

## **The International Baccalaureate Program: Meeting the needs of high-ability students in Qatar**

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### **Abstract**

This article presents an analysis of the International Baccalaureate's Middle Years Program (MYP) to determine the extent to which it is suitable to address the learning needs of gifted students in the educational context of Qatar. The student population comprises predominantly Qatari nationals and citizens from neighbouring Arab cultures in the Gulf Corporation Council (GCC) countries. The dynamics of this context involve the interrelationships of three conceptual elements: the cultural and educational context of Qatar; conceptions, identification and nurture of giftedness; and the International Baccalaureate's MYP. Each of these elements is examined individually and then in relation to one another in order to determine the potential for the three contexts to interact or intersect.

**Key words:** high ability, science, International Baccalaureate, Qatar

### **Introductory note**

In consideration of the complex and sensitive nature of the cultural issues involved, this analysis needs to be recognised as a combination of my review of the literature available in English, combined with my observations from one year of living and working in Qatar. I have taken the perspective of an outsider observing a situation, without access to many of the insights afforded through knowledge of the Arabic language and the inside-knowledge of the culture that is shared by the local community. What follows is my best attempt to interpret and portray the cultural and educational contexts as accurately and faithfully as possible.

Figure 1 summarises the context of this article and the conceptual elements involved.

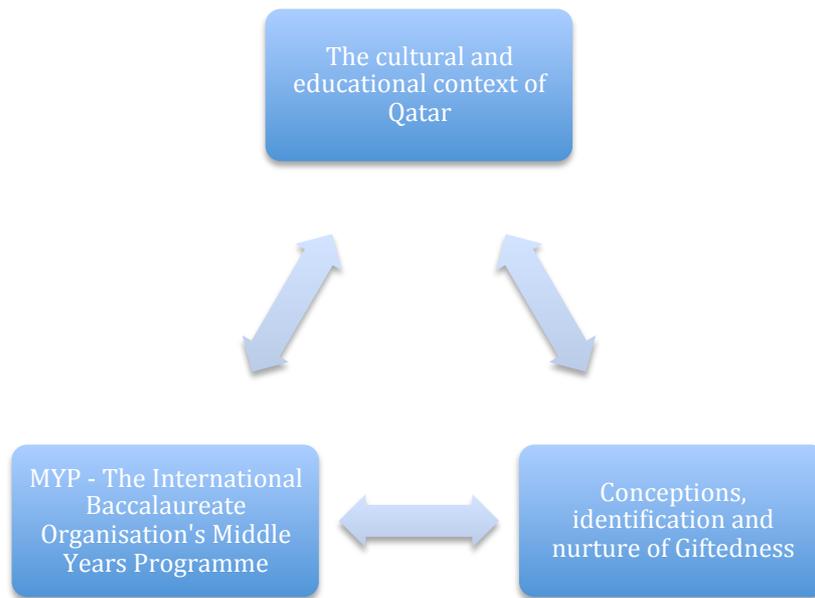


Figure 1. Interrelated conceptual elements of the study site.

## 1. The cultural and educational context of Qatar

### *Qatari culture: Tradition and transition*

Understanding what constitutes an effective education for gifted Qatari students is inseparable from understanding their cultural context, which, in turn, is inseparable from an understanding of their Islamic heritage. For example, part of that heritage is a belief that their principal duty in life is to acquire perfection and purity in their thinking, perceptions, and beliefs. By fulfilling their duty of servanthood to the Creator, Nourisher, and Protector, and by penetrating the mystery of creation through their potential and abilities, they seek to attain the rank of true humanity and become worthy of a blissful, eternal life in another, exalted world (Gülen, 2004, p. 202).

Qatar is officially an Islamic state, becoming an emirate in 1916, and gaining independence in 1971 (United States, Superintendent of Documents, 2014, para. 1). Prior to the discovery of oil and gas resources in the 1940s, the pearl industry formed its main source of income and industry (Central Intelligence Agency, 2014). Throughout Qatar's history, until as recently as the 1980s, the Qatari people lived with difficult economic circumstances, in a harsh desert environment, holding fast to their Islamic faith. In contrast, at the time of writing, the State of Qatar had the highest per capita income in the

world (Central Intelligence Agency, 2014; Harkness & Khaled, 2014, p. 591), causing some aspects of traditional culture and lifestyle to be rejected, whilst others have been preserved.

