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Abstract

This essay presents an overview of the system of gifted education in the Kingdom of Saudi Arabia. To highlight the characteristics of this system, however, its presentation is preceded by a discussion of particular aspects of Saudi society and its general system of education. These aspects distinctly differentiate the general and gifted systems of Saudi education from other educational systems in the world, in spite of these systems' many similarities.

Keywords

educational interventions, gifted education, gifted identification

Schooling, as a social activity, is always contextualized within the society whose norms and values it promotes. Correspondingly, any subsystem of gifted education is embedded within a system of general education and, therefore, only can and should be understood in the context of this general system and the society it serves. This is especially the case for the Kingdom of Saudi Arabia (KSA), whose educational system not only has a number of shared but also many unique specific features when compared with those of other Middle Eastern countries (Kanalán & Celep, 2011) and the world at large (Shavinina, 2009). Thus, to highlight the characteristics of the Saudi system of gifted education, it is important to comment, albeit briefly, on particular aspects of

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Saudi society and its system of education. Within the context of this brief commentary on the Kingdom's system of general education, its system for the identification and education of gifted and talented children will be described.

General Education in the KSA

Among the many distinct features of the Kingdom—a young country (founded in 1932) with old traditions—three are particularly important for the discussion that follows. First, Saudi society is founded upon the ideals of Salafism—a conservative interpretation of Sunni Islam, which aspires to return to primordial fundamental Islamic sources. Second, the population of Saudi is growing at a rate of about 3.2%; currently the country has 28.1 million people (including ~27% who are non-Saudis), approximately 7 million of whom are school-aged children (World Bank, 2012a). Third, Saudi Arabia possesses the second-largest oil reserve in the world and its economy is heavily dependent on the oil industry. Each of these features imposes a particular set of parameters on the general system of education in Saudi.

Notwithstanding a limited number of major descriptions (Al-Zid, 1984; Essa, 1979; Rugh, 2002a, 2002b), little is published in English on education in Saudi Arabia, and what is available comes mostly from various academic theses (i.e., master's and doctoral qualification works). Correspondingly, here we comment briefly on particular aspects of the general educational system in the Kingdom as they pertain to the needs of gifted and talented students in Saudi Arabia.

The system rests on the tradition that arose from a seat of learning (in Arabic—*madrasah*, a place to learn all kind of things, but in the context of or with an emphasis on Islamic studies) established by the Prophet Mohammad in Makkah in the 7th century, AD. According to historic documents, this tradition later differentiated into *kuttab(s)*; Islamic schools held in mosques to study the Qur'an that existed in the Western region as early as the 7th century; notably, some of these early schools admitted girls as well as boys) and *maktab(s)*; small local schools) described first by Ibn Sina in the 11th century (Asimov & Bosworth, 1998; Rugh, 2002b; Wynbrandt, 2010). The modern system is characterized by a strong orientation toward Islamic roots and societal values, with learning and teaching based on the requisite that, no matter the academic subject, the Islamic faith is developed and maintained, and that the students are furnished with Muslim ideals and equipped with skills and knowledge that will guarantee Saudi Arabian society's economic, social, and cultural prosperity (Al-Sadan, 2000). The following citation from the 2004-2014 directives from the KSA Ministry of Education is instrumental in grasping the flavor of public schooling in the Kingdom as, by 2014 (Arabic year of 1435), the vision of the Ministry will be realized in

. . . the graduation of male and female students with Islamic values and the appropriate knowledge and practice. These students will have acquired practical knowledge, skills, and attitudes; they will be able to react positively to and face modern changes; they will be able to apply advanced technologies with efficiency and flexibility and to deal with international competition in scientific and practical fields. Their positive participation in an efficient

educational system will allow them to develop appropriate abilities and attitudes and to spread the positive spirit of work at school environments that encourage learning and social education. (as cited in Almutairi, 2008, p. 11)

One of the core pillars of the Saudi system is the gender-based segregation of students, with the first public school for girls being opened in 1964 (Al-Hariri, 1987). The Saudi government furthers this segregation of the sexes by prohibiting women's access to self-transportation, imposing the use of videoconferencing in teaching and learning where females and males correspond only through remote devices, and strictly curtailing the roles imposed on male and female professors in communicating with their students and with each other. The segregation policy is also reflected in the Saudi official educational policy's ideological connection to Islamic values (Almutairi, 2008).

