

**Critical Document Analysis of Equivalency Decree
4443 (2001) and Decree 848 (2018):**

**An examination of equivalency criteria for upper
secondary school qualifications in the UAE**

**تحليل نقدي للقرار 4443 (2001) والقرار 848 (2018):
مقارنة معايير معادلة مؤهلات المرحلة الثانوية العليا في دولة الإمارات
العربية المتحدة**

by

SOUZAN SALIBI-HACHEM

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Abstract:

The changing face of education and the unprecedented number of people studying and working in countries other than their home countries have necessitated an international interest in classifying and mapping of qualifications. In addition to the International Standard Classification of Education (ISCED) levels developed by the United Nations Educational, Scientific and Cultural Organization (UNESCO), each country has developed its own criteria or qualification framework to classify qualifications and map out their equivalency levels. In the UAE, Decree 4443 was issued in 2001 to specify equivalency criteria for qualifications earned in the ever increasing number of private schools; a necessity since a majority of Emiratis is opting to study in such schools. After nearly 20 years of implementation, Decree 4443 can no longer serve its purpose for a number of reasons, including its numerous shortcomings and the rapid advancements happening on the curricular fronts in international schools. The much-anticipated Decree 848 was issued late in 2018 to replace Decree 4443. Through critical analysis of both documents, namely Decree 4443 and Decree 848, this qualitative research highlights aspects where Decree 848 falls short of fulfilling its promise of a more progressive decree with criteria that are more equitable, inclusive and aligned to international curricula than its predecessor, namely Decree 4443.

تحليل نقدي للقرار 4443 (2001) والقرار 848 (2018):

مقارنة معايير معادلة مؤهلات المرحلة الثانوية العليا في دولة الإمارات العربية المتحدة

نبذة مختصرة:

استلزم واقع التعليم المتجدد والمتغير والعدد غير المسبوق من الذين يدرسون ويعملون في بلدان أخرى غير بلدانهم الأصلية اهتماماً دولياً بتصنيف المؤهلات العلمية والعمل على إيجاد معايير لمقارنتها. بالإضافة إلى مستويات التصنيف التي طورتها منظمة الأمم المتحدة للتربية والعلم والثقافة (اليونسكو) ، وضعت كل (ISCED) الدولي الموحد للتعليم منظومة تعليمية معاييرها الخاصة أو إطار عمل لتصنيف المؤهلات ورسم مستويات معادلتها

في الإمارات العربية المتحدة، صدر القرار 4443 في عام 2001 لتحديد معايير معادلة المؤهلات المكتسبة في العدد المتزايد من المدارس الخاصة؛ وأعتبر ذلك ضرورياً لأن غالبية الطلبة الإماراتيين يختارون الدراسة في المدارس الخاصة. وبعد ما يقارب العشرين عاماً من التطبيق، لم يعد القرار 4443 يفي بالغرض لعدة أسباب، بما في ذلك أوجه القصور العديدة في معايير المعادلة والتقدم السريع الذي يحدث في مناهج المدارس الخاصة والدولية منها على وجه التحديد. صدر القرار 848 الذي طال انتظاره في أواخر عام 2018 ليحل محل القرار 4443. من خلال التحليل النقدي لكلتا الوثيقتين، وهما القرار 4443 والقرار 848، يبرز هذا البحث النوعي جوانب قصور القرار 848 في تطوير معايير لمعادلة الشهادات تكون أكثر إنصافاً وشمولاً وموائمة مع المناهج الدولية من المعايير في القرار 4443.

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Chapter 1: Introduction

1.1 What does equivalency or comparability of upper secondary school qualifications mean?

1.1.1 Education phases and global extension of compulsory education

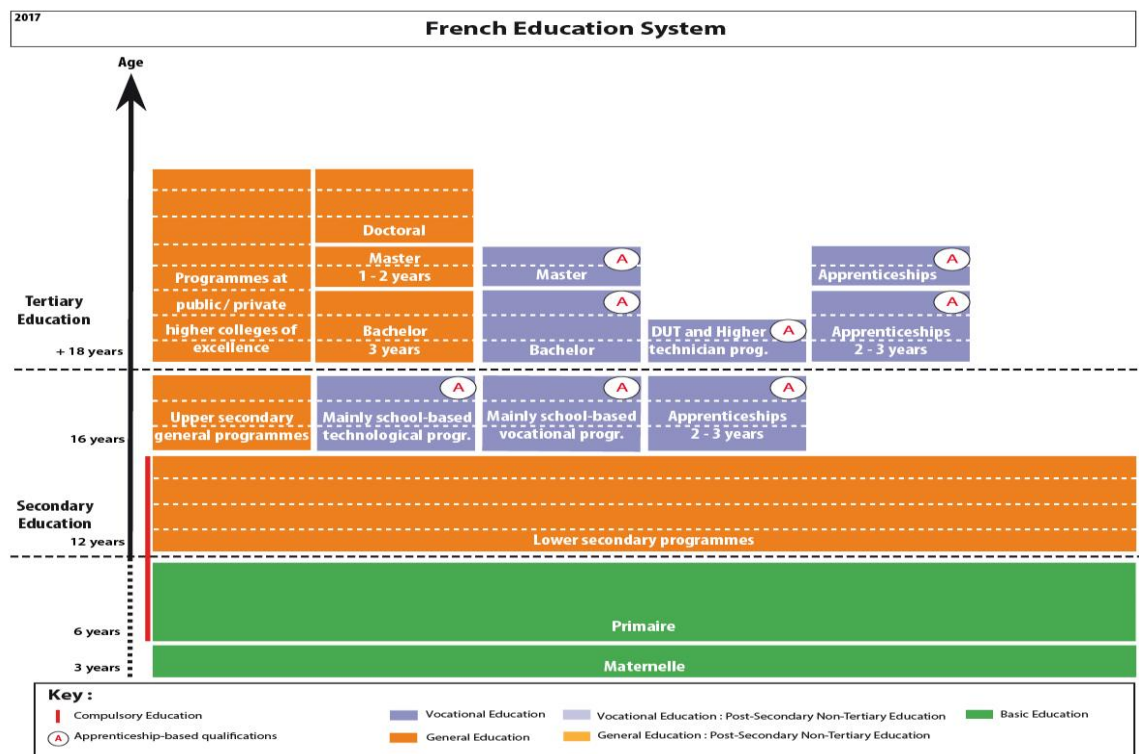
The last 30 years of the 20th century saw an unparalleled surge in the number of students receiving state endorsed education in almost every country in the world (Ortiz-Ospina and Roser, 2019). This has come about due to a multitude of reasons, ranging from the rise of universal expectations regarding the rights of the child to the complexity of the nature of the work place, which is increasingly demanding complex skills and competencies. The United Nations' conventions on the Rights of the Individual and on the Rights of the Child stressed the importance of education for all, especially vulnerable children (UNHCR, 2019). It has become a universal expectation that in almost every country in the world, the constitution will guarantee the right of every child to free education until at least the end of primary phase. In addition to the increasing availability of free primary education, many countries are raising the age for compulsory education to the end of secondary phase (OECD Global Report, 2019) (Science Direct, 2019). This has come about mainly because the skill set and knowledge base offered till the end of primary phase, with a main focus on literacy and numeracy, does not equip school leavers at that age (usually around 11 years) to undertake any complex white-collar job where expectations for know how is on the increase. In addition to the increasingly complex nature of job expectations, many societies have raised the age of compulsory education because the definition of a minor extends to the age of 18 (UNICEF). In many countries, minors are not allowed to have full time jobs and likewise employers are not allowed to hire workers who are considered minors. Therefore, this population group is more or less obliged to continue their education until they are legally considered adults at the age of 18.

Because education has been extended to the later stage of secondary education, or to the category of students who fall between the ages of 16 to 18, many countries have introduced a broader range of study pathways with a wider array of school exit qualifications. Not everyone is expected to pursue and be able to perform in very academically laden study programs. Thus, many countries have introduced and implemented a number of pathways that in principal would cater to the vast majority of needs and abilities of students within that age range. A typical example of such an educational system that offers a multitude of pathway options is the French system.

1.1.2 Varied educational pathways and qualifications at the secondary phase

The French education system is one of the oldest established systems in the world. It took its present day form when Napoleon set up Lycees to educate young French soldiers who will later join the army as officers (Encyclopedia Britannica, 2019). The French education system is typical in that it spreads over 12 years starting from Cours Préparatoire (CP), or what is equivalent to Grade 1, and extends all the way to the Baccalaureate final class (or Grade 12) (European Commission/EACEA/Eurydice, 2018). Typically, students start CP at age 6 and finish school with a Baccalaureate degree at 18. All students study the same subjects up until the end of Grade 9 where they sit for a very important test called the Brevet. Results on the Brevet usually determine what students will study in the Lycee phase or the “high school”. Students might opt for a Baccalaureate in literature, science or economics or opt for the more vocational, but equally rigorous, Baccalaureate Technique (Technical Baccalaureate). The figure below shows the educational phases in the French system, the corresponding age and phase levels and possible qualifications that could be earned.

Figure 1-1 The French Education System (ONISEP, 2017):



Students graduating from the French education system have several options to obtain a variety of exit qualifications. Each path will allow students access to certain study programs in French universities. For example, students who hold a baccalaureate in economics and the social sciences have the priority when applying to schools of political science; those with the baccalaureate in science will have priority for the medical sciences. In addition to the academic baccalaureate pathways, around 24 % of students at the age of 16 (after they sit for the Brevet exams) choose to pursue vocational qualifications (OECD, 2016). National universities and employers in France are fully in-tuned with the school system and ensuing qualifications and the system is seamless and linearly aligned. But, what if a student who has a French Baccalaureate in Economy and the Social Sciences (commercial sciences) or a Baccalaureate Technique in Science and Laboratory (STL) applies to a university in the United Kingdom or in the United States of America for a certain program of study? How will these universities determine whether this student has the necessary set of skills and in depth knowledge to be able to join the study programs? How can these universities compare this student's set of skills, knowledge and understanding to that of another student who has graduated from their own educational system or from China for example? The French system in its varied possible pathways, streams and qualifications at the end of the secondary level is typical to many educational systems around the world.

Research into international practice related to comparability and equivalency criteria for upper secondary school criteria is not abundant. This research aims to explore international criteria used for the purpose of equivalency and the different systems and procedures in select countries that offer this service. This information will serve as a backdrop to the equivalency criteria applicable in the UAE. This research into the evaluation of equivalency Decree 4443 and Decree 848 is novel in the UAE. In fact, in the Arab world in general, there is dearth of any relevant research about equivalency criteria applicable in the different Arab countries. There is very little publically available research and data on the effect of these policies on students' choices, how closely are they aligned to international expectations or any information related to the criteria and methods used by different countries to set their equivalency criteria. Therefore, the following research aims to highlight comparable international practices and review existing practice in the UAE to illustrate how the current policies affecting equivalency decisions are disadvantaging students graduating from private international schools in the UAE.

The introduction in Chapter 1 explored different educational systems and the possible qualifications students could gain once they completed their upper secondary studies.

The introduction also gave an overview to some major reasons why there is a global increase in the need for systematic policies and procedures to compare and “equalize” qualifications. Chapter 2 focuses on literature and system review related to equivalency. Although the literature may not include typical research due to the lack of such literature being available, the chapter will explore comparable equivalency criteria and international policies and procedures in select countries. This provides a background to which we can compare the policies and procedures that are in practice in the UAE. Thus, the literature review section was substituted with research detailing international comparability levels and criteria and systems in place in several countries to equalize qualifications. The first section included in depth research to explore the meaning and categories of educational qualifications. There is also reference to the international criteria for mapping and recognizing qualifications, namely ISCED levels introduced by UNESCO in 1976 and endorsed by many member states. Chapter 3 clearly identifies the research question relevant to this study. Chapter 4 explores document review as a research method, including possible limitations.

In order to contextualize the contents of Decree 4443 and Decree 848, Chapter 5 includes comprehensive overview of the educational landscape in the UAE, for both the public and private sectors. This provides contextual information about the historical development of the public and private sectors in the UAE, the study programs (curricula) available, relevant regulations and regulatory authorities and data related to students. In depth document review of Decree 4443 will explore a number of shortcomings in the criteria and in implementation. Analysis of Decree 848 aims at answering the research question of whether this decree has successfully addressed the flows identified in Decree 4443. Analysis will be substantiated with relevant literature and data to ensure valid and credible justifications for the flows outlined within the policy. Lastly, discussions of findings will conclude with a set of recommendations that aim to remedy the shortcoming of both Decree 4443 and Decree 848 to better serve the interest of students and to guarantee future equivalency criteria are equitable and inclusive of all educational pathways and choices.

Chapter 2: Literature and System Review

2.1 International Standard Classification of Education (ISCED) levels

Countries have begun to set systems in place, including policies and processes, in order to accommodate the rising need to determine the comparability of one qualification to the other. In fact, this need had become such a universal issue, that the United Nations Educational, Scientific and Cultural Organization (UNESCO) convened in Geneva in 1975 in its International Conference on Education and issued the first version of International Standard Classification on Education (ISCED) 2001 (OECD, 1999). The aim of the first ISCED levels was for it to be used ‘as an instrument suitable for assembling, compiling and presenting statistics of education both within individual countries and internationally’ (UNESCO, ISCED 1997). The ISCED levels published in 1975 and ratified in 1976 were a universal “reference classification for organizing education programs and related qualifications by levels and fields of education” (UNESCO-UIS, 2014). This was a first attempt at an international level to assess, compare and validate the myriad of qualifications that existed globally at school and tertiary education levels.

Due to rapid developments in the educational field and from countries’ experiences in the application of ISCED-76 levels, there was a need to evaluate and update the levels by the mid 1990’s (OECD, 1999). The growth of vocational education and qualifications, the increasing diversity of education providers and organizations and the onset of distance learning by new technological means such as the internet necessitated a revised ISCED edition in 1997 (UIS, 2006).

ISCED-97 levels were widely used by international organizations such as the Organisation for Economic Co-operation and Development (OECD) and the World Bank to measure educational outcomes of countries and to compare education programs. ISCED levels were (and still are) also used for statistical purposes to quantify the educational levels of a country’s population. Governments also use ISCED levels to design their educational programs for international comparability purposes. UNESCO member states use ISCED to report on their educational statistics and international indices related to educational outcomes (UNESCO-UIS, 2012). In 2011, the UNESCO Institute for Statistics (UIS) updated ISCED-97 to ISCED 2011. Main reasons cited for this update include “recognition of the expansion of early childhood education and the restructuring of tertiary education” (UNESCO-UIS, 2012).

