Gifted Education Curriculum Design: A Comparison of Saudi Arabia's Mawhiba and Hong Kong's GEP

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ABSTRACT

This comparative study examines two distinct national curricula for gifted education: Saudi Arabia's Mawhiba program and Hong Kong's Gifted Education Program. Both initiatives represent innovative educational frameworks designed to foster student potential, enhance capabilities in science and technology, and support national development goals. Saudi Arabia's Mawhiba program aligned with Vision 2030 utilizes a centralized five-stage implementation strategy that integrates multi-tier enrichment, international and domestic scholarships, mentorship via alumni networks, and direct engagement with scientific fields. In contrast, Hong Kong's GEP operates through a structured three-tier operational plan emphasizing school-based implementation, off-school enrichment, the "Equalizer" instructional differentiator, professional teacher development, and active parental involvement. Through a comparative examination of their curriculum design, identification mechanisms, and support systems, this paper highlights how centralized national initiatives and structured school-based frameworks address student needs while expanding avenues for innovation and academic growth.

Keywords: Gifted education, policy analysis, comparative pedagogy, Saudi Arabia, Hong Kong, Mawhiba

INTRODUCTION

Gifted and Talented Education (GATE), has taken up center stage for many countries aspiring to be economically and educationally developed and sustainable. The world economy is growing fast, and technological and scientific changes are drastic, leading countries to redefine, redesign and reinvent their policies. Many nations prioritize the development of homegrown talent (Renzulli, 2023). However, the challenge lies in reaching and identifying the talent needed to address and keep up with the exponential growth and rapid changes. In developing a curriculum to identify and train these Gifted and Talented students, countries can grow in all aspects. The population of gifted learners demonstrates a high level of academic abilities, cognitive and intellectual qualifications, and hence require proper care and guidance from the school and teacher (Eva et al., 2025). To cater to the gifted learners a program that can identify, understand and cope with the exceptional needs must be developed (Villarente & Santos, 2025)

Researchers have found that a primary goal of programs for the gifted is the education of identified gifted students (Renzulli, 2021). This paper explores the case of Saudi Arabia and Hong Kong in the context of goals, objectives, features, programs, implementation and criticism of the programs. Contrasting their centralized versus decentralized models would help contextualize the study's value and strengthen the introduction. This comparative analysis highlights how inconsistent legislative frameworks often lead to substantial disparities in assessment and teacher preparation (Alodat, 2025; Jolly & Robins, 2021), ultimately necessitating a clearer alignment between national strategic mandates and localized educational delivery.

While regional policy discourses increasingly emphasize the role of gifted education in fostering global competitiveness and social efficiency, the effective translation of these objectives remains contingent upon standardized identification protocols and rigorous curriculum planning (Al-Mahdi et al., 2021; Ćurić et al., 2025). Recent studies indicate that enhancing these educational ecosystems requires a deliberate shift toward integrating sophisticated learning technologies that facilitate both autonomous student discovery and collaborative enrichment.

To tap into the talent and potential of the hidden talents and intellectual ability of the students, policymakers

and curriculum developers are always improving and introducing innovative programs to the curriculum framework. Gifted education and the enrichment programs offered within this framework are innovative programs which both Saudi Arabia and Hong Kong have introduced in the public education system (Al-Duraywish, 2023; Manasrah et al., 2023).

1.1 Gifted Education in Saudi Arabia

The Saudi government initially acknowledged the necessity for recognizing outstanding pupils in 1969 (Al Nafea et al., 1992) (Alelyani, 2021). Between 1990 and 1996, King Abdul Aziz City of Science and Technology launched a project for significant national study with assistance from the Ministry of Education and the General Presidency for Girls Education. In 2000, the Saudi Ministry of Education established an autonomous organization to monitor and oversee the education of talented pupils in the country, King Abdul Aziz and his Companions' Foundation for the Gifted (KACFG) (Manasrah et al., 2023). Talented Student Care Centres are organizations tasked with providing educational, social, and psychological support to gifted students. Mawhiba was created by a royal order issued by King Abdullah bin Abdul Aziz Al-Saud in 1999 (Manasrah et al., 2023). Scholars and researchers from the Ministry of Education, the Presidency of Girls' Education, King Abdul Aziz City of Science and Technology, and King Saud University recommended this. The KACFG is Saudi Arabia's first and largest foundation for the education of the gifted and talented, providing programs and assistance with significant funding. The KACFG offers financing and support to students at the Saudi Ministry of Education's six primary centers for gifted education. Mawhiba focuses on developing exceptional students' academic talents and personal traits, with the goal of developing them into future leaders. With vision 2030, Saudi Arabia has prioritized the cultivation of human capital to foster a knowledge-based economy, recent critical policy analyses suggest that the implementation of these high-level strategic goals faces significant challenges, including curriculum misalignment and resistance to pedagogical change (Alfaiz et al., 2022; Azhar & Rashid, 2024)

1.2 Gifted Education in Hong Kong

Hong Kong ranks at number 4 on the PISA scorecard (Hu & Liu, 2022). Hong Kong has promoted gifted education through institutions such as the Hong Kong Academy for Gifted Education and the Gifted Education Program (Ng & Ma, 2025). The program has adopted a broad definition that considers both IQ and special talents (Kuo, 2021). To provide gifted students with appropriate learning opportunities and challenges, Hong Kong developed school-based programs in mainstream schools, and subsequent research on Project GIFT reported positive outcomes (Shek et al., 2022). The study served as a pivotal moment in the establishment and implementation of gifted education in Hong Kong. The Hong Kong Academy for Gifted Education has provided support relevant to gifted learners, but the available evidence does not verify the launch of a twice-exceptionality scheme in 2009 (Yuen et al., 2025). "Twice exceptionality" refers to gifted children with SEN (such as autism, reading and writing difficulties and ADHD) (Siu et al., 2025).