The societal transformation, within a generation, is due to the management of Qatar's substantial oil and gas reserves under the leadership of the Father Emir, Sheikh Hamad bin Khalifa Al Thani, during his reign from 1995 to 2013 (Harkness & Khaled, 2014, p. 591; Kerr, 2013, para. 1). The landscape of Doha, the capital city, now features a combination of skyscrapers and impressive structures, many of which are less than ten years old. Such expansion has seen the need to import a large workforce, resulting in Qataris now making up only 15% of the total population, which has grown from less than 450,000 in 2004 to approximately 2,000,000 in 2014 (Harkness & Khaled, 2014, p. 591; Qatar, Permanent Population Committee, 2012, p. 21). Materially and socially, therefore, Qatar is undergoing a very rapid transition, contrasting strikingly against its timeless desert backdrop. Amidst this change, there is a desire amongst many Qataris to avoid what Gengler (2012) describes as “the pervasive and unchecked Western influence, both in the cultural and political-military realms” (p. 70), whilst retaining and strengthening their adherence to the ideals and traditional values that have defined them for hundreds of years. Such desires extend to the classroom as well. Gengler (2012) reports that concerns associated with access to education, along with its content, mirror “the larger tension between Western-style (and Western-operated) development and the preservation of local tradition and control” (p. 71).

According to Kerr (2013), upon his abdication the Father Emir called on his son to preserve the values and identity of Qatar, along with its presence in the Arab world and Gulf region. Politically, Sheikh Tamim has been predicted to be a “more conservative, risk averse figure than his father” (Kerr, 2013). Harkness and Khaled (2014, p. 592) also found examples of cultural preservation in their study of Qatari marriages. Almost half (47%) of marriages occur within extended family lines and this trend is increasing, based on a desire to strengthen Qatari family and cultural values (Harkness & Khaled, 2014). They concluded that, whilst aspects of modernisation can be catalysts for cultural disruption in Qatar, they can also provide the driving force behind greater adherence to traditional values (p. 600).

Numerous authors have concluded that combinations of customary and contemporary practices must be considered carefully when interpreting the culture in Qatar (e.g.,

Gengler, 2012, p. 70; Harkness & Khaled, 2014, p. 600; Kerr, 2013, para. 12). Issues associated with these practices are seen to be central to nearly all of Qatar’s forward-looking projects, as it seeks to become a hub for finance, tourism, culture, sports and education.

### ***Qatari education: History***

The Prophet Muhammad said, “to seek knowledge is obligatory for every Muslim” (Subhi-Yahmin, 2009, p. 1465). In the 1950s when the Ministry of Education was founded, the emphasis of the Qatari education system was on providing free education to a largely illiterate population (Brewer et al., 2007, p. 2). Subsequent to the 1950s, the pedagogy remained rigidly teacher-centred and dependent on rote learning. Most education was religious: “Islam was practised in its purest sense, and was paramount; unquestioned” (Lamontagne, 2005, p. 11, as cited in Hoddinott, 2013, p. 20). Subsequently, an initial evaluation of Qatar’s education system, performed by the U.S.-based RAND Institute in 2001, found that the overall standard of education was extremely low, with very limited evidence of variety in lessons, poorly trained educators and no capacity to meet the range of learning needs present in classes (Brewer et al., 2007, pp. 2–3).

### ***Qatari culture: Modernisation and vision***

Qatar aims to build a modern, world-class education and training system that provides a first-rate education comparable to that offered in the best schools, universities and technical colleges in the world. That system will incorporate programs that encourage analytical thinking, creativity, innovation and entrepreneurship, while promoting social cohesion and respect for Qatari values (Qatar, General Secretariat for Development Planning, 2011, p. 105).

The Qatar Foundation for Education, Science and Community Development is a major, non-profit, government-funded driving force behind efforts designed to support the transition of Qatar from a carbon-based economy to one based on knowledge. Its vision statement directs it to “lead the human, social, and economic development of Qatar; making Qatar a nation that can be a vanguard for productive change in the region and a role model for the broader international community” (Qatar Foundation, 2014, online).