However, what are ISCED levels and how are programs of study generally categorized according to these internationally recognized levels? What defines a level is a complex set of criteria that include learning outcomes, depth and breadth of the program, level completion, possible destination, nature of the program (vocational or general) and field of study (OECD, 2017). Below is a brief description of ISCED levels:

ISCED 2011	Programs of Study
01	
02	Early Childhood Education
Level 1	Primary Education
Level 2	Lower Secondary Education
Level 3	Upper Secondary Education
Level 4	Post- secondary non-tertiary education
Level 5	Short cycle tertiary education
Level 6	Bachelor's degree or equivalent
Level 7	Master's degree or equivalent
Level 8	Doctoral degree or equivalent

ISCED level 0 (01 and 02): early childhood education provides learning and play experiences outside the context of the home. It aims to develop children's cognitive, social and motor abilities for a smoother integration into the primary phase. This level is typically available in nurseries, day care centers and pre-primary phases at some schools and includes children aged 3 to 5.

ISCED level 1: primary education aims to ensure students develop basic skills in literacy (reading and writing) and numeracy. There is no specialization at this phase but the skills prepare students for the more specific subject based learning in lower secondary phase. Naming of this level vary but are mostly known as primary, elementary or basic phases. Typically, this level lasts anywhere between five to seven years and includes students aged between 6 and 11.

ISCED level 2: lower secondary education includes more subject specific curricula. Students who have reached this phase are more prepared for lifelong learning and for the specialized in-depth content expected in the next level. Increasingly, some systems include vocational options at this level of education. Typically, this level spans over three to four years in what systems call the middle-school, secondary or intermediate phase. Students' ages range from 12 to around 16 years.

ISCED level 3: upper secondary education prepares students for the world of work or for tertiary education, or both. At this level, students usually choose specialized

subjects or streams based upon their future aspirations. Typically, students study fewer subjects but in much greater depth. In many systems, this is the phase where students acquire their first official qualifications after a typical timeframe ranging from a maximum of five years to a minimum of two. Expected completion age is around 18 years of age.

ISCED level 4: post-secondary non-tertiary education is short cycle program, usually two years, which equips students for the world of work in a particular specialization. These programs are usually offered in a variety of institutions ranging from training facilities, to community colleges or, increasingly, online.

ISCED levels 5, 6, 7 and 8: tertiary education that typically builds on students ISCED level 3 preparation. Tertiary level programs vary in range from a three-year bachelor degree (ISCED level 5) to a doctorate in philosophy (ISCED level 8). Usually, each level builds on the proceeding level and programs are offered in institutions of higher learning that meet certain standards, including the academic qualifications of teachers.

In the “ISCED 2011 Operational Manual” published by UIS, OECD and the European Statistical Office (Eurostat) in 2015, ISCED levels are further broken down into attainment levels, levels of completions, categories of programs and examples of possible qualifications. This level of details is useful for countries to classify their education programs and for statistical purposes when reporting on levels of attainment, or educational levels, of its citizens. Building on these internationally recognized levels, many countries developed their own “levels” or qualification frameworks to classify their own educational systems and to categorize all possible pathways and qualifications within that system. One such framework is the Regulated Qualifications Framework (RQF) launched in 2015 by the Office of Qualifications and Examinations Regulations (Ofqual) in the UK (Ofqual , 2019). The RQF is an updated version of previous frameworks developed for the same purpose. The regulatory authority responsible for comparing and granting equivalency status in the UK will refer to the RQF and ISCED levels in its process of comparison. This will be discussed in further details in section 2.2.5.

2.2 Examples of entities that classify and compare qualifications

Annually, a growing number of people in countries across the globe need to obtain equivalency status for their qualifications, at various ISCED levels, for reasons that include further education to employment. Countries vary in their approach to offering this service. In some countries, it is centralized in the ministry of education and is based on strict expectations very closely aligned to its own system. Other countries outsource this service to authorized centers and individuals who provide this service based on official criteria aligned to ISCED levels. These systems tend to be accommodating of the diverse range of international qualifications. Below is an

overview of the process of equivalency in some countries, internationally and regionally in the Middle East. For a varied number of reasons, countries cited as examples below see a high traffic number of equivalency seekers on an annual basis.

2.2.1 The United States of America

The US Department of Education recognizes certain authorities, centers or certified individuals, to provide such services according to approved standards and evaluation methods. The National Association of Credentials Evaluation Services (NACES) is an association of independent, nongovernmental organizations that provides credential evaluation services to individuals who have completed part or all of their education outside the United States (NACES, 2019). Individuals may use these services for the purpose of employment, immigration or study. There is also the Association of International Credentials Evaluators (AICE), which sets stringent standards for evaluating credentials and is also recognized by the US Department of Education (AICE, 2016).

2.2.2 Canada

The Alliance of Credential Evaluation Services of Canada (ACESC) offers services of evaluating credentials for the purpose of employment, immigration, licensure or enrollment in institutions of higher education. ACESC is a Canadian membership organization established in 1990 that offers services of credential evaluation after Canada ratified the UNESCO conventions related to the recognition of qualifications (ACESC, 2019) .

2.2.3 The UAE

The authority to grant equivalency status currently (2019) lies with the Ministry of Education. Up until recently however, local educational authorities such as Abu Dhabi Department for Education and Knowledge (ADEK) and the Knowledge and Human Development Authority (KHDA) in Dubai had similar authority to grant equivalency to qualifications earned from private schools within their jurisdictions. International qualifications or qualifications obtained from private schools in the UAE are given equivalency status to national qualifications earned in public schools according to expectations outlined in a series of ministerial and cabinet decrees.

2.2.4 Lebanon

The Ministry of Education and Higher Education (MEHE) offers “recognition” or equivalency services for all levels of qualifications earned within the country in private schools or from abroad. Lebanese citizens will not be accepted into certain programs of study at university level if they have not acquired equivalency status for their secondary education qualifications. Moreover, certain professions, such as those in law, medicine and engineering, cannot be practiced without proper equivalency.

2.2.5 The UK

The National Recognition Information Centre (NARIC) is the reference authority that issues comparability certificates, which inform relevant stakeholders regarding a person's qualifications, and the level of achievement in comparison with UK based qualifications. NARIC has its own band of levels for reference when comparing international qualifications (UK NARIC , 2019). Evaluations issued by NARIC are based on a thorough study and analysis of the program of study. This includes analysis of the study load of the qualification, type of program, duration of study, assessment mode, the status of the issuing institution and whether the qualification is accredited in the home country of origin (Flanders, France and UK NARIC, 2006) (Department of Education, UK NARIC , 2018).

UK NARIC places qualifications according to its framework of 15 bands that broadly match all ISCED levels. These bands also correspond with the Regulated Qualification Framework (RQF), which is the official qualification framework for England, Wales and Northern Ireland (EACEA, 2019). When UK NARIC issues an official statement of comparability, it places the candidate's qualifications in the most closely matched RQF band. Below is a table that aligns ISCED 2011 levels to UK NARIC bands, and in turn to the RQF levels. When a candidate from with a Bachelor's Degree from France applies for a statement of comparability, a thorough analysis of his degree might result in it being compared to either RQF level 5 (if is only three years for example) or to RQF level 6.

Table 2-1: ISCED levels, UK NARIC and RQF levels (collated from cited sources):

ISCED 2011 Levels	UK NARIC Bands	RQF Levels	Skills descriptor
ISCED 01	Band 0	Entry level 1	Early Childhood 0 - 3
ISCED 02		Entry level 2	Pre-primary Pre KG
ISCED 1	Band 1	Entry level 3	Primary – Elementary
		Level 1	
ISCED 2	Band 2	Level 2	GCSE
ISCED 3	Band 3	Level 3	AS and A-levels
ISCED 4	Band 4	Level 4	

	Band 5		Short cycle tertiary- associate degree
ISCED 5	Band 6	Level 5	Ordinary Bachelor's
	Band 7		
	Band 8		
ISCED 6	Band 9	Level 6	Honors Bachelor's or equivalent
	Band 10		
ISCED 7	Band 11	Level 7	Post Graduate Degree- Mater's
	Band 12		
	Band 13		
ISCED 8	Band 14	Level 8	Doctorate
	Band 15	Not applicable	Post Doctorate

Table 2-1 ISCED Levels, UK NARIC and RQF Levels

Although highly regarded, NARIC comparability statements are not binding. Meaning, universities and employers have the right to impose their own set of demands that might complement or exceed the remit of the qualification level NARIC has categorized a qualification by.

2.3 Reasons justifying the need for specific criteria and systems to classify and compare qualifications

Classification and comparability of qualifications is a matter of international necessity. Countries are constantly working on updating their policies and processes to compare and verify qualifications earned in their own educational institutions to qualifications earned abroad. Usually, the main focus is on qualifications earned at the end of secondary education, or what equals ISCED level 3, and upper ISCED levels (5 - 8). This is because qualifications earned at ISCED level 3 determine eligibility to tertiary programs and qualifications earned at ISCED level 5 to 8 determine eligibility for the world of work (UNESCO-UIS, 2012). The next section will explore some of the reasons, globally and regionally, that necessitated a rise in the need for policies and services to map out and compare educational qualifications.

2.3.1 Mobility of students

With the movement of so many students across international boundaries to pursue tertiary education, now more than ever before, there is a need for a systematic and scientific measure by which to compare qualifications earned at the upper secondary education level. The latest international statistics show that over five million students (UNESCO, 2018) opt to pursue tertiary education in countries other than their own. The most popular destinations being the US, UK and Canada.

In Western countries, the need for a systematic and reliable method by which to compare and understand qualifications arises from the growing numbers of international students attending institutes of tertiary education. Students come from all over the world with upper secondary education credentials that vary in scope and nature. Institutions of higher education are in need of an objective and credible system to evaluate these credentials and report on the readiness of students to access programs of study at their institutions.

The United States has been considered the number one destination for international students for decades. Currently, US universities and other post-secondary institutes of learning host around 1.1 million students coming from countries all over the world (IIE, 2017). This constitutes a hefty 22% of the total number of international students studying abroad according to the 2018 UNESCO report. Nearly 33% of the international students the US hosts come from China, followed by 17% from India, 5% from South Korea and Saudi Arabia respectively and 3% from Canada. Around 440,000 international student (40%) are enrolled in undergraduate programs while another 35% are pursuing their graduate degrees (MPI, 2019).

In the United Kingdom, which is considered the second most popular destination for international students, around 458,490 international student are pursuing their tertiary education (2018, Study in the UK). The top five countries of origin are China, India, the US, Hong Kong and Malaysia. Students from these countries combined amount to nearly 38% of the total number of international students studying in the UK. Another 30% of the total number of international students come from European Union (EU) countries such as France, Italy, Spain and others. 56% of all international students are pursuing their undergraduate degree and another 44% are in graduate schools (2018, Study in the UK).

According to bulletins published by the Canadian Bureau for International Education, around 494,525 international students study in Canada at all levels of education. Around 75% of these students study in post-secondary level of education whether at a college level (41%) or university level (57%) (2018, CBIE). Students from East Asia (mainly from China at 28%) constitute the biggest portion of international students studying in Canada at 40%. This is followed by 27% of students coming from South Asia (mainly from India at 25%). Additionally, 8% of students come from Europe (where nearly half the students are from France), followed by the Middle East and North African and South America with 7% of students coming from each region (2018, CBIE).

The above statistics briefly illustrate the mobility of around two million students who opt to study abroad. An additional three million students are also mobile and study in countries other than their homeland. All of them needed to verify their credentials for admission into their next level of education, no matter where they come from or have

opted to study. Likewise, all of them will require the same process of verification of the qualifications earned abroad when they return home or opt to work in whatever country of their choice.

2.3.2 Rise in the number of international schools

Globally, and in the past two decades alone, the educational landscape has seen an exponential growth in the number of private and international schools. In almost every country in the world, there is a rise in the number of privately owned and managed schools offering parents, and students, a promise of better quality educational services (ICEF Monitor, 2018). In many cases, the private school will offer the same national curriculum on offer in the country's public schools. The difference would ultimately be in the quality of teachers, in the ratio of teachers to students, in the quality and availability of resources and in the level of support students may receive on an individual level. Moreover, many parents opt for private schools because they want their children to mingle with students from the same or better socio-economic backgrounds and to increase their chance at admission to a top tier university (ISC Research , 2019). In addition to the care and support factor, there is a rise in the number of private schools globally that offer "international curricula", which is a curriculum other than the national curriculum on offer in public and other private schools in a particular country (ISC Research , 2019). The difference between a private school and an international school is sometimes confusing where people may actually assume one is the synonym to the other. However, there is a fundamental difference between the two categories of schools. In Lebanon, for example, there are around 2,804 schools in total. Of these, around 1,547 schools (54%) are private. These are privately owned and managed schools and almost all of them offer the national curriculum of Lebanon. Only a handful of private schools in Lebanon (around 8) are "international", meaning, they offer curricula other than the national curriculum of Lebanon (BLOMINVEST BANK, 2017). The International School Council Global Report for 2016 calculates that there are over 8,200 international schools globally educating around 4.3 million students. There is a projected increase in that number for the next two decades to include a number of schools with an enrollment of over 8.7 million students (September 2016, Gulf Business). Students enrolled in international schools are increasingly coming from the indigenous population of the host countries. Parents, especially well to do parents, are opting for international curricula to ensure their children master an additional language and earn international qualifications that will allow competitive access to international universities, especially qualifications such as the A-levels and the International Baccalaureate Diploma (IB Diploma) (ISC Research , 2019). For example, around 60% of Emirati students in Dubai study in private schools, and around 60% of this total study in international schools. The other 40% of Emiratis study in private schools that offer the UAE Ministry of Education curriculum (KHDA, 2017).

For governments in countries where there is a number of international schools, there is an increased need to set up systems and develop policies to compare, map out and recognize the qualifications earned by students. This becomes of particular importance when students are indigenous to the country and have opted to earn qualifications other than those developed by the national educational authorities.