2. LITERATURE REVIEW

2.1 Definition of Giftedness

Subotnik et al. (2011) define giftedness as a developmental process: Giftedness is the manifestation of performance or production that is clearly at the upper end of the distribution in a talent domain even relative to that of other high functioning individuals in that domain. Further, giftedness can be viewed as developmental, in that in the beginning stages, potential is the key variable; in later stages, achievement is the measure of giftedness; and in fully developed talents, eminence [emphasis added] is the basis on which this label is granted (Jung, 2022).

Stricker et al. (2019) describe gifted individuals as "Gifted individuals are those who demonstrate outstanding levels of aptitude (defined as an exceptional ability to reason and learn) or competence (proven performance or success in the top 10% or rarer) in one or more fields," adding “any organized area of activity having its own symbol system (e.g., mathematics, music, language) and/or set of sensorimotor abilities is considered a domain. (e.g., painting, dance, sports).” (España & Morales, 2024)

Recent scholarship defines giftedness in education as an exceptional ability, rapid learning, or high intellectual performance (Takata, 2026) or as a high potential to produce ideas or products that are both novel and appropriate, emphasizing its complexity (Besançon & Lubart, 2025). Scholarship also emphasizes the multifaceted nature of giftedness, highlighting the importance of both subjective evaluations (teacher and parent nominations) and objective assessments (Raven's Matrices) in identifying gifted students (Priyadarshani & Senarath, 2025). Scholars have also addressed the complexity of defining giftedness, noting that advanced psychomotor, cognitive, and language skills are early indicators (Delaune & Delaune, 2025).

2.2 Characteristics and Traits of Giftedness

According to (Renzulli, 1979) Gifted behavior occurs when there is an interaction among three basic clusters of human traits: above-average general and/or specific abilities, high levels of task commitment (motivation), and high levels of creativity. Gifted and talented children are those who possess or are capable of developing this composite of traits and applying them to any potentially valuable area of human performance. As noted in the school wide Enrichment Model, gifted behaviors can be found "in certain people (not all people), at certain times (not all the time), and under certain circumstances (not all circumstances)."

National Association of Gifted Children (NACG 2018) outlines the characteristics of gifted children as: Students with gifts and talents perform or have the capability to perform at higher levels compared to others of the same age, experience, and environment in one or more domains. They require modification(s) to their educational experience(s) to learn and realize their potential. Students with gifts and talents:

- Come from all racial, ethnic, and cultural populations, as well as all economic strata
- Require sufficient access to appropriate learning opportunities to realize their potential
- Can have learning and processing disorders that require specialized intervention and accommodation
- Need support and guidance to develop socially and emotionally as well as in their areas of talent.

Some of the common characteristics that can be derived from the definitions and differentiation by various researchers are as follows:

- Ability to comprehend material several grade levels above their age peers
- Surprising emotional depth and sensitivity at a young age
- Strong sense of curiosity
- Enthusiastic about unique interests and topics
- Quirky or mature sense of humor
- Creative problem solving and imaginative expression
- Absorbs information quickly with few repetitions needed
- Self-aware, socially aware, and aware of global issues

The National Association for Gifted Children lists the following detailed traits of giftedness among children (NAGC. Retrieved June 4, 2022). It states that no two gifted individuals are exactly the same, each with their own unique patterns and traits (Reis et al., 2021). There are many traits that gifted individuals have in common, but no gifted learner exhibits traits in every area (see Table 1).

Table 1: Traits of Giftednees among Children

Cognitive	Creative	Affective	Behavioral
Keen power of abstraction	Creativeness and inventiveness	Unusual emotional depth and intensity	Spontaneity
Interest in problem-solving and applying concepts	Keen sense of humor	Sensitivity or empathy to the feelings of others	Boundless enthusiasm
Voracious and early reader	Ability for fantasy	High expectations of self and others, often leading to feelings of frustration	Intensely focused on passions- resists changing activities when engrossed in own interests
Large vocabulary	Openness to stimuli, wide interests	Heightened self-awareness, accompanied by feelings of being different	Highly energetic -needs little sleep or downtime
Intellectual curiosity	Intuitiveness	Easily wounded, need for emotional support	Constantly questions
Power of critical thinking, skepticism, self-criticism	Flexibility	Need for consistency between abstract values and personal actions	Insatiable curiosity
Persistent, goal-directed behavior	Independence in attitude and social behavior	Advanced levels of moral judgment	Impulsive, eager and spirited
Independence in work and study	Self-acceptance and unconcern for social norms	Idealism and sense of justice	Perseverance—strong determination in areas of importance
Diversity of interests and abilities	Radicalism		High levels of frustration—particularly when having difficulty meeting standards of performance (either imposed by self or others)
	Aesthetic and moral commitment to self-selected work		Volatile temper, especially related to perceptions of failure
			Non-stop talking/chattering

Source: Clark, B. (2008). *Growing up gifted (7th ed.)* Upper Saddle River, NJ: Pearson Prentice Hall.

