal data will be stored, managed and archived.**

**Will the project involve the use/transfer of data held by another organisation?**

No

**Please confirm that data sharing agreements or similar are in place and outline strategies for protecting data during data sharing.**

see attached

**Does the project involve use of data, images, texts, or other materials in which individual people (currently alive, or living in the past 100 years) are identifiable?**

No

Where secondary data about identifiable people is being used, please confirm that permissions are in place and outline strategies for safeguarding individuals.

NA

### Safety and wellbeing

What criteria will be employed for deciding the end point at which the study will stop because of unjustifiable further risk of harm or distress, psychologically or physically, to researchers or participants?

During the recruitment process of participants any concerns with health, fitness and psychological issues will be observed. Any identified issues will be assessed and where required will then be actioned to avoid long term issues. At no stage will the process be compromised with any areas in respect of risk, harm or distress to participants or the researchers

Please confirm that a health and safety risk assessment has been carried out and recorded, by whom and the date of approval.

A risk assessment has been completed and duly signed by the first supervisor and logged with the Office Manager of the Faculty of Business and Law

### Amendments

Have you implemented all the requested amendments?

Yes

If no, please provide reasoning for the feedback you have omitted.

1. Travel plan amended as per feedback highlighted that all travel will be done within the United Arab Emirates in which the researcher already resides.
2. Email address adjusted as per recommendations
3. Specialized data centre reference removed
4. Stored participants data identification stored separately to the actual research data both in hard and soft copy versions
5. Retention of data managed and retained after 12 months of research completion. Once the 12 months after research has been completed, the anonymised data will be made available.
6. Data managed using University server's password protected. No data will be stored on external drives, USB, or laptops

Sent on **08 Jul 2019** by **John Horton**

[Download as PDF...](#)

Dear Sami

Application ID: ETH1819-0142

Project title: Bridging the gap between Apprentice Schemes and Traditional Qualifications within the United Arab Emirates'

Lead researcher: Mr Sami Handley

Thank you for your recent application to the Research Ethics Committee. The application was considered on the 8th of July 2019. The decision is:

Approved

We are happy to confirm that your application can be approved with immediate effect. Congratulations on reaching this stage. We wish you all the best for your project.

Please update the Committee via Gateway if you need to make substantial changes or additions to the approved project.

Yours

John Horton



**University of Northampton**  
**Faculty of Business and Law**

**Interview Transcript**

**Date 28<sup>th</sup> September 2020**

**Zoom meeting – start time 9.00am – Finish time 9.50am**

**Participant Type – Educational Sector**

**Participant Name ‘A’**

**Stage 2 Interview:** *The theme of this interview is based around exploring the current vocational structure within the UAE and to understand how these can be enhanced to include apprentice types of programs*

**Question 1.**

**I asked participant ‘A’ - based on the 2030 Vision, i.e., to have 10 vocationally qualified students versus 1-degree student in the UAE, do you believe that this vision is realistic?**

*Participant ‘A’ responded by saying that, visions are only realistic if when they are set, they are achievable. Although we have some institutions offering vocational qualifications, the uptake and the number of providers is minimal. The number of providers is low based on our strict protocols and adherence to certain processes. Because of this, several dynamics surface, firstly there is limited clarity as to what apprentice programs really are, and that includes where and how these can be offered and whom by.*

*Participant ‘A’ went onto to say, what we know is that there is an emphasis on vocational training, whether that is a vocational qualification or an apprentice program, to date that’s not clear. That said, to get to 10 is a big ask as it would mean that 1000 vocational students versus 10 academic students, I really doubt this is a realistic number and believe most, if not all would not give up their university place versus a work-related qualification no matter how good the offer. In my professional view, there is a huge amount of work required to bridge the gaps of understanding and knowing the differences between and academic education and a vocational education.*

**Question 2.**

**Following on from question 1, I then asked participant ‘A’, we already know that apprentice programs are used throughout the world with a degree of success, how do you think that these can be successful and be integrated into the UAE educational structure.**