Table 2-2: Number of international schools in the top ten countries globally (ISC Research , 2019)

Table 2-2 Number of International Schools in the Top Ten Countries Globally

Global ranking	Country	Number of international Schools
1.	United Arab Emirates	589
2.	China	550
3.	Pakistan	455
4.	India	408
5.	Spain	353
6.	Kingdom of Saudi Arabia	243
7.	Japan	243
8.	Egypt	191
9.	Brazil	191
10.	Indonesia	190

2.3.3 Rise in the number of immigrants and migrants, regionally and internationally

Recent years have witnessed an unparalleled surge in the number of people seeking to immigrate to other countries and in the number of forcibly displaced people who had to flee their home country for a number of reasons. The World Migration Report (2017) estimates the figure to be close to 244 million people (close to 3.3% of the total world's population) who immigrated to countries other than their own in 2015. This is an increase from the estimated 155 million immigrants reported two decades ago (IOM, 2017).

Reasons for people immigrating to other countries vary enormously. Individuals and families choose to live in another country because of work, family and study (IOM, 2017). Increasingly, reasons for immigrations include violence, conflict, persecution or disasters. Not all immigrants wish to permanently settle in their new country of choice. Some choose to immigrate for work purposes only and eventually go back “home” for retirement, as is the case of many Arab nationals living and working in Gulf Cooperation Countries (GCC) including the United Arab Emirates. Another such group of “temporary immigrants” includes Europeans who choose to study or work

in another European country but eventually choose to go back to their “home” countries (Eurostat, 2019).

Many Arab nationals are expats in other Arab nations. Data from the 2018 World Migration Report puts the Kingdom of Saudi Arabia (KSA) as the third most popular destination for migrants worldwide. KSA comes in after the United States of America and the United Kingdom with 5.8% of the total number of migrants choosing it a destination to live and work in. That translates to nearly 14,152,000 million migrants living in the KSA. The United Arab Emirates also attracts its fair share of migrants at 2.9% (IOM, 2017). This equals nearly 7,076,000 million migrant expats living in the UAE.

A healthy percentage of the migrant population living in KSA and the UAE are Arab nationals. Nearly half of this Arab expat population is comprised of families who spend an average of 5 years or more abroad (HSBC, 2018). Their children will attend mostly private schools in the host countries and graduate with qualifications that will need equivalency when they choose to go back to their home countries. For example, over 9 million Egyptians live and work abroad in other Arab countries (Al Masry Al Youm , 2017). Given that national universities are free in Egypt, most of the expat workers’ children will return home for their tertiary education. However, admission to universities, especially national public universities, is subject to those students obtaining equivalency status to their upper secondary exit qualifications gained abroad. The Ministry of Higher Education, heavily influenced by the Supreme Council of Universities, dictates conditions and requirements for equivalency in Egypt (Ministry of Education, Egypt, 2019). The same expectations are applicable to students who go back to their home countries in Jordan and Lebanon and who have studied internationally or in one of the Arab nations such as KSA and UAE. Equivalency requirements in both countries are very stringent and aim to compare qualifications earned at ISCED level 3 with their own Tawjihiya (in Jordan) or Baccalaureate (in Lebanon).

2.3.4 Demands of professional associations and unions

Another important reason that justifies the need to compare qualifications is the presence of strong associations and unions in some countries that dictate the level and kind of qualifications needed for individuals to practice certain professions. Expectations for certain qualifications not only include university qualifications (ISCED level 5 and beyond) but also qualifications earned at the upper secondary education phase (ISCED level 3). One such example is the Lebanese Order of Physicians. In order to practice medicine in Lebanon, a physician must be licensed by the Ministry of Health and be a member of the Order of Physicians (LOP, 2016). Both will require the candidate to either have a Lebanese Baccalaureate (the official exit qualification from the formal Lebanese education system at the upper secondary phase). If the candidate does not have a Lebanese Baccalaureate but has another upper

secondary school qualification, he or she must obtain an official equivalency from the Ministry of Education (LOP, 2016). Conditions to obtaining equivalency to the Lebanese Baccalaureate are quite stringent and demanding. If not aware of these demands, many Lebanese expats who have studied abroad in both their upper secondary education phase and tertiary education might not be eligible to practice medicine in their home country of Lebanon because they fail to meet the equivalency criteria. In the UAE, there are also equivalency expectations of all Emiratis wishing to join the work force in the public sector or for professional practice in particular fields such as medicine (Ministry of Health, UAE, 2017).

Chapter 3: Research Scope and Question

As discussed in the previous chapters, it is obvious that there is a growing global need for policies and procedures to compare upper secondary school qualifications in order to attest whether the level of skills, knowledge and understanding a student has gained in one system is equal to the level of skills, knowledge and understanding expected in another system. The need is so global, the UNESCO, in collaboration with OECD and other organizations, has set about the ISCED levels in order to broadly categorize the different kinds of qualifications that exist internationally and are growing. In addition to the international ISCED levels, many countries have also developed their own qualification frameworks by which they measure, ratify and quality assure their own qualifications. Countries also use these frameworks to compare and grant equivalency to qualifications earned in other countries or in international schools within their countries.

In the UAE, the need for such comparability and equivalency criteria has been a priority for the past several decades. This is mainly due to the growing number of private and international schools offering curricula other than the national curricula of the Ministry of Education. Furthermore, the number of Emirati and Arab expats enrolled in these schools is growing. These students need to get an equivalency status for their upper secondary school qualifications so that they can enroll in national universities, in the UAE or in their home countries. Equivalency status for Emirati students is also necessary for their national service, to be eligible for state endorsed scholarships to universities abroad, and to join the workforce in government entities.

Equivalency Decree 4443 was issued in 2001 to regulate the process of equivalency to qualifications earned at the upper secondary phase in international schools in the UAE. Its criteria will remain in effect until the end of the 2020 – 2021 academic year. Starting with the academic year 2021 – 2022, Decree 848, which was issued in 2018, will take effect. Decree 4443 however has proven to have a number of flaws that has affected, and is still affecting, the study choices and pathways of many students

enrolled in private schools in the UAE. The much awaited Decree 848 was issued late in 2018 in an attempt to address the flaws in Decree 4443 and to reflect a more progressive approach to granting equivalency status in the UAE. Through critical analysis of Decree 4443 and Decree 848, this research aims to explore whether the newly developed set of equivalency criteria addresses the flows in Decree 4443.

Chapter 5 of this research provides background information about the educational landscape in the UAE with details related to the public and private educational sectors. A thorough analysis of Decree 4443 will list its shortcomings and the reasons that lead to a national need for a revised equivalency policy. A critical analysis of Decree 848 will explore all aspects of this new decree in order to address the research question proposed above.

For the purpose of this study, analysis of Decree 4443 and Decree 848 will concentrate on requirements for international qualifications earned in private schools offering three curricula. These are the International Baccalaureate (IB) curriculum, the National Curriculum of England and Wales (UK curriculum) and a curriculum of one of the states in the United States of America (US curriculum). Reasons for this will be further explored in Chapter 5 but are mainly due to the fact that most Emiratis, and Arab expat students, are enrolled in schools offering these curricula. This is the group of students most in need of equivalency status for their qualifications.

Chapter 4: Methodology

This research is a qualitative in depth evaluation and analysis of two documents that dictate equivalency criteria in the UAE. Primary sources fundamental to this research are the two policies in question, namely Decree 4443 for 2001 (official copy in Arabic in Appendix 1) and Decree 848 for 2018 (official copy in Arabic in Appendix 3). The research is supported by relevant primary and secondary sources such as national and international reports, information about schools in the UAE and other pertinent data.

Document analysis as a research method has been gaining more traction, especially in research related to the social sciences (Attride-Sterling, 2001) (Patton, 2001) (Skovdal, M. and Cornish, F. , 2015) . As proposed by Bowen (2009), document analysis is a useful method to explain and draw conclusions about a social phenomenon or a practice. Although not a very widely used research method on its own, it is very useful “for specialized forms of qualitative study” (Bowen, 2009). As explained earlier, this specific study of documents pertaining to equivalency criteria is novel to the UAE and the Arab world. No previous data, qualitative or quantitative, could be drawn on, and thus an in depth study of the decrees themselves, how clauses are interpreted and their effect on students’ choices is a much needed analysis to support current understanding and future action.

The sequential flow of this research does not quite follow the orthodox research norms. It is an in depth document analysis given in the context of the historical, political and social construct of the UAE. Contextual information explains the rising presence of private schools in the UAE, which in turn necessitates equivalency criteria. Furthermore, this research attempt to explain the complex nature of the context of the educational landscape and the “overlap” in authority and jurisdictions, which has had a big role in the state of things. The importance of historical and social perspectives in qualitative research cannot be underestimated in order to lend validity to current state of affairs, as shown in the document analysis of Decree 4443 and Decree 848 (Creswell, J. and Miller,D., 2000) (Korstjens, I. and Moser, A. , 2017).

For validity, confirmation and verification, this research includes a substantial number of secondary sources. Some of the primary sources is comprised of data (knowledge) and documents that are available through my work. Other secondary sources are data, documents, reports and other types of sources available to the public. The use of these sources is important also for triangulation. Through document analysis of Decree 4443 and 848, findings, whether about the applicability or relevance of the equivalency criteria, are supported through the use of secondary sources and information. This triangulation is crucial for correlating findings and for offering a different lens to support the findings from the document analysis (Fusch,P. and Ness, L., 2015) (Bowen, 2009).

Limitations and Ethical considerations:

As mentioned above, document analysis as a research method may be advantageous for a number of reasons, but, like any research method, it could also have its own set of limitations (Bowen, 2009). In the main, two limitations that may apply to document analysis research are biased selectivity and insufficient details (Bowen, 2009). In order to address any biased selectivity of documents to support findings, I have included relevant and authoritative documents to support or verify an assumption. For example, to support findings related to difficulty in applying the equivalency criteria on graduates of IB curriculum schools, documents used to support this claim are written and produced by the International Baccalaureate Organization itself. Regarding the possible limitation of insufficient details, especially quantitative details, this was to a certain degree compensated by data collated personally from those publically accessible or specifically collected for this research. This lack of quantitative data regarding the number of students who apply for equivalency on a yearly basis in the UAE, from which curricula and whether they get their equivalency or not is strictly confidential. Even though I had partial access to this data through work, ethical consideration could not permit that I use these without proper consent. Availability of quantitative data related to this topic will be one of the recommendations to be discussed in the last chapter. This is crucial data related to any future work regarding equivalency criteria for the students in the UAE.

As some of the sources were obtained through my work, these had to be considered and used within ethical and professional boundaries. Names of individuals and entities, including schools, have been withheld. Any identified names in this research were cleared with those concerned before being included or it is used within the context of it being public knowledge and is referenced.

Chapter 5: Document Analysis of Decree 4443 and Decree 848

5.1 Education in the UAE

According to the latest statistics, the United Arab Emirates is home to over 9,000,000 million residents. Over 85% of the residents in the UAE are non-Emiratis with the largest concentrated group coming from South East Asia (40%). Of the total number of people living in the UAE, around 1,107, 808 (12% of the total population) are K-12 students attending either public or private schools spread over the seven Emirates (Education Data Center- Ministry of Education , 2018).

There are nearly 1,229 schools in the UAE with 617 public schools and 612 private schools offering a range of 19 different curricula (Ministry of Education, UAE, 2017 - 2018). An additional 17 technical schools offer vocational qualifications and mainly cater to an all Emirati student body. Most schools (both public and private) are located in the capital Abu Dhabi (including Al – Ain) with a total number of 407 schools, almost 60% of which are private schools. Dubai follows with 275 schools, where nearly 75% of these are private schools. The Emirate of Sharjah comes in third with nearly 229 schools almost half of which are private (Education Data Center- Ministry of Education , 2018). The large number of private schools in the UAE is not surprising given that most of the population are expatriates. An added reason for this huge number of private schools is that public schools only enroll expats to a maximum of 20% of their total enrollment, granted that students fulfill certain conditions such as academic excellence and being fluent in Arabic (School Operations, MoE, 2017). Therefore, private schools in the UAE are a necessity to maintain and attract millions of expatriate migrants to live and work in the UAE for extended periods of time.

Table 5-1: Number of public and private schools in the UAE (Education Data Center- Ministry of Education , 2018)

Table 5-1 Number of Public and Private Schools in the UAE

Emirate	Public schools	Private schools
Abu Dhabi	249	198
Dubai	71	204
Sharjah	113	116

Ajman	35	39
Um Al Quain	17	7
Ras Al Khaimah	80	33
Fujairah	52	15
Total	617	612

5.1.1 The public education sector

A. Pre-1971 – 2016:

The public educational system in the UAE was officially established in 1971 with the founding of the first Ministry of Education in the newly formed nation. Prior to 1971, there were a number of public schools across the seven trucional states that would later form the United Arab Emirates. These emirates were Abu Dhabi, Dubai, Ras Al Khaimah, Sharjah, Um Al Quain, Fujairah and Ajman. Schools back then implemented the national curriculum of Kuwait and were under the direct supervision of the Ministry of Education in Kuwait (Davidson, 2008). With the formation of the United Arab Emirates in 1971, the newly founded Ministry of Education set out to develop a national curriculum and expand the number of public schools serving the Emiratis and some of the Arab expat community living in the UAE in the 70's and 80's of the past century.

The curriculum and educational system that were developed in the early 70's of the 20th century remained largely unchanged until 2016. The system was mainly modelled after the Kuwaiti and Egyptian systems of education, considered by many Arabs as quite advanced during that era. Another reason for the system being modeled after the Egyptian system is that most of the Emirati high school graduates during those decades pursued tertiary education in Egyptian universities and thus to them the transfer was seamless (Ridge, N., Kippels, S., El Asad, S. , 2015).

The educational system in the UAE was based on 12 years of formal schooling starting from age 6 until the age of 17 plus, or what is equivalent to Grade 1 to Grade 12. All students studied the same core subjects up until the last two years of education. After Grade 10, students had to choose between two streams in their last two years of education. More often than not, that choice was not up to the student or parents, but was based on the performance of the student in Grade 10 end of year exams. In Grades 11 and 12, students pursued study in either the Literary or the Scientific streams. As the names suggest, these streams had clear concentration on different subjects and prepared students to pursue tertiary studies in either the sciences or the humanities. In reality though, many of the students in the literary section were placed there because of poor performance and not because of any inclination or interest in the humanities. At the end of Grade 12, all registered students sat for external tests prepared and graded by the Ministry. They were tested on all the subjects they have studied in Grade 12. If a student passed with a general score of 60 or above over 100, then that

student was granted a General Certificate of Secondary Education, or “UAE Tawjihiya”, which granted access to tertiary education. Of course, access to different programs of study at universities was determined by the stream the student was in and secondly by the general average obtained on Grade 12 examinations. This background information is important because it lends itself to the rationale upon which the first decree (or policy) regarding equivalency was based on, namely Decree 4443.