2.3 Theories of Gifted Education:

There are several theoretical interpretations and definitions of the word Gifted. Many similarities and differences exist amongst the theories, and some appear to reflect the evolution of ideas from other sources. It should be remembered that concepts of giftedness and talent are sensitive to time, place and cultural contexts, while being underpinned by social values (Stambaugh, 2022).

The Renzulli Schoolwide Enrichment Triad Model

The Schoolwide Enrichment Model (SEM) evolved after 15 years of research and field testing by both educators and researchers (Renzulli, 1988). It combined the previously developed Enrichment Triad Model (Renzulli, 1979) with a more flexible approach to identifying high-potential students, the Revolving Door Identification Model (Renzulli, Reis, & Smith, 1981). Gifted behavior occurs when there is an interaction am-

ong three basic clusters of human traits: above-average general and/or specific abilities, high levels of task commitment (motivation), and high levels of creativity. Gifted and talented children are those who possess or are capable of developing this composite of traits and applying them to any potentially valuable area of human performance. As noted in the Schoolwide Enrichment Model, gifted behaviors can be found "in certain people (not all people), at certain times (not all the time), and under certain circumstances (not all circumstances)." (VanTassel-Baska & Brown, 2007)

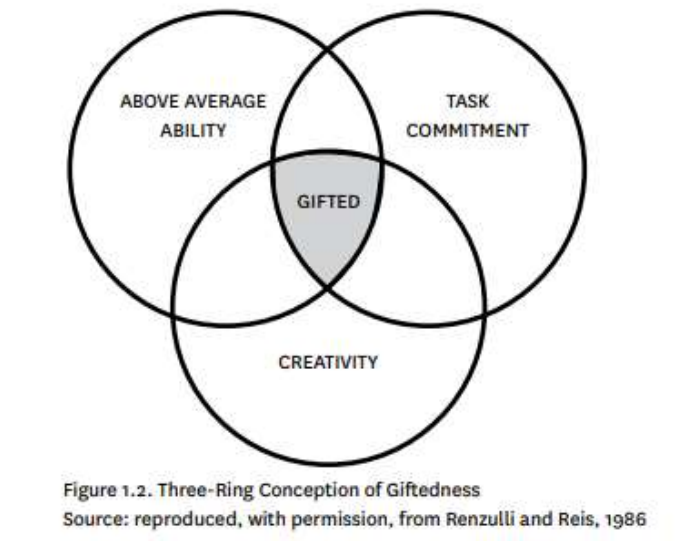


Figure 1.2. Three-Ring Conception of Giftedness
Source: reproduced, with permission, from Renzulli and Reis, 1986

Figure 1: Three-Ring Conception of Giftedness (*Source:* (Renzulli & Reis, 1994)

The Betts Autonomous Learner Model

The Autonomous Learner Model for the Gifted and Talented was developed to meet the diverse cognitive, emotional, and social needs of gifted and talented students in grades K–12 (Betts & Kercher, 1996). As the needs of gifted and talented students are met, the students will develop into autonomous learners who are responsible for the development, implementation, and evaluation of their own learning. The model is divided into five major dimensions: (a) orientation, (b) individual development, (c) enrichment activities, (d) seminars, and (e) in-depth study. It does contain a degree of comprehensiveness in that the model applies broadly to all curricular domains and ages of learners.

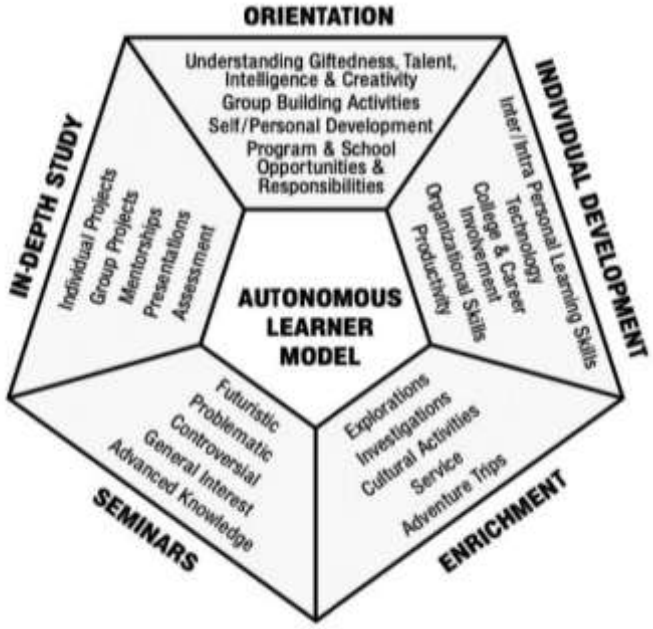


Figure 2: Bett's Autonomous Learner Model (Betts & Kercher, 1996)

Gardner's Multiple Intelligences

Multiple Intelligences (MI) as a curricular approach was built on a multidimensional concept of intelligence (Gardner, 1983). Seven areas of intelligence were defined in the original published work, with an eighth intelligence added by Gardner in 1999. They are (a) verbal/linguistic, (b) logical/mathematical, (c) visual/spatial, (d) musical/rhythmic, (e) bodily/kinesthetic, (f) interpersonal, (g) intrapersonal, and (h) naturalistic. The multiple intelligences approach has been used in the formation of new schools, in identifying individual differences, for curriculum planning and development, and as a way to assess instructional strategies. A plethora of curricular materials has been produced and marketed based upon MI theory. This approach holds widespread appeal for many educators because it can be adapted for any learner, subject domain, or grade level. The model is not easy to implement and does require teacher training, financial resources, and time (Katriana et al., 2026).