*Participant ‘A’ provided the following feedback, this is a very interesting question, one that can easily be answered. The UAE in some ways lag behind the rest of world, maybe the apprentice programs are an example of not been a front runner, however we do have a lot of universities and colleges with high intakes, which also includes an international presence as well, so to suddenly try and convert these students into those that would want an apprentice program would be, in my view almost impossible. After a pause, participant ‘A’ then carried*

on by saying, if the target audience was based on those currently work or want to retire early from one of the Government sectors, then yes, apprentice programs could work. I will say, that apprentice programs will not be at the levels other countries have been at, we here have too much of a transitional workforce and the level aimed at apprentices, employers I doubt will invest. I feel we need to be a little more creative and innovative in how we package these programs especially at corporate and institutional level, maybe there is room to develop a model that gives access to learning on the job and learning in the class.

### **Question 3.**

**The 3<sup>rd</sup> question introduced to participant 'A' was, what do you see as been the biggest issues based around embedding apprentice programs and vocational qualifications.**

Participant 'A' straight away said that I feel the main challenges are how we target people and organisations; this includes marketing and communication channels. The problem is people may know about these programs but also have limited or no experiences of what they have seen, what I mean by this, is that there could be knowledge but then transferring this knowledge into reality could be difficult. The other main issue is trying to convince the UAE Nationals, they are so integrated into the academic scene, and they see little mileage in using such programs, albeit this is more of an assumption because they chose not to know about such things unless its forced onto them, still, I feel they really will see no value. I will use an example of an engineer, most Nationals will enter the business as a trainee with a Bachelors with a view to climb the ladder really quickly, would they see the apprentice programs or vocationally led programs as a hindrance is the question, my feeling is they would, therefore it is a big obstacle, However, if they have friends who have done some programs perhaps out side of the UAE they may take their influence and knowledge.

### **Question 4.**

**Keeping the flow, I asked participant 'A' if we could move onto the next question, a nod of approval and I asked, from some of our recent interactions with past and present students, there seems to be a stigma attached to these types of qualifications, why do you think this exists**

Participant 'A' said, yes agree, the stigma I feel, is there and that stigma is mainly based around culture and how the population, specifically the UAE Nationals perceive such qualifications along with how they will map their careers. Most people do not understand vocational and whatever comes with it, i.e. apprentice programs, and those that do believe in these tend to connect with labour intensive occupations like construction and engineering. The other stigma are the parents, parents want the best for their kids and their kids to become leaders almost from birth, in their view this is done through education and working for top organisations and the government. Their education is around universities and quite often doing these abroad such as USA is a huge option and opportunity for academic growth.

### **Question 4a**

**Based on the above question I then asked participant 'A', what do you think needs to be done in relation to helping students connect with vocational qualifications and apprentice programs**

Participant 'A' responded by saying that, I feel more needs to be done in relation to how the programs are branded and marketed, communication, benchmarking and connecting with people are all huge factors in this domain. There has to be a huge push from the Government

*and Ministries to help schools and colleges embrace these programs, with this there has to be a financial commitment or recognition that financial support will be provided to kick start these initiatives and commitments stating the Government and corporates will invest heavily with some very lucrative job prizes at the end – this I am sure will entice those who have flexible outlook. Those that don't will always use academic routes as the only way.*

**Question 5**

***Finally, as a closing question, I asked participant 'A', do you; in your own experience believe there is an appetite to provide these programs in the UAE.***

*Participant 'A' responded by saying, in all honesty, and unless research helps to change the mindsets, I see limited appetite, this appetite will only become real once the Governments and Ministries show their own keenness in the form of investment and putting words into actions. The educational bodies are not aligned and have very bureaucratic processes that would put off the best, it can take over one year to have one qualification approval and that's after many committees etc. worthy – I really don't know!*

*I thanked participant 'A' for being honest and open and stated once again that this information will be treated in the strictest of confidence.*

*The meeting lasted 50 minutes with no interruptions.*





*University of Northampton  
Faculty of Business and Law*

**Interview Transcript**

**Date**

**Online meeting, 19.12.2020**

**Started 11.15am – finished 12.00 noon**

**Participant Type – Employer**

**Participant Name ‘K’**

**Stage 2 Interview:** *The theme of this interview is based around exploring the current a vocational structure, including offering apprentice programs is attractive enough for employers to embrace within the UAE.*