The country’s current public educational system is a product of a review and subsequent recommendations from the RAND Institute (Brewer et al., 2007). Commissioned in 2001,

a systematic reform was initiated in order to convert Qatar's schools into a competitive educational system. The reform became known as *Education for a New Era* (Romanowski, 2013, p. 175). Whilst being received positively by many, Gengler (2012, p. 71) asserts that the process caused misgivings amongst some Qataris, due to the organisation's historical ties to the U.S. military, along with many of the innovations it proposed having been transplanted directly from a U.S. cultural and educational context. Hence, the desire by some to reassert national and cultural ownership over Qatari education has also been documented (Gengler, 2012, p. 71).

The positive vision imparted in the Qatari government's current five-year National Development Strategy, as quoted above, alludes to no such divisions. Rather, the strategy states that education is intended to promote social cohesion and respect for Qatari moral and ethical values, along with its cultural heritage, and to advocate constructive interaction with other countries. Concurrent with this vision, there is a call for the educational curriculum to be more aligned to the needs of the labour market as well. Graduating from higher educational contexts is linked with the potential for Qataris to take a more prominent role in the knowledge economy, enabling them to contribute to its sustainable development (Qatar, General Secretariat for Development Planning, 2011, pp. 124–129). Hence, for Qatar, a future knowledge-based economy would involve participants combining their grounding in the values of their heritage with the skills and knowledge required by a modernised labour market.

### ***Qatari education: Wisdom and Islamic roots***

A community's survival depends on idealism and good morals, as well as on being able to reach the necessary level in scientific and technological progress (Gülen, 2004, p. 208). Young people with talent and ability must therefore be well educated. In his survey of gifted education in the Arabian Gulf and Middle Eastern regions, Subhi-Yahmin (2009, p. 1478) asserted that Arabic and Islamic countries face a number of problems and challenges in relation to definitions of education, in general, and gifted education in particular. Theorists (e.g., Hernandez de Hahn, 2000, p. 549; Sternberg, 2007, p. xviii) note that the identification of intellectual gifts occurs, in part, through recognition of traits that are valued by the identifier. Therefore, to some degree, cultures and societies perceive intelligence and giftedness differently from each other. A discussion of the phrase "Philosophy of education" serves to highlight some of these challenges from an Islamic perspective. Halstead (2004, p. 517) points out that the individual terms

“philosophy” and “education” both require individual explanations.

First, the subject of philosophy, from the Islamic perspective, requires an historical contextualisation. Until the time of the Muslim theologian Al-Ghazali (1058–1111 CE), perspectives on the authority of knowledge were evenly balanced between those of the philosophers and rationalists, on the one side, and those of the more orthodox theologians on the other (Halstead, 2004, p. 518). Al-Ghazali argued that it was not possible to attain certain knowledge without the help of revelation and spiritual understanding, thereby giving higher authority to religion than to reason alone, as a source of knowledge. His influence on all subsequent Islamic thinking, including that related to education, has led to uneasiness about philosophical thinking that persists to this day among Islamic traditionalists (Halstead, 2004, p. 518). It follows, therefore, that the focus of Islamic education has been primarily concerned with the initiation of students into “the perceived truths of faith” (Halstead, 2004, p. 519). Indeed, a popular point of view has held that “anything outside the divine truth of the Qur’an is at best superfluous ... and at worst dangerous, since the study of philosophy and other non-Islamic sciences could lead believers astray from the true path” (Halstead, 2004, p. 518).

Secondly, understandings and interpretations of the word “education” also take on different perspectives. Halstead (2004, p. 519) describes three words in Arabic that are normally translated as “education”. The first of these words emphasises the gaining of knowledge, another promotes growth to maturity, and a third involves the development of good manners. The author explains that there is significant overlap between the three words. However, in combination, they form an overview of the Islamic concept and goal of education, namely, “the aim of producing good Muslims with an understanding of Islamic rules of behaviour and a strong knowledge of, and commitment to, the faith” (Halstead, 2004, p. 519).