Sternberg's Triarchic Componential Model

Sternberg's Triarchic Componential Model is based upon an information processing theory of intelligence (Sternberg, 1981). In the model, three components represent the mental processes used in thinking explaining the relationship between analytical, creative and practical roles an individual plays in connecting to the external world (Yu et al., 2025). The executive process component is used in planning, decision making, and monitoring performance. The performance component processes are used to execute the executive problem-solving strategies within domains. The knowledge-acquisition component is used in acquiring,(Deary & Sternberg, 2021)retaining, and transferring new information (Saini, 2021). The interaction and feedback between the individual and his or her environment within any given context allows cognitive development to occur (VanTassel-Baska & Brown, 2007).

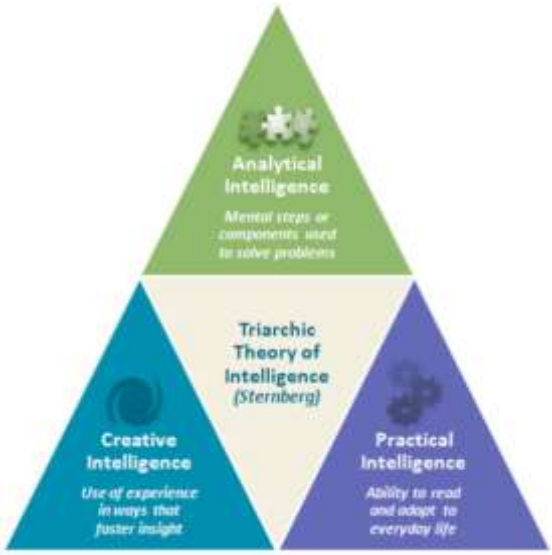


Figure 3: Triarchic Componential Model of Intelligence (Sternberg, 1985)

Gagne's Differentiated Model of Giftedness and Talent (DMGT):

The Differentiated Model of Giftedness and Talent propose a clear distinction between giftedness and talent. In his model, the term giftedness designates the possession and use of untrained and spontaneously expressed natural abilities (called aptitudes or gifts) in at least one ability domain to a degree that places a child among the top 10% of his or her age peers. By contrast, the term talent designates the superior mastery of systematically developed abilities (or skills) and knowledge in at least one field of human activity to a degree that places a child's achievement within the upper 10% of age-peers who are active in that field or fields. His model presents five aptitude domains: intellectual, creative, socio-affective, sensorimotor and "others" (e.g. extrasensory perception). These natural abilities, which have a clear genetic substratum, can be observed in all tasks children are confronted with in the course of their schooling. (Gagné, 1985)

