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Muslim Gifted and Talented Curriculum: A Design of Framework

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Abstract

A gifted and talented curriculum, generally known as gifted education, is a programme or curriculum comprising practises, guidelines, and theories utilised in educating gifted and talented children. The core of the gifted and talented curriculum is accelerated and enrichment in the curriculum itself. In Malaysia, gifted education has been continuously revolutionised since 2006. Under the Education Planning and Research Department, the Ministry of Education highlighted the need to establish a special school for gifted and talented students or form gifted classes within the mainstream education system. Therefore, this article emphasises the special curriculum of gifted and talented education focusing on Muslim education, known as the Integrated Naqli Aqli Gifted Education (IGEd) Curriculum that integrates Al Quran and Sunnah perspectives. This IGEd curriculum will mould Muslim students to become holistic in all aspects of the nation and ummah.

Keywords: Muslim Gifted and Talented Curriculum, IGEd Curriculum, IGEd Framework, Integrated, Accelerated.

Gifted and Talented Curriculum

The ideology of multiple intelligences promotes new ways of thinking about students with unique gifts and talents. Previously, the term "gifted" was only used to describe students with exceptional verbal abilities. Nevertheless, recent definitions of gifted have been extended to encompass uncommon abilities in diverse fields, including creative writing, music, or arts. In Asia, the Philippines is one of the countries with a gifted and talented curriculum funded by a government limited to science and mathematics programs (Roy, 2017; Pawilen et al., 2018). Researchers discovered that retaining gifted students in general education classrooms using specific instruction and sufficient training, motivation, and understanding of education guides the gifted student and educator (Rasheed, 2020; Shore, 2021; Van et al., 2021). Although there are various curriculum gifted and talented models, one main commonality is what to expect and achieve among gifted and talented students (Rasheed, 2020). Unfortunately, although gifted and talented education is still growing in third-world countries, it is quite expensive to implement (Pawilen et al., 2018; Mun et al., 2020). This is because of difficulty among educators in handling the issues related to gifted and talented students, which need more effort to move to a new curriculum paradigm (Mun et al., 2020).

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The gifted and talented approach develops with various components, including knowledge, originality, cognitive flexibility, social cognition, and personality development (Cheung et al., 2020; Roy, 2017). The comparison between eastern and western philosophies on gifted (Roy, 2017):

- Eastern notions consider the importance of environmental influences and believe more in student potential.
- Western emphasis on individualistic, cognitive-motivational functioning and students' creativities.

Muslim Gifted and Talented Curriculum

Islam has a dynamic approach to the concept of gifted and talented. According to many investigations undertaken by Muslim scholars, the phrase giftedness is related to the Arabic word mawhiba (Almutairi et al., 2021). Fatma and Scott (2007) conducted a study in the United States (U.S.A) that emphasised teacher curricular and instructional practices among gifted students in Islamic schools and found that only a few programs were available. The integration of Islamic beliefs into other academic disciplines was rarely practised in most Islamic schools. In other words, there was a strong demarcation between Islamic beliefs and other academic areas being taught by teachers.

A study by Anam and Zaenuri (2021) documented that the main challenge faced by gifted students is the lack of special attention, especially during the learning process. Therefore, they developed a new approach known as the Living Qur'an Curriculum (LQC) by implementing Qur'an values in the learning process based on the order of life. Additionally, they highlighted the concept of Wasathiyah (moderation) attitudes among the general public, which comprised of three core concepts: Sharia (religious symbols of religion), Belief (Agedah), and Excellence in faith (Akhlaq).

This study aimed to design a framework and module prototype of the IGEd curriculum implemented among Kolej GENIUS Insan (KGI) students. Students were nurtured from the IGEd curriculum following the implementation of this module prototype and framework, thereby enhancing their abilities to self-control and distinguish with good attributes. Specifically, these comprised their improved reading, memorisation, and comprehending abilities of the Qur'an, which reflect their leadership qualities. Another aspect is enhanced worship and obedience to religious beliefs aligning with Islamic perspectives, which in other words, denote more devotion to worship. Additionally, the students' problem-solving abilities in science and technology were improved following the integration of Aqli and Naqli knowledge. Consequently, each component in the developed framework elaborated on the IGEd curriculum's details.

Integrated Naqli Aqli Gifted Education (IGEd) Curriculum Definition IGEd

Curriculum and co-curricular activities are critical in implementing and executing a gifted education programme. This involves the integration of skills, knowledge, norms, cultural elements, values and faith in the knowledge of the Holy book (Al-Qur'an) and deeds of the Holy Prophet (Al-Sunnah). These events assist in moulding talented and gifted students and transforming them into holistic individuals that would contribute positively to the development of the ummah.

