

Traces of Nidhal Guessoum's Thought: a Monument to the Integration of Modern Islamic Education

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ABSTRACT: *This study attempts to find the basic principles proposed by Guessoum in harmoniously combining religious knowledge and modern science without sacrificing the essence of both. This study uses a qualitative method with a literature study type of research. Primary data sources are quoted from Nidhal Guessoum's thoughts through several relevant books and journals. At the same time, secondary data is quoted through online media searches such as Sinta, Scopus, Google Scholar, DOAJ, Garuda, Mendeley, Emerald Insight, ScienceDirect, and other media. Data collection techniques use documentation techniques with literature studies from various literature and media, such as books, journal articles, etc. Data is collected and categorized, inventoried, and analyzed critically. The data analysis technique used is content analysis, which includes descriptions and implications. Content analysis provides description, verstehen, interpretation, holistic and reflection. The study results show Guessoum's traces of thought, monuments to integrating modern Islamic education, emphasize an inclusive and comprehensive approach. Guessoum stresses the importance of engaging students in an active learning process and allowing them to develop a deep understanding of Islamic teachings. Guessoum's contributions to modern Islamic education cover many aspects, from integrating religion and science to applying Islamic values in social and global contexts. Guessoum emphasized the need for the integration of faith and science. Guessoum believes Islamic education teaches religious doctrines but includes humanitarian, scientific, cultural, justice, equality, and peace values.*

Penelitian ini berupaya menemukan prinsip-prinsip dasar yang diusulkan oleh Guessoum dalam menggabungkan ilmu agama dan ilmu pengetahuan modern secara harmonis tanpa mengorbankan esensi dari keduanya. Penelitian ini menggunakan metode kualitatif dengan jenis penelitian studi pustaka. Sumber data primer dikutip dari pemikiran Nidhal Guessoum melalui beberapa buku dan jurnal yang relevan. Sedangkan data sekunder dikutip melalui penelusuran media daring seperti Sinta, Scopus, Google

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Socular, DOAJ, Garuda, Mendeley, Emerald Insight, ScienceDirect, dan media lainnya. Teknik pengumpulan data menggunakan teknik dokumentasi dengan studi pustaka dari berbagai literatur dan media, seperti buku, artikel jurnal, dan lainnya. Data dikumpulkan dengan cara mengumpulkan dan mengkategorikan, menginventarisasi, dan menganalisis secara kritis. Teknik analisis data yang digunakan adalah Analisis Isi dengan deskripsi dan implikasi. Analisis isi meliputi deskripsi, verstehen, interpretasi, holistik dan refleksi. Hasil penelitian menunjukkan bahwa jejak pemikiran Guessoum yang menjadi monumen integrasi pendidikan Islam modern menunjukkan penekanan pada pendekatan yang inklusif dan komprehensif. Guessoum menekankan pentingnya melibatkan peserta didik dalam proses pembelajaran aktif dan memberi mereka kesempatan untuk mengembangkan pemahaman yang mendalam tentang ajaran agama Islam. Kontribusi pemikiran Guessoum bagi pendidikan Islam modern meliputi berbagai aspek, mulai dari integrasi agama dan sains hingga penerapan nilai-nilai Islam dalam konteks sosial dan global. Guessoum menekankan perlunya integrasi agama dan sains. Guessoum berpandangan bahwa pendidikan Islam tidak hanya mengajarkan doktrin agama, tetapi juga mencakup nilai-nilai kemanusiaan, ilmiah, budaya, keadilan, kesetaraan, dan perdamaian.

Keywords: *Nidhal Guessoum, Traces of Thought, Educational Integration, Modern Islamic Education.*

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I. INTRODUCTION

The rapid changes of the times with their various uniqueness and sophistication have changed the paradigm of Islamic education today. This illustrates the significant development of modern Islamic education which is more open, universal, and flexible (Kusumaputri et al., 2021; Mustafa, 2020). Education that integrates religious values with modern science is a fundamental foothold to reactivate the golden historical memory of Islamic civilization that does not recognize the dichotomy of science and religion (Prastowo et al., 2023).