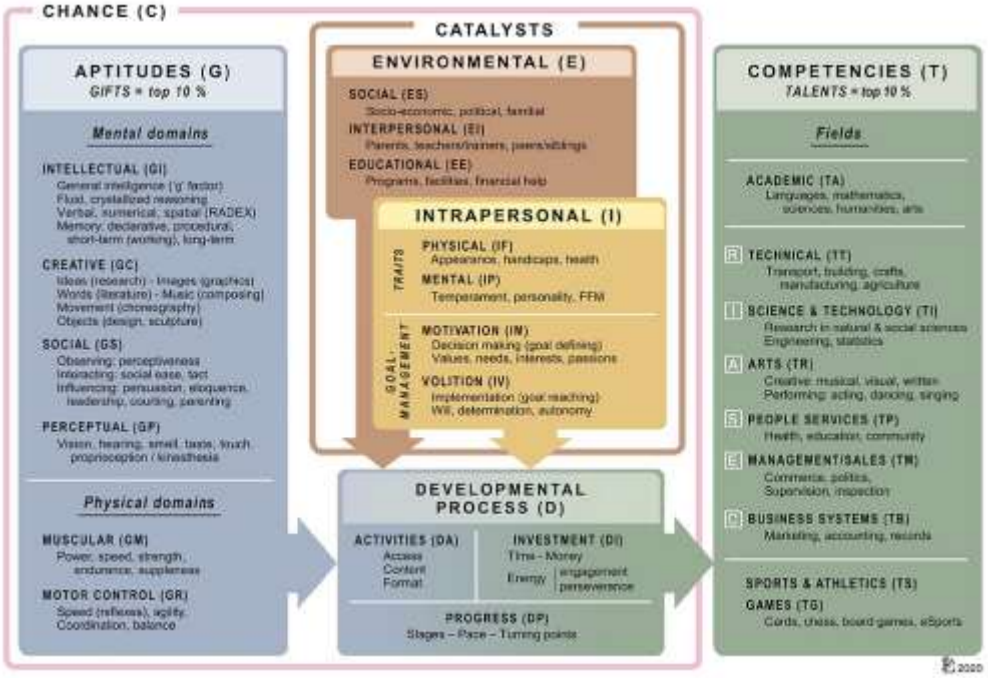


Figure 4: Detailed Illustration of DMGT model

Source: https://gagnefrancoys.wixsite.com/dmgt-mddt

3. MAWHIBA - GIFTED EDUCATION PROGRAM IN SAUDI ARABIA

King Abdulaziz and his Companions Foundation for Giftedness and Creativity. “Giftedness, devoid of care from its community is as a seedling without fostering or irrigation. Neither faith accepts nor does reason approve of its neglect or disregard” Custodian of the Two Holy Mosques King Abdallah bin Abdul Aziz Al- Saud said in a statement made on the eve of the Foundation’s initiation 1419\3\8. (Manasrah et al., 2023) Mawhiba was established in (1419 AH) to celebrate the 100th anniversary of entering Riyadh by King Abdulaziz - may Allah have mercy on him - and his loyal companions. Since then, King Abdulaziz & His Companions Foundation for Giftedness and Creativity "Mawhiba" is inspired by the biography of the founding king and his loyal companions. Mawhiba is a national institution with an international presence and exceptional outlook. Recent research (e.g., Alhazmy, 2025) suggests that the implementation of top-down reforms faces challenges, including curriculum misalignment and institutional resistance. Acknowledging these complexities would provide a more balanced and critical comparative analysis to keep up with the development plan objectives that aim to create an intellectual and creative society (Alomari & Alarfaj, 2023). Focus on offering high-quality programs in different fields to public education students inside and outside the Kingdom to develop their scientific and innovation skills.

Rationale of Gifted Education

Vision: To enable giftedness and creativity as the main contributions to the advancements of humanity. To provide an inspirational environment for giftedness and creativity, and promote passion for science & knowledge in the development of future leaders.

Strategic Objectives:

1. To demonstrate the potentials of gifted students.
2. To develop an integrated framework for gifted students to be nurtured and connected in their journey.
3. To catalyze the progress in gifted education.
4. To leverage collaboration with partners.

5. To reach beyond national boundaries.
6. To enhance the efficiency and effectiveness of the foundation.
7. To enhance the financial sustainability of the institution.
8. To build the foundation on a culture of social impact.

Identification of Gifted Students

Mawhiba Multiple Cognitive Aptitude Test

This test aims to detect students' potential academic abilities and skills in the fields of language, mathematics, science and some aspects of creativity through a number of dimensions, sections, pattern (Manasrah et al., 2023)s and images. It is the key test for evaluating students' abilities and for admitting them in all programs and activities related to the National Project for Gifted Identification since 2011. The test can be taken in Arabic or English.

Test Sections

- Creativity (mental flexibility)
- Linguistic reasoning and reading comprehension
- Mathematical and spatial reasoning
- Scientific and mechanical reasoning

1. Mawhiba Competition
2. Kangaroo Mawhiba
3. Bebras Mawhiba

Implementation Strategies

The Journey of 5E's: o The journey starts with Exploring student interests and talents, then empowering their abilities with specialized courses, then taking them to Excellence through linking them with scientists and specialized courses, finally they Engage with the society through Mawhiba Alumni.



Figure 5: The 5 E implementation stages in Mawhiba program

Programs

1. Mawhiba Mentorship

2. Enrichment Programs: Mawhiba Academic Enrichment Program, Mawhiba Enrichment Research Program, Mawhiba After school Enrichment Program, Mawhiba Universal Enrichment Program, Mawhiba Skill Enrichment Program, Mawhiba Ambassadors, 3. Partnership Programs with Schools, Mawhiba Classes, Mawhiba Advanced Program for Science and Math.

4. Mawhiba Program for Elite Universities – Tamayuz: The Mawhiba Program for Elite Universities "Tamayuz" is an integrated training program to qualify and prepare the best students who wish to study in prestigious American universities ranked among the top 50 universities in the world. The program lasts for one year starting from the second semester of grade 11 until the student obtains unconditional admission acceptance

5. Competitions: Mawhiba International Olympiad Program and ng

6. Mawhiba Scholarships

7. Mawhiba Virtual world

4. GIFTED EDUCATION IN HONG KONG

The Education Bureau initiated the gifted education policy in Hong Kong in 2000 (Yuen et al., 2025). The foresighted policy advocates the adoption of a three-tier operation mode in implementing gifted education (see Figure 6) to fully cater for the diverse educational needs of the gifted students through an inclusive approach. Gifted education in Hong Kong has progressed with significant transformation over the last 10 years. The local gifted education policy has been put into practice and widely recognized.

Rationale of Gifted Education

The Education Bureau has been offering gifted education based on the following rationales since 2000 by what of National resources – nurturing gifted students for future societal development and Special education – gifted students have special educational needs, which have to be appropriately addressed to fully unleash their potential. Gifted education in Hong Kong should not be interpreted as only to served special educational provision for identified gifted students to enhance their abilities and achievements through developing their subject knowledge, leadership skills and positive values.