Table 5-2: The public educational system in the UAE from 1971 to 2016

Table 5-2 The Public Educational System in the System in the UAE from 1971 to 2016

Age	Educational Phase	Grade level	
6	Cycle 1	Grade 1	
7		Grade 2	
8		Grade 3	
9		Grade 4	
10		Grade 5	
11	Cycle 2	Grade 6	
12		Grade 7	
13		Grade 8	
14		Grade 9	
15	Cycle 3	Grade 10	
16		Literary Stream	Scientific Stream
		Grade 11	Grade 11
17+		Grade 12	Grade 12

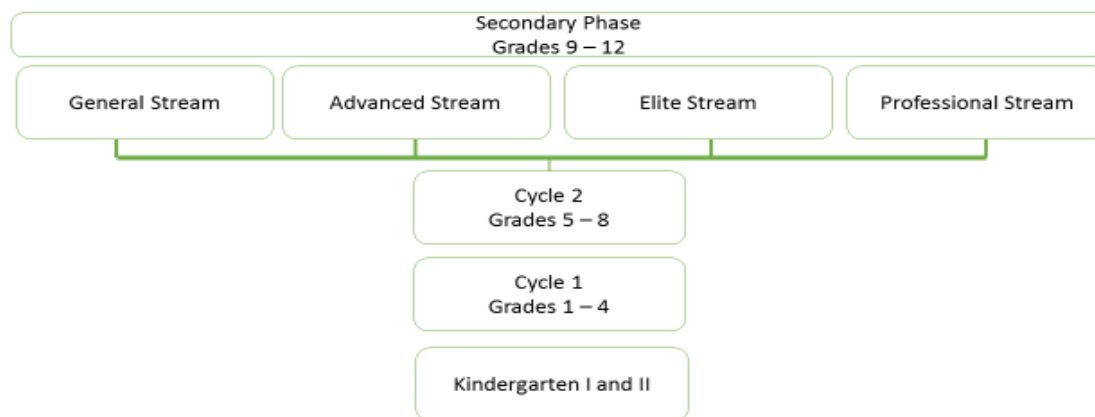
B. 2016 - onwards:

With the advent of His Excellency Engineer Hussein al Hammadi to the Ministry of Education in 2014 (The Cabinet, 2019), an intensive workshop to reform the public educational system in the UAE began. The overhaul included a restructuring of the grade level system, replacing the existing Literary and Scientific streams with different streams, developing a new national curriculum and restructuring the leadership and governance structure of public schools (Ministry of Education , 2017). In the current educational system in public schools, students study the same core subjects from Grade 1 until Grade 8. There has been an increased focus on the subjects of English, the sciences and math (STEM subjects) in response to UAE performance on international assessments, such as Trends in International Math and Science Standards (TIMSS) and Program for International Student Assessment (PISA) (Pennigton, 2016). This is also in line with the government’s strategy to encourage

more Emiratis to specialize in STEM related careers (Ministry of Education , 2017) (UAE Vision , 2018).

Figure 5-1: The structure of the UAE education sector since 2018 (own work from a presentation prepared for use at work):

Figure 5-1 The Structure of the UAE Education Sector Since 2018



After Grade 8, students choose, largely dictated by their performance in Grade 8, to enter any one of four streams. The General Stream caters for a broader spectrum of students who are undecided or who might not have performed well on Grade 8 exams. It still allows them a broad range of choice when entering university. In the Advanced and Elite Streams there is a major focus on mathematics and the sciences, with physics taking center stage as the primary science with biology and chemistry taught as supporting subjects. Students in the Elite stream study nearly all subjects in English. The Professional Stream was recently introduced in the 2018 – 2019 academic year. It aims to provide a vocational alternative to students who might not fit in any of the other three streams. This is a novel introduction to the educational system in the UAE. Historically, many students who were struggling academically would leave school in Grade 9 or 10, and either enlist in the army and the police or stop their educational journey altogether (Ministry of Education, 2018).

The new public educational system offers students four different exit qualifications depending on their stream of study. Students from the General Stream will exit with a *General Certification in Secondary Education in the General Stream*. Students from the Advanced Stream will exit with a *General Certification in Secondary Education in the Advanced Stream*. The type of exit qualification will determine what program

of study students can pursue in national universities. Only students with Advanced or Elite Streams will be allowed to pursue a degree in engineering for example. This new public educational system will heavily influence the rationale behind Decree 848 for granting equivalency to high school qualifications earned from private schools.

5.1.2 Private education sector in the UAE

According to the ISC report for 2018, the UAE ranks first in the world with the number of international schools (ISC Research , 2019). This is a remarkable story of growth given that the first private school established in the UAE opened its doors in 1961 to serve the growing Indian community working and living in Dubai (Ridge, N., Kippels, S., El Asad, S. , 2015). Even before the UAE Trucial States united in 1971, it started to attract a growing number of expatriates due to the discovery of oil in the late 1950s. The 60s witnessed a growing number of British and American schools being set up to serve the emergent presence of these communities in both Abu Dhabi and Dubai. Currently, the UAE hosts more than 600 private schools offering 19 different curricula with a total enrollment of over 800, 000 students (80% of the total student population in the UAE) (Education Data Center- Minsitry of Education , 2018).

Table 5-3: Emirati and non-Emirati students in private schools per Emirate:

Table 5-3 Emirati and Non-Emirati Students in Provate Schools per Emirate

Emirate	Abu Dhabi	Dubai	Sharjah	Ajman	Um Al Quain	Ras al Khaimah	Fujairah	Total
Total number of students	241,853	281,432	180,750	53,015	6,769	32,066	22,749	818,634
Emirati students	63,481	32,911	23,312	4,341	2,071	5,639	7,410	139,165
% of Emirati students	26%	12%	13%	8%	30%	17%	32%	17%

As indicated in the table above, an average of 17% of students studying in private schools in the UAE are Emirati students. In some emirates, Emirati students constitute more than third of the student population in the private schools, such as in the Emirates of Um al Quain and Fujairah, with Abu Dhabi closely trailing at 26%. Although the number of Emirati students in Dubai does not exceed 12% of the total

number of students in private schools, this actually constitutes more than half of the total number of Emirati students in the Emirate of Dubai. To elaborate further, the total number of Emirati students in the Emirate of Dubai equals 54,224 students. More than 30,000 of them are enrolled in private schools (Education Data Center- Ministry of Education , 2018), this equals to around 57% of the total number of Emirati students in Dubai. Other figures published by the Knowledge and Human Development Authority in Dubai puts the total number of Emirati students studying in private schools at 32,103 student, which raises the total percentage closer to 60% (KHDA, 2017). The number of Emirati students in private schools is significant because it is mandatory for the Emiratis to seek equivalency for qualifications earned in these private schools if they wish to enroll in any university in the UAE, for military service and for government-sponsored scholarships to study in universities abroad.

Table 5-4: Number of students in the different curricula private schools in the UAE (Ministry of Education, UAE, 2017 - 2018):

Table 3-4 Number of Students in the Different Curricula Private Schools in the UAE

Curriculum	Number of students	Number of Emirati Students
Ministry of Education	129,453	12,016
UK	218,443	35,558
US	158,094	83,861
International Baccalaureate (IB)	22,004	4,582
Indian	212,663	0
SABIS	26,745	5,933
*Others	42,345	2,021
Total	809,747	143,971

*Others: refers to curricula that are offered by a few number of schools such as Pakistani, Iranian, French, Philippines, etc.

Numbers confirm that more students in the UAE attend private schools, which reflects the proportion of Emiratis to non-Emiratis living in the country. Moreover, even amongst Emiratis who have the option and the priority to attend public schools, it is evident that a sizable proportion opt to attend private schools (around 60% of Emirati students in total). As seen in the table above, the three most attractive curricula for Emirati students is the US, UK and IB curricula. Although the number of Emirati students in SABIS schools surpasses the number of Emiratis in IB schools, it will not be discussed as a separate curriculum. That is because students in SABIS schools sit for either AS, A-Level or AP exams, which are related to the UK and US curricula respectively. Moreover, equivalency decrees do not distinguish SABIS as a separate and distinct curriculum.

The number of students studying in UAE schools has increased over the past few decades to reflect the increasing number of people of who live and work in the UAE. Proportionally though, it has not changed. Over the past few decades the number of students studying in private schools, Emiratis and non Emiratis alike, has always been far greater than students studying in public schools (Burton, G. and Warner, R., 2017). Thus, the government realized early on the need to ensure students graduate with minimum requirements considered “equal to” or equivalent to what their counterparts in the public schools are studying. The concept of granting “equivalency” to qualifications earned in private and international curricula is not new in the Arab world. Lebanon, Jordan and Egypt have had their own criteria for equivalency established as far back as the 1960s (Minsitry of Education and Higher Education, Lebanon, 2019). The UAE is a relatively new country. With the real surge in the number of private schools in the 80s and 90s of the past century and the rising number of Emirati students enrolled in these private schools came the need for a formal decree that clearly sets the expectations for granting equivalency.

5.2 Decree 4443 for the year 2001

Ministerial Decree 4443 for the year 2001 was the first comprehensive decree approved by the Cabinet in 2001 in an attempt to clearly define expectations for the graduates from private schools. In the absence of any other formal method to assure the quality of educational provision offered by private schools, this decree also attempted to set the minimum expectations in order to ensure schools deliver on their promise to parents and students (Al Bayan, 2005).

5.2.1 Policy overview

The decree aimed at providing guidelines for equivalency criteria for high school qualifications obtained from private schools offering the following curricula:

1. Ministry of Education curriculum
2. UK curriculum schools
3. US curriculum schools
4. Canadian curriculum schools
5. International Baccalaureate (IB) curriculum schools
6. Community schools (others)

Students who graduate Grade 12 from private schools offering the Ministry of Education curriculum are granted automatic equivalency to their qualifications. These students sit for the same tests and under the same conditions as their counterparts who study in public schools. In fact, the qualifications themselves are issued by the Ministry of Education and thus it is only logical that these qualifications have the same standing as the “Tawjihiya” issued in the public school system. Table 7 below summarizes equivalency criteria for qualifications earned in UK, IB and US curriculum schools.

Table 5-5: Summary of the equivalency criteria in Decree 4443 for UK, IB and US curricula (own translation from original Arabic version):

Table 5-5 Summary of the equivalency criteria in Decree 4443 for UK, IB and US Curricula

School Curriculum	General requirements that apply to all curricula	Specific requirements
UK curriculum	<p>-Students must study mandatory subjects of Islamic Education (for Muslim students) and Arabic in Grades 10, 11 and 12 (or equivalent)</p> <p>-Students must pass Ministry exams for these two subjects at the end of Grade 12</p>	<ol style="list-style-type: none"> 1. In schools where students sit for their I/GCSEs in Grade 10 (Year 11), the following conditions apply: <ul style="list-style-type: none"> • Students must obtain 5 I/GCSEs at grades (A* - E) • Students must obtain 4 Advanced Subsidiary (AS) subjects at grades (A – D) or 2 Advanced level (A-level) subjects at grades (A* - D). 2. In schools where students sit for their I/GCSEs in Grade 11 (Year 12), the following conditions apply: <ul style="list-style-type: none"> • Students must obtain 5 I/GCSEs at grades (A* - E) • Students must obtain 2 AS (A – D) or 1 A-level subject at grade (A* - D). <p>Arabic and Islamic Education will not be considered if taken as part of these external exams.</p>

US curriculum		<ol style="list-style-type: none"> 1. Students must submit their school based report cards for Grades 10, 11 and 12 clearly showing that: <ul style="list-style-type: none"> • They have passed all their subjects with at least 60% • They have studied five subjects other than Arabic and Islamic Education each year 2. Students must obtain at least 500 on the Test of English as a Foreign Language (TOEFL) or obtain a band 5 on International English Language Testing System (IELTS) 3. Students must score at least 400 on the Scholastic Aptitude Test (SAT I) math component.
IB curriculum		<ol style="list-style-type: none"> 1. Students must obtain the full IB Diploma with a score of at least 24 points. 2. Students must study three subjects at the Higher Level (HL) and three subjects at the Standard Level (SL) 3. IB chosen subjects must NOT include Arabic or Islamic Education.

The decree included a list of approved subjects from which students can choose. Any subject taken and tested outside of this approved list was not considered for equivalency. The list of subjects includes:

- | | |
|---------------------------------|----------------------------|
| 1. English language | 2. English literature |
| 3. French | 4. General science |
| 5. Physics | 6. Biology |
| 7. Chemistry | 8. Geology |
| 9. Mathematics | 10. Economics |
| 11. Business | 12. Accounting |
| 13. Computer | 14. Sociology |
| 15. Genetics | 16. Psychology |
| 17. History | 18. Geography |
| 19. Information technology (IT) | 20. Design technology (DT) |
| 21. Food and health science | |

Decree 4443 remains in effect until the end of academic year 2020 -2021. Students who fulfill the requirements listed above acquire equivalency status to their

qualifications which will then be considered “equal” to the Ministry issued Tawjihiya. Equivalency status was not granted according to the previously existing Literary or Scientific streams or the newly established General, Advanced and Elite. It is rather a general equivalency.

5.2.2 Document analysis:

Although Decree 4443 has been in effect for nearly 20 years, the rationale for its criteria was never established nor clearly understood. Its application was also a matter of dispute between the different educational entities across the UAE. Scrutiny of the criteria clearly reflect the following flows:

5.2.2.1 Lack of reference to international qualification framework: Although by 2001, ISCED-97 levels were published and ratified by most UN member states, Decree 4443 did not refer to these levels. In fact, neither the decree itself, nor any literature related to the decree (which was scarce and mainly limited to newspaper reviews), explains in full the rationale used by policy makers at that time for the criteria on which equivalency to the Emirati Tawjihiya were based on. There is no evidence to suggest that any formal and documented mapping exercise was conducted to map out and compare all the learning outcomes and expectations per curricula (such as the exercise conducted by NARIC to inform their decisions).