After the Abbasid decline, Muslim scholars experienced psychological pressure. They fell asleep for a long time, so the progress of various scientific fields experienced a bottleneck that made the gap between Islam and science. Guessoum, such conditions hurt Muslims with the backwardness of multiple aspects of life, such as social, economic, technological, political, and educational (Herlina, 2023; Huda & Habibi, 2022; Prastowo et al., 2023; Wijaya, 2022).

The dichotomy of religion and science has polarized the education system, especially in Indonesia with the majority of Muslims. As reflected in *pesantren* and madrasah education, which focuses on Islamic sciences, public schools emphasize science and science more by multiplying religious values (Bigliardi, 2018). Various efforts began to unite the spirit of religious and general education. Unfortunately, until now, the Ministry of Religious Affairs and the Ministry of Education have been separate, which makes Islamic education dilemmatic.

The current dichotomy of Islamic education has brought two-sided problems into the vortex. *First*, Islamic education is seen as highly indoctrination, procedural, and ritualistic, which features rigid, robotic, antagonistic, and consumptive faces that end only at the psychomotor level (morality behavior). Second, Islamic education is not present even in the arrangement of humanity, humanities, and the search for science-ecology, giving rise to a worldly, secularistic, and materialistic face that ends only at the cognitive level (Amril, 2021). Simply put, there is no connection between theological-*qouliyah*, humanitarian-*insaniyah* and ecological-*kauniyah* values as the basis of Islamic education (Amril, 2023).

The integration of Modern Islamic Education has become a crucial monument for the integrity of Muslims. It emphasizes that Muslims must be able to develop integrative science by strengthening their hard and soft skills. Similarly, Guessoum stated the need for integrative science because studying both is a religious commandment (Aghajani, 2023).

Some contemporary Muslim scholars have attempted to reconcile the integrative nature of science and religion Nidhal Guessoum. One of the figures who significantly contributed to modern Islamic education's thinking (Khan, 2022). Guessoum is an Algerian astrophysicist and professor at the American University of Sharjah, United Arab Emirates. Guessoum has developed the concept of integrating religion and science known as theistic science (Bigliardi, 2018; Guessoum, 2018a, 2019; Guessoum & Bigliardi, 2023).

This research will review Guessoum's thoughts on integrated Islamic education by elaborating on modern thoughts as a unified whole. Nidhal Guessoum is a Muslim scholar who actively echoes Islamic education relevant to the times' challenges and changes. Guessoum always strives to integrate Islam and modern science, thus creating a holistic and religious values-based education. Guessoum asserted that modern Islamic education must keep pace with the development of science and technology while maintaining a strong religious identity and morality (Aghajani, 2023).

Various studies on Guessoum's thoughts on integration have influenced the development of modern Islamic education. For example *first*, Prastowo et al. (2023) the study results show that integrating theological science applied in *pesantren*-based universities must involve philosophical foundations, the scope of integration, and educational goals. The research uses field studies, and the research results focus on philosophy. In contrast, this research is a literature review of the historical, philosophical, and sociological aspects. *Second*, Herlina (2023) the study aims to find information literacy, part of library science, to understand the integration between science and Islam and its implementation in life. Meanwhile, this research discusses the traces of Nidhal Guessoum's thinking about integrating Modern Islamic education.

Third, Huda & Habibi (2022) this research only focuses on exploring Nidhal Guessoum's thoughts on the Logical Synthesis Between Science and Islam through his book *Islam's Quantum Question: Reconciling Muslim Tradition and Modern Science*. Meanwhile, the author explores the traces of Nidhal Guessoum's thoughts on the integration of Modern Islamic education through his various works. *Fourth*, Kurniawan (2023) explained that the integrative-interconnecting paradigm initiated by Abdullah is a model that transforms dyadic into a triadic paradigm pattern. This triadic pattern is inspired by the epistemology of *Bayani*, *Irfani*, and *Burhani*. This pattern will enable

the current Islamic Religious Universities to provide a higher education system that can adapt to changing circumstances and times with the holy book and inner experience.

