Re-envisioning Public Education in the United Arab Emirates

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Abstract

As one of the youngest education systems in the Gulf region, the UAE's public education sector has undergone rapid transformation in just over five decades. Understanding the historical foundations and current reform trajectories of this system is critical for policymakers, educators, and researchers seeking to address contemporary challenges in education quality, student outcomes, and alignment with national development goals. This study examines how historical decisions continue to shape educational practice and explores pathways for future reform.

The public education system of the United Arab Emirates (UAE) is as young as the country itself. It was officially formed at the time of unification of the former Trucial States in 1971 and mandated free public education for all. Previously education had been limited to young males. Schools and resources were scarce, with records indicating only 4000 students attended twenty schools in 1961. Education at the time focused on religion, offering classes memorizing the Holy Quran and the Prophet's Hadiths, Islamic rituals, and calligraphy. Egypt and Kuwait were largely responsible for educational efforts at that time. In an effort to eradicate illiteracy nationwide, the UAE government – with no indigenous educational system of its own from which to draw – began the process of importing the skills needed to build local educational capacity, ultimately choosing an Egyptian model which serves as the foundation of the present public education system in the UAE.

This paper examines the impact of this historical decision on the current educational system before moving on to highlight recent efforts of public-school reform. It then considers the UAE government's vision for the future (Vision 2021) before making suggestions for further educational reform based on the tenets of the Vision.

Keywords: Public Education**,** UAE, Educational Reform, UAE Vision 2021

Current state of affairs

The public education system in the UAE comprises 61% of all schools in the nation (Al-Qutami, 2011). The system although currently under reform is plagued by a number of issues (Ridge, 2011). These include concerns related to outdated curricula and teaching and assessment methods, as well as under-qualified teachers with little to no professional development opportunities. The dropout rate for young Emirati males in high school–as high as 14% in parts of the country (Ridge, 2009) – is of particular concern. Efforts at reform through the Abu Dhabi Education Council and other nationwide initiatives may have afforded the UAE one of the highest literacy rates in the Arab world but have failed in achieving substantial reform to date (Badry, 2012). These challenges are compounded by leadership capacity gaps, as a 2008 assessment found that approximately 70% of public school principals did not have the required skills to lead their institutions effectively (Rai & Beresford-Dey, 2023). With no overarching curriculum document for the country, a limited curriculum, and a continued focus on rote-learning and standardized testing despite efforts to the contrary (Ridge 2011), the system continues to struggle to produce innovative and critical thinkers as called for by national leaders. This is evidenced through student performance in tests conducted by the Organisation for Economic Co-operation and Development (OECD) through its Programme for International Student Assessment (PISA). The results of the educational testing of 15-year-old students worldwide-indicated students in the UAE are struggling to keep up with those in leading nations. It is important to note here that the test itself is not a typical knowledge-based test, but rather one that tests fundamental knowledge and skills needed for contributing to modern-day society. The assessment is different in that it measures student ability to solve problems and apply the knowledge they have gained to new situations. This includes the testing of reading, mathematics, science, and creative problem-solving (PISA 2012). The United Arab Emirates placed well below the OECD average in all areas, with Shanghai-China leading the way in mathematics, reading, and science, and Singapore placing first in problem-solving.

(See Table 1.1). In reading, for example, the OECD states that only 36% of UAE students currently have the basic skills to effectively participate in a knowledge-based economy such as the on envisioned by their leaders. These results are disappointing for the UAE given the high level of investment in educational reform to date. With Vision 2021 now leading the nation into a knowledge economy, a re-envisioning of education is required to refine the country's educational reforms.