5.2.2.2 Inequity in the level of demand: The demands outlined in Decree 4443 across the different curricula are not equal to each other nor to the demands of the UAE Tawjihiya. Criteria listed above clearly indicate that requirements to grant equivalency to qualifications earned from a US curriculum school are much easier to attain than requirements needed to attain equivalency from both UK and IB schools.

To demonstrate the above, the criteria required for equivalency in Decree 4443 will be measured using the UCAS tariff point system. The Universities and Colleges Admissions Criteria (UCAS) point system was first introduced in 2001 as a centralized service for students to use to apply for universities in the UK (UCAS, 2014). Although almost exclusively used by UK universities, the UCAS tariff point system has gained international recognition and is a reliable and credible method to use for comparing the weightings of international qualifications. UCAS tariff points are updated periodically and the weighting system changed, but for this exercise, the 2015 UCAS tariff points will be used as it is the closest weighting system to the one that existed when Decree 4443 was issued in 2001.

Table 5-6: 2015 UCAS tariff points for equivalency criteria in Decree 4443

Table 5-6 2015 UCAS Tariff Points for Equivalency Criteria in Decree 4443

Curriculum	Criteria according to Decree 4443	Total UCAS tariff points (2015)																										
UAE Tawjihiya	<ul style="list-style-type: none">General Certificate of Secondary Education issued at the end of Grade 12 by the Ministry of Education	<ul style="list-style-type: none">Zero UCAS tariff pointsAcceptable at 70% or better in lieu of GCSE on a subject for subject basis (except English language)Students often had to do a foundation year before joining the full program																										
UK	<ul style="list-style-type: none">5 I/GCSE at A* - E2 to 4 A S subjects (A- D)1 or 2 A-levels (A* - D).	<ul style="list-style-type: none">I/GCSEs did not carry any UCAS tariff pointsAdvanced Subsidiary – AS :<table><tr><td>Grade</td><td>UCAS tariff points</td></tr><tr><td>A</td><td>60 (highest possible)</td></tr><tr><td>B</td><td>50</td></tr><tr><td>C</td><td>40</td></tr><tr><td>D</td><td>30</td></tr><tr><td>E</td><td>20 (lowest possible)</td></tr></table>Advanced Level- (A-level):<table><tr><td>Grade</td><td>UCAS tariff points</td></tr><tr><td>A*</td><td>140 (highest possible)</td></tr><tr><td>A</td><td>120</td></tr><tr><td>B</td><td>100</td></tr><tr><td>C</td><td>80</td></tr><tr><td>D</td><td>60</td></tr><tr><td>E</td><td>40</td></tr></table>	Grade	UCAS tariff points	A	60 (highest possible)	B	50	C	40	D	30	E	20 (lowest possible)	Grade	UCAS tariff points	A*	140 (highest possible)	A	120	B	100	C	80	D	60	E	40
Grade	UCAS tariff points																											
A	60 (highest possible)																											
B	50																											
C	40																											
D	30																											
E	20 (lowest possible)																											
Grade	UCAS tariff points																											
A*	140 (highest possible)																											
A	120																											
B	100																											
C	80																											
D	60																											
E	40																											
US	<ul style="list-style-type: none">High School Diploma earned from the schoolTOEFL or IELTSSAT I math component	<ul style="list-style-type: none">Zero UCAS tariff pointsOn its own (without external tests), the High School Diploma maybe considered equal to GCSEs.																										
IB	<ul style="list-style-type: none">Full IB diploma with a minimum of 24 points	<ul style="list-style-type: none">260 UCAS tariff points for the full diploma at 24 points																										

As seen above, the demands of Decree 4443 using the UCAS tariff points were not balanced. The Tawjihiya itself (against which all other qualifications were measured) carried zero tariff points and the IB Diploma at 24 points (which is the minimum possible one could earn) carried 260 tariff points. Students with qualifications from a UK curriculum school having earned two A-levels at grade C will earn 200 UCAS tariff points. The results seen above show a complete imbalance in favor of the US

curriculum (least expectations) with the IB system being the least favored (most expectations).

Furthermore, there was no consideration given to the assessment and grading systems applicable in each curriculum. The IB Diploma subject exams and the A-levels are taken in very tightly controlled environments and the grading of the tests themselves is rigorous, tightly moderated and highly credible (Australian council for Educational Research (ACER), 2017). In contrast, grades given to each subject granted by schools offering the US curriculum in the UAE are entirely based on school-based exams. There is no way of ensuring the credibility, validity and reliability of such assessments taking place in each individual school. Although there are a number of very high performing US curriculum schools in the UAE, KHDA inspection results, and as early as 2008, show that the vast majority of US curriculum schools are not high performing schools and their assessment methods are not very credible (DSIB, 2009).

Additionally, there is no evidence to suggest that in the development of Decree 4443 any consideration was given to the amount of time students have to spend studying each subject, or what is universally called Guided Learning Hours (GLH) (Ofqual , 2019). The IB organization has clear guidelines for the number of GLHs for each subject at Higher or Standard level. It even has clear instructions regarding the time a student has to spend working on the Extended Essay and the Theory of Knowledge component of the IB Diploma (IBO, 2019). The same applies for AS and A-level subjects with a highly recommended number of GLH set by the examining boards to ensure students are ready for their tests in accordance with Ofqual's Total Qualification Time (TQT) criteria (Ofqual, 2019). Although in the American system there is clear and applied definition to what constitutes a credit (120 Carnegie learning hours per year per credit) (Wainbridge, 2019), most schools offering the US curriculum operating in the UAE did not follow that at all (DSIB, 2013). So in reality, when students submitted their school based report cards from US curriculum schools that stated that the student has actually studied 8 to 9 subjects, the students might actually have studied these subjects for only 2 or 3 lessons per week, which does not qualify for a full credit. This raises the concern of breadth and depth in the demands of Decree 4443 across the curricula, which corresponds to the “size” of any given qualification as described by the ISCED levels and the criteria used by NARIC and the UCAS tariff points.

5.2.2.3 Confined list of subjects: The list of subjects included in Decree 4443 served a purpose in the beginning of the 2000s to ensure all schools were offering academic subjects of value that students can use when pursuing tertiary education. However, and because Decree 4443 remained in effect for nearly two decades without any modification, the list of subjects came to confine what students can and cannot choose when pursuing their different qualifications. The list also did not reflect the tremendous changes that were happening in the educational field worldwide and

particularly the changes that were happening to the UK GCE subjects and exams at all levels, I/GCSE, AS and A-levels (Qfqual, 2017). Furthermore, the list confined IB Diploma students who have to choose six subjects from the six groups as outlined and expected by the IB Organization (International Baccalaureate Organization, 2014). The groups are:

Group 1: Studies in language and literature

Group 2: Language acquisition

Group 3: Individuals and societies

Group 4: Sciences

Group 5: Mathematics

Group 6: The arts

As indicated above, the 6th group of the IB subjects is concerned with all subjects related to arts. In reality, when a student submitted their IB Diploma for equivalency, and even if the student has fulfilled all other conditions, that students would not be granted equivalency if one of the 6 IB subjects were in the arts. This went against the philosophy of the whole IB Diploma program that aimed at developing well-rounded individuals who studied a wide range of subjects including languages, mathematics, the sciences, the social sciences and the arts (IBO, 2019).

5.2.2.4 Lack of any reference to vocational qualifications: Decree 4443 lacked any reference to vocational qualifications. This factor affected the ability of the decree and decision makers to ensure that all qualifications are recognized and in effect recognizing students' varied abilities, interests and needs. Vocational qualifications were gaining more recognition in the UK and many universities started admitting students with vocational qualifications, or those who had a mix of academic and vocational qualifications (Turner, 2018). One of the main changes to the ISCED levels in 2011 is in recognition of the growing status of vocational qualifications (insert). An example of such vocational qualifications in the UK are the Business and Technology Education Council Qualifications, which are more commonly known as BTECs. These qualifications are recognized at Level 3 according to the UK RQF. By 2016, one in four students entering university in the UK held a BTEC qualifications, which is double the number of students with vocational qualifications entering universities a decade earlier (UCAS, 2017) .

Another important development in vocational qualifications was the introduction of the IB Career- related Program (IB CP) as an alternative pathway to the full IB Diploma (Behle, H., Kremakova, M., Layonette, C. , 2015). The program was developed in recognition of the fact that a number of students cannot attain at the level required of them to pass the rigorous IB Diploma and also in order to cater to students' varied abilities and interests and to prepare them for the world of work. The IBO introduced the IB Career-related Diploma in 2012. It offers a combination of some

academic subjects and a recognized career related vocational component, such as BTECs. The program proved to be popular and since then has been growing exponentially in a number of countries worldwide. In 2012, only 41 schools worldwide offered the IB CP diploma, and by 2017, this number grew to 171 schools globally (IBO, 2017). In fact, many universities are now admitting students with IB CP (refer to Table 15).

Although not officially recognized in Decree 4443, vocational qualifications, such as BTECS, were a growing feature in the UAE, especially in Dubai schools. The table below, acquired from Pearson representatives in Dubai, show the number of schools offering BTECs in the UAE. These qualifications are either taken alone, mainly in UK curriculum schools, or as part of the academic program (as in the Abu Dhabi Vocational Educational and Training Institutes) and the IB CP program in schools that offer the IB curriculum.

Table 5-7: Schools offering BTECs in the UAE

Table 5-7 Schools Offering BTECs in the UAE

School	Curriculum	School	Curriculum
Abu Dhabi Vocational Educational & Training Institute (ADVETI)	MoE	Brighton College- Al Ain	UK
Cambridge International School	UK	Deira International School	UK/ IB
Dubai British School	UK	Dubai English Speaking College (DESC)	UK
Emirates International School – Jumeirah	IB	GEMS First Point	UK
GEMS Wellington Academy	UK/ IB	GEMS World Academy	IB
Greenfield Community School	IB	Raffles World Academy	IB
Jumeirah English Speaking School (JESS)	UK/IB	Jumeirah Baccalaureate School (JBS)	IB
Nord Anglia International School	UK/ IB	Repton School	UK/ IB
Scholars International School	UK	School of Research Science	UK
Sunmarke School	UK	The British School- Al Khubairat	UK
The English College	UK	The Sheffield Private School	UK
The Winchester School	UK	GEMS Wellington International School	UK/ IB
Total		24 schools	

5.2.2.5 Different implementation and interpretation by the various educational entities:

Adding to the ambiguity of expectations in Decree 4443 is the complexity of the private school jurisdiction in the UAE. As noted earlier, private schools in the UAE are part of the authoritative jurisdiction of different entities, which had the authority, as granted to them by local government decrees, to grant equivalency status to qualifications earned from private schools within their jurisdiction. Up until as recently as the summer of 2018, a student who graduated from a private school in Abu Dhabi would seek equivalency status from ADEK. A student who graduated from a private school in Dubai would go to KHDA for the same service. Similarly, a student who graduated from a private school in any of the remaining emirates would need to go to the MoE for that service.

Over time, each entity interpreted the criteria in Decree 4443 as it saw fit and also modified the expectations in local by-laws that sometimes contradicted Decree 4443 altogether. This meant that students might gain equivalency status in one Emirate but might not gain equivalency for the same qualification in another Emirate. This created confusion regarding university admissions in national and private universities alike.

An example of a contradicting application of Decree 4443 are guidelines issued by KHDA (circa 2014) regarding equivalency status for the IB CP program and the IB certificates. Where Decree 4443 was very clear that only the full IB Diploma will be granted equivalency, the guidelines issued by KHDA (full copy attached in Appendix 3) gives full equivalency status to the IB CP and IB certificates (when students take only IB subjects without doing other components of the IB Diploma). This meant that students graduating from Dubai schools obtained equivalency from KHDA which was not necessarily ratified by the Ministry of Education and not accepted in national universities. This not only created confusion with higher education but also for Emirati students seeking government endorsed scholarships to study abroad.

5.3 Important developments in the educational landscape during the time period extending from 2016– 2019

It became obvious to all stakeholders engaged in the educational process that Decree 4443 was no longer serving its main purpose to quality assure provision in private schools. Nor was it serving the purpose of being an equitable measure by which to quality assure and compare qualifications earned from private schools against the qualifications earned from the public system in the UAE. In addition to this growing realization, a number of major developments took place that would change the educational landscape in the UAE and lead to a decision to form a committee to develop a new equalization policy to replace Decree 4443. These developments include a new structuring for the Ministry of Education, overhauling of the public school system, limiting the authority of some local educational entities and, in 2016, the creation of the Educational and Human Resource Council (EHRC), headed by

H.H. Sheikh Abdallah Bin Zayed Al Nahyan, Minister of Foreign Affairs and International Cooperation.

The Ministry of Education in its present governance structure came into being with the formation of the new Cabinet in February 2016. Where previously the Ministry of Education was a separate entity from the Ministry of Higher Education and Scientific Research, the Cabinet formation in February 2016 merged the two ministries into one. In addition, the newly formed Ministry with a bigger remit for education for all age groups now has three ministers as part of its governance structure. As mentioned previously, Minister Ibrahim Al Hammadi was appointed as Minister of Education in 2014. In the Cabinet reshuffle of 2016, HE Al Hammadi continued to hold this post but was supported by the appointment of His Excellency Dr. Ahmed Belhol as the Minister of State for Higher Education and Her Excellency Jameela Bint Salem Al Muhairy as Minister of State for General Education. These new appointments reflected the growing interest of the rulers of the UAE in improving education and as Sheikh Mohamad Bin Rashid, the Vice President and Prime Minister of the UAE, explained, “The new Cabinet focus is on the future, youth, happiness and education” (Gulf News, 2016). This was a clear message about the importance of education for the rulers of the UAE and for the agenda of improvement.

The other major development was actually started before this merger of the two ministries and it involved a major restructuring of the public educational system. This was discussed at length in a previous section in this study entitled *Reformed public education sector since 2016*. This is a fundamental change that will influence future equivalency criteria development by introducing different study streams in the public school secondary phase.