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IGEd Curriculum

IGEd curriculum provides a complete learning experience that can prepare students to be more

competitive and construct more Islamic scholars globally. This is in line with the philosophy of the

Kolej GENIUS Insan in integrating the knowledge of Naqli and Aqli by the augmentation of the Noble personality among Islamic scholars (Al-Abrar personality). Eventually, an exceptional generation and knowledgeable nation can be developed through this curriculum with the embellishment in understanding, interpretation, memorisation and employment of the Quran and Sunnah in their lifestyle and consequently correlate to Science, Technology, Mathematics and Engineering (STEM). Hence, this curriculum approach could develop the tradition of Islamic science among gifted and talented students, which might also be implicit through a combination of various fields of knowledge.

The emphasis on the IGEd curriculum compared to several Islamic (tahfiz) institutions resulted in the added value findings and adapted to the curriculum developed for gifted and talented students. This approach is more holistic by applying religious elements and incorporating VARK (visual, audio, reading & writing and kinesthetic) aspects during the teaching and learning experience. Moreover, the IGEd curriculum also deliberates the Differentiated Learning style applied according to the student's cognitive level. In addition, the use of technology during the implementation can further enhance students' critical and creative thinking skills, especially in solving problems for society. These elements also encompass the levels of knowledge, including understanding, application, and analysis based on Bloom's Taxonomy.

Implementing the IGEd curriculum in teaching and learning creates students' ability to identify, apply and integrate the STEM components in solving problems innovatively and creatively. Furthermore, noble values could be nurtured by integrating the knowledge of Naqli and Aqli, which are elucidated in the Pillars of Spirituality. The latter emphasises the continuous nurturing of moral qualities, including kindness, faith in God, responsibility, generosity, gratitude, love, respect, justice, honesty, courage, diligence, moderation, cooperation, tolerance, discipline, and self-reliance.

Syllabus Package for IGEd Curriculum

Figure 1 depicts the IGEd subject package set by Kolej GENIUS Insan for talented and gifted students. The components include the national curriculum, ulumuddin, research, insaniah and co-curricular components. The national curriculum involves 11 compulsory subjects where students are required to enrol in the subjects matter throughout their study in Kolej GENIUS Insan (KGI). Meanwhile, the Ulumuddin part consists of a combination of two (2) subjects from the national curriculum component (Arabic, Islamiyyah Education study and Al-Quran and Sunnah Education) with the addition of five elements of Al-Quran hifz, including memorization (hafazan), tahriri, tadabbur, tajwid and tafsir ilmi.

In addition, the Insaniah component offered six subjects that need to be taken by students as additional subjects and followed by the selection of one of the international languages throughout the students' studies at Kolej GENIUS Insan. Starting from Year 2, students are also given initial exposure to the basics of research based on the integration of Naqli and Aqli Knowledge.

The co-curriculum component as a supplement element contains a uniform unit, club and association and sport. Each student can select each element offered in the component where

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they can learn a lot of programs and activities. Consequently, they can participate in many competitions from school to international levels.

Therefore, the concept of multiple intelligences inspires new ways of thinking about students with unique gifts and talents. The term "gifted" was initially employed to describe students with exceptional verbal abilities. However, the definitions have been recently extended to incorporate uncommon abilities in diverse fields, including creative writing, music, or arts.

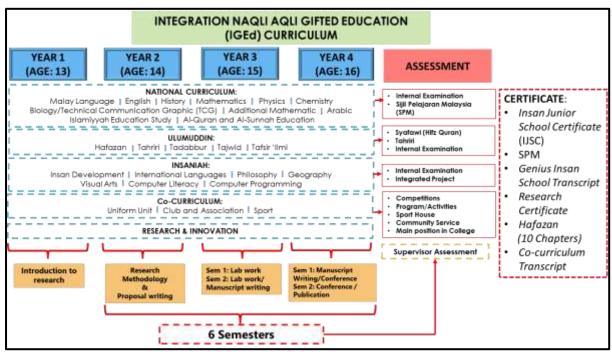


Fig. 1. Subject package for IGEd Curriculum

Teaching and Learning Style

The teaching and learning style in the IGEd curriculum involves the application of knowledge and skills on the values applied in Science, Technology, Engineering and Mathematics (STEM) and is integrated with arts and religiosity. Kolej GENIUS Insan (KGI) implemented the IGEd curriculum by focusing on integrating Naqli and Aqli knowledge to resolve issues or challenges experienced in daily life, as well as those faced in the environment and society. The STEM elements that are worked in the primary and secondary school curriculum in Malaysia include important elements, which are STEM knowledge, skills and values. These three elements are included in the IGEd curriculum for all STEM subjects and integrated with arts and religiosity to further improve the curriculum at KGI.