Vision 2021

The UAE's Vision 2021 defines the nation's future economy as driven by knowledge and skills rather than by oil. This change in direction has a significant impact on the education system since it is now tasked with creating "knowledgeable and innovative Emiratis [who] will confidently build a competitive and resilient economy" (Vision 2021, 1). The Vision further defines its future citizens as "ambitious and responsible [and] actively [engaged] in an evolving socio-economic environment" (2). The leaders want the nation's citizens to "take charge of their path in life" (4) and be productive, self-reliant, risk-takers. The Vision calls for "innovation, research, science, and technology" (18) to play a key role in the development of a knowledge-based economy fuelled by cutting-edge creativity and entrepreneurial spirit. The education system is called upon to produce "well-rounded citizens" (23) that are able to engage in critical thought and compete with "students in the most advanced nations" (23).

These various characteristics defining the future UAE citizen are critical in the educational reform process, as they serve as the foundation for a new and improved system. It is important to use the descriptors from the Vision statement to assess the current reforms in place and to build on the ones supporting the Vision. The next section of this paper will analyse the descriptors in greater detail, outlining the skills and knowledge needed in the education system to create said citizen.

Skills and Knowledge Needed for Vision 2021

Well-rounded Knowledgeable Citizens

Subject Area	OECD Average	Highest Score	UAE Score
Mathematics	494	613	434
Reading	496	570	442
Science	501	580	448
Problem-Solving	500	562	411

Table 1.1 OECD UAE Performance Indicators

The first characteristic to address is the overall notion of a well-rounded, knowledgeable citizen. According to the *Merriam Webster Online Dictionary* (2014), a well-rounded person is someone who has been "educated in many different subjects." The current public school system falls short in this regard as it has a limited curriculum on offer, with most schools focusing mainly on mathematics, Arabic, Islamic studies, and the sciences (Ridge, 2011). Students in the system have very few options to customize their education as a result. In order to broaden UAE nationals' knowledge base, the public education system will need to offer a variety of courses beyond the current curriculum, allowing students to choose their own educational path. A good example of such a system is found in Ontario, Canada, where students choose programs that match their skills and interests. Classes include a wide range of options beyond the traditional, including business studies, world studies, the arts (drama, art, music), computer studies, physical education, and much more (Ontario Ministry of Education, 2006). This concept can be carried over into first-year university programs where students partake in a general education year regardless of their choice of major. Not only will this broaden students' general knowledge base, but it will also afford students the opportunity to explore a variety of other majors. This model of first-year education at university is commonly found in North America.

Creative and Innovative Citizens

Another recurring theme in the Vision is that of creativity and innovation. Creativity is defined as "the use of imagination or original ideas to create something" (*Oxford Online Dictionary*, 2015). This is further expanded by Franken (1993: 396) to include "the tendency to generate or recognize ideas, alternatives, or possibilities that may be useful in solving problems." Sternberg and Williams (1996) believe creativity is more than just ability, however. It is an approach to life.

Building creativity in children early on in their development is essential, as "creative potential... [becomes] suppressed by… society" (Sternberg & Williams, 1996: 2) in the later years of development. A creative entrepreneur by the name of Driediger (2015) believes one way of building creativity is surrounding oneself with the world's greatest works of music, literature, and art. These masterpieces, he claims, stimulate one's creativity and serve as standards for one's own work. This speaks to the earlier recommendation of providing students in the public school system exposure to broader subject matter. Sternberg and Williams (1996) also highlight the importance of critical thinking in creativity and innovation. Critical thinking not only includes the ability to redefine a problem and question assumptions, but also includes the ability to analyse and evaluate both existing and new ideas. According to Author (2014b), one-way critical thinking is readily built in students is through extensive reading programs in schools. Another way critical thinking is fostered among youth is through the inquiry-based learning approach. Central to this approach is student curiosity. Savery (2006) defines inquiry-based learning as a "student-centred, active learning approach focused on questioning, critical thinking, and problem solving" (16). Students come up with a question they want answered or a problem they want solved, then work collaboratively in researching solutions and sharing newly gained knowledge and experiences with one another. Incorporating this type of learning into the UAE public education system across disciplines would most certainly help students achieve Vision 2021 citizen status.