The purpose of educating a girl is to bring her up in a proper Islamic way so as to perform her duty in life, be an ideal and successful housewife and a good mother, ready to do things which suit her nature such as teaching, nursing and medical treatment. (Al-Salloom, 1995, pp. 19-20)

Policy documents also acknowledge "women's right to obtain suitable education on equal footing with men in light of Islamic laws" (Al-Salloom, 1995, pp. 19-20). The practical realization of this right is such that, at the precollege level, educational options for girls are almost identical to those for boys (with the exception of the "double exception" that only boys take physical education and only girls study home economics). This differentiation of the purposes of education, however, manifests itself fully at the college and postgraduate levels. Although women constitute 58% of all university graduates in the KSA (Baki, 2004), social and professional restrictions on females (i.e., permission for women to enter only certain occupations, mostly in the fields of medicine, science, and education) result in women staying in school longer than men, and qualifying for more advanced degrees (Cordesman, 2003). The emphasis on starting a family rather than progressing in a career and the limitation of access to only particular jobs that have been established for females have a specific impact in the Kingdom. Although it needs highly educated "person power," social and professional restrictions impose limits in terms of the numbers and types of jobs for women (Al Rawaf & Simmons, 1991; Baki, 2004; Doumato, 1999; El-Sanabary, 2006; Hamdan, 2005; Mobaraki & Söderfeldt, 2010; Rizzo, Abdel-Latif, & Meyer, 2007). For example, although women are not restricted from all engineering fields—they can study internal design engineering and computer science engineering—other kinds of engineering like chemical engineering, petroleum engineering, electrical engineering, and so forth are not open to girls because there are no employment opportunities available for them in these fields. In other words, women cannot study certain fields of engineering because there are no jobs in those fields that open to them and, therefore, they cannot compete with men for these jobs. By controlling women's access to labor market education, the Kingdom is not preparing Saudi women for the global economy;

it perpetuates the socially accepted status quo (Baki, 2004). In turn, the limited career access for comparatively highly educated young Saudi women and a lack of consumption of their skills by the labor market create a productivity crisis in the Saudi labor force (Cordesman, 2003).

The government of the Kingdom formed its educational policies under the global slogan "Education for All" (Rugh, 2002b). All students, from those with disabilities to those with gifts and talents should be provided with appropriate high-quality education (Aljughaiman, Majiney, & Barakat, 2012). The Saudi education system is also multi-track and multilevel. There are parallel educational tracks, such as public versus private, general versus vocational, religious versus secular, and civic versus military. There are five levels of education in the Kingdom—preschool (very limited in scope), elementary (6-12 years of age, 6 grades), intermediate (12-15 years of age, 3 grades), secondary (15-18 years of age, 3 grades), and postsecondary and university level (18 years of age and older, where the number of years depends on the type of the program in which a person is enrolled). The current public educational system of the Kingdom includes 24 governmental and 16 private universities, more than a hundred (~150) colleges and other similar institutions, and 30,000+ schools (Alarfaj, 2011). Yet, it has been observed (Prokop, 2003) that enrollment ratios in Saudi schools are relatively low (in 1996, they amounted to 76% for primary, 61% for secondary, and 16% for tertiary education) and dropout rates are relatively high (more than 40% of Saudis do not reach secondary school, and approximately 28% of the new entrants to the labor market were dropouts from elementary and adult vocational training programs).

Education in the Kingdom is compulsory for children aged 6 to 15; it is free and it includes not only schooling per se but also textbooks and health services (Faraj, 2005). Characteristics of learning and teaching in the Kingdom are memorization as the dominant style of learning and lecturing as the dominant style of teaching (Basamh, 2002; Merebah, 1987). Saudi schools use a unified curriculum and a set of corresponding textbooks; both are issued and managed by the Ministry of Education. Correspondingly, attempts at innovation have been centralized; there have been attempts by the Ministry to diversify learning and teaching methods in the classroom (Ministry of Education, 2008). The outcomes of these attempts have not been evaluated, although they have been criticized for not producing materials that are sensitive to the current needs of teachers, parents, and students. Local (district) educational authorities are charged with a responsibility to pass the directives from the Ministry down to schools (Al-Ajroush, 1980); thus, students, parents, teachers, and local administrators do not have any impact on what is taught in Saudi schools and how it is taught. Although it has been shown that local participation improves student outcomes (Al-Saif, 1996; Bin Salamah, 2001), engaging such participation is simply not a common practice in the Kingdom. Educational progress is tracked with the examination system, which is set by the school at each grade (Al-Salloom, 2004) until the second term of the final year of secondary school, when the examination is set by local school districts. Moreover, the outcomes of these attempts have been criticized for not being responsive (or quick enough) to the international pressure exerted on the Kingdom to make changes in their textbook materials after September 2001. Such a lack of response is

