

SUMMARY

As a result of increasing concerns about the employability and skills of the country's youth, the United Arab Emirates (UAE) has recently undertaken substantial efforts to re-imagine and reform the national school curriculum. There are two new approaches currently being implemented on a trial basis in the country—a new standards-based curriculum in Abu Dhabi schools and a new English-medium curriculum in selected government schools, the *Madares Al Ghad* (Schools of Tomorrow), across the UAE. Local authorities hope that these new approaches will mark a landmark shift away from the tyranny of rote memorization toward a skills-based education that prepares students to live and work in the 21st century.

This brief will examine the meaning of the term “curriculum,” the history of curriculum development in the UAE, the role of various agencies and ministries in current initiatives, and the challenges and possibilities that lie ahead on the road of reform. It concludes with recommendations for policy makers on how to implement sustainable curriculum reform that will engage all stakeholders in the process.



Challenges to Curriculum Development in the UAE

By Samar Farah and Natasha Ridge

What Is “Curriculum”?

In its broadest sense, the term curriculum can be said to encompass the principles, underlying educational philosophy, goals, content and concrete functioning of the “instructional program” in the classroom, as well as the written and other materials needed to support the educational system.

Curriculum as a concept can be broken down into three key components: intended curriculum, implemented curriculum and attained curriculum. The *intended curriculum* typically includes the guiding documents produced by the Ministry of Education or other education authorities which dictate how much, how often and what should be taught in schools. The *implemented curriculum* is what actually happens in the classroom, how effectively teachers present the material, how long they spend on a topic and what resources they have to teach the content. Finally, the *attained curriculum* is what students actually learn in their classroom, what skills and values they pick up, and what content they absorb and retain.

History of Curriculum Development in the United Arab Emirates

Formal education was introduced in the UAE in 1953, when the first Kuwaiti educational mission opened a school in the Emirate of

Sharjah. Following that, schools were opened across the UAE with funding from Qatar, Bahrain, Egypt and Saudi Arabia.¹ Typically, the countries that funded the schools also staffed them and used the same texts and curricula that were used in their home countries.

In 1972, after the creation of the UAE, the newly established Ministry of Education began to consolidate this very eclectic mix of schools. Despite the establishment of a central education authority, the Ministry of Education, the curriculum in the secondary schools was still borrowed from neighboring countries, and all of the textbooks were imported.² It was not until 1979 that the Ministry of Education launched its National Curriculum Project to create a single Emirati curriculum. However, this curriculum did not come into full use until 1985.

Since 1985 the word “curriculum” in the UAE context is largely used to refer to official textbooks, or intended curriculum, rather than any documentation outlining what skills or standards a student should acquire in a particular grade or subject. This has meant that teachers have been very restricted in what they can teach, as they are bound precisely to the content and activities prescribed by the textbooks in order to ensure that what they teach matches what will be assessed.

Table 1: Curriculum within the UAE Context

Type of Curriculum	Description
Intended	<ul style="list-style-type: none"> • <i>Ministry of Education 2008-2010 Strategic Plan</i> • common national examinations • subject syllabi • school textbooks (revised on a five-year basis by educational consultants and scholars in local universities) • student workbooks (laying out standards, activities, strategies, expected outcomes and tools for teaching and assessment)
Implemented	<ul style="list-style-type: none"> • How teachers teach • What teachers teach <ul style="list-style-type: none"> - how content is presented - materials or pedagogical approaches used
Attained	<ul style="list-style-type: none"> • What students learn, based on: <ul style="list-style-type: none"> - results of end of year examinations (MOE) - Trends in International and Mathematics and Science Study (TIMSS)

Curriculum Development Activities in the Ministry of Education

In the Ministry of Education (MOE), the Curriculum Department has a threefold role.³ First, the Ministry is charged with providing “modern curriculum” in line with the second goal of the *MOE 2008 – 2010 Strategic Plan*, the details of which are not prescribed.⁴ Second, it reviews and approves textbook manuscripts every five years, which then become key resources for teachers in the classroom. Finally, it is responsible for the preparation and oversight of assessment and examinations.

Unlike in the majority of OECD countries, there is no overarching curriculum document for the UAE which outlines the curriculum goals, standards or content in its entirety. This document typically outlines the content and performance levels desired for students in each grade and subject.⁵ While subject syllabi exist in the UAE, these are not used by teachers and are not readily available in schools.

The mandate to provide a “modern curriculum” has resulted most recently in the 2007 launch of the *Madares Al Ghad* (Schools of Tomorrow). In specially selected schools, new English medium textbooks for English, science and math have been introduced in order to both improve students’ levels of English and to change the way in which these subjects are taught and understood.⁶ Moreover, despite the introduction of more student-centered materials and textbooks in the schools in 2009, the lack of corresponding reforms in assessment mechanisms has meant that teachers often return to the old teacher-centered, textbook-driven ways of teaching.