Identification of Gifted Students

The Education Bureau has made reference to local experience and the most recent overseas studies, and advocates a school-based approach to identification and selection process for Level III programs should be more stringent than those for Levels I and II in order that the specific potential of gifted students can be unearthed. Schools can identify gifted students with a variety of tools and place these students in different programs as appropriate to nurture their potential. Identification tools can be generally classified into subjective and objective types.

Table 2: Subjective and Objective tools for Identification of Gifted Students

Subjective	**Objective**
Nomination by teachers	Standardized cognitive tests
Nomination by parents or guardians	Individual or group performance in verbal and non-verbal tests
Nomination by peers	Performance-based assessment
Self-nomination	School-based academic achievements
Anecdotal description or evidence	Student portfolios

	Creativity tests
	Competitions

Identification tools, such as Behaviour Observation Checklist, Learning Behaviour Checklist, Area-specific Aptitude Checklist and task-based activities are made available at the Education Bureau website on gifted education.

4.3 Implementation Strategies

The Three-Tier-Operation Mode provides a logical framework for schools to plan holistically their school-based gifted education programs from Level I to Level III

Level I: Schools should build on its strength and teachers' readiness to decide on the entry point for implementation. A holistic gifted education plan has to be drawn up. Short-term and long-term goals, covering both areas of cognitive and affective development, have to be set.

Level II: Not only can a school-based gifted education policy (Al-Duraywish, 2023) help establish the school's long-term direction for gifted education development, it can also foster synergy among teachers and staff to cater for the learning needs of gifted students. The school needs to review the education philosophy of its sponsoring body, its vision and mission, its strengths and resources before devising a school-based gifted education policy that is compatible with (Hui et al., 2025) the school context.

Level III: A school-based gifted education program can be implemented at Level 1 through differentiation on a class basis, or through the pull-out approach at Level II.

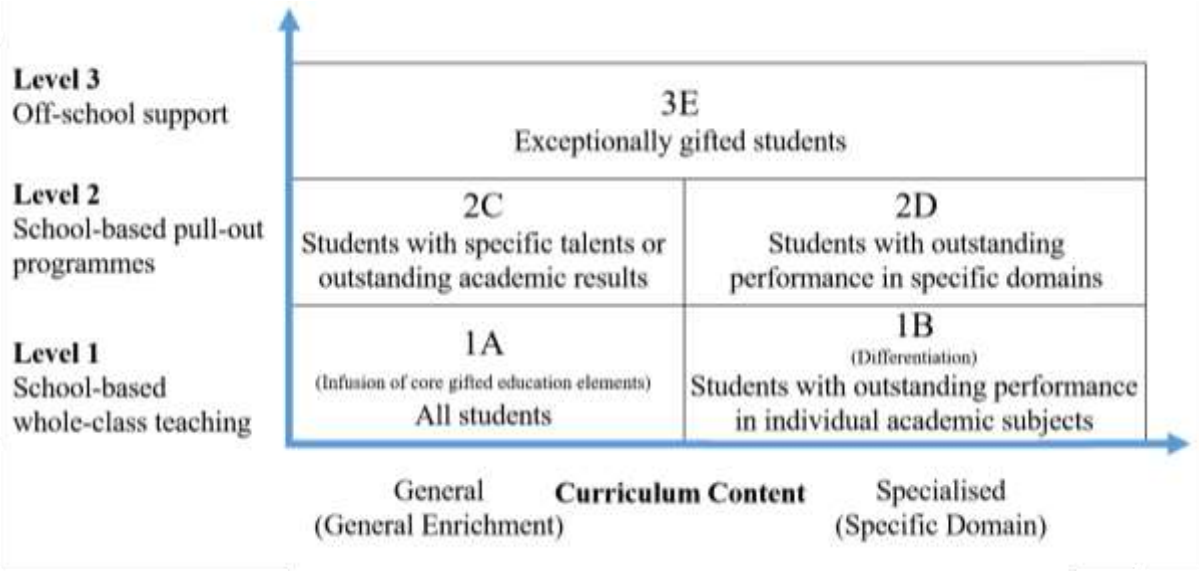


Figure 6: The three-tier implementation model for gifted Education in Hong King

Programs

The Hong Kong Academy for Gifted Education, offers different programs for schools, teachers and students under the Gifted education program. For schools and teachers Accredited advanced courses in gifted education and Professional development programs for teachers is provided. For the students a wide array of program including (1) Weekend and summer enrichment programs, (2) University credit-bearing programs, (3) University induction programs, (4) Mentoring and research programs conducted by university academics, (5) Olympiad-related training programs (university level), (6) Dual enrolment and (7) Online gifted. Subjects include Chinese, English, Mathematics, General Studies / Science and Technology, General Studies/ Humanities, and Affectionate Education. These subjects are offered to a different target group of students as illustrated in Table 3.

Table 3: Subjects offered to specific age group in gifted education program

Learning Areas	Targets
Mathematics / higher-order thinking skills	Form 1 to 3 gifted students with potential in Mathematics
Project learning / interdisciplinary studies	Primary 4 to 5 gifted students
Chinese history / creativity	Form 1 students
Science Education / General Studies for primary schools	Primary 5 to 6 gifted students
	Form 2 to 3 gifted students

Teacher Professional Development: A new framework for the professional development of gifted education teachers in Hong Kong is formulated to enable teachers with a clear pathway.