A third development carried substantial political implications on the educational landscape in the UAE particularly in relation to the complicated jurisdiction matrix between the federal authority, namely the Ministry of Education, and the local educational entities, namely ADEK in Abu Dhabi and KHDA in Dubai. Since its inception in 2006 by Law (30) of 2006, KHDA’s jurisdiction has been mainly concentrated on the private schools in the Emirate of Dubai. This was not the case in Abu Dhabi. The Abu Dhabi Education Council (ADEC) was established in accordance by Law (24) in 2005, issued by His Highness Shaikh Khalifa Bin Zayed Al Nahyan, President of the UAE. ADEC’s remit and jurisdiction was much bigger than that of KHDA’s. ADEC’s remit included all the private schools in the Emirate of Abu Dhabi (including Al Ain and Al Dhafra areas) and the public schools in the same geographical area. Overall, and as recently as 2017, ADEC was responsible for nearly 41% of all schools in the UAE. In line with the government’s strategy to streamline the educational landscape in the UAE, His Highness Sheikh Khalifa bin Zayed Al Nahyan, changed the name of the Abu Dhabi Education Council to become the Department of Education and Knowledge (ADEK) by Law No. 9 of 2018. The

change did not only include the change of name, but more importantly, ADEK now only has jurisdiction over private schools and all public schools were concentrated under the powers of the Ministry of Education. Although this development in and by itself has little to do with the subject of equivalency per se, it was quite a forceful message towards reinstating the authority of the Ministry and in streamlining all decisions related to education at the federal level (Zaman, 2017).

A final important development that is instrumental in shaping and influencing the current educational landscape in the UAE is the formation of the Education and Human Resource Council in 2016 under the chairmanship of H.H. Sheikh Abdallah bin Zayed al Nahyan. Members of this Council include all three education ministers, other ministries related to lifelong learning such as the Minister of Culture and Knowledge Development, Minister of State for Advanced Science and the Minister of Human Resources and Emiratization. Also on the Council are Her Excellency Sara Musallem, appointed Chairwoman to ADEK in January 2019 (The National , 2019) and Dr. Abdallah Karam, Director General of KHDA. Membership to the EHRC is a clear message to all that decisions related to education will become uniform and include all entities. This guarantees representation of all types of schools and encompasses all students in the UAE.

5.4 Equivalency Decree 848 for the year 2018

By the end of October 2018, new Ministerial Decree 848 was released to the public. This was the long awaited new equivalency policy that culminated the work of the Technical Committee. The Decree outlined clear conditions for equivalency for the following curricula which will become applicable in the academic year 2021 - 2022:

1. Ministry of Education curriculum
2. US curriculum
3. UK curriculum
4. International Baccalaureate (IB) curriculum
5. Canadian curricula (depending on the province)
6. Australian curricula (depending on the province)
7. French curriculum
8. Embassy schools
9. Others

5.4.1 Policy overview

As stipulated earlier, and for the purpose of this study, the ensuing section will discuss in detail equivalency requirements in Decree 848 for students in US, UK and IB curriculum schools. As explained earlier, equivalency requirements for students studying in private schools offering the Ministry of Education curriculum are straightforward. Since these schools have to offer the curriculum as specified by the Ministry of Education and their students take the same tests as students studying in

the public schools, qualifications earned in these schools are automatically recognized as equal to qualifications issued in the public system.

Below are the equivalency requirements in Decree 848 for the three major curricula. Unlike Decree 4443, the new decree stipulates requirements for equivalency in accordance to the study streams newly founded in the public education system.

Table 5-8: Summary of equivalency criteria in Decree 848 for the UK, IB and US curricula (own translation from original Arabic document):

Table 5- 8 Summary of Equivalency Criteria in Decree 848 for the UK, IB and US Curricula

General requirements	Requirements per stream
<p><u>US curriculum:</u></p> <ul style="list-style-type: none"> Students must take 18 credits in Grades 9, 10, 11 and 12 not including Arabic and Islamic Education. Students must obtain an average of at least D (60%) in all subjects. Students will gain equivalency to the different streams if they fulfill the following conditions: 	<p>General Stream:</p> <ul style="list-style-type: none"> Pass the following subjects in Grades 9 – 12: <ol style="list-style-type: none"> 4 credits of English 4 credits of math 4 credits of science (must include physics) 3 credits of social studies Sit for English proficiency test – TOEFL or IELTS Sit for SAT I math reasoning
	<p>Advanced Stream:</p> <ul style="list-style-type: none"> Students must pass 2 Advanced Placement (AP) subject tests Students must pass the following subjects in Grades 9 – 12: <ol style="list-style-type: none"> 4 credits of English 4 credits of math including AP in Math Calculus AB 4 credits of science including AP in one of the sciences 3 credits of social studies
	<p>Elite Stream:</p> <ul style="list-style-type: none"> Students must obtain 4 APS Students must pass the following subjects in Grades 9 – 12: <ol style="list-style-type: none"> 4 credits of English

	<ol style="list-style-type: none"> 4 credits of math including AP in Math Calculus AB 4 credits of science including <ul style="list-style-type: none"> - AP in Physics C: Electricity and Magnetism or in Mechanics - AP in chemistry or biology Another AP in any subject
<p><u>UK curriculum:</u></p> <p>In Year 11 (Grade 10), students must take <u>5 I/GCSEs</u> including the following subjects:</p> <ol style="list-style-type: none"> English language or literature Math (Extended) Humanities (history or geography) Physics (Extended) Another science subject <p>*student must obtain grade (A* - D)</p>	<p>General Stream:</p> <ul style="list-style-type: none"> Students must obtain <u>2 A-levels</u> at (A* - D) in any 2 subjects
	<p>Advanced Stream:</p> <ul style="list-style-type: none"> Students must obtain <u>3 A-levels</u> at (A* -D). <p>Subjects must include:</p> <ol style="list-style-type: none"> Math Two sciences (biology, chemistry or physics)
	<p>Elite Stream:</p> <ul style="list-style-type: none"> Students must obtain <u>4 A-levels</u> at (A* -D). <p>Subjects must include:</p> <ol style="list-style-type: none"> Math Physics Another science subject (chemistry or biology) Any additional subject
<p><u>IB curriculum:</u></p> <ul style="list-style-type: none"> Students must pass six IB subjects IB Arabic can be considered as one of the subjects 	<p>General Stream:</p> <ul style="list-style-type: none"> Students must study six IB subjects at any level Subjects must include English, math and science Students must obtain a minimum sum of 24 points out of 42 with no grade less than 3 in any subject Full IB Diploma is not required for this stream
	<p>Advanced Stream:</p> <ul style="list-style-type: none"> Students must obtain the full IB Diploma Students must take English (any level) Math at HL One HL science subject (physics, biology or chemistry) <p>*If physics is not at HL then it must be studied at SL</p>

	<p>Elite Stream:</p> <ul style="list-style-type: none"> • Students must obtain the full IB Diploma • Students must take English (any level) • Math at HL • Two HL science subject (physics, biology or chemistry) <p>*If physics is not at HL then it must be studied at SL</p>
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5.4.2 Document analysis – Findings

The issuance of the decree was much awaited and its release was a major headline in nearly all Arabic and English newspapers in the UAE (Bayoumi, 2018). Educational entities and schools also engaged with the Ministry once the decree was announced. Although Decree 848 addressed a few issues highlighted as shortcomings in Decree 4443, it fell way short of the high expectations and much awaited criteria many were hoping for regarding equivalency in the UAE. Decree 484 did address a few flows in Decree 4443. For example, it did address the issue of the IB Diploma where it allowed students to gain equivalency to the General Stream if they studied and passed six IB subjects or certificates, without the need to obtain the full Diploma. Furthermore, the new decree did allow IB students to study IB Arabic as one of the subjects that would be considered for equivalency. Both of these new considerations were welcomed progress from Decree 4443. However, Decree 848 not only perpetuated some of the flows in Decree 4443 but also created its own set of challenges for students studying in private schools in the UAE. These were mainly:

5.4.2.1 Equivalency criteria aligned to the public system streams of study:

The new decree stipulated that qualifications earned from studying in private international schools in the UAE will be comparable to qualifications earned in the public school system in the different study streams. That means if a student is studying in a UK curriculum school or a US curriculum school, he or she has to fulfill certain criteria in order to be granted equivalency to any one of the three streams, General, Advanced or Elite Streams.

With all its flaws, Decree 4443 granted equivalency to the General Certificate of Secondary Education or Tawjihiya without differentiating expectations within one curriculum. Nor was equivalency granted according to the streams that previously existed in the public system, namely the Literary and Scientific Streams. Decree 848 is implementing a “philosophy” that is applicable to the public school system in the UAE but is not necessarily applicable to the philosophy of the UK, US and IB curricula. Students in the UK studying for their UK A-level subjects are not differentiated based on their choice of subject. The same applies to IB Diploma students where students obtain the Diploma after fulfilling certain conditions

applicable to all students and the diplomas themselves are not stratified into any categories. Of course, the concept of streaming is particularly alien to the US curriculum system in the high school phase. Graduation requirements in many States outline certain core credits all students have to study in Grades 9 – 12. In addition, students then choose to pursue their tertiary education and future career interests by choosing some “electives” to complement their core subjects (refer to the table below). Some students choose electives in further mathematics, others in science and some in the humanities. In the end, they all earn their High School Diplomas without any differentiated titles. What differs and is considered by universities is the number of credits and the subjects chosen as part of the electives.

Table 5-9: Graduation requirements in four States/ Education Boards in the USA:

Table 5-9 Graduation Requirements in Four States / Education Boards in the USA

Subjects	Michigan ¹	Los Angeles-California ²	Boston-Massachusetts ³	Texas Education Agency ⁴
English	4	4	4	4
Math	4 (math in senior year)	3	4 (math in senior year)	3
Science	3	2 (lab sciences)	3 (lab sciences)	2 (lab sciences)
Social Studies	3	3	3	3
World/ other language	2	2	2	-
Visual/ performing arts	1	1	1	1
P.E/ Health	1	2.5 (.5 for health)	1	1
Career path / university guidance	-	1	1	1.5 (Speech/ academic readiness)
Electives	4 to 5	4 to 5	4 to 5	6.5

¹(Michigan Department of Education, 2017)

² (Los Angeles Unified School Department , n.d.)

³ (Massachusetts Department of Elementary and Secondary Education, 2019)

⁴ (Texas Education Agency , 2019)

Total credits needed	At least 18 credits to graduate 22 to 23 credits for competitiveness	At least 19 credits to graduate 23 to 24 credits for competitiveness	At least 19 credits to graduate 23 to 24 credits for competitiveness	At least 22 credits to graduate 25 to 26 credits for competitiveness
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5.4.2.2 Not equitable in demand across the different curricula:

Decree 848 did not address the flow that has long existed in Decree 4443. Expectations for equivalency were not equitable across the curricula and remained so in the new decree. As shown in **Table 10**, requirements for equivalency differ according to streams and become increasingly more demanding from the General Stream to the Elite Stream. That is common across the three curricula. However, expectations for each stream differ in the level of demand across the curricula. For clarification, the demands for the General Stream in the UK curriculum asks for two A-levels in any two subjects at a grade from A* to D. The demand for the same stream in the IB curriculum asks for six IB subjects (at any level) with a minimum sum of 24 points. Both these demands, although unequal in weighing, equally requires students to sit for rigorous international exams in each subject. These exams are internationally moderated and students can compare their achievements to the thousands worldwide who take these exams. For students studying in US curriculum schools, the demand for equivalency to the General Stream does not even remotely compare to the demands in the UK and IB curricula. Students have to pass 18 credits in certain subjects and obtain a passing grade of D or 60%. All these grades are based on internal school exams that arguably have little credibility and validity when compared to board exams for the A-levels and the IBO exams for the IB subjects. Even if students in US curriculum schools are asked to sit for IELTS or TOEFL to test their English proficiency and for SAT I math component, these are the current demands in Decree 4443 and are not equal to the level of demand in A-levels and IB subject tests.

5.4.2.3 Heavily in favor of STEM subjects:

Differentiation in demand across the streams is determined by the level of mathematics and science, especially physics, students study. For students to gain equivalency to the Advanced and Elite Streams they must study and sit for a combination of mathematics and science tests. No reference is made to any subject related to the humanities or others. The table below simplifies the demands in Decree 848 for a clearer picture.

Table 5-10: STEM subjects in equivalency criteria in Decree 848*Table 5-10 STEM subjects in equivalency Criteria in Decree 848*

Curriculum	Expectations for the Advanced Stream	Expectations for the Elite Stream
US curriculum	2 APs <ul style="list-style-type: none"> AP in math Calculus AB AP in one of the sciences (biology, chemistry or physics) 	4 APs <ul style="list-style-type: none"> AP in math Calculus AB AP in physics AP in another science subject (biology or chemistry) AP in any other subject
UK curriculum	3 A-levels <ul style="list-style-type: none"> A-level in mathematics 2 A-levels in science subjects (biology, chemistry or physics) 	4 A-levels <ul style="list-style-type: none"> A-level in mathematics A-level in physics A-levels in another science subject (biology or chemistry) A-level in another subject
IB curriculum	Full IB Diploma 3 HL subjects <ul style="list-style-type: none"> IB math HL IB science HL (biology, chemistry or physics) *If physics is not at HL then it must be studied at SL	Full IB Diploma 3 HL subjects <ul style="list-style-type: none"> IB math HL 2 IB sciences HL (biology, chemistry or physics) *If physics is not at HL then it must be studied at SL

Although the different streams in the public sector are differentiated based on the level of mathematics and the sciences, the above demands are not easily applicable in other curricula. In accordance with the previous point, the philosophy upon which these curricula are built does not cater to such differentiation. In fact, GCE and IB statistics for the exam intake for 2018 show that most students will not opt for the above high level subjects in math and the sciences, and definitely not in the dictated combinations.

In 2018, 163,173 candidate sat for different IB subject tests (International Baccalaureate, 2018). Of these, 65,974 candidates obtained the full diploma. 14,841 students (22% of the diploma holders and only 9% of the total number of exam takers) sat for HL math. Even fewer students sat for HL physics at 12,956 (20% of the diploma holders and 8% of the total number of exam takers) (International Baccalaureate, 2018). In a special report to the Technical Committee in 2018, the IB Organization shared some statistics from the 2017 student intake of IB exams. In May 2017, around 159,371 students sat for IB exams in different subjects. As can be seen in **Table 13**, the number of students who took the proposed combinations to obtain

equivalency status to the Advanced and Elite streams was nearly negligible globally, in the GCC countries and the UAE. The combination required for the Elite Stream which includes HL math, two HL sciences and SL physics (at minimum) is particularly rare. Only 10 out of the nearly 160,000 candidates took this combination, worldwide.