Textbook revision and approval is a five-year process undertaken by the MOE. To date the most noticeable changes have been the English language textbooks for primary students, in which the old UAE-produced texts were replaced with *UAE Parade*, which is an adaptation of the well known

series *New Parade*. These texts embrace the communicative approach and come with a substantive teacher's guide, cassettes and other resources to help students learn English in an interactive and enjoyable way.

Finally, the curriculum department is responsible for assessment. While this should create a natural synergy, whereby changes in textbooks (intended curriculum) lead to changes in teaching styles (implemented curriculum) and examinations (attained curriculum), this has not been the case. Examinations have retained a heavy focus on textbook memorization, and therefore discourage teachers from embracing new student-centered approaches to teaching.

Other Influences on Curriculum Development

Ministry of Higher Education and Scientific Research

Typically, the Ministry of Higher Education and Scientific Research (MOHESR) would have little to no role in curriculum development at the school level. However, in 2007 the MOHESR introduced the Common Educational Proficiency Assessment (CEPA) for English in order to determine which students would be required to take a foundation year (or two) to strengthen their English language skills before entering the public universities, all of which conduct instruction in English. The initial year saw a number of problems, including the poor preparation of teachers for the exam and a mismatch between the exam content and the content of the textbooks. In order to address this dilemma, the Grade 12 English curriculum has since been modified to better reflect the topics covered in the CEPA exam.

The CEPA was subsequently also launched for Math, and in 2009 it was introduced for Arabic. It will therefore continue to have some impact on what students learn in these

subjects in Grade 12, as it is compulsory for those who wish to enter one of the three public higher education institutions in the UAE (UAE University, The Higher Colleges of Technology, and Zayed University) to pass the exam.

Abu Dhabi Education Council

Since the establishment of the Abu Dhabi Educational Council (ADEC) in 2005, it has been at the forefront of curriculum development in the UAE. Most recently it has developed a new curriculum based on outcomes, or standards, rather than textbooks, in consultation with an arm of the New South Wales Government, Australia.

This English medium curriculum in Abu Dhabi has been developed for Science, IT, and Health and Physical Education for grades K-9, for English for grades K-12, and for Math for grades K-10. As in the *Madares Al Ghad*, the focus of the new curriculum is to improve the English language skills of the students so that they avoid a time-consuming foundation year upon entry into university. However, it is more comprehensive as it involves a new standards-based curriculum which is taught by a large number of native English-speaking teachers.⁷

The new ADEC curriculum is an important move away from dependence on the textbook as the sole transmitter of curriculum content. It places more emphasis on critical thinking and problem solving skills rather than memorization. At this stage, the curriculum is being tested in the Model schools and Public Private Partnership (PPP) schools.⁸ If successful, the new curricula might eventually be implemented in all government schools in the Emirate and eventually in all government schools across the country.

Challenges and Recommendations

While the development of the new standards-based curriculum in Abu Dhabi is an important step forward in improving the curriculum in the UAE, there are still many issues that have not been addressed. The main challenges that

lie ahead include transforming the attitudes and approaches of teachers, expanding the scope of the curriculum content, and designing appropriate assessment strategies. Finally, local capacity must be expanded in order to ensure sustainability and suitability in curriculum reform.

Transforming Teaching

To ensure the successful implementation of the new curriculum, a radically different mindset and approach is required. Moving away from a textbook-driven curriculum to one in which teachers need to plan what and how they will teach, drawing from a variety of sources, will entail retraining teachers on the fundamentals of teaching. The type of training required will need to extend beyond pedagogical expertise – the transmission of knowledge – to incorporate reflective dimensions, enabling teachers to independently develop instructional materials. This will require more intensive training and better follow-up than currently exists.

The Ministry of Education structure incorporates supervisors for every subject whose role is to visit teachers and observe lessons to assess the quality of teaching. Currently, the role of the supervisor is marginal as principals can choose their supervisors; that is, they can select those who will be most amenable to giving a good report. If the role of the supervisor was strengthened and improved, this would likely have a positive impact on student learning. In their study of Cuba's education system, Carnoy et al. (2007) found that supervision and mentoring played a critical role in ensuring quality of teaching, if used effectively. The UAE should be no different.⁹

Unfortunately, many teachers are unlikely to substantially change their behavior unless they are provided with incentives to do so. The current system does not reward student-centered teaching, and this is unlikely to change unless there is an insistence upon a change in teacher styles.