Through the use of their abilities, the gifted and talented have historically been expected to serve their families, relatives, neighbours, countries and humanity (Subhi-Yahmin, 2009, p. 1467). Attempts to identify other traits that traditionally have exemplified giftedness illustrate that the picture becomes quite complex. However, the level of detail included below is pertinent, due to its relevance to the International Baccalaureate Organisation’s (IBO’s) Learner Profile (e.g., MYP: From Principles into Practice, 2014, p. 5), mentioned in later sections of this review.

According to Subhi-Yahmin (2009, p. 1465), leadership and wisdom are characteristics that have long been valued. Reflection is also recognised as a vital step in conducting observations to increase one's knowledge and develop conclusions. In addition, sorrow, piety, task commitment, responsibility, self-confidence, ethical qualities, humility, truthfulness, modesty, thankfulness and patience are all aspects of character traditionally associated, in Islamic contexts, with creative and productive people. Furthermore, the attributes of determination, confidence, discernment, and living a moderate and balanced life are valued, as they can be applied in the service of one's community (Subhi-Yahmin, 2009, p. 1466).

Wisdom, in the Arabic tradition, has been summarised by other authors through the following four components: *Intelligence*, an innate and heritable potential; *Knowledge*, experientially based; *Vision*, the ability to see the big picture, to view and balance the multiple ramifications of an action; and *Decisiveness*, the ability to effectively bring these qualities to bear upon the situation in the moment to render the best outcome (Aljughaiman & Berki, 2012, p. 136). The degree to which these components coalesce in one person denotes the level of wisdom possessed by that individual (Aljughaiman & Berki, 2012, p. 136).

Academically gifted individuals are distinguished by their love for reading and learning. Their high analytical ability helps them to develop knowledge of an area (or areas) of interest to reach expertise or excellence. The authors draw parallels with this knowledge-development process and various models of talent development present in the literature, including Gagné's (2013) Differentiated Model of Giftedness and Talent (DMGT). According to this model, natural abilities are subjected to developmental processes, involving the investment of effort, mediated by the interactive effects of personality and environment in order to develop competencies (Aljughaiman & Berki, 2012, p. 133).

The literature suggests that members of the wider community at the study site, who hold to traditional Islamic understandings of education, are likely to evaluate the curricular framework on offer in the light of the three definitions of education, the four dimensions of wisdom, and the associated developmental descriptions of academic abilities outlined above. Therefore, they will also be important considerations in determining the extent to which the International Baccalaureate's Middle Years Program meets the needs of high ability learners.

## **2. Conceptions, identification and nurture of giftedness**

### ***Gifted in Qatar: Conceptualisation***

Patience is of great importance in education. Educating people is the most sacred, but also the most difficult, task in life (Gülen, 2004, p. 208). Educating the gifted is even more more difficult because of competing conceptions of giftedness.

Arab research into giftedness across the GCC countries had, in the past, been characterised by a single paradigm, which was a descriptive or psychometric one (Khaleefa, 1999, p. 21). However, Stoeger (2009, p. 30) argues that multi-dimensional conceptions of giftedness, which consider other personality traits such as motivation, creativity, or wisdom, in addition to intelligence, are preferable strategies to the single paradigm. Subhi-Yahmin (2009, p. 1470) reports that gifted children across the GCC countries have more recently been identified as those who have shown high ability, high creativity, high task commitment, and associated behavioural characteristics, all of which are measured by six test instruments available only in Arabic. Despite the apparent parallels between the three descriptors listed above and Renzulli's (1998) multi-dimensional Three Ring Conception of Giftedness, the latter model was not mentioned by the article's author.

The manner in which giftedness is interpreted depends on the values and world-views of each culture (Hernandez de Hahn, 2000, p. 549). Stoeger (2009, p. 30) states that “the identification, education and investigation of gifted students have been resolutely moulded for decades by viewpoints and perspectives developed and advanced in Europe and the United States”. As Ieridou (2013, pp. 334-335) noted, in her discussion of giftedness in the context of Cyprus, efforts to import educational systems into new contexts without critical reflection and study of the cultural realities of the context and needs of the people can create discord between the education system and the society. Romanowski (2013, p. 178) directs the same criticism towards the RAND Institute's importation of Western standards to Qatar's public schools. It is important, therefore, to question whether this criticism could also directed towards the MYP.