1. Education Bureau Basic Online Course for Teachers - Gifted Education

2. Education Bureau Teachers' Online Foundation Course - Affective Education for Gifted/Highly Ability Students

Online Gifted and Gifted Program 2021/22

The online gifted courses include five courses in Earth science, paleontology, astronomy, mathematics and the changing economy of Hong Kong. The target students of HKAGE are gifted students aged 10 to 18. Students who complete each level of study in the course and pass the level general test will be issued a certificate of study for that level. Form 1 students who can pass the Level 3 test in any of the programs will be eligible to apply for HKAGE students.

Student Competition

Providing appropriate learning opportunities for gifted students in different fields every year, territory-wide competitions in different areas are conducted to provide suitable platforms for gifted students to showcase their talents. Students who perform well in the competition will be selected for training to participate in international competitions to further develop their potential. Students take part in Territory-wise, National and International competitions which include International Olympiads in specific subjects.

5. DISCUSSION

Table 4: Comparison of Gifted Education Program design in Saudi Arabia and Hong Kong

Features	Saudi Arabia	Hong Kong
Name	Mawhiba	Gifted Education
Basis of Foundation	by Royal Order No. 109, dated 13/5/1420H (1999)	Based on the recommendations of Education Commission Report No.4 (1990)
Regulating body	King Abdulaziz and his Companions Foundation for Giftedness & Creativity	Education Bureau of HKSAR
Year started	1999	2000
Objective	To create an intellectual and creative society. Focus on offering high-quality programs in different fields to public education students inside and outside the Kingdom to develop their scientific and innovation skills.	To fully cater for the diverse educational needs of the gifted students through an inclusive approach
Rationale	Based on 8 Strategic Objectives to provide an environment, promote science and technology and leadership	Based on including National resources and Special education with a Dual purpose of Universal

		Gifted & Universal Quality Education
Identification Process	Mawhiba Multiple Cognitive Aptitude Test.	Schools should formulate a strategic identification mechanism with tools prepared by the Education Bureau
	Mawhiba Competition	More stringent for Level III
	Kangaroo Mawhiba	Subjective tools – nominations, Objective tools – Tests, competitions, assessments
	Bebras Mawhiba	
Implementation structure	5 Level Journey of 5 E's. (in 5 stages)	1. Tier Operation (3 Levels)
	1. Exploration	Level 1: Whole-class (School based)
	2. Empowerment	Level 2: Pull-out (School based)
	3. Excellence	Level 3: Off-site support (special education provision)
	4. Engage	
	5. Enable	
Duration	5 years	5 years
Program Strategy	1 Mawhiba Mentorship	**For students**
	2. Enrichment Programs	Weekend and summer enrichment programs
	Mawhiba Academic Enrichment Program	University credit-bearing programs
	Mawhiba Enrichment Research Program	University induction programs
	Mawhiba After school Enrichment Program	Mentoring and research programs conducted by university academics
	Mawhiba Universal Enrichment Program	Olympiad-related training programs (university level)
	Mawhiba Skill Enrichment Program	Dual enrolment
	Mawhiba Ambassadors	Online Gifted and Gifted Programme
	Partnership Programs with Schools	
	Mawhiba Classes	
	Mawhiba Advanced Program for Science and Math.	
	4. Mawhiba Program for Elite Universities – Tamayuz	
	5. Competitions:	
	Mawhiba International Olympiad Program	
	The National Olympiad program (ibdaa)	
	6. Mawhiba Scholarships	
	7. Mawhiba Virtual world	
Teacher Training	No training for teachers provided	Professional development programs for teachers
		Accredited advanced courses in gifted education
Competitions	Participation in International Olympiads in science	Students take part in Territory-wise, National and International competitions which include
	Biology, Junior Science, Physics, Mathematics, Informatics.	

	National Olympiad for Scientific Creativity	International Olympiads in specific subjects.
	Mawhoob Competition - annual scientific competition	
	Kangaroo Mawhiba – Maths competition	
Digital integration	Virtual World – The complete Gifted program on the digital platform for student study	Online gifted program – Course includes five courses in Earth science, paleontology, astronomy, mathematics and the changing economy of Hong Kong.

Differences

Objectives: One of the major differences found was the aim, Mawhiba aims at international experience and Gifted Education Program in Hong Kong aims at internal universal access to experience. This shows that there is no specific target to be achieved in the Hongkong plan. The aim is to just ensure that every gifted student is reached out and every one attains an equal opportunity by way of Universal access to experience and special programs in public education system. On the other hand, we can see that the Mawhiba program in Saudi Arabia has very specific objective of promoting science and technology along with creativity and leadership. The component of subject and leadership is absent in Hongkong. Hongkong GEP program without its subject specification allows student with artistic abilities also to develop their skills.

***Identification Process*:** The identification process is different in both the programs. In Mawhiba program we can see that the authorities of Mawhiba has a centralized structure to the identification process which is conducted by way of competitions. These competitions are specific to subjects (Shek et al., 2022) and age group of the students. On the other hand, we see that in Hong Kong, the testing and identification mechanism solely rests on the school, which becomes a more subjective process. Such kind of system may lead to internal inconsistencies as there is no central authority to check on the reliability on universal inclusion.