upheld “because the state would be putting its survival at risk. The purpose of education is to ensure social obedience to the ruler” (Braunschweig, 2012, p. 29).

The Saudi government invests a substantial portion of its total budget (24% in 2012, (Al-Iktissad Wal-Aamal (Pan Arab), 2012) in education. To compare, Saudi’s public expenditure on education in 2007 comprised 6.4% of its Gross Domestic Product, whereas the corresponding number for the United States and United Kingdom was 5.5%, and for the United Arab Emirates—0.7% (World Bank, 2012b). Such investments, in part, are justified by the government’s realization of the growing working-age population, which is estimated to increase from 3.99 million in 2004 and to 8.26 million in 2020 (Prokop, 2003).

Yet, the number of positions in the government sector, except for jobs in the education and health care systems, is projected to stay put; thus, the expectation is that it is the private sector that will consume the majority of new entrants to the labor market. In this context, academic and technical skills become increasingly important. As is the case around the world, the private sector in the Kingdom gives preference to the best candidates, regardless of their citizenship. Unfortunately, it is commonly viewed that the Kingdom lacks skilled employees and that such a shortage is a direct result of the country’s educational and economic policies during the oil boom years, which has generated a serious gap between the qualifications of graduates of the education system and the requirements of the Saudi labor market (Viviano, 2003). Not only is education failing women by limiting their participation in the labor market, it is also not preparing men. One illustration is that young Saudis with bachelor’s degrees in Islamic philosophy do not possess the minimal skills required by the private sector to be hired in virtually any capacity. Such a lack of appropriate occupational education has created the need for migrant workers in Saudi Arabia (~25%-30% of the population), although the government is proposing to replace foreign workers (the process known as *Saudization*). The government has made certain occupations only available to Saudi citizens, has increased some work visa fees, and has set minimum wages on some jobs to increase the employer’s cost when using foreign labor. Yet, the main obstacle remains: Young Saudis have difficulty competing, in terms of their skills and knowledge, with their foreign peers.

Correspondingly, the major challenge faced by the Saudi general education system is twofold (Prokop, 2003). First, the quality of education should be improved overall so that the graduates of the system have skills and knowledge that match the demands of the labor market. This requires a redefinition of the trajectory the educational system in the Kingdom has experienced so far, and its switch from quantitative expansion (i.e., more students, more teachers, and more schools) to qualitative improvement (i.e., quality of the textbooks, qualification of teachers, and quality of school facilities). Second, the labor market should be in a state of constant expansion for Saudis, as the Kingdom’s population keeps growing rapidly. This requires increasing the proportion of native Saudis in the workforce, introducing economic reforms to attract investment and encouraging the participation of the private sector in employment creation.

Thus, the Saudi educational system is under a lot of pressure, as its roots and commitments are ideological and religious (i.e., connected to the past and old values), but

its future lies in its ability to meet the demographic and economic demands of their changing society (Rugh, 2002b). Currently, the system is exhibiting some signs of change by demonstrating new trends in its functioning, such as increasing geographic and subject diversification (in response to pressure on educational institutions to enroll more and more students, especially for postsecondary institutions); placing more emphasis on science and vocational training (i.e., to service the needs of such companies as Saudi Aramco or Saudi Airlines); and promoting study in English to respond to the increasing globalization and privatization of the Saudi economy. The change, however, has not been rapid and its implementation has been slowed down by the persistence of highly centrally controlled textbooks and other classroom materials, and with the question as to whether government authorities and nominees have the capacity, interest, and desire to make the content they present in these materials relevant to contemporary society. Another relevant factor discouraging change is a lack of diversity in pedagogical approaches (i.e., the official approach still stresses rote memorization and heavy dependence on a single textbook, and provides limited opportunities for the development of creative or applied thinking). What is also notable is the amount of time and priority given to the study of Islam in all K-12 schools, although 2 years ago Islamic studies became a subject rather than the context of all studies. The Islamic principles and doctrine are taught not only in religious classes but also in Arabic and social-studies classes. It is specifically the content and method of the Saudi educational system that prompted the World Bank to criticize the existing system and to suggest that “The quality of education must be upgraded to the demands of the twenty-first century. The emphasis needs to shift to cognitive skills and computer literacy” (World Bank, 1995, p. 18).