**Question 1.**

**The first question which I asked participant ‘K’ was, as an employer there are many challenges including controlling costs whilst ensuring there is a good level of talent and capability available within the organisation, therefore, would you see a fit to consider an apprentice scheme to help attract and develop future talent?**

*Participant ‘K’ highlighted costs have a significant impact on the way we attract and retain staff, most of our positions are functional staff and I cannot see the relevance or a fit, after all, what I know is to be an apprentice you are best suited to engineering or construction. I have not seen any programs that are related to functions such as Human Resources or Marketing. So, I would say the challenges we face as a business is around financial support, we need to also understand what programs are available and the numbers that would potentially be involved. I think one other concern is, who will we use to develop and deliver these apprentice programs, again if its external, that means another cost to an already unknown.*

**Question 2.**

**The second question asked of participant ‘K’ was, based on experiential knowledge, what would prevent an employer from the public and private sector from accepting an apprentice program as a choice to develop staff?**

*Following on from the first question, participant ‘K’ started to say that the main issue is based around understanding and how they would fit into with current talent or organisational structures. Most organisations already invest a great deal of money in developing staff, which equates to around AED 5M per annum. I feel the apprentice program could be not only a burden on these costs but also it could be one of those, flavours of the month, meaning does it really have longevity and will it really impact in the way it is designed. My views would be to consider high level government support and start at the base level, which is, help school leavers train and be better prepared for work before they leave school. The other point would be any*



*kind of mandate, there is enough pressure on the mix of UAE Nationals to employ, therefore a further add on could become too much for the employer.*

### **Question 3.**

**Following on, the third question posed to participant 'K' was, if apprentice or vocationally driven qualifications were to become a mandate from the Government, what be your expectations with regards to support.**

*The response from participant 'K' was sort and succinct, stating that, although I have mentioned it could be a burden us the employer, if on the other hand we were provide substantial financial incentives (initially) and good access to quality candidates I think then it would be palatable. The problem we all face in industry especially looking at how vocational and apprentices' schemes are used in other countries is that we would get lower level and less competent people to work with and qualify, albeit I cannot see many of these types in the UAE nationals.*

*Before finishing this question, I asked participant 'K' if anything else was needed to be recorded? Participant 'K' indicated that this was OK for this question.*

### **Question 4.**

**Finally, the last question provided to participant 'K' was, many apprentice programs are well received in different parts of the world in particular Europe. From your understanding, why have they had success and how could some of these learning's be embedded into the UAE culture.**

*Participant 'K' responded by saying that, what I know and understand is that such programs land because they are already part of the government's mandates and part of the culture. The word apprentice or vocational is readily accepted and not many people don't know what they are, on the contrary the UAE people and Governments lack that clarity, there are pockets but these are so rare that their voice would not be heard easily. I think what needs to happen is a full look at and market comparison by the UAE Ministry's looking at various methods to try and embrace the methodology, after all, it may be pertinent to start at higher age groups, those that need to retrain or with organisations that need to downsize and thus giving them a tool to help retrain people for the future. I think these in my experience are a good staring point, targeting graduates could be troublesome based on their expectations and ambitions and of course salary and benefits expectations.*

The meeting was concluded with a thank you, whilst highlighting the protection of the data and confidentiality. Participant 'K' asked if the transcript would be made available, which I confirmed and once ready, each page would need to be initialled to confirm originality.