The main element of STEM itself is the basic knowledge related to understanding STEM concepts that involve knowledge in terms of ideas, principles, theories, and a deep understanding of the STEM field. Therefore, IGEd curriculum development provides exposure, knowledge, skills, and STEM values integrated with Naqli and Aqli to students in their teaching and learning process in school through activities that can attract students either done in class or in out of class. The result of constructive, progressive, and dynamic exposure to the knowledge integration is very important to produce students who are sensitive to developing the latest and future technology.

IGEd curriculum also embedded STEM skills with Naqli and Aqli knowledge integration. STEM skills that need to be inculcated in students are their competence in exploring and solving problems through scientific methods of solution related to science and technology in Islam.

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The skills that want to be instilled in these students can be achieved through activities that involve projects and group assignments. Among the skills that need to be applied are process and technical skills. Process skills involve the skills of learning and applying knowledge in solving problems. These process skills involve science, mathematics, design, and computational thinking skills. Meanwhile, technical skills involve psychomotor skills, including manipulative skills, management skills, and handling of materials, tools, and machines correctly and safely (KPM, 2016).

The artistic elements applied at KGI highlight the advantages of students in terms of creative and artistic results such as drawings, infographic posters, video construction and STEM models that are creative but still apply the STEM concept. The integration of Naqli and Aqli knowledge in the learning approach in the next lesson helps the students to be able to relate the STEM knowledge learned with the understanding that has been written and enshrined in the Quran and hadith.

In nurturing interest and exposure among the students, STEM values and ethics have been implemented by practising positive morals that need to be followed by students as a guide in implementing STEM by integrating Naqli and Aqli. Therefore, applying STEM values and ethics during the learning and teaching process produces students with strong personalities. The emphasised values are systematic, objective, consistent, thinking rationally, perseverance, commitment, responding to challenges, daring to try, open-minded, innovation, and others (KPM, 2016). Therefore, students become interested in asking questions and exploring the environment through inquiry and solving real problems through this approach. It was also able to cultivate the practice of integration of Naqli and Aqli, which also goes through cross-curricular elements.

Finally, these IGEd curriculum skills can create students who can identify, apply, and integrate the components and concepts of science, technology, engineering and mathematics in solving problems in innovative and creative ways and the integration of Naqli and Aqli.

Implementation among Students

The activities or events conducted outside the classroom could be used to demonstrate the knowledge and skills applied via the IGEd curriculum approach to talented and gifted students. The planned activities by the educator must be implemented through inquiries, problem solving and projects. Several teaching and learning activities have been conducted with STEM as the core element and with Naqli. For instance, a Physics project in the form of an experiment (practical) carried out to solve problems and discussed through a video presentation. The video produced must also contain Naqli elements so that the students can relate to the topic learnt and Naqli content. Figure 2 shows the example activity in the IGEd curriculum.

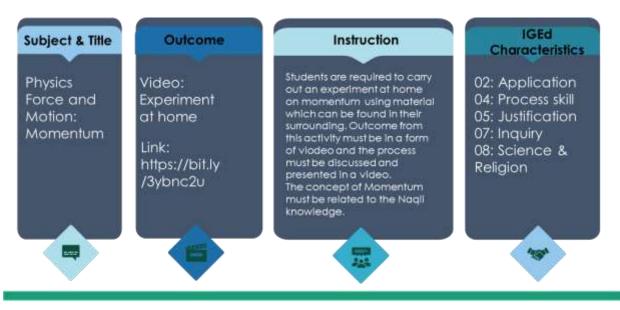


Fig. 2. Example of activity in IGEd curriculum

Methodology: Flow of IGEd Framework

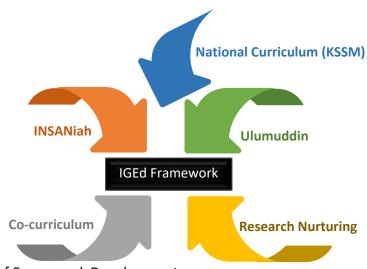


Fig. 3. Flow Process of Framework Development

Based on Figure 3, the IGEd framework combined the integration with five (5) main components, which are

(a) National Curriculum

The national curriculum in Malaysia refers to Kurikulum Standard Sekolah Menengah (KSSM) syllabus that applies to upper secondary school students.