Entrepreneurs and Risk-takers

The UAE is not alone in its vision of entrepreneurial citizens. The European Commission (2013) put out a report highlighting the benefits of an 'entrepreneurship education' with a plan to embed related programs into mainstream education by the year 2020. According to the Commission, this move will produce graduates that are three to six times more likely to become entrepreneurs in their lifetime. The report highlights two integral components needed for this educational initiative to work: highly trained teachers with creative and entrepreneurial spirit, and a learning environment that promotes creativity and risk-taking. This translates into a curriculum that focuses on "the ability to think critically, take initiative, problem solve and work collaboratively" (European Commission 2013: 3) and a classroom where mistakes are openly welcomed. In Entrepreneurship Education, project-based learning with active hands-on cross-curricular activities is the norm. Lessons that draw on real-life experiences replace more traditional forms of teaching. For this innovative teaching approach to work, teachers must be highly qualified in the modern methods of teaching, and well-trained in the skills and knowledge of entrepreneurship. Embedding entrepreneurship education into the UAE public education system then would require not only a complete overhaul of the current curricula, but also the re-training of the many expat teachers currently in place. Local teacher training colleges would also need to adopt this philosophy and train future national teachers to teach entrepreneurship education.

Socially Responsible Citizens

> *We cannot live only for ourselves. A thousand fibers connect us with our fellow men.* – Herman Melville

Vision 2021 also calls for citizens that are both self-reliant and socially responsible. Before further developing this idea, it is important to understand what it means to be socially responsible. The Workshop for Civic Initiatives Foundation (WCIF) offers the following definition, in part, of individual social responsibility:

> The individual social responsibility includes the engagement of each person towards the community where he lives, which can be expressed as an interest towards what's happening in the community, as well as active participation in the solving of some of the local problems.

This can be further expanded to include taking responsibility for one's own actions and being aware of how they impact others.

In terms of how this translates into classroom lessons, the Morningside Center for Teaching Social Responsibility (Spiegler, 2015) believes it entails teaching students to understand not only themselves, but also others and the world as a whole. In classrooms that teach social responsibility, teachers allow for active participation and independent learning – lending itself easily to flipped classroom components. Students decide what they learn and the manner in which they will learn it (Zainuddin & Perera, 2019; Vaughn, 2020; Bovill, 2020). This type of classroom allows for free student expression and the discussion of contentious issues, where conflicts are solved through open dialogue (Spiegler, 2015). There is a focus on intercultural communication and the understanding and acceptance of others' views. Students learn to problem solve and negotiate win-win solutions. The classroom, in essence, functions similarly to a democracy (Spiegler, 2015).

To foster independence and allow students to build their understanding of the world and their global knowledge as a whole, the public education system may want to consider offering a more diverse curriculum through blended-learning methodology. With students choosing their own learning path in terms of subject matter and method of learning, they are able to hone these skills naturally. In terms of engagement with the community, schools can collaborate with local, national or even international organizations to effect change through various student initiatives.

Actively engaged Citizens

The leaders of the UAE have also called for actively engaged citizens, which ties in directly with individual social responsibility. According to the Academy for Educational Development (2003), citizens actively engaged in non-financial and non-material community service benefits the nation considerably. This type of engagement is not monetary in nature, but rather relates to physical or intellectual contributions to one's community. Volunteer work is one example of this type of engagement, fostering a greater understanding among people and a greater sense of community. Embedding volunteer work into the public education system in the UAE may be a good option in the creation of actively engaged citizens. Volunteer work will not only expand students' understanding of others–a concept highlighted earlier as important–but will also afford the students many different learning experiences while at the same time allowing them to effect change in a tangible way.