Thus, it has been stated in the literature (Cordesman & Burke, 2002) that the Kingdom has set the general priority principle for education (“Education for All”), but it has not developed the means and efficacy indicators to meet its own proclaimed goals. It is important to mention notable attempts to reach those goals. One such attempt is reflected in the decision, for better or for worse, to translate and adapt the McGraw-Hill series for math, science, and English, which was made 2 years ago. Yet, textbook substitutions must be supported by changes in teaching (Reuters, 2011). And as of today, such changes have not been accomplished; the Saudi way of teaching is still characterized primarily by dependency on rote learning, low teaching standards, and minimal orientation toward the skill requirements of the global market. Such a foundation (i.e., way of teaching), in turn, generates a mismatch between educational output, the quality and the expansion of the job market, and the professional success of young Saudis, especially Saudi females.

Saudi Gifted Education Nested Within Its General Education

The English-language literature on the profile of gifted identification and education in the KSA is even more limited than that on general education. Based on this literature and our interpretation of the Saudi literature (which is also limited), it appears that the

policies toward identification and services for gifted children are still being formed; as is the case with the system of general education, these policies have features that are unique to the KSA and features that are common among gifted programs around the world, in the Middle East, and in the Kingdom (Subhi-Yamin, 2009).

Driven primarily by ideas of “equal opportunities” (or “Education for All,” see above), the general education system in the Kingdom was designed for the average learner; no provisions were made for gifted learners (Maajeeny, 1990b). It appears, however, that the situation began changing in the 1990s, and a set of literature reviews and policy analyses (in Arabic), conducted with the support of the King Abdul Aziz City for Science and Technology (as cited in Alfahaid, 2002), arrived at a current definition of intellectual giftedness.

The official beginning of gifted education in the Kingdom goes back to 1999, when a so-called “Saudi Project of talent search” (Al Nafie, 2001) took place. Prior to this project, although the official education policy for gifted education was formulated in 1969, no systematic vision for identifying and educating gifted children existed, although small sporadic programs for such children were in place (Adas, 1998; Al Qarni, 2010; Jarwan, 2004; Maajeeny, 1990a). The project was supported by a number of key players in the general system of education (Ministry of Education, King Abdul Aziz City for Science and Technology, and General Headquarters for Girls’ Education) and was focused on (a) developing a procedure for identifying gifted students and (b) developing enrichment programs in mathematics and science. The project adopted the U.S. (specifically, the National Association for Gifted Children) definition of giftedness, that is, Marland’s (1972) definition of gifts and talents. Although details are changed in translation, the KSA definition of a gifted student, similarly, makes reference to

a male or female student possessed of special aptitude, unusual capabilities, or distinguished performance; these merits together make him/her unique among his/her peers in one or more domains appreciated by the community and bear special relevance to fields such as mental superiority, educational attainment, creativity, innovation, and special talents and capabilities. (Aljughaiman, 2005, p. 76)

For the project, the identification procedures were based on (a) nominations from teachers justifying their students’ giftedness, (b) outstanding domain-specific academic achievement, (c) achieving the 90th percentile or above on the Saudi Group Test for Mental Abilities,¹ developed and validated in the 1990s by Abdullah Al Nafie and colleagues, and (d) outstanding indicators of other facets of giftedness, that is, using the amended and adapted versions of the Wechsler Intelligence Scale for Children, the Torrance Test of Creative Thinking, and a questionnaire pertaining to characteristics of gifted students. The system assumes that intellectual giftedness can be established at the age of 9 (school Grade 4) and this developmental stage is the focus of the majority of the current identification efforts in the KSA. Theoretically, identification can be triggered at any stage of a child’s academic career, but in practice, currently, no provisions are made to carry this out. The main reason for starting the

identification process at age 9 was that all of the assessment tools available in Saudi Arabia for identification purposes are standardized for the ages between 9 and 16.