## Appendix 10 – Semi-structured interview transcript (Stage 2)



University of Northampton  
Faculty of Business and Law

### Interview Transcript

Date 04 November 2020

Started at 1.00pm – finished 1.50pm

Participant Type – Qualifications Body

Participant Name – 'T'

**Stage 3 Interview:** The theme of this interview is based around exploring the vocational qualifications structure and its fit with the overall education structure within the UAE

#### Question 1.

**Participant 'T' asked for a brief overview based on the information sent. Following this introduction, I started with the first question.**

**You have been working within this sector for some years now and have experienced many challenges especially in and around the vocational sector. Why is the UAE not able to embed or engage vocational learners!**

Participant 'T' thanked me for the brief and started to answer the question by stating, this is a very interesting question, the Emirate of Abu Dhabi set up the National Qualifications authority with a vision to help develop training providers and vocational qualifications within the UAE. What they currently do is follow some of the norms set within Europe especially the UK where there are regulated qualifications and levels to be attained. This helps develop a framework to provide an overview of the requirements. However, these standards are tough to administer and thus can put providers off from developing vocational qualifications. This means there are only have a handful of providers where they provide certain and specific qualifications at a vocational level. One of the big challenges we face is ownership of the process, which also means representation from all of the 7 Emirates, funding as in financial stimulus packages and marketing support. So, I feel it is not just the learner where the fault lays its more about how and who provides the training and back up, with very few providers it limits us a lot, not only that, this also means that it is then difficult to introduce new programs like apprentice programs.

#### Question 2.

**Following on from the first question, participant 'T' was asked, in connection with question 1, what could be done to help this problem move forward, i.e., resolved!**

Participant 'T' started by saying that,

we are really proud of our academic institutions and believe we can hold our heads up high in this arena, especially some of our universities. This success has a positive and negative impact on our work at the NQA especially around the vocational route. The positive is that students have a desire to learn and do spend a lot of time and money to ensure they get the best

education. The negative is that these same learners struggle with understanding the value of vocational qualifications, they seem to believe they are second degree and actually hold limited CV or career value. I know with my work this is not correct and know the value. To resolve this, we need schools, universities and organisations involved to understand what needs to be done and the part they will play. This also means, we have to develop an educational program and use modern methods of creating awareness. Secondly and as important, the bureaucracy needs to be resolved, the qualification mechanisms are complicated and require a new and fresh look to see how we can attract students and employers

### **Question 3.**

**The third question asked participant 'T' to describe, what do you see as the biggest issues based around embedding apprentice programs and vocational qualifications.**

Participant 'T' in short provided the following, I have mentioned that we need an easier route for the development of programs, currently we ask organisations to develop a committee and from this committee we ask standards to be mapped against International Standards, these standard number are really complicated and if you took a glance, it would potentially put you off. This means we would have to adopt programs from other countries that fit in with the educational mechanism therefore make it easier to then be accepted.

### **Question 4.**

**Finally, this question posed to participant 'T' In your experience and your extensive knowledge, would you see there is room for apprentice programs within the UAE educational landscape?**

Participant 'T' said that there is room, however, the culture needs to change, the acceptance level of such qualifications needs to be accepted and most importantly the longer-term vision and value of these programs needs to be developed and cascaded. There is some work to be done at ministry level where these programs become choices for students rather than add on programs. What I mean here is that, once people see these as valuable and see them as a career development and qualification-enhancing tool that enriches their current qualification standards, then and only then the culture will break

The interview finished as per the time schedule, again, I reiterated the importance of the data and protecting the sensitivity of the answers.



*University of Northampton  
Faculty of Business & Law*

**PARTICIPANT INFORMATION SHEET**  
**Dated August 2020**

**Study title**

The purpose of this study is based on 'Bridging the gap between Apprenticeship Schemes and Traditional Qualifications within the United Arab Emirates'

**Invitation paragraph**

To help us explore and understand this subject, you are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully'.

**What is the purpose of the study?**

To assess and determine the feasibility of developing and implementing a sustainable apprenticeship scheme in the United Arab Emirates. Apprenticeship schemes globally are well grounded and culturally accepted as a means to educate people before work and during work in particular within many European states. This study will help us navigate through the benefits of such schemes including where traditional qualifications stand and understand the resources and financial investments along with what cultural challenges may be faced.

**Objectives are:**

**Why have I been invited to participate?**

We have chosen you to participate based on your work experiences and academic achievements within the United Arab Emirates. Those invited whom reside or work outside of the UAE will provide varied perspectives including any personal experiences of vocational qualifications.

**Do I have to take part?**

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason.