Ambitious Citizens

Vision 2021 also requires the UAE's future citizens to be ambitious in nature. Although many definitions abound for the term 'ambition,' it is linked to the concept of an individual's drive for success. *Time Magazine* (Kluger, 2005) reports on three common characteristics of ambitious people. Firstly, all ambitious people set themselves goals. Secondly, once said goals are reached, new goals are immediately created. Thirdly, ambitious people do not allow failure or setbacks to stop them from accomplishing a goal. The article highlights research that shows genetic disposition is part of the equation, as well as one's ability to persist. Other research indicates that the upper middle class in non-collective societies tends to show the highest level of drive to achieve their goals and improve their lives, not the poor or the wealthy. Kluger (2005) distinguishes between non-collective and collective societies in his article to highlight the role culture plays in individual ambition, arguing that a 'culture of competition' is needed to breed ambitious citizens. Judge and Kammeyer-Mueller's 2012 study on ambition, however, shows that ambition is actually linked to individual differences related to personality traits (such as the desire to work hard and being sociable) as well as cognitive abilities. To create ambitious citizens then, the education system would need to instil a healthy dose of competition into its classrooms as well as encourage students to set goals and strive to achieve them. When students experience difficulties reaching their goals, they need to be encouraged to not give up, and to find alternative ways to deal constructively with setbacks.

Productive Citizens

Closely linked to ambition is the concept of productivity. Someone who is ambitious also works hard and is productive in nature. A productive citizen can be described as someone who has many achievements and gives back to society rather than taking from it. Robin Sharma (2015), a famous author on leadership, highlights time management, daily routines, and focused work times without distractions as essential ingredients to building productivity. These suggestions can easily be built into the education system, with teachers building time management skills, strict routines, and quiet work time into every day. This way an atmosphere nurturing creativity is promoted.

Discussion and Recommendations

Vision 2021's call for knowledgeable, skilled, ambitious, socially responsible, and risk-friendly citizens requires a re-envisioning of the current public education system. Although elements of the earlier-stated recommendations are being embedded through various initiatives around the country, there is no consistency in the reform. First and foremost, the leadership needs to create a standard curriculum document for all public schools in the UAE, regardless of Emirate. The new curricula–in line with Vision 2021–would be wise to include three common areas for change. The following will highlight a summary of these changes and discuss the possible challenges involved with their implementation.

Recommendation 1: Broader Education

In order to shape knowledgeable citizens and develop intercultural understanding and world knowledge, it is recommended the public education system expand its current core courses to include a wider spectrum of subject matter. Currently government schools tend to limit subjects to the sciences, mathematics, Arabic, English and Islamic Studies in the higher grades (Ridge, 2011). This is in direct contrast to western institutions around the world. For example, the Ontario curriculum (Ontario Ministry of Education, 2006) in Canada offers students a broad range of courses, ranging from drama, dance, music, and the visual arts, to business, computer, world studies, and health sciences. Once students reach the first year of university, they are enrolled in another flexible general education program, where students can explore an even wider range of subjects in their first year of study. The University of Regina (2015), for instance, has a myriad of courses on offer including geology, film studies, astronomy, art history, justice studies, religious studies, theatre, social and political thought, gender studies, and a selection of languages (including Russian, Mandarin, Arabic, and Ukrainian). Whereas the courses on offer at the United Arab Emirates University rival this selection, the general education on offer is linked to the program of the major, limiting the selection of classes. This means a student studying accounting, for example, will have some general education courses from which to choose, such as one of four thinking skill classes (United Arab Emirates University, 2015), but may not easily be able to study off-track subjects such as archaeology. Allowing for a greater variety in the first- and second-year courses at the university level will not only empower students to choose their own path, but will also build greater world knowledge, possibly exposing students to the world's great works of art, literature, film, architecture, music, and so on. Another possible addition to the current structure at both high schools and universities could be the option of a semester abroad for language study. Studying abroad for a semester not only helps build language skills, but intercultural communication and global understanding as well. Other benefits from a semester abroad according to Online Universities (2012) include building one's independence, cultivating international contacts, developing one's social skills, and gaining much-needed experience for future employment. The literature indicates that intercultural skills gained abroad in particular are of interest to future employers (Johnson & Kaufman, 2005), as is the ability to "work from a variety of perspectives" (Hermans, 2007: 513-514). Some universities deem this aspect of education so important that they have made the overseas learning experience mandatory – such as at Goucher College in the United States.