Table 11: Number of students who actually take IB tests as per the requirements in Decree 848 (document presented by IBO representatives in the UAE):

Table 5-11 Number of Students Who Actually take IB Tests as per the Requirements in Decree 848

Subject combination	Number of students <u>globally</u> taking combination	Number of students in the <u>GCC</u> taking combination	Number of students in the <u>UAE</u> taking combination
HL Math HL Biology HL Physics	172	0	0
HL Math HL Chemistry HL Physics	2312	11	3
HL Math HL Biology HL Chemistry	1053	2	0
HL Math HL Biology HL Chemistry SL Physics	10	0	0

The Department of Education (DfE) in the UK and Ofqual publish yearly bulletins detailing GCSE, AS and A-level entries in the UK. Although there is very little information publically available about the combination of A-level subjects students take, bulletins do show the number and percentage of students taking different subjects. The 2019 bulletin show a slight decrease (2%) of A-level entries from 759,670 entries in 2018 to 745,585 entries in 2019 (Ofqual, 2019). Of all the entries, only 35,255 candidates sat for physics A-levels in 2018 (Ofqual , 2018) and 36,420 in 2019 (Ofqual, 2019); that equals around 5% of all A-level entries yearly. That is most probably because students who take physics at A-level are those who want to focus on engineering in their tertiary studies. In fact, the table below shows the combination of A-levels required for different study programs at some universities in the UK, and it is clear that the combination required for equivalency to the Advanced and Elite streams are very specific to engineering.

5.4.2.4. Not based on mapping of learning outcomes:

When Decree 848 was shared with the public, it was not accompanied by any additional supporting literature to explain the rationale upon which criteria for equivalency was decided. This remains a shortcoming that characterized Decree 4443 as well. For any policy that would affect every Emirati graduate from private schools in the UAE and many expats living in the UAE, it is a very reasonable expectation to include criteria that is grounded on thorough mapping of all learning outcomes across the curricula being addressed in the decree. Equivalency criteria lack any reference to a matrix of depth and breadth, skills and competencies and assessments used to measure students' acquired knowledge and skills. Post decree release feedback from schools and boards pointed to the fact that this much needed exercise was missing.

IB, A-levels and AP subject assessments are all very highly regarded by universities and are at college preparatory level. More often than not, students who attain good grades on these subject tests are given college credit and do not have to repeat the subject during the first year of university study. In addition, students who sit the whole IB Diploma and acquire more than 35 or 36 points are often given credit for the whole first year and enter as sophomores, or to the second year of university study as stated in the Guide for IB students applying to US institutions (2016). Do subjects given in the public school system have the same standing? Does the curriculum, learning outcomes and teaching ensure students of the public system have the same level of depth of knowledge, skills and competencies measured and documented in students who study IB, A-level and AP subjects? Are students who gain the Tawjihiya with a good grade average admitted into the second year of university study? This is not benchmarked anywhere, and in fact, many students who finish from the public school system still enter universities, nationally and internationally, in need of foundational courses in English, math or the sciences (Pennigton, 2017)

5.4.2.5 Not aligned to ISCED levels or to the QF Emirates (QFE) levels:

A major drawback of Decree 848 is the fact is that it is not aligned to any national or international qualification levels framework. When Decree 4443 was issued in 2001, ISCED levels may not have been in widespread use, particularly in the Arab world. Moreover, no Arab country had by then developed its own qualification level framework. However, in 2018, the matter is completely different.

The UAE has been at the forefront regionally in developing its own qualification framework and has set up the National Qualification Authority (NQA) to oversee and streamline lifelong learning for all residents in the UAE (NQA, 2018). NQA, based upon best practice in qualification frameworks, developed a qualification framework to categorize academic and vocational learning at different levels. It is aligned to ISCED levels and the European Qualification Framework (EQF). Where ISCED and EQF have categorized 8 levels, the Qualification Framework for the Emirates (QF

Emirates) structure identifies 10 categories (NQA, 2018). These categories are listed in the figure below as found on the NQA website:

Figure 5-3: UAE Qualifications Framework (QF Emirates) Levels:

Figure 5-3 UAE Qualifications Framework (QF Emirates) Levels

PRINCIPLE QUALIFICATIONS TITLES OF QFEMIRATES					
Level	Generic name	Vocational education and training	Higher education	General education	Lifelong Learning
10	Doctoral degree		Doctoral		Recognition of Prior Learning (RPL)
9	Master degree	(Applied) Master	Master		
8	Graduate Diploma	Applied Graduate Diploma	Post Graduate Diploma		
7	Bachelor degree	(Applied) Bachelor	Bachelor		
6	Higher Diploma	Advanced Diploma	Higher Diploma		
5	Diploma / Associate Degree	Diploma	Associate Degree		
4	Certificate	Certificate 4		Secondary School Certificate (G 12)	
3	Certificate	Certificate 3		TBA	
2	Certificate	Certificate 2			
1	Certificate	Certificate 1			

What is internationally recognized as ISCED level 3 qualification is categorized at level 4 in the Emirates framework. As noted above, the categories also aim to recognize vocational learning at all levels

Description of qualifications earned at Level 4 encompass achieved outcomes that demonstrate students have the required knowledge, skills, understanding and competencies (NQA, 2018). This is broadly applicable to all qualifications earned at the upper secondary level where assessments, national and international, can prove students have achieved required outcomes. Therefore, A-levels, IB subjects, BTECs and APs all fall within this category, without any differentiation based on subject. However, Decree 848 stipulates that recognition of these qualifications is subject specific for equivalency to be granted.

5.4.2.6. Lack of any reference to vocational or technical qualifications:

Decree 848 only recognized the possibility of equivalency to three streams. Although the professional stream has been introduced into the public high school system in 2018, it is not part of the equivalency criteria. Therefore, students who were and are enrolled in courses that contained vocational components will be disadvantaged and will not receive their equivalency. This is especially damaging since KHDA, which

used to recognize vocational programs such as the IB CP (as per KHDA guidelines in Appendix 2), stopped their equivalency services in the summer of 2018. This is not a publicized event nor was it shared officially with any of the stakeholders. However, and because of many delicate high level push and pull between the federal authority (MoE) and local entities (such as KHDA), it was decided that KHDA will stop granting equivalency status to qualifications earned in private schools in Dubai, especially to Emiratis (who have to also obtain equivalency from the MoE to enter national universities). Below is a list of private schools in Dubai that offer the IB CP program and whose students, especially the Emiratis and Arabs, will no longer receive equivalency for their qualifications. There are no private schools that offer the IB CP outside Dubai because no entity, including ADEK, used to recognize these qualifications.

Table 15: Schools that offer IB CP in the UAE

Table 5-12 Schools that Offer IB CP in the UAE

	School Name	KHDA Inspection Rating	Education Group
1.	Deira International School	Very Good	Al Futtaim Education Foundation
2.	Dubai International Academy	Very Good	Innoventures Education
3.	Collegiate American School	Good	Innoventures Education
4.	Emirates International School - Jumeirah	Good	Al Habtoor Group
5.	GEMS Wellington Academy - Silicon Oasis	Very Good	GEMS Education
6.	GEMS Wellington International School	Outstanding	GEMS Education
7.	GEMS World Academy - Dubai	Very Good	GEMS Education
8.	Greenfield Community School	Good	Ta'leem
9.	Jumeira Baccalaureate School	Very Good	Ta'leem
10	Repton School, Dubai	Outstanding	Evolve Knowledge Investments

Decree 848 does not consider vocational qualifications on equal parity with other qualifications. Internationally, these same vocational qualifications are recognized by varied organizations, such as UNESCO at ISCED level 3, in and in the UK at RQF

level 3. Even the NQA in the UAE recognized vocational qualification in the QFEmirates levels. Where internationally, more and more universities are accepting and enrolling students with vocational qualifications, in the UAE these same qualifications are not recognized. Below is a list of students who graduated from an IB school located in Dubai Investment Park in Dubai in 2017 – 2018 academic year. All these students did their IB CP with BTECs. Below is some additional information about this cohort:

- The cohort includes 25 students in all
- All students received their IB CP Diploma
- 11 students did BTEC in Arts and Design
- 12 students did BTEC in Business
- All BTECS were at least at Diploma level (120 credits)
- 5 students took 2 IB subjects
- 20 students took 3 IB subjects
- 24 students went to university
- 1 student went into direct employment

Table 5-13: Specializations and destinations of Greenfield Community School IB CP graduates in 2017 – 2018:

Table 5-13 Specializations and Destinations of Greenfield Community School IB CP Graduates in 2017 - 2018

Specialization	Destination
BA in Law	Oxford Brookes University, UK
BA in Interior Design	Oxford Brookes University, UK
BSc in Sport & Education	Leeds Trinity University, UK
BA in Business	BA in Business at Middlesex University, Dubai
Employment	In the UK
BA in Drama & Performing Arts	Singapore
BA in Graphic Design	University of Florence, Institute of Design, Italy
BA in Photography & Media	Queensland University of Technology, Australia
BA in Graphic Design	American University of Beirut
BA in Marketing	Queensland University of Technology, Australia
BA in Psychology	Leeds University, UK
BA in Business	Middlesex University, Dubai
BA in Business	Lahore Business School, Pakistan
BA in International Business	Herriot Watt University, Dubai campus.
BA in Business	Berkeley College, New York, USA

BSc in Sports Management	Bournemouth University UK.
BA in Business Entrepreneurship & Innovation	Greenwich University, UK
BA in Business Entrepreneurship & Innovation	Greenwich University, UK
BA in Business	Sungkyunkwan University, Seoul, South Korea.
BA in Film & Media Studies	Middlesex University, Dubai
BA Hons in Criminology	Humber College, Toronto, Canada.
BA in Business	Oxford Brookes University, UK
BA in Business Entrepreneurship & Innovation	Greenwich University, UK
BA in Business Psychology	Greenwich University, UK
BA in Business with Accountancy	Oxford Brookes University. UK

As can be seen in the above table, almost all students were accepted in universities worldwide to pursue programs of study of their choice. If these same students applied for equivalency in the UAE for the same qualifications that earned them university entry, they will not be granted equivalency according to Decree 848.

Chapter 6: Discussion and Recommendations

The need for policy to determine criteria for comparing, recognizing and “equalizing” qualifications has been established. The need has been steadily growing over the past half century and will most probably remain in need for the foreseen future. Changes and reforms in education are constantly taking place. New and varied qualifications are also constantly being presented to meet the needs and abilities of all students. Advancement in technology is could also cause a paradigm shift in educational practices, in terms of curricula and ultimately qualifications. In parallel, the world is witnessing an unprecedented rise in global movement of people from one country to the other. Whether people move for work or further education, they will need to validate their qualifications through “recognition” and equivalency. As discussed in Chapter 2, countries have set up polices and systems according to international criteria (set by UNESCO and/or other entities) and national expectations (set by each individual country) in order to be able to recognized and equalize qualifications, with for their own citizens or for newcomers. Because no systems are absolutely the same, general “banding” of qualifications offers general categories that are applicable to most qualifications. This is where levels such as the ISCED levels can prove useful and fair when applied universally.

While it is understandable that every country wants to protect its national curriculum and set its criteria for private schools at a high bar, it must also take into consideration scientific and proven practices when developing criteria that will affect individuals living in the country and those who might leave or join the country, for reasons of education and work. The following are some recommendations for any upcoming attempt at updating or changing equivalency criteria applicable in the UAE:

- Any future work at setting equivalency criteria must be based on a thorough study of all curricula involved. A professional study must map out all learning outcomes and skills that are expected in each phase of the curricula on offer in private schools in the UAE. This study will not only identify precise academic outcomes but it will also present the philosophy and principles of the building blocks of every curriculum. Is it a curriculum based on streaming? Is it a curriculum based on a concentrated study of a few subject in great depth? Or is it a curriculum that proposes a wider and broader spectrum of subjects at a lesser level of depth so that it accommodates more students?
- Comparing achievements in each curriculum must also include a thorough study of the types of assessments that are applicable in each system. This added and very important dimension in the comparison exercise will reflect the credibility, validity and rigor of the different assessment systems. This should guide any future work in setting criteria for equivalency in whether to give equal weighting to qualifications earned by sitting for unmoderated and

unchecked school exams and those earned by sitting for rigorous highly moderated external exams.

- Work on future equivalency criteria must stem from full recognition of the criteria in Decree 4443 and Decree 848 that did not cater to the different needs, abilities and interest of students. Such guiding information must be based on systematic data gathering to inform future decisions.
- Future equivalency criteria must be aligned to the national qualification framework and to international ISCED levels. For international credibility of equivalency criteria in any country, it is only logical to expect that expectations will be justifiably aligned to a framework that clearly describes the expectations of learning and qualifications at every level. National equivalency criteria must also be aligned to international criteria for comparability and validity.
- Comparability and equivalency of qualifications is a legal exercise of recognizing qualifications earned by students. It must be taken in its broader sense of recognizing learning and must never confine students' choices in further or tertiary education. Once recognition or equivalency has been granted, it should be up to each university's admission criteria and expectations to determine whether a student is eligible and capable of pursuing a particular study program or not. If study choice at tertiary level is a continuation of a linear course based on streaming that happens to a student in the middle school, then we have created a system that places a student on a lifetime course that is not based on choice or a system that recognizes that motivations and interests might change along this course.

Chapter 7: Conclusion

This research paper presented a critical analysis of two documents which stipulate equivalency decrees for holders of upper secondary schools qualifications from private schools in the UAE. Chapter 1 established what qualifications at upper secondary school phase are and the possible pathways available to student in the different educational systems. Chapter 2 explored a number of international and national criteria applicable in select countries by which qualifications are compared and given equivalency. It also gave some reason why equivalency to qualifications is an established international need, especially with the number of mobile students studying in countries other than their own and the rise of international schools, whether in the UAE or internationally.

An in depth qualitative study of two documents, namely equivalency Decree 4443 (of 2001) and Decree 848 (of 2018) attempted to answer the focal question of research.