(b) Ulumuddin

Ulumuddin's component includes Alquran and Hadith's knowledge in describing the topic of each subject that has been offered.

(c) Research

Research is one of the components in the IGEd framework to nurture the Muslim student in research fields such as article writing, experimental work, conference presentation and publication.

(d) Insaniah

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The Insaniah focuses on the developing personality of Muslim students by offering the additional subject to enhance the knowledge and growth of the confidence level of Muslim students.

(e) Co-Curriculum

Co-Curriculum refers to extra activities, programs and learning experiences other than an academic subject.

Results and Discussion

IGEd curriculum is the first gifted and talented curriculum in Malaysia which integrates national curriculum (KSSM) and al-Quran and Al-Sunnah education. The framework of the IGEd curriculum was established concerning five (5) main components, including Academic KSSM, Ulumuddin, research, Insaniah and co-curriculum. These components were certainly coherent with the National Education Philosophy and Islamic Education Philosophy, which emphasise the balance of intellectual, spiritual, emotional, and physical in holistically developing the potential of intelligent individuals. Fig. 4 shows the summary of the KGI IGED framework.

The outer layer of the framework displayed the main concepts applied in developing this IGEd curriculum: Integrated and Accelerated. Integration in the context of the IGEd Curriculum refers to a systematic and continuous adjustment process by combining, forging, integrating, and developing the learning content of intelligent students based on the THREE following elements.

- INAQ: Integration of Naqli (revealed) and Aqli (acquired) knowledge
- KSSM: Curriculum and Assessment Standards Document for KSSM for secondary school
- Advanced Syllabus: Chapter or content at the pre-university and undergraduate level

Meanwhile, accelerated in the context of the IGEd Curriculum refers to the process of 'unpack-and-repack' of the KSSM 4 Year curriculum by diversifying the acceleration and compression strategies of subject content implemented through different educational practices.

Furthermore, the second layer of the framework was the key elements in the IGEd curriculum, where each element has its contribution percentage. The main element was the Academic KSSM which has the highest weightage of 50%, followed by 20% of Ulumuddin. These 2 combined academic elements were complemented with 10% research, 10 % insaniah and 10% co-curriculum.

In Academic KSSM element, it refers to the national curriculum syllabus embedded in the IGEd curriculum that was compiled through several processes:

• 'Unpack-Repack': Syllabus content of 11 subjects including Malay, English, Arabic, History, Quran & Sunnah Education, Islamic Shariah Studies, Mathematics, Additional Mathematics, Physics, Chemistry and Biology of Form 4 and Form 5 (upper secondary school), which were combined with the content of Form 1 until Form 3 (lower secondary school) syllabus including Malay, English, Arabic, Islamic Religious Education, History, Mathematics, and Science) to fulfil teaching and learning activities throughout 4 years of study. Consequently, the developed repacked academic curriculum element was integrated with

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INAQ through Al Quran and As-Sunnah for appropriate topics according to the USIM Guidelines (Teaching and Learning Policy based on the Integration of Naqli and Aqli Knowledge, Universiti Sains Islam Malaysia, p. 11). Eventually, this explains the four INAQ methods under *Mustawa al-Ta'sil* (Ayatization): Which refers to the use of the basic sources of Islamic teachings as a reference, namely the Al-Quran, Hadith and the books of turath that are muktabar. The second phase was *Mustawa al-Muqaranah* (Comparison) which Refers to the differences and similarities of approaches between Islamic knowledge and Aqli knowledge that result when the relationship between a concept of knowledge and the source of the religion is examined in more depth. The third stage was *Mustawa al-Takyif* (Adaptation): The comparisons facilitated the process of selecting, screening, assessing, adapting and implementing any values, principles, and frameworks of knowledge that do not contradict Islamic beliefs and teachings to be executed fairly and scientifically. The highest stage was *Mustawa al-Takamul* (Integration), which refers to the amalgamation and application of various disciplines of knowledge in producing a holistic discipline of knowledge.