There are some challenges, however, to implementing a broader curriculum and an overseas study option in the UAE. A recent study exploring the cultural bias of the IELTS examination revealed that students did not desire to learn about the 'outside world' (Author, 2014a). The study identified this phenomenon as the discourse of the 'un-Islamic,' where students refrain from learning about anything unrelated to their world or faith. The existing censorship in the public education system – anecdotally confirmed by expat teachers – currently limits teachers' ability to expand student knowledge of the world. Upon speaking with teachers, classics such as *The Count of Monte Cristo* were disallowed in the classroom for many socio-cultural and political reasons. The exposure to the world's greatest art, music, and literature then is in direct conflict with the current educational censorship in place – an issue that would need to be addressed with the expansion of the curriculum. Additionally, implementing a broader curriculum requires school leaders with high cultural intelligence who can adapt their leadership styles to navigate the UAE's diverse educational environment while respecting local values (Rai & Beresford-Dey, 2023). Overseas study options would be equally difficult to mandate, as girls and young women usually need to be accompanied by a male family member for any form of travel.

Recommendation 2: New Ways of Learning

To allow for greater learner autonomy in the education system, new ways of learning need to be embraced by all stakeholders. Empowering students by having them choose their own learning path through customized education is one way. Another is to allow for a variety of non-traditional learning methods within that

customization. Students would not only choose *what* to learn but also *how* to learn. Blended learning systems are ideal for this type of learning. Although definitions for blended learning abound in the literature, a good description of blended learning usually includes a combination of online and face-to-face classroom instruction (Graham, 2004). This not only builds learner autonomy through the use of personal agency, but also enriches the students' learning experiences (Osguthorpe & Graham, 2003). There are many forms blended learning can take in the classroom. According to the Christensen Institute (2012), the four most common models are: Rotation, Flex, A La Carte, and Enriched Virtual. Of these, the Rotation Model is probably the best fit for UAE classrooms due to a solid mix of brick-and-mortar with online learning. This type of learning consists of students rotating between various activities, one of which is online. This can be done on a set schedule or at the discretion of the instructor. In this category, there are four program types. Station Rotation is where students move from one activity to another in the classroom. In this type, all students experience all stations evenly. Lab Rotation, on the other hand, is when students specifically go to the computer lab for their online activities –one of many activities in the lesson. The Flipped Classroom model is different in that the online learning occurs off-site at the discretion of the individual student. Here the core 'learning' part of the lesson is the responsibility of the student. Teacher guided help is then given in the classroom. In essence, the traditional format of the class is flipped. Individual rotation consists of individual learning plans for students who are all on different schedules with no need to visit all stations. Elements of the Rotation Model could easily be built into the new standard school curriculum, with the exception of the ultra-flexible individual rotation.

A possible challenge to implementing the Rotation Model into the UAE curriculum, however, is the amount of learner self-discipline needed for its success (Collis et al., 2003). With a highly teacher-centred approach currently dominating the public classrooms in the UAE, this shift from passive learner to active learner will require good support systems.

With the call for entrepreneurs by 2021, the addition of entrepreneurship education to mainstream education is also an important recommendation. This allows for project-based or inquiry-based learning to take place in the classroom, where thinking critically, making mistakes, and solving problems in groups is emphasized. Alberta Learning (2004) defines inquiry-based learning as "a process where students are involved in their learning, formulate questions, investigate widely and then build new understandings, meanings, and knowledge [which can be used] …to develop a solution" (1). The problems investigated in this type of learning tend to pertain to real life situations. Inquiry-based learning is known to be particularly effective in increasing student creativity and independence (Kuehne, 1995). Often inquiry-based programs are closely linked to school library programs, with research indicating the school library can enhance student achievement by up to 9% (Lance, 2001). This ties in directly to the claims by Author (2014b) which highlight the importance of literacy and literary resources in the development of a knowledge economy. Ridge and Farah (2012) investigated the extent of library use at government schools in the UAE and found close to 70% of students in those schools had limited to no access to it in their final year of high school. With school libraries currently under-utilized and under-stocked (Ahmed, 2012; Abu Dhabi Education Council 2013), the new education system would ideally embrace a more dynamic version of the library and its role in students' education. Successful implementation of inquiry-based learning and library programs requires teacher leadership, where teachers are given opportunities to lead professional development, share best practices, and participate in school-level decision-making (Rai & Beresford-Dey, 2023)