Did equivalency Decree 848 address the issues identified in Decree 4443? A comprehensive overview of the UAE education landscape, including both the public and private school sectors, explored the need for a country such as the UAE to have clear equivalency criteria in order to be able to give equivalency status to qualifications earned from its ever increasing number of private schools. Equivalency Decree 4443, which has been in effect since 2001 and will continue to be in effect until 2021, can no longer serve its purpose. Many changes have taken place on the national and international educational landscape that the criteria stipulated in this decree have become somewhat of a constraint to students' choices and aspirations, especially for Emiratis and Arabs studying in US, UK and IB curriculum schools. It not only limits students' choices, but it is also not equitable in its demands across the different curricula. The much-awaited new Decree 848, issued in 2018, also fell short in addressing shortcomings of Decree 4443. Analysis presented in Chapter 5, section 5.4, justified the findings that not only did Decree 848 mirror some of the same shortcomings identified in Decree 4443, it actually presents a new set of challenges for students studying in the private sector. For example, Decree 848 differentiates demands for equivalency according to the streams in the public system while Decree 4443 had the same criteria within each curriculum without any differentiation. In reality, this means that schools now have to offer subjects in groupings or in a sequence that might be alien to the original philosophy of the curriculum in the home country.

Findings from the analysis of equivalency decrees present a case for reconsideration of these decrees. The need for criteria to grant equivalency for upper secondary school qualifications is justified. Reasons for such criteria range from the number of students who are mobile and change locations and systems of study to the fact that there is growing trend of students attending private schools offering international curricula. In a country such as the UAE, hosting an ever-growing number of expats and where Emirati students are increasingly attending private schools, equivalency criteria is necessary. However, unless the approach and principles underpinning the development of new equivalency criteria change, then new decrees will just perpetuate the same set of challenges that both Decree 4443 and Decree 848 currently present for students.

References:

- ACESC, 2019. *About the ACESSC*. [Online]
Available at: <https://canalliance.org/en/>
[Accessed 14 June 2019].
- AICE, 2016. *Setting the Standard*. [Online]
Available at: <http://aice-eval.org/>
[Accessed 14 June 2019].
- Al Bayan, 2005. *The Ministry Outlines its Conditions for Private Schools in the UAE*. Abu Dhabi, Dubai Media Incorporated.
- Al Masry Al Youm , 2017. 9.5 million Egyptians live abroad, mostly in Saudi Arabia and Jordan. *Egypt Independent*, 1 October.
- Alhebsi, A., Pettaway, L., Waller, L., 2015. A History of Education in the United Arab Emirates and Trucial Sheikdoms. *THE GLOBAL eLEARNING JOURNAL*, 4(1), pp. 1 - 5.
- Attride-Sterling, J., 2001. Qualitative Research. *SAGE Publications* , 1(3), pp. 385 - 405.
- Australian council for Educational Research (ACER), 2017. *System-Wide Analysis of Assessment Practices (SWAAP) Concept note*, Montreal : UNESCO Institute for Statistics .
- Bainbridge, W., 2019. *Carnegie unit, Academic Credit System*, s.l.: Encyclopedia Britannica.
- Bayoumi, A., 2018. 8 شروط لمعادلة شهادات الطلبة في المدارس البريطانية والأميركية 8. *Emarateloyoum*, 19 November , p. 6.
- Behle, H., Kremakova, M., Layonette, C. , 2015. *The International Baccalaureate Career-related Programme (CP): Students' Experiences, Post-secondary Destinations and Outcomes*, Warwick : Warwick Institute for Employment Research .
- Bowen, G. A., 2009 . Document Analysis as a Qualitative Research Method. *Qualitative Research Journal* , 9(2), pp. 27 - 40.
- Burton, G. and Warner, R., 2017. *A Fertile Oasis: The Current State of Education in the UAE* , Dubai: Mohammed Bin Rashed School of Government.
- Council of Europe , 2014. *The European Network of National Information Centres on academic recognition and mobility*. [Online]
Available at: https://www.coe.int/t/dg4/highereducation/Recognition/ENIC_en.asp
[Accessed 9 February 2019].
- Creswell, J. and Miller,D., 2000. Determining Validity in Qualitative Research. *Theory and Practice* , 39(3), pp. 124 - 130 .

Davidson, C., 2008 . From traditional to formal education in the lower Arabian Gulf, 1820–1971. *History of Education*, 37(5), pp. 633 - 643.

Department of Education, UK NARIC , 2018. *Overseas degree equivalency: methodology* , London : UK NARIC .

DSIB, 2009 . *Annual Report 2009*, Dubai : Knowledge and Human Development Authority .

DSIB, 2013. *Dubai Schools Inspection Bureau, The performance of private schools in Dubai*, Dubai : KHDA.

EACEA, 2019. *United Kingdom - England National Qualifications Framework*. [Online] Available at: https://eacea.ec.europa.eu/national-policies/eurydice/content/national-qualifications-framework-93_en [Accessed 18 June 2019].

Education Data Center- Ministry of Education , 2018 . *General Education Statistics, 2018 - 2019* , Dubai : EDC.

Encyclopedia Britannica, 2019 . *Lycee, Education* , s.l.: Encyclopedia Britannica, Inc. .

European Commission/EACEA/Eurydice, 2018 . *The Structure of the European Education Systems 2018/19: Schematic Diagrams. Eurydice Facts and Figures*, Luxembourg: Publications Office of the European Union. .

Flanders, France and UK NARIC, 2006. *Evaluation of European recognition criteria to promote good practice*, Cheltenham: UK NARIC.

Fusch,P. and Ness, L., 2015. Are we there yet? Data Saturation in Qualitative Research. *The Qualitative Report* , 20(9), pp. 1408 - 1415.

Gulf News, 2016. The New UAE Cabinet: Sheikh Mohammad Makes Announcement on Twitter. *Gulf News*, 16 February , p. 1.

HSBC, 2018. *Expat Explorer Survey 2018*, Dubai : HSBC.

IBO, 2017. *Facts and Figures, Growth in number of IB programmes*. [Online] Available at: <https://www.ibo.org/about-the-ib/facts-and-figures/> [Accessed 17 June 2019].

IBO, 2019 . *Curriculum*. [Online] Available at: <https://www.ibo.org/programmes/diploma-programme/curriculum/> [Accessed 15 June 2019].

ICEF Monitor, 2018. *Annual survey finds continued growth in international schools*. [Online] Available at: <https://monitor.icef.com/2018/09/annual-survey-finds-continued-growth-in-international-schools/> [Accessed 15 June 2019].

International Baccalaureate Organization, 2014 . *General regulations: Diploma Programme*, Cardiff: International Baccalaureate Organization.

International Baccalaureate, 2018 . *The IB Diploma Programme Statistical Bulletin, May 2018 Examination Session*, Cardiff: IB Global Centre.

IOM, 2017. '*Migration and migrants: A global overview*', Geneva : IOM.

ISC Research , 2019. *2018 Global Report on the International Schools Market* , UK: Group ISC.

KHDA, 2017. *From Now to Next, The Last 10 Years of Private Education in Dubai - and Beyond*, Dubai: Knowledge and Human Development Authority.

Korstjens, I. and Moser, A. , 2017. Practical guidance to qualitative research. Part 2: Context, research questions and designs.. *European Journal of General Practice* , 23(1), pp. 274 - 279.

LOP, 2016. *Terms of Affiliation*. [Online]
Available at: <http://oml.org.lb/en/Pages/78/Terms-of-Affiliation>
[Accessed 15 June 2019].

Los Angeles Unified School Department , n.d. *Graduation Requirements*. [Online]
Available at: <https://achieve.lausd.net/Page/2114>
[Accessed 6 July 2019].

Massachusetts Department of Elementary and Secondary Education, 2019. *MA Graduation Requirements and Related Guidance*. [Online]
Available at: <http://www.doe.mass.edu/mcas/graduation.html>
[Accessed 6 July 2019].

Michigan Department of Education, 2017. *Michigan Merit Curriculum: High School Graduation Requirements* , Lansing : Michigan State Board of Education .

Ministry of Education , 2016. *Dr. Mohammad Al Mualla appointed as the Undersecretary for Higher Education Academic Affairs*. [Online]
Available at: <https://www.moe.gov.ae/En/MediaCenter/News/Pages/MohamadAlMaa.aspx>
[Accessed 3 June 2019].

Ministry of Education , 2017. *Comprehensive Development Processes in Education*. [Online]
Available at: <https://www.moe.gov.ae/En/MediaCenter/News/Pages/2017yprep.aspx>
[Accessed 15 June 2019].

Ministry of Education and OECD, 2018 . *PISA 2018*. Dubai : Ministry of Education .

Ministry of Education, Egypt, 2019. *Certificate Equivalency Criteria*. [Online]
Available at: <https://tansik.egypt.gov.eg/application/Certificates/Mo3adla/Dalel/5.htm>
[Accessed 26 May 2019].

Ministry of Education, UAE, 2017 - 2018 . *School Statistics* , Dubai : Ministry of Education .

Ministry of Education, 2018. *Professional Stream*. [Online]
Available at: <https://www.moe.gov.ae/En/ImportantLinks/Forms/pages/prostream.aspx>
[Accessed 15 June 2019].

Ministry of Health, UAE, 2017. *Unified Healthcare Professional Qualification Requirements*. Abu Dhabi : Ministry of Health, Department of Health (Abu Dhabi) and Dubai Health Authority .

Ministry of Education and Higher Education, Lebanon, 2019 . *History of Equivalency Committee*. [Online]
Available at: <https://www.mehe.gov.lb/ar/Pages/Transactions/Committee.aspx>
[Accessed 13 June 2019].

NACES, 2019 . *What does NACES do?*. [Online]
Available at: <https://www.naces.org/>
[Accessed 14 June 2019].

NQA, 2018. *Introducing NQA*. [Online]
Available at: <https://www.nqa.gov.ae/EN/Pages/AboutUs/IntroducingNQA.aspx>
[Accessed 17 June 2019].

NQA, 2018. *Types of Qualifications*. [Online]
Available at:
<https://www.nqa.gov.ae/EN/Pages/QFEmirates/QualificationsFramework/TypesQualifications.aspx>
[Accessed 17 June 2019].

OECD, 2016. *France: Education At A Glance 2016: OECD Indicators*, Paris: OECD Publishing .

Ofqual , 2018 . *Entries for GCSE, AS and A level*, Coventry : Ofqual .

Ofqual , 2019. *ofqual*. [Online]
Available at: <https://www.gov.uk/government/organisations/ofqual>
[Accessed 14 June 2019].

Ofqual, 2012. *International Comparisons in Senior Secondary Assessment*, London : Office of Qualifications and Examinations Regulation.

Ofqual, 2019. *Entries for GCSE, AS and A level Summer 2019 exam series*, Coventry : Ofqual .

Ofqual, 2019. *Total Qualification Time Criteria*. England: Ofqual .

ONISEP, 2017. *France*. [Online]
Available at: <http://mavoieproeurope.onisep.fr/en/initial-vocational-education-and-training->

in-europe/france/

[Accessed 10 June 2019].

Patton, M., 2001. *Qualitative Research and Evaluation Methods*. 3rd ed. Thousand Oaks, CA: Sage Publications .

Pennigton, R., 2016. UAE ranking in school survey drops in science, reading and maths. *The National* , 6 December .

Pennigton, R., 2017. Plans to phase out foundation year for university by end of 2018 postponed. *The National* , 23 July .

PEO, 2018. *Professional Engineers Ontario*. [Online]

Available at: http://www.peo.on.ca/index.php/ci_id/2057/la_id/1.htm

[Accessed 1 June 2019].

Qfqual, 2017. *Guidance Summary of changes to GCSEs from 2015*. [Online]

Available at: <https://www.gov.uk/government/publications/gcse-changes-a-summary/summary-of-changes-to-gcses-from-2015>

[Accessed 6 June 2019].

Ridge, N., Kippels, S., El Asad, S. , 2015. *Education in Ras Al Khaimah and the United Arab Emirates*, Ras Al Khaimah : Sheikh Saud bin Saqr Al Qasimi Foundation for Policy Research.

School Operations, MoE, 2017. *Policy on Students' Registration*. Dubai : Ministry of Education .

Skovdal, M. and Cornish, F. , 2015. *Qualitative Research for Development: A guide to practioners*. Warwickshire : Practical Action Publishing .

Texas Education Agency , 2019. *State Graduation Requirements*. [Online]

Available at: <https://tea.texas.gov/graduation.aspx>

[Accessed 6 July 2019].

The Cabinet, 2019 . *Cabinet Members*. [Online]

Available at: <https://uaecabinet.ae/en/details/cabinet-members/his-excellency-hussain-bin-ibrahim-al-hammadi>

[Accessed 2 April 2019].

The National , 2019 . Sheikh Khalifa announces Abu Dhabi Executive Council reshuffle. *The National* , 21 January , p. 1.

Turner, C., 2018 . Universities now admitting twice as many BTEC students as they did a decade ago, figures show. *The Telegraph* , 4 June , p. 10.

UAE Vision , 2018. *National Priorities*. [Online]

Available at: <https://www.vision2021.ae/en>

[Accessed 15 June 2019].

UCAS, 2014. *International qualifications, for entry to university or college in 2015*, England : UCAS Rosehill New Barn Lane Cheltenham.

UCAS, 2017. *A record proportion of 18 year olds, from across the UK, gained a place at university or college in 2017. This is despite a fall of 1.2 per cent in the 18 year old population in the UK in 2017*. [Online]

Available at: <https://www.ucas.com/corporate/news-and-key-documents/news/largest-ever-proportion-uks-18-year-olds-entered-higher-education-2017-ucas-data->
[Accessed 15 June 2019].

UIS, U.-., 2006 . *ISCED 1997* , s.l.: UNESCO-UIS.

UK NARIC , 2019. *UK NARIC Band Framework*. [Online]

Available at:

<https://www.naric.org.uk/naric/Code%20of%20Practice/Band%20Framework.aspx>
[Accessed 17 July 2019].

UKCISA, 2018 . *International student statistics: UK higher education*. [Online]

Available at: <https://www.ukcisa.org.uk/Research--Policy/Statistics/International-student-statistics-UK-higher-education>
[Accessed 9 February 2019].

UNESCO-UIS, 2012 . *ISCED 2011*, Montreal : UNESCO-UIS.

UNESCO-UIS, 2014. *ISCED Fields of Education and Training 2013 (ISCED-F 2013)*. First ed. Montreal: UNESCO- UIS.

Union, European, 2018 . *Europe without frontiers*. [Online]

Available at: https://europa.eu/european-union/about-eu/history/1990-1999_en
[Accessed 9 February 2019].

Wainbridge, W., 2019. *Carnegie Unit, Academic Credit System*, s.l.: Encyclopedia Britannica, Inc..

Zaman, S., 2017. UAE adopts new Emirati School Model. *Gulf News* , 3 September .