## **3. The IBO's Middle Years Program**

According to MYP: From Principles into Practice (2014, p. 5), the International Baccalaureate's Middle Years Program (MYP), first introduced in 1994, is designed to be a coherent and comprehensive curriculum framework that provides academic challenge

and develops the life skills of students from the ages of 11 to 16. Aspects of the MYP framework will be discussed in the following paragraphs and related back to Subhi-Yahmin's (2009) findings, as presented in the previous section entitled "Qatari Education: Wisdom and Islamic roots".

*Holistic learning*, *Intercultural awareness* and *Communication* are the three Guiding Principles that underlie the MYP, and are implied in the Learner Profile (International Baccalaureate Organisation, 2010, p. 3). Each has clear parallels with Subhi-Yahmin's (2009) findings related to wisdom in Islamic thought.

The International Baccalaureate Organisation (IBO) recommends catering to different ability levels in the MYP through differentiation and inclusion in the regular classroom (International Baccalaureate Organisation, 2010, p. 3). This recommendation is qualified by the statement that differentiation is most effective when the classroom involves a culture of collaboration that supports problem solving. The IBO also states that students and teachers will need "a wide range of strategies and flexibility of timing and approach if they are to achieve common goals" (International Baccalaureate Organisation, 2010, p. 4). This collaborative aspect resonates very strongly with the Qatari emphasis on family and community.

In another publication (International Baccalaureate Organisation, 2013, pp. 28-31), the IBO promotes the needs of gifted learners by first providing a list of 28 "Possible challenges" these learners may present. This list of items is essentially a list of traits associated with giftedness, so it can serve as a "rule-of-thumb" guide for teachers to use in the initial identification of gifted learners. In addition, teaching strategies and associated resource lists are provided in the same document. The strategies listed essentially describe the creation of the safe, challenging learning environment, as previously mentioned, but stop short of providing specific recommendations. The publication does provide a list of some famous models of differentiation that could be employed to assist with the implementation of MYP, including Renzulli and Reis's Schoolwide Enrichment Model (see, for example, Davis, Rimm & Siegle, 2011, pp. 176-183) and Betts' Autonomous Learner Model (see, for example, Davis, Rimm & Siegle, 2011, pp. 183-185). This suggests that the IBO is acknowledging the need for educators to supplement its MYP framework with specialised and contextually relevant literature related to giftedness, in order to fully address the needs of gifted learners. Therefore,

whilst the IBO's documentation related to giftedness is limited, the lack of rigid definitions that may not fit specific contexts can also be viewed as a positive attribute.

One example of an organisation promoting the use of the MYP with gifted learners comes from the Texas Association of the Gifted and Talented (TAGT). Boswell's (2008) summary of the nature of the MYP emphasises its suitability to the needs of the gifted population in that state, because of the avenues of inquiry it provides, assessment measures it recommends and the broad range of learning contexts to which it is suited. She reports that the MYP offers students opportunities that meet their cognitive and affective needs.

Key features of the MYP curriculum include a focus on: *Inquiry*, drawing on students' prior knowledge and curiosity to engage in significant learning; *Principled Action*, as both a strategy and an outcome; and *Critical Reflection* as an ongoing habit that promotes discernment, awareness of others' perspectives and leads to creativity (MYP: From Principles into Practice, 2014, p. 11). "Reflection", "ethical qualities", "truthfulness" and "developing conclusions" are terms that have clear parallels, and are used by Subhi-Yahmin (2009, p. 1466) to describe an Islamic perspective on wisdom.

The MYP is designed to be a curriculum framework, through which the teacher is enabled to support students as they attempt to grasp transferable concepts and understandings, thereby promoting deep, conceptual thinking. An emphasis is placed on the importance of learning how to learn, rather than what to learn, along with being able to evaluate information (Davis, Rimm, & Siegle, 2011, p. 140). For assessment practices to be valid, in a concept-driven learning context, they must involve analysis of understandings and the application of prescribed concepts (MYP: From Principles into Practice, 2014, p. 16). This aspect of the MYP is highly compatible with Gagné's (2013) DMGT, as described previously. The ability to identify learning needs for all students, in ways that allow for extended learning, along a variety of directions related to student interest or ability, creates an ideal context for differentiating extension tasks. It also provides opportunities to practise skills at a variety of levels. This combination provides opportunities to develop what Gagné (2013) describes as "catalysts" for talent development.