Expanding Curriculum Content

The Ministry of Education's recent announcement of an overhaul of the physical education curriculum to provide more instruction hours, as well as better facilities, is a great step in the direction of expanding the scope of school content.¹⁰ However, more positive steps need to be taken with regard to other subjects such as art and music, both of which have not been given enough importance in the national curriculum so far. According to the Knowledge and Human Development Authority's (KHDA) Dubai Schools Inspection Bureau, music is not offered after Grade 6, and art is not offered after Grade 9, except to a few students who choose to pursue them as extracurricular activities.¹¹ Theories of cognition suggest that experiences in the arts (visual arts, music, theater and dance) create capabilities or motivations that show up in non-arts capabilities.¹²

In a cross-country comparison of the subjects and respective instruction time offered in grades 7-9, it is noticeable that the UAE places a greater emphasis on math and language education than the OECD countries, including the top two scoring countries on the Programme for International Student Assessment (PISA) – Finland and Korea.¹³ Benavot (2006) argues that this trend is prevalent in most countries across the Middle East, Africa and South Asia, whereas the OECD countries allocate relatively more time to aesthetic and physical education.¹⁴ Despite the heavy time allocation to these subjects in the UAE, students remain weak in math (see Dubai's results in the 2007 TIMSS) and poor in English, indicating that simply having more hours in a subject is not enough to see test score gains.

Another neglected content area in the UAE is Information and Computer Technology (ICT). Currently this comprises a single subject in which students learn outdated computing skills, often on obsolete machines. In Finland, however, technology is no longer offered as in

Table 2: Percentage of Instruction Time by Subject in Grades 7-9

Subject	Finland	Korea	OECD	UAE MOE	UAE MAG
Native Language	13	11.5	15	20	19
Math	13	9	13	17	17
Science	17	11.5	11	11.5	11
Social Studies	7	11.5	12	14	14
Foreign language	14	11.5	12	17	19
Technology	0	6	3	3	3
Arts	15	6	8	3	3
Music	0	3	0	0	0
Physical Education	7	6	8	3	3
Religion	5	0	3	11.5	11
Vocational skills	4	3	2	0	0
Other	0	3	5	0	0
Electives	5	18	8	0	0

Source: Eduardo Andere, “Comprehensive Education Outside the United States,” *Why We’re Behind: What Top Nations Teach Their Students But We Don’t* (Common Core, 2009).

individual subject in the curriculum. Instead, the government has successfully integrated ICT across the national curriculum, creating a “digital learning” environment. This initiative is currently being replicated across the world.¹⁵ To achieve similarly effective change in the UAE would require teachers to receive further training on the use of ICT for instructional purposes, as well as a change in the ICT syllabus, which is currently not practical or relevant to real-life demands.

Overall, the UAE curriculum is narrow and covers fewer subjects and subject areas than the best performing countries in the world. UAE schools fail to offer vocational skills training or any elective subjects — such as home economics, environmental science or business studies. The UAE could also benefit from diversifying its secondary level curricular offerings and lengthening its school week. Currently, it is estimated that UAE schools have approximately 22.5 hours of instruction per week, in comparison to the international average of 27 hours per week.¹⁶ Extending the school day would enable the broadening of the curriculum.

Assessment Strategies

To encourage independent thinking and improve problem solving skills, students need to be assessed on how they apply learned skills to new situations. This is lacking in the existing examination and assessment structures, also known as the attained curriculum. Exams currently require students to provide only limited responses and do not present students’ weaknesses clearly, leaving them with incomplete feedback on their progress.¹⁷

Reforms need to be carried out at the national level to ensure more systematic and rigorous assessment. The current decentralized approach to examinations, in which the MOE office in each emirate develops its own examinations, with the exception of grade 12, is problematic due to the small size of the public school system. Rather, the creation of a single examination system for all end-of-year exams would assist the MOE in comparing academic achievement in schools across emirates to determine which schools are performing

well and which are not. This, in turn, would enable schools to implement tracking processes for the progress of students, whereby teachers could identify where students are falling behind and how they can work together to help the students to improve their work.

Creating Sustainable and Suitable Curriculum Reform Processes

The final challenge that lies ahead for the UAE is one that holds larger political and economic consequences for the country. It is the challenge of creating a national body that is able to develop and revise the national curriculum. This body needs to be comprised of local experts who are able to produce and review proposed curriculum changes.

The Ministry of Education and the Abu Dhabi Education Council have both relied heavily on foreign expertise to spearhead their curriculum development initiatives. Though it is easy in the short term to import consultants who tend to be more experienced in the field, such a situation is unsustainable in the long term, as it leaves Emirati nationals and experts excluded from the process and, consequently, without the necessary skills to develop curricula. Through decreasing its reliance on external expertise and providing better education and training for nationals and home grown experts, the UAE has an opportunity to build local capacity for developing curriculum.