Recommendation 3: Engagement with Community

In order to produce actively engaged and socially responsible citizens, it would be beneficial for students to be involved in their local and global communities through the education system. This link to community work could easily be achieved through inquiry-based learning where students identify and address needs in the community. This would make learning meaningful and productive for students. Mandatory community service is not a new educational notion. In Canada, a number of high schools have implemented mandatory community service with positive short-term and long-term results (Pancer et al., 2007) as have other parts of the world. This addition to the education system in the UAE would not only enhance the student learning experience but also build civic-minded citizens for the future. A possible challenge to this initiative's implementation would be the 'work' aspect of volunteering. Unlike the West, students in the UAE do not work outside of school – either in high school or at university. University education is free, and students live at home with their families, so the concept of 'work' or 'volunteer work' is new to them. Moreover, there would need to be a significant amount of individual choice over the form of the volunteer work to suit cultural and societal norms.

Conclusion

Vision 2021 clearly outlines the government's vision of its future citizens as leading edge, highly educated, and entrepreneurial in nature. For this Vision to be realized, the public education system must undergo a significant reformation and move from a passive, teacher-centred, test-driven environment, to an open, active, student-centred environment fostering creativity and critical thinking. This transformation requires strategic investment in developing culturally responsive school leaders equipped with the competencies to navigate reform challenges while maintaining alignment with the UAE's national identity and values (Rai & Beresford-Dey, 2023). The three major recommendations made in this paper offering students a broader, more personalized education, are integral to the Vision's success. It is also important, however, to acknowledge the diversity of the members of every society and encourage the development of skills and talent in all sectors, encouraging those with high levels of academic ability to move forward into higher education, and those with practical skills to engage in other career choices. It is widely known in the UAE that high school and university graduates prefer government sector work to private sector work due to better benefits, pay, and working conditions. The government has acknowledged this trend and is working on initiatives to encourage the country's youth to venture into the private sector. The banking sector has been highly successful in achieving what is termed 'Emiratisation,' with some banks reporting up to 48% of their employees as Emirati (ADIB, 2015). Other industries have not been so fortunate, seeing dwindling numbers in a variety of traditional Emirati professions such as fishing (Salem, 2013). Moreover, the stigma related to working in lower-level jobs is detrimental to the involvement of young Emiratis in UAE society. According to Hoteit, a regional expert, high school students have the ability to do lower-end to medium-level jobs, but refuse to do so (Young, 2013). Any reformation of the education system would therefore be wise to address this issue to encourage participation at all levels of society. By implementing the educational reform recommendations outlined in this paper, the UAE would be one-step closer to producing Vision 2021 citizens for its ever-growing knowledge economy. Future research should examine the implementation and effectiveness of these reform recommendations in UAE public schools, particularly investigating how school leadership practices and teacher professional development influence successful adoption of blended learning, inquiry-based approaches, and community engagement initiatives. Additionally, longitudinal studies tracking student outcomes and workforce readiness would provide crucial evidence for assessing whether these reforms successfully cultivate the knowledge, skills, and dispositions required for Vision 2021's knowledge-based economy.