**What will happen to me if I take part?**

Rest assured, we aim to help you understand what is required through this briefing sheet. Your involvement will include you completing an online questionnaire based on whether you are a current student, a past student or an employee within an organisation in which questions will be based purely on knowledge and experiences. We will not expect you to answer questions that have any emotional content, assumptive views or any other factors that take you away from the purpose.

The questionnaire will take no more than 30 minutes to complete which includes specified questions based on the subject.

This questionnaire will be our source of gathering research, as such we rely hugely on your honest and candid feedback, other parts of our research will use historical and academic methods. Therefore the main advantage of this questionnaire is that we are able to receive realistic and experiential information directly from source, i.e. you the participants.

**Will my information in this study be kept confidential?**

We pride ourselves and uphold the true ethics of the rules of participation, which means that all information that is collected (subject to legal limitations including where information disclosed compromises the laws of the Country) will be kept confidential. This means that all information provided will be handled securely, will be kept in a safe and secure place along with protecting the anonymity of the individual. We will NOT provide names, locations, positions, organization name or any other detail that may compromise or disclose a pathway towards breaching this confidentiality.

**What should I do if I want to take part?**

Attached to this information sheet is a 'Participants Consent Form' this guides you through your rights to participate and the understandings associated with taking part in this research.

**What will happen to the results of the research study?**

The research findings including the results of the questionnaires which will be published in a short paper which forms part of the assignments within the DBA (Doctor of Business Administration) program. As such these results will only be viewed by the researcher and the tutor marking the project. Those participating can have a copy of the results on completion of the marking by contacting the researcher directly.

**Who is organising and funding the research?**

As a student of the University of Northampton and Faculty of Business and Law, this research forms part of an ongoing study process towards a DBA (Doctor of Business Administration).

**Who has approved this study?**

This research has been approved by the FBL (Faculty of Business and Law) Research Ethics Committee

**Contact for Further Information**

If you have any concerns about the way in which the study has been conducted, you can contact the researchers supervisor, details below:

Supervisor Name: Dr. Hala Mansour

Email: [Hala.Mansour@northampton.ac.uk](mailto:Hala.Mansour@northampton.ac.uk)

**Thank you**

I would like to thank you for taking your valuable time out to read this information.

## Appendix 12 – Participation Questionnaire invitation letter (Questionnaires)



*University of Northampton  
Faculty of Business & Law*

### **PARTICIPANT QUESTIONNAIRE INVITATION LETTER August 2020**

Dear (student / organisation),

We are conducting surveys as part of a research study based on 'Bridging the gap between Apprentice Schemes and Traditional Qualifications within the United Arab Emirates'. This will help increase our understanding of how they are perceived and experienced. As an individual or as an organisation that has gone through or is contemplating a vocational route, you are in an ideal position to give us valuable first-hand information from your own perspective. The questionnaire will take no more than 30 minutes of your time and is very informal. We are simply trying to capture your thoughts and perspectives within this educational field. Rest assured, your responses to the questions will be kept confidential. There is no compensation for participating in this study. However, your participation will be a valuable addition to our research and findings could lead to greater understanding of perceived gaps between apprentice scheme's and academic qualifications. If you are willing to participate please provide the best email to send the questionnaire link to, If you have any questions please do not hesitate to ask. Thanks!

Thank you

Sami Mohammed Handley (Researcher)

**Contact for Further Information**

If you have any concerns about the way in which the study has been conducted, you can contact the researchers supervisor, details below:

Name: Sami Mohammed Handley

Email: [sami.handley@Northampton.ac.uk](mailto:sami.handley@Northampton.ac.uk) Appendix 12 – Participation information sheet  
(Semi-structured interviews)



## Appendix 13 – Participation invitation letter (Semi-structured interviews)



*University of Northampton  
Faculty of Business & Law*

### **PARTICIPANT INTERVIEW INVITATION LETTER August 2020**

Dear Participant,

We are conducting a focused semi-structured interview as part of a research study based on 'Bridging the gap between Apprentice Schemes and Traditional Qualifications within the United Arab Emirates'. This will help increase our understanding of how they are perceived and experienced. As an individual that has valuable first-hand information in and around vocationally driven qualifications, it will be of great benefit to understand these experiences from your own perspective. The semi-structured interview will take no more than 40 minutes of your time and is very informal. We are simply trying to capture your thoughts and perspectives within this educational field. Rest assured, your responses to the questions will be kept confidential. There is no compensation for participating in this study. However, your participation will be a valuable addition to our research and findings could lead to greater understanding of perceived gaps between apprentice scheme's and academic qualifications. If you are willing to participate please provide the best email to send the calendar invite to, If you have any questions please do not hesitate to ask. Thanks!