Concepts covered within the MYP framework are categorised as either Key concepts or Related concepts. Key concepts are, "broad, organizing, powerful ideas, taken from each

subject group, that have relevance within and across subjects and disciplines, providing connections that can transfer across time and culture” (MYP: From Principles into Practice, 2014, p. 15). Related concepts promote the exploration of key concepts in greater depth and detail. The combination of the two conceptual levels is said to provide opportunities for students’ learning to feature depth, complexity and abstraction. This, then, is purported to allow them to engage and make connections with their learning, achieving more complex levels of understanding than would otherwise occur.

According to their own reporting, the IBO values learning that is collaboratively constructed and involves transformation of personal understandings, as opposed to contexts featuring the transmission of knowledge and memorisation of facts (MYP: From Principles into Practice, 2014, p. 14). The goal of concept-based learning is the active construction of meaning by building connections between prior understandings and new information or experiences, derived through inquiry into new content (MYP: From Principles into Practice, 2014, p. 72). The starting point is, therefore, intended to be students’ current understanding, placing a priority on effective use of assessment at all stages of the teaching and learning cycle. In the MYP, assessment is performed against four, equally weighted, criteria for each subject area. In the Sciences, for example, these are: Criterion A, Knowing and Understanding; Criterion B, Inquiring and Designing; Criterion C, Processing and Evaluating; and Criterion D, Reflecting on the impacts of science. Hence, only one of the criteria assesses the level of scientific knowledge and understanding, whilst another makes inquiry and design prerequisites of all appropriate MYP science courses. Criterion referencing also requires that students are not compared with peers on a performance distribution, nor are they required to master all strands of specific criteria at lower achievement levels before they can be considered to have achieved the next level (MYP: From Principles into Practice, 2014, p. 78). These criteria have parallels and overlapping features with the four components of wisdom, identified by Aljughaiman and Berki (2012, p. 136).

In addition to supporting a concept-based learning philosophy, assessment in the MYP has two further aims: to promote the development of critical and creative thinking skills, as well as the general development of the whole person (MYP: From Principles into Practice, 2014, p. 78). Parallels are evident in Subhi-Yahmin’s (2009, pp. 1471-1474) article, which refers at length to the need for critical and creative thinking skills. Moreover, all previous references to the acquisition of wisdom can collectively be seen to

contribute to understandings about development of the whole person.

To understand how the MYP purports to address the needs of the whole student, one needs to refer to what the IBO terms its “Learner Profile” (e.g., MYP: From Principles into Practice, 2014, p. vii). The learner profile is described as the IBO’s mission in action (MYP: From Principles into Practice, 2014, p. 9). It exhorts learners to strive to become “Inquirers, Knowledgeable, Thinkers, Communicators, Principled, Open-minded, Caring, Risk-takers, Balanced and Reflective” (MYP: From Principles into Practice, 2014, p. 9). These are promoted as attributes of internationally minded people and promote the development of human qualities that extend beyond intellectual development and academic content. Once again, the parallels with the Learner Profile and literature from the section entitled “Qatari Education: Wisdom and Islamic roots” are striking.

Finally, “international mindedness in a global context” is a phrase used in the MYP literature, where “international” is defined as referring to the world’s constituent parts, nation states and their relationships with each other, and “global” as the perspective of the planet as a whole (MYP: From Principles into Practice, 2014, p. 11). Arguably, the way in which international mindedness is interpreted in a Qatari cultural context is fundamental to the wider acceptance or rejection of the MYP for a Qatari educational context. The priority of international mindedness is dependent on one’s viewpoint. In Qatar, the importance of cultural traditions and customs, in combination with deep-rooted connections to issues of faith, give the above phrase a particular significance that impacts the ways in which the MYP and philosophies of the IBO are evaluated as influences upon the current and future contexts of Qatari society.