References

Abu Dhabi Education Council. Library Upgrade Project, accessed January 25, 2015, www.adec.ac.ae/en/Education/P12Education/Pages/Library-Upgrade-Project.aspx

Academy of Educational Development (2003). Activating Communities: How to Engage Citizens in Local Level Projects, accessed January 15, 2015, http://www.uzuvrh.hr/UserFiles/pokretanje_zajednice_ENG.pdf

ADIB. ADIB Announces Emiratisation Rate Reaches 48%, accessed January 29, 2015, http://www.adib.ae/adib-announces-emiratisation-rate-reaches-48

Ahmed, A. (2012). Boring School Libraries? Not Anymore, *The National*, April 4, 2012, accessed January 12, 2015, http://www.thenational.ae/news/uae-news/education/boring-school-libraries-not-any-more#ixzz2YudUl36b

Alberta Learning (2004). Focus on Inquiry: A Teacher's Guide to Implementing Inquiry-based Learning, accessed January 28, 2015, https://education.alberta.ca/media/313361/focusoninquiry.pdf

Association of California School Administrators (2013). Preparing Productive Citizens: Civic Education Key to the Common Core, accessed January 15, 2015, http://www.acsa.org/FunctionalMenuCategories/media/EdCalNews/EdCal-2013/Jan28/Civic-ed.aspx

Bovill, C. (2020). Co-creation in learning and teaching: The case for a whole-class approach in higher education. Higher Education, 79(6), 1023-1037.

Christensen Institute (2012). Blended Learning Models Definitions, accessed January 25, 2015, http://www.christenseninstitute.org/blended-learning-definitions-and-models/

Collis, B., Bruijstens, H., and van der Veen, J. K. (2003). Course Redesign for Blended Learning: Modern Optics for Technical Professionals, *International Journal of Continuing Engineering Education and Lifelong Learning 13*(1-2): 22-38.

Driediger, J. "Seven Ways to Increase Your Creativity," accessed January 4, 2015 http://www.hongkiat.com/blog/increase-creativity/

Franken, R. (1993). *Human Motivation*. Pacific Grove, CA: Brooks/Cole Publishing Co.

Author, H. (2014a). *Cultural Bias in University Entrance Examinations in the UAE.* Abu Dhabi: ECSSR Press.

Author, H. (2014b). Challenges to building a 'Knowledge Society': The role of literacy in promoting critical thinking in the UAE. *Policy 10*. Abu Dhabi: Al Qasimi Foundation for Policy Research.

Graham, C. (2004). Blended Learning Systems: Definitions, Current Trends, and Future Directions. In *Handbook of Blended Learning: Global Perspectives, Local Designs,* Curtis Bonk and Charles Graham (Eds.), pp. 3-21. San Francisco, CA: Pfeiffer Publishing.

Hermans, J. (2007). High potentials: A CEO Perspective, *Journal of Studies in International Education 11*: 510-521.

Johnson, T., and Kaufmann, H. (2005). Send future US business leaders abroad, *The Christian Science Monitor,* accessed January 19, 2015, from http://www.csmonitor.com/2005/1208/p09s01-coop.html

Judge, T., and Kammeyer-Mueller, J. (2012). On the Value of Aiming High: The Causes and Consequences of Ambition, *Journal of Applied Psychology 97*(4): 758-775, accessed January 20, 2015, http://dx.doi.org/10.1037/a0028084

Kluger, J. (2005). Ambition: Why Some People Are Most Likely to Succeed, *Time Magazine*, November 6, 2005, accessed January 25, 2015, http://content.time.com/time/magazine/article/0,9171,1126746-7,00.html

Kuehne, B. (1995). The Barkestorp Project: Investigating School Library Use, *School Libraries Worldwide, 1*(1): 13-27.

Lance, K. (2001). Proof of the Power: Quality Library Media Programs Affect Academic Achievement. *Multimedia Schools, 8*(4): 14-16, 18, 20.

Merriam Webster Dictionary. Accessed December 27, 2014,http://www.merriam-webster.com/dictionary/well%20rounded

Pancer, S., Brown, M. and S., Henderson, A., and Ellis Hale, K. (2007). The Impact of High School Mandatory Community Service Programs on Subsequent Volunteering and Civic Engagement. *Research Report.* Toronto: Imagine Canada.