The project results, enriched by virtue of being part of the National Education Program, have led to the establishment of the Center for Gifted Students in Riyadh. The project findings also formed the foundation for the establishment of the King Abdul Aziz and His Companions Foundation for the Gifted.

The Center's task was to identify gifted students in the last three grades of primary education (i.e., Grades 4-6; the identification now includes secondary school students as well). The following procedure outlines the general steps for working with the gifted: (a) school nomination, (b) educational and psychological assessment (see above for the instruments), (c) individualized placement in a gifted program, and (d) program effectiveness evaluation. Although initially started as a program for boys in the city of Riyadh only, the Center's activities gradually expanded to include girls and then spread throughout the country. Thus, the Ministry of Education has established two satellite gender-specific centers for the gifted in the majority of districts throughout the country, in many, if not all, of its 42+ educational districts (Budari & Bahebery, 2010).

Throughout all these developments, the Ministry of Education has formulated several principles for gifted education, the most important of which are summarized in the two statements below (AlJughaiman, 2010). First, all students in Saudi Arabia have the right to learn and be educated in a manner that matches their capabilities and which allows them to maximize their potential. Therefore, programs for gifted students are considered to be their right. Gifted students have needs that differ (at least in the domain of their giftedness) from those of other students, and the curriculum in schools should have programs that serve their special needs. Second, the needs of gifted students are diverse. In addition to academic needs, needs related to personality development, social realization, maturation of thinking, and self-fulfillment are also important. Effective ways to meet the needs of gifted students should involve the application of different methods for educating such students, including academic acceleration and enrichment programs and experiences. These alternative methods of educating the gifted should be carefully planned, adequately prepared, flexible and suitable for adaptation by teachers to individual students, and conscientiously implemented.

The expertise in Saudi Arabia is localized with the King Abdul Aziz and His Companions Foundation for the Gifted (also known as Mawhiba, <http://www.mawhiba.org>). In conjunction with the National Center for Assessment in Higher Education, the Mawhiba is working on the development of a new identification paradigm for the system of gifted education in the Kingdom. As explicated by Mawhiba, the mission of KSA's system of gifted education is focused on a number of objectives, specifically: (a) to facilitate and foster giftedness, invention, and creativity; (b) to create professional pathways in the areas of medicine, environmental science, communication and telecommunication, education, the arts, engineering science, and technology; (c) to support and provide enriched educational activity for the gifted and talented students of the Kingdom; (d) to educate the population (parents, teachers, and employers) about methods of nurturing gifts and talents; and (e) to assist educational and professional

institutions across the Kingdom in the creation of a comprehensive program for the gifted and talented.

While the system of gifted education in the Kingdom has not been fully formed just yet and is described, at least in English, in what sometimes appear to be contradictory documents (Dracup, 2011), its 25 years of development have generated a number of accomplishments. Specifically, first, the education policy in Saudi Arabia now mentions the importance of using suitable methods that can identify and nurture gifted students and their abilities (Ministry of Economy and Planning, 2010). Moreover, it states that the Government should promote gifted and talented students by giving them special attention, to develop their gifts and to give them the chance to realize their potential (Ministry of Education, 2008). Second, gifted education today currently targets boys and girls. Third, since 2003, an increasing number of centers have been opened for nurturing gifted students. The number of gifted centers increased to 42 centers for boys and 46 centers for girls by 2009. The time period from 2004 to 2009 has seen an exponential increase in the number of schools that have implemented gifted programs. The number of schools has almost doubled each year, beginning with 27 schools in 2004 and reaching 700 schools in 2009. Overall, however, the programs for gifted boys in Saudi Arabia are prioritized over those for gifted girls. The total number of boys' schools with programs for gifted students is 353, while only 292 girls' schools have such programs. Fourth, in addition to the government programs for the gifted, there are some specific activities that are supported by private donors (Al-Salloom, 2004). Specifically, Samba Bank supports summer business and banking education camps for gifted girls in Al Khobar, Riyadh, and Jeddah; Saudi Aramco supports science and technology summer camp in science and engineering in Dhahran; Exxon Mobil supports science and technology summer program at King Fahad University for Petroleum and Minerals, and Microsoft supports web-related skills summer camps in Riyadh and Jeddah. Fifth, although, according to the definition of giftedness, multiple diverse areas of human performance are noted by the KSA educational system, particular emphases are placed on math and science. Sixth, education for gifted children is carried out within the framework of mainstream inclusive education, predominantly using pull-out approaches. Based on what is available in the English-language literature, there have not been any formal studies capturing the prevalence of giftedness or its distribution among the different societal levels or in the different geographic locations in the Kingdom, evaluating the specificity and sensitivity of the identification instruments, or appraising the effectiveness of specific programs or general policies for children who have been identified as intellectually gifted.