***Implementation strategy*:** The implementation strategy of Mawhiba has clearly defined stages and a complete plan for 5 years without any drop-out situation. The implementation model has been represented as journey of growth rather than stages of completion. This shows that emphasis is on overall development of the students rather than completion of the program. The Hongkong GEP, is completely dependent of the school for implementing the programs. The stages have also been setup as per the school curricular stages and not much difference in the strategy.

Teacher Training: The Mawhiba program does not mention any form of teacher training or professional development opportunities for teacher. This is a flaw in the plan, as educating, training and continuous professional development of the teachers involved in the program is important. Without proper training, the teachers will not be able to provide the required assistance (Cheung et al., 2022)to the students. In this regard, GEP program in Hong Kong has laid down a definitive plan for teachers with professional development programs and accredited advanced courses for the teachers. This shows the importance it lays on the teachers as a major part of the GEP program is implemented at the school and classroom level. Although the program strategy is largely on school based programs, with proper training and development to teachers, the aim can be attained.

Virtual Integration: The digitalization of the program in Mawhiba is the complete integration of technology in assisting the students in the 5 year journey. The virtual world supports the learning process of the students with digital resources like the digital library. The Hong Kong online gifted program is a separate initiative to provide special education to the gifted students in the virtual space. This is only 1 year program which in reality does not meet the strategy of the bureau itself. A mentoring program like the GEP will require more time allocation.

Programs: The program plan in Mawhiba is very diverse areas including that of science, research, mentorship, leadership, ambassador, skills development, olympiads and entry to elite international universities. This shows the vision of the program in attaining the aims. The programs are very extensive and impactful in attaining intellectual individuals. The scholarship program and the elite university program give a boost Mawhiba in terms

of its impact in attainment of the aim. The GEP program of Hong Kong is more focused on internal development and since the program is school based the programs are also designed to be executed at the school level.

Parental Involvement: The involvement of parents in the growth and development of the gifted students is an important part. This can be noted in the GEP program of Hong Kong. With various educational programs to enhance the parents understanding of giftedness, strengthening the parenting skills and providing a platform for parents to interact may strengthen the impact of the program. The consultation and assessment centre provides the much-needed support to parents.

Similarities

Duration and Intake age: Both the programs have been distributed over 5 years and intake at the age of 9 years. Both systems recognize the necessity of fostering specific cognitive competencies, yet they remain susceptible to the common challenge of inadequate instructor preparation, as seen in other international contexts where teachers often lack the formal specialized training required to support high-ability learners effectively (Alsamiri, 2024; Antoun, 2022).

Programs: The enrichment programs in both Saudi Arabia and Hong Kong are conducted at all levels for the students. Both countries utilize these frameworks to facilitate the psychological and academic growth of high-ability learners, although they differ in their reliance on standardized versus decentralized assessment measures (Alfaiz, 2026; Dt et al., 2026).

6. CONCLUSION

The Mawhiba program of Saudi Arabia, although started as a vision of a bunch of friends, the implementation strategy of 5 stages makes it a well-structured program. Although introduced in 1999, the methodology and implementation strategy were reintroduced in 2010. The introduction of Mawhiba Alumni as mentors and the Virtual World program have given new direction to the program (Babineau, 2023), while mentorship and alumni support programs help in continued assistance without a break even after the student has completed the program.

Keeping in line with the aims of Vision 2030 of the kingdom, the programs have included skills development, Ambassadorship, partnership programs, and the elite university Tamayuz program. To cater to Saudi Arabia's growing market demand, scholarship programs for students within the country and those aspiring for international studies have been introduced. The focus on science and technology establishing labs and engaging students with scientists and those from specialized fields is an innovative idea that integrates engagement and experience, establishing a strong link between academics and field practice. Overall, the innovative program, with its methodology of a support system by identifying, nurturing, and investing, aims at developing and enhancing giftedness and creativity based on international experiences and field practice. Programs such as these are not only innovative in their own nature, but also open up avenues for innovation by the students.

In comparison, the GEP program of Hong Kong is a very well-laid-out curriculum plan with detailed explanation and a structured plan for implementation. Introduced in the year 2000, it has been revised and improvised with the introduction of various initiatives, including professional development programs for teachers, training, assessment, and support programs for parents. The structured approach of the program has been described in policy documents, and the 3 levels spread across 5 years give students ample time to explore and experience. The innovative approach of school-based education makes it stand out, although it is still a part of the general curriculum, while enrichment programs based out of the school enable students to access resources easily.

The GEP program, with its aim of inclusion and universal gifted education, makes it possible for all students to access the opportunity for intellectual development. The use of technology as a differentiator, sometimes referred to as the “great equalizer,” (AVCU & Ayverdi, 2022) supports the identification and development of the gifted, and assistance for competitions at national and tertiary levels by professional accredited teachers gives leverage of success to the students. Furthermore, the importance of the program regarding the involvement of parents can be seen in the various programs conducted for educating parents of gifted students in developing a nurturing environment and supporting them in the due course. This innovative aspect of parental involvement stands out in terms of curriculum framework and policy, as policymakers are addressing the foundational needs of the

students. With innovative courses added to the gifted education program, the students' capabilities in science and technology have improved and the country is moving ahead in a stable state. Overall, the program demonstrates a structured approach to gifted education.

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