Rai, J., & Beresford-Dey, M. (2023). School leadership in the United Arab Emirates: A scoping review. Educational Management Administration & Leadership, 53(6), 1335-1357. https://doi.org/10.1177/17411432231218129

Ridge, N. (2009). The Hidden Gender Gap in Education in the UAE. *Policy Brief 12.* Dubai: Dubai School of Government.

Ridge, N. (2011). The Role of Curriculum in the Creation of a Knowledge-based Economy in the UAE. In *Education in the UAE: Current status and future developments,* 55-81. Abu Dhabi: ECSSR Press.

Ridge, N., and Farah, S. (2012). The 30%: Who are the males in higher education in the UAE? *Policy 30*. Accessed January 20, 2015 http://www.academia.edu/1548327/The_30_Who_are_the_males_in_higher_education_in_the_UAE

Ontario Ministry of Education (2006). The Ontario Curriculum Grades 11 and 12:

Business Studies, accessed December 27, 2014, http://www.edu.gov.on.ca/eng/curriculum/secondary/business1112currb.pdf

Oxford Online Dictionary (2015). Accessed January 4, 2015, http://www.oxforddictionaries.com/definition/english/creativity

Salem, O. (2013). Debate Rages over Dwindling Number of Emirati Fishermen in UAE, *The National*, March 11, 2013, accessed January 29, 2015, http://www.thenational.ae/news/uae-news/debate-rages-over-dwindling-number-of-emirati-fishermen-in-uae

Savery, J. (2006). Overview of Problem-based Learning: Definitions and Distinctions, *Interdisciplinary Journal of Problem-Based Learning 1*(1), accessed January 20, 2015, http://dx.doi.org/10.7771/1541-5015.1002

Sharma, R. (2015). Twenty-one Tips to Becoming the Most Productive Person You Know, accessed January 18, 2015, http://www.robinsharma.com/blog/09/become-the-most-productive-person-you-know/

Spiegler, J. (2015). Five Strategies to Teach Social Responsibility, accessed January 13, 2015, http://www.teachhub.com/5-strategies-teach-social-responsibility

Sternberg, R., and William, W. (1996). *How to Develop Student Creativity*? Alexandria, Virginia: ASCD Books.

Tiwari, A. (2008). SR is Here, Watch-out CSR! Accessed January 14, 2015 http://nonprofitfundraisingindia.blogspot.com/2008/06/isr-is-here-watch-out-csr.html

University of Regina (2015). Course Catalog accessed January 19, 2015. https://banner.uregina.ca/prod/sct/bwckctlg.p_disp_cat_term_date

Vaughn, M. (2020). What is student agency and why is it needed now more than ever? *Theory Into Practice*, 59(2), 109-118.

Westheimer, J. (2020). Civic education and the rise of populist nationalism. *Peabody Journal of Education*, 95(1), 4-16.

Workshop for Civic Initiatives Foundation. Accessed January 14, 2015, http://www.wcif-bg.org/en/

Online Universities (2012). Twenty Big Reasons Study Abroad Should be Required Today, accessed January 19, 2015. http://www.onlineuniversities.com/blog/2012/05/20-big-reasons-study-abroad-should-be-required-today/

Osguthorpe, C., and Graham, C. (2003). Blended Learning Systems: Definitions and Directions, *Quarterly Review of Distance Education 4*(3): 227-234.

Young, S. (2013). Most Emirati Students not Motivated, says Study, *Khaleej Times,* June 2, 2013, accessed January 29, 2015, http://www.khaleejtimes.com/nation/inside.asp?xfile=/data/youthspecial/2013/June/youthspecial_June2.xml&section=youthspecial

Zainuddin, Z., & Perera, C. J. (2019). Exploring students' competence, autonomy and relatedness in the flipped classroom pedagogical model. *Journal of Further and Higher Education*, 43(1), 115-126.