Thank you

Sami Mohammed Handley (Researcher)

**Contact for Further Information**

If you have any concerns about the way in which the study has been conducted, you can contact the researchers supervisor, details below:

Name: Sami Mohammed Handley

Email: [sami.handley@Northampton.ac.uk](mailto:sami.handley@Northampton.ac.uk)

**Appendix 14 – Participants consent form.**



*University of Northampton  
Faculty of Business and Law*

**CONSENT FORM FOR PROJECT PARTICIPANTS  
August 2020**

**Title of Project:** *'Bridging the gap between Apprentice Schemes and Traditional Qualifications within the United Arab Emirates'*

Dear Participant,

You will be given a copy of this Consent Form to keep and refer to at any time.

Tick the appropriate column for each item if your answer is "yes" or "no"

	<b>Statement</b>	<b>YES</b>	<b>NO</b>
1	I have read and understood the Participant Information Sheet and know what the research involves.		
2	I have been given the opportunity to ask questions about the project and my participation.		
3	I voluntarily agree to participate in the project		
4	I understand that I have the right to withdraw at any time, without having to explain my reasons for doing so.		
5	The procedures regarding confidentiality have been clearly explained to me		
6	I understand and agree that my participation involves taking part in the questionnaire/interviews/focus groups being audio recorded and /or video-taped.		
7	The use of the data in research, publications, sharing and archiving has been explained to me.		
8	I understand that the data will be kept by and at the University of Northampton securely		

	<b>Statement</b>	<b>YES</b>	<b>NO</b>
	and may be used for articles or reports as an output of this research project, but my confidentiality and anonymity will be maintained.		
9	I do not want to reveal my identity in this project and in any output of this research and understand that my identity will be kept anonymous.		
10	I agree to participate in this research procedure as outlined to me above		

Thank you  
Researcher

Participants consent:

Name in full

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Signature

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## Appendix 15 – Data sharing usage agreement

### Data Sharing and Usage Agreement

This agreement establishes the terms and conditions under which the Sami Mohammed Handley and the parties involved during the research project can acquire and use data from the other party. Either party may be a provider of data to the other, or a recipient of data from the other.

1. The confidentiality of data pertaining to individuals will be protected as follows:
  - a. The data recipient will not release the names of individuals, or information that could be linked to an individual, nor will the recipient present the results of data analysis (including maps) in any manner that would reveal the identity of individuals.
  - b. The data recipient will not release individual addresses, nor will the recipient present the results of data analysis (including maps) in any manner that would reveal individual addresses.
  - c. Both parties shall comply with all Federal and State laws and regulations governing the confidentiality of the information that is the subject of this Agreement.
2. The data recipient will not release data to a third party without prior approval from the data provider.
3. The data recipient will not share, publish, or otherwise release any findings or conclusions derived from analysis of data obtained from the data provider without prior approval from the data provider.
4. Data transferred pursuant to the terms of this Agreement shall be utilized solely for the purposes set forth in the “consent forms”.
5. Any third party granted access to data, as permitted under condition #2, above, shall be subject to the terms and conditions of this agreement. Acceptance of these terms must be provided in writing by the third party before data will be released.