Fig. 4. KGI IGEd Framework

Ulumuddin element IGEd curriculum focuses on three main parts of the Ulumuddin component namely Hifz Al-Qur'an; Tadabbur; and, Sijil Pelajaran Malaysia (SPM) Early subjects. Hifz Al-Qur'an was the subject that is based on five components including *Al-Qiraat* (reading), *Al-Fahm* (understanding), *Al-Hifz* (memorization), *Al-Amal* (practice) and *Al-Tabligh* (delivery). Memorization of the Qur'an uses a thematic memorisation method that allows students to memorise the verses of the Qur'an systematically. Meanwhile, the Tadabbur component expands students 'ability to explore the Qur'an through the perspective of STREAM (Science, Technology, Religiosity, Art, Mathematics). Throughout this subject, students analyze the verses of *kauniyyat* found in the Qur'an by integrating the verses with the latest scientific findings and research. It is also guided and reinforced by the subject of

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Tafsir Ilmi which serves to explain the method of interpreting the verses of the Qur'an scientifically. Another ulumuddin component was SPM Early Subjects, which emphasises three early subjects: Arabic Language, Islamic Shariah Education, and Al-Qur'an and Sunnah Education. Some basic elements from these three subjects are also woven and introduced to Form 1 student as an introduction.

Fig. 5 shows research elements applied in the IGEd curriculum where interlocking between KGI students, KGI lecturers and USIM or other lecturers were communicating through research activities and practices, whether through seeking and imparting knowledge. This element implements INAQ-based research focusing on gifted and talented projects and other research fields with the research ecosystem among KGI, USIM and other universities that can provide benefits and experiences in terms of social interaction and practical skills in conducting research projects. Eventually, the mentoring program was in line with the research activities and students' independent study in their circle of the research field to improve soft skills and practical skills applied in higher education later. At the end of their research, students will be assessed through their research output, including article publications, proceeding articles, book chapters, conference presentations, and innovation competitions. In practice, IGEd RESEARCH is arranged to resemble the implementation of the final year project of the bachelor's degree program by offering a research project totalling SIX (6) credits for three years. Consequently, these components aligned with the research aspirations of the IGEd curriculum that was INAQ-based education as well as its continuity in empowering intelligent education.

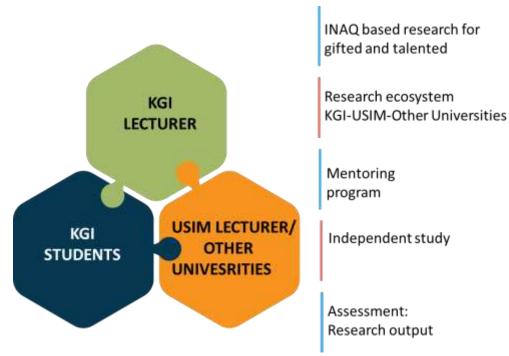


Fig. 5. Interaction of Research Partner

INSANiah IGEd curriculum focuses on building students' personalities in terms of skills, confidence, communication and personality. Through INSANiah, the elements of students' self-development are strengthened and empowered so that every action is guided by the

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teachings of the Qur'an and Al-Sunnah. Through the INSANiah component, the abqari personality (*Rabbaniyah*, *Akhlaqiyyah*, *Alamiyyah*, *Insaniah and Siasiyyah* (*RAAIS*)) is also strengthened to realise the mission of becoming an Islamic scholar.

The co-curriculum component further complements the desire to produce holistic students. Co-curricular activity refers to action designed from the learning and teaching process outside the classroom (curriculum) where students are opportune to add to, strengthen and exercise the values and skills learned in the school. The co-curriculum assessment method uses the PAJSK assessment format set by the Minister of Education (MOE) for all schools under it. The Education Act 1996 has stipulated that this co-curricular component includes Uniformed Units, Associations/Clubs and Sports where each student is required to participate in one of each type. Moreover, 10% of this PAJSK mark is necessary for students to enter a local university and get the same opportunity to earn this 10%. Eventually, participation in the olympiad is highly encouraged for excellent students because it meets the criteria of better outstanding students.

Conclusion

The framework design for the Muslim gifted and talented curriculum is the only curriculum specially designed for Muslim gifted and talented students. The framework design is important to equip individuals with the ability to integrate naqli and aqli knowledge. Nurturing the students with the five components of the IGEd curriculum, the syllabus package, teaching and learning style and the curriculum implementation will enrich them with added values required to be more resilient to the global challenge. This framework is useful for the gifted and talented syllabus as a guidance in teaching an learning for Muslim gifted and talented students. Therefore, it is highly recommended to be implement and adopted to Muslim gifted and talented around the world. Finally, this framework can help others Muslim gifted and talented school to nuture their students to become holistic Muslim scholar.

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