It has been reported that, in 2007, there were more than 66,000 Saudi male and female students who were identified as gifted and served (Al Qarni, 2010). However, there have been serious concerns voiced by educators, parents, and even students themselves, as to the quality of these programs. Among such concerns are observations that many widespread approaches and pedagogical techniques for the education of the gifted—such as grouping, tracking, and acceleration—although proclaimed targets in the official documents, are not systematically developed and implemented either for practical or political reasons. Thus, for example, tracking in Saudi Arabia is

implemented only to a limited degree and with certain caveats. Specifically, tracking takes place in senior secondary school, at Grade 11, when students have to select either the science track or the arts track. As the latter track is considered inferior in terms of college and job opportunities, it is not encouraged by policy or by families. However, while most boys tend to select the science track, more girls still favor the arts track (Aljabri & Alahmadi, 2012). This is explained, in part, by the fact that the number of career opportunities for girls in the science track are very limited (e.g., girls cannot study or practice engineering, except for interior design, which is considered a type of engineering in the KSA). Moreover, there is also a concern about the lack of formal training for teachers of the gifted, although plenty of in-service workshops are available. Finally, an often cited shortcoming is a lack of school psychological and counseling services for typical and especially atypical children (Aljughaiman et al., 2009; el Sendiony, el Marzouky, & el Ghamedy, 1987; Gerner, 1985) and a lack of appropriate assessment instruments (Batterjee, 2011), indicating a need to further investigate structural and measurement issues pertaining to cognitive abilities among Saudi people.

Relatively little is known, based on publications in English, about the specifics of the many enrichment programs used in the Kingdom. It has been stated that

Despite the fact that summer enrichment programs in Saudi Arabia are evaluated yearly by both external and internal evaluators (including evaluators from the Ministry of Education and the King Abdul Aziz and His Companions Foundation for the Gifted), there is a paucity of published studies that deal with the effects of these programs on participating students' thinking skills, research skills, personal and social skills, and mastery of academic content. (Aljughaiman, 2005, pp. 10-11)

Thus, with rare exceptions (Aljughaiman, Ibrahim, & Khazali, 2012), there is little evidence for or against the effectiveness of these programs. In general, these programs could be subdivided into two categories (the majority of these programs are provided by the Ministry of Education, but some of them are provided by private sponsors, as mentioned above): programs provided during school time and programs provided during summer school break.

The former programs are further subdivided into enrichment and out-of-school programs. The enrichment programs strive to provide (a) specialized care for gifted students under the auspices of permanent members of school staff; (b) educational opportunities and equal opportunities for all students to demonstrate their giftedness; (c) the preparation of teachers specializing in the care of gifted people within each school, who are well aware of the methods of teaching gifted students; and (d) ways to enhance the strengths of all students in all fields. The main type of gifted education that is utilized within this category of programs is the pull-out. They typically begin in the fourth grade and are focused on enhancing the depth and complexity of the knowledge being acquired within mainstream education rather than any specific skills not found in the regular curriculum. The out-of-school programs (Majiney, 2008) are further subdivided into the Thursday (Thursdays are equivalent to Saturdays in the Islam

countries) program, the after-school enrichment program, which is delivered for 1 full day each month, and the mentorship program. The out-of-school programs strive to provide (a) activities during weekends; (b) training for students to achieve certain skills, such as leadership and team work; (c) opportunities to discover the capabilities of students, and familiarize them with the options to develop them; and (d) instruction to develop certain skills (e.g., creative thinking and problem solving).