\_\_\_\_\_  
Sami Mohammed Handley

Date: \_\_\_\_\_

\_\_\_\_\_  
Research Participants Name

Date: \_\_\_\_\_

## Appendix 16 – NVivo Data examples

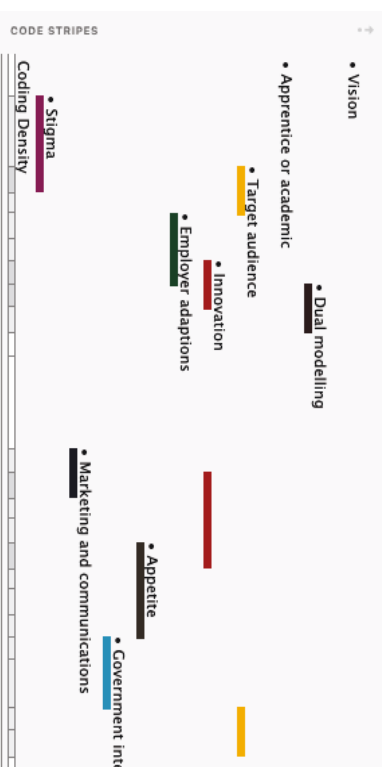
Apprentice programs are used throughout the world with a degree of success, and this success can be integrated into the UAE educational structure.

This is a very interesting question, one that can easily be answered. The UAE is somewhat lagging behind the world, maybe the apprentice programs are an example of not being a runner, however we do have a huge amount of Universities and colleges with high standards which also includes an international presence as well, so to suddenly try and convert students into those that would want an apprentice program would be, in my view, impossible. However, if the target audience was based on those currently working or retiring early from one of the Government sectors, then yes, apprentice programs could be implemented, that apprentice programs will not be at the levels other countries have been here, we have too much of a transitional workforce and the level aimed at by employers I doubt will invest. I feel we need to be a little more creative and innovative in how we package these programs especially at the corporate and institutional level, maybe there is room to develop a model that gives access to learning on the job and learning in the classroom.

### Question 3.

What do you see as the biggest issues based around embedding apprentice programs into vocational qualifications.

As I mentioned earlier, I feel the main challenges are how we target people in organisations; this includes marketing and communication channels. The problem is that we may know about these programs but also have limited or no experiences of what this is, what I mean by this, is that there could be knowledge but then transferring that knowledge into reality could be difficult. The other main issue is trying to convince the Nationals, they are so integrated into the academic scene, and they see little value in using such programs, albeit this is more of an assumption because they chose not to study about such things unless it's forced onto them, still, I feel they really will see no value in using an example of an engineer, most Nationals will enter the business as a trainee or Bachelors with a view to climb the ladder really quickly, would they see the value of apprentice programs or vocationally led programs as a hindrance is the question, my feeling would be, therefore it is a big obstacle. However, if they have friends who have done such programs perhaps outside of the UAE they may take their influence and knowledge.



### Questionnaire 1

1. What are your views with regards to vocational qualifications being equivalent to that of academic qualifications?

Because I have taken one program as so know what they mean, I feel they are a great addition when we are at work. I am not sure if they are equivalent to academic qualifications but would assume they are not.

There should be no comparison, academic qualifications are of a higher level than vocational is what I believe, especially where an employer is concerned. I think vocational works whilst in work only.

What I feel is that academic qualifications will always lead the way, the vocational qualifications if available are a top up to work related knowledge and skills.

It would be really good to have some alignment and people to see that the hard work put into vocational qualifications is the same, unfortunately it is not the same at the moment in the UAE.

What I am seeing at the moment is that organisations do not really understand enough about the differences, this is then transferred to the workplace. I asked my line manager to look at ways I can develop and straight away he told me to look at the university or look at training courses, when I asked about a vocational qualification, he smiles and said, why be bothered with these, they mean nothing. But I did push and find one.

I have worked really hard to get my current academic qualifications and feel really proud of the fact that I have done well. My worry is, even with me going through a vocational qualification, it will become a shadow of my academic ones, although the vocational qualification means a lot to me.

Vocational qualifications are quite new in the UAE, but what I know is that there is a grading mechanism that shows the level of qualification. If you understand this, then the equivalency is there. The problem is the name vocational, if it was called something else that linked it with academic qualifications it would be better.

Today the educational landscape is changing, but in this part of the world there is a great deal of catching up to do. At present the vocational qualifications are secondary in many people's eyes, there is no equivalence.