### **Putting the elements together**

The final aspect of giftedness mentioned under “Qatari Education: Wisdom and Islamic roots” is the academic component. Davis, Rimm and Siegle (2011, pp. 124-125) have synthesised numerous studies and curricular models to produce the following ten-item summary of desired attributes of curricula for the gifted:

1. maximising achievement in basic skills
2. content that is beyond the prescribed curriculum
3. exposure to a variety of fields of study
4. student-selected content
5. high content complexity

6. experience in creative thinking and problem solving
7. discovery and inquiry skills
8. development of thinking skills
9. development of computer-based skills
10. affective development, and development of motivation.

From the above list, scope for addressing points 1 to 8 has been evident throughout this review. Point 9 is also addressed through the context of the study site. Each student is required to have a laptop computer, through which much of the student's learning is accessed and assessed. Utilising this opportunity for differentiation to suit gifted students still requires deliberate efforts; however, the MYP is in no way a limiting factor to prevent this from happening.

Point 10 was addressed, with respect to the affective development of the learner, through the Learner Profile. However, motivation is a separate issue that requires a brief discussion. The National Development Strategy (2011, p. 134) acknowledges that on national and international tests many Qatari students perform below expectations in core subjects such as mathematics and science. Such statistics point to the presence of underachievement as an important issue for education in Qatar. The 1.7% unemployment status for men (Qatar, Permanent Population Committee, 2012), along with previously mentioned wealth statistics and the largely imported labour market have created a situation where students are not forced to make a connection between the need to work hard at school in order to secure a successful career path and financial security. High rates of obesity and diabetes (Wilbur & Ameri, 2011, p. 35) are further indicators of motivation issues related to healthy diet and exercise habits. According to Peters, Grager-Loidl and Supplee (2000), lack of motivation is one of the most important contributors towards underachievement.

Conceptually, underachievement is linked to the intrapersonal, goal-management aspect of the developmental process as described by Gagné (2013) in his DMGT. Without overcoming these motivation issues, the potential to progress through the developmental process, responsible for nurturing natural abilities into competencies, is significantly restricted. With parental, administrative and community support, talented teachers can create a learning environment that maximises the educational opportunity of each student (Adams, 2012, p. 263). When combined with the concept-based context of the MYP,

there is also potential to stimulate interest and inquiry in topics that are seen to be relevant in ways not possible through content-delivery models of education.

## **Conclusion**

In a discussion of the progress of Qatar in preparing for its transition from a carbon-based economy to a knowledge-based future, Nachef, Bin Jantan and Boularas (2014, p. 225) have employed a concept described as “Fuzzy Modelling” to investigate fundamental attributes of “knowledge”. Various aspects of that construct were described, along with each one’s relative potential to have an impact on Qatar’s future. They defined four constituent categories: *know what*, *know why*, *know who*, and *know how*. The authors explained that the first two categories can be attained through reading or attending lectures, whilst the last two are more related to practical experiences (Nachef, Bin Jantan & Boularas, 2014, pp. 225-226). These categories are said to exist in a hierarchical series of networks, which require knowledge and connections to access or participate in. The related ability to join these knowledge and learning networks affects the socio-economic position of individual members, organisations, and national economies.

The underlying skills required to join these networks, and facilitate the development of what the report terms the “human capital”, include being inquiring, knowledgeable thinkers who are reflective, open-minded and balanced, able to calculate and take risks, act on their principles in caring ways, and communicate clearly at all stages of the knowledge development processes. In other words, much of the skill base that Qatar is seeking to instil in its workforce, as it grows towards a knowledge-based economy, is found in the IBO’s Learner Profile (MYP: From Principles into Practice, 2014, p. vii).

Overall, the literature consulted for this review has shown compelling evidence of the potential for the MYP framework to provide a suitable theoretical and philosophical setting to cater to the needs of high-ability students in a Qatari context. Elements related to growth in wisdom from an Islamic perspective can be nurtured through the MYP in order to develop character traits associated with traditional notions of giftedness. The further development of the constituent traits of the learner profile, including but not limited to “knowledgeable”, will also support more academic and Western notions of giftedness. All of this development can take place in a context that is well suited to the cultural values and traditions of the state of Qatar, supporting its goals of modernisation into a knowledge-based society and economy.

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