The latter summer programs are provided not by schools and school districts, but by the King Abdul Aziz and His Companions Foundation for the Gifted and The General Administration for Gifted Education or by private donors (see above for examples). These programs strive to provide (a) activities for gifted students during the summer vacation for the enrichment of their giftedness and preferences; (b) development of thinking skills and the promotion of creativity; (c) development of practical skills; (d) opportunities for students to identify their abilities and preferences; (e) ways to build students' confidence in themselves and their abilities; and (f) gains in the levels of motivation and the promotion of the freedom of self-learning. The target group of the programs provided by the Foundation for the General Management of Giftedness includes primary and secondary students; the target group of the summer program from King Abdul Aziz and His Companions Foundation for the Gifted is high school and university students. The subjects of these programs are science and technology. The summer programs range from 2 to 4 weeks. Many university professors are involved in the planning, implementation, and supervision of these programs (Aljughaiman, 2012).

For illustration purposes, the Oasis Enrichment Model (OEM), one of the most prominent programs that is represented well in the English literature, will be discussed. This program: (a) focuses not only on the achievement of the gifted but also their interest in schooling; (b) nurtures and supports their commitments to their own intellectual capacity; (c) focuses on the development of their analytical, creative, and practical thinking skills in research (problem identification, data gathering, and result interpretation) and affective (self-reflection, communication, and teamwork/cooperation) dimensions; and (d) develops their resilience to challenges they might face in everyday life. The OEM is endorsed by the Ministry of Education (Aljughaiman, 2005). As of the end of 2012, about 398 schools and gifted centers had adopted this model; more than 567 teachers and 2,589 students are participating in 84 different cities around the country (Ministry of Education, 2013). The Ministry of Education formally adopted the framework of teacher training preparation, described in the OEM manual, which consists of 150 training contact hours (Aljughaiman, 2008). The OEM has developed over a period of 10 years, with contributions from a variety of international experts, but with a goal to match the cultural and educational context of Saudi Arabia (Aljughaiman et al., 2009). The framework of the OEM (Aljughaiman, 2005) is based on a $3 \times 3 \times 4$ design and is built around three axes (deep academic content, research and thinking skills, and affective regulation), three stages (exploration, perfection, and creativity), and four sequential phases (1 year per phase, but shorter implementation phases are possible). The OEM utilizes the pull-out approach so that the gifted students are brought together in specialized classes for specialized lessons outside of their mainstream education during either the academic year or during summer vacation.

The OEM model has been shown to be efficacious in a number of empirical studies (Aljughaiman & Ayoub, 2012a, 2012b; Aljughaiman et al., 2012). According to the current literature, this is the only model representative of gifted education programs in the Kingdom that has been systematically evaluated empirically. Major findings of the OEM program evaluations have indicated that the programs show effectiveness regarding the following student attitudes toward school: student attitude toward learning, a significant increase in student motivation, a significant increase in student creative behavior, and a significant increase in critical thinking skills. However, the findings show that the OEM is effective on most of the variables examined except for integrated science process skills. These findings should be taken with caution due to the lack of longitudinal studies, the limitation of the number of studies dealing with each variable, and concerns about the reliability of some of the tests that were used to examine some of the variables.

As the science of gifted identification and the accompanying services are only beginning to be developed in the KSA, there are still relatively few relevant publications. Yet, these publications cover a wide spectrum of topics. To exemplify, in conducting the literature search for this article, we came across discussions of such issues as anxiety in gifted female students (Aljughaiman & Tan, 2009), twice-exceptional children, that is, children with gifts and disabilities, and giftedness.

In conclusion, the science of gifted identification and education is still young in the KSA. Yet, it has benefited from the substantial resources provided to it internally, and from a significant amount of expertise offered to it from the international community. How it develops in the future will be an indicator of how well it can capitalize on the rather unique—on a global scale—circumstances of its development and maturation.

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Note

1. The test includes the following: semantic ability (deduction, verbal relationship, word meaning, and phrase meaning), numeric ability, visual-spatial ability (recognizing different shapes, interfering shapes, and relationships between shapes), and symbolic ability (deduction through pictures, deduction through shapes, and pattern completion).

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