This process needs to begin with the UAE being more cautious when “borrowing” curricula reforms from abroad. So far the UAE has depended heavily on expertise from the United States and Australia, from which it imports the majority of its curriculum. However, both countries are relatively weak performers in the TIMSS and PISA assessments. In fact, US students lag behind Finland by roughly two full grades in math and science.

Therefore, in the pursuit of a better, more encompassing curriculum the UAE may need to explore the possibility of learning from the experiences of other countries, such as the top-scoring PISA and TIMSS performers, Korea and Finland.

Concerns about loss of national identity are also an important reason why the UAE requires its own curriculum authority. Nowhere is national identity more clearly defined than through the public school curriculum. External consultants cannot fully understand the needs of the nation, its vision, its goals, and its moral foundations. This is illustrated in recent concerns that have been raised about the shift to using English as a medium of instruction in the Madaras Al Ghad Schools, whereby parents and Federal National Council (FNC) members have expressed fears over a decline in children’s command of Arabic.¹⁸ Many also felt resentful of a foreign language and a foreign curriculum being imposed upon Emirati children. If there was more local involvement in curriculum development, many of these problems could be diminished or mitigated.

Conclusion

It is undeniable that providing the appropriate curriculum in schools is essential to creating a generation of innovative and skilled citizens. To that end, the curriculum must be conceptualized in holistic terms as more than just what should be taught but also as how it is being taught and assessed. Without a comprehensive approach, curriculum development will continue to be understood solely in terms of textbook development. If a wider view of curriculum is embraced, fundamental issues such as offering constructive teacher training, expanding the scope of curriculum content, implementing effective evaluation strategies and investing in long-term local capacity to develop curriculum would undoubtedly bring lasting and meaningful change to the educational system in the UAE.

ENDNOTES

- 1 O. M. Suliman, "A Descriptive Study of the Educational System of the United Arab Emirates," (Ed.D. diss., University of Southern California, 2000).
- 2 Ibid.
- 3 The Ministry of Education is responsible for implementing the national curriculum in the northern Emirates only. Abu Dhabi and Dubai branched off in 2005 and 2008 respectively to implement their independent curricula.
- 4 UAE Ministry of Education, "MOE Strategic Objectives," <http://www.moe.gov.ae/English/Pages/StrategicObjectives.aspx>.
The "MOE Strategic Objectives" are also contained within the Executive Summary of the MOE 2008-2010 Strategic Plan (Arabic).
- 5 William H. Schmidt, Curtis C. McKnight, Richard T. Houang, HsingChi Wang, David E. Wiley, Leland S. Cogan and Richard G. Wolfe, *Why Schools Matter: A Cross-National Comparison of Curriculum and Learning* (San Francisco, CA: Jossey-Bass, 2001).
- 6 Previously, math and science were taught in the Arabic language.
- 7 UAE University spends 1/3 of its budget on its foundation program; reducing the number of students who attend this program would result in significant budget savings.
- 8 Model schools are government schools that are attended by Emirati students only, whereas PPPs are public schools that are managed by local and regional private education providers.
- 9 Martin Carnoy, Amber K. Gove, and Jeffery H. Marshall, *Cuba's Academic Advantage: Why Students in Cuba do Better in School* (Stanford, California: Stanford University Press, 2007).
- 10 Health studies indicate that 12% of UAE children aged 12 to 16 are considered to be obese, predominantly due to a poor diet and a lack of exercise. Alison McMeans, "Two out of five Dubai children found to be overweight," *The National*, October 13, 2009.
- 11 Knowledge and Human Development Authority, *Dubai School Inspection Bureau Annual Report 2009*, <http://www.khda.gov.ae/CMS/Pages/En/annualreporten.aspx>.
- 12 James C. Catterall, "The Arts and the Transfer of Learning," *Critical Links: Learning in the Arts and Student Academic and Social Development* (Washington, DC: Arts Education Partnership, 2002)
- 13 PISA is one of two global exams that assess different features of student learning. Unlike the Trends in Mathematics and Sciences Study (TIMSS), PISA is a skills-based evaluation of "what students can do with their knowledge."
- 14 Aaron Benavot, "The Diversification of Secondary Education: School Curricula in Comparative Perspective," in *Education for All Global Monitoring Report 2006* (Paris: UNESCO, 2006).
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- 17 *Dubai School Inspection Bureau Annual Report 2009*
- 18 Mahmoud Habboush, "FNC: Failures in Arabic 'Breach of Constitution'," *The National*, October 28, 2009.

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