Fifth, Ali (2019) research shows the importance of integrating the religious and science curriculum in student boarding schools to eliminate the inherent knowledge dichotomy in society. This scientific integration model is implemented through comprehensive religious studies learning, adapted to each student's major, and promotes a dialogic-interactive approach. The difference in this study is that it analyzes the traces of Guesooum's thought as a monument to the integration of Modern Islamic education. This research is expected to contribute to the development of Islamic education today. This research discusses the traces of Nidhal Guessoum's thought as a monument to the integration of Modern Islamic education.

II. METHOD

This type of research is a literature study exploring Nidhal Guessoum's thoughts on integrating Modern Islamic education (Ridwanulloh et al., 2022). The qualitative approach uses data in the form of narratives or sentences, which is processed systematically to produce conclusions (Khalili, 2022). Primary data sources are quoted from Nidhal Guessoum's thoughts through several relevant books and journals. Meanwhile, secondary data is cited through online media searches such as Sinta.kemdikbud.go.id, Scopus.com., Google Scoular, DOAJ (Directory of Open Access Journal), Garuda, Mendeley.Com., Emerald Insight, ScienceDirect, and other media.

The data collection technique uses documentary techniques (documentation methods) with literature studies from various literature and media, such as books, journal articles, and others. Data is collected categorized, inventoryed, and critically analyzed. The data analysis technique used is content analysis, which includes descriptions and implications. The content analysis consists of a) Description: describing and describing clearly and completely Nidhal Guessoum's thoughts, b) Verstehen: understanding comprehensively, c) Interpretation: after the data is collected and fulfilled for research, the author delves into it, d) Holistic: understanding the data thoroughly, e) Reflection: developing new ideas, f) Heuristic: reflection in bringing up new things related to Islamic education (Husein et al., 2022).

III. RESULT AND DISCUSSION

Biography of Nidhal Guessoum

Guessoum was a professor of Physics and Astronomy who sought to build bridges (epistemic reconciliations) between Islamic tradition and modern science. Nidhal Guessoum was born on 6 September 1960 in Algeria into an intellectual family. His father was a professor of philosophy at the University of Algeria and a hafiz, a graduate of two of the world's leading universities, namely the Sorbonne University, Paris, and Cairo University of Egypt. His mother was a literature lover with a Master's in Arabic literature (Bigliardi, 2018).

His primary education was passed at the Lycee Amara Rachid School in Algeria, which used Arabic and French as its language of instruction. Undergraduate education at Algerian University of Science and Technology, Algeria, Theoretical Physics program,

graduated in 1982, with the best graduate predicate. Master's and Doctoral level education is taken at the University of California, USA. He graduated with a Master's in Physics in 1984 and completed his Doctorate in 1988 with a dissertation entitled *Thermonuclear Reactions of Light Nuclei in Astrophysical Plasmas* (Rofiq & Hasbi, 2021).

After completing his doctorate, Nidhal immediately took a post-doctoral program at the NASA research centre, USA, in 1988-1990, under the direct guidance of Prof. Reuven Ramaty (1937-2001). Reuven Ramaty is a figure at NASA and an expert in gamma-ray astronomy, nuclear astrophysics, and cosmic rays. After completing his post-doctorate, Guessoum returned to Algeria and became a lecturer at the University of Blida, Algeria, from 1990 to 1994. From 1994 to 2000, he moved to Kuwait and became an assistant professor at the College of Technological Studies. In 2000, Nidhal moved to the United Arab Emirates (UAE) and became a full Professor in 2008 at the American University of Sharjah in the Department of Physics, Faculty of Art and Science (Guessoum, 2011).

Nidhal produces many papers in books, proceeding seminars, research results, and international journals for a popular book in Indonesia, namely *Islam's Quantum Question Reconciling Muslim Tradition and Modern Science*. Other works include 1) *Islam Big Bag ed Darwin: Les Quetions Qui Fachent*; 2) *Islam et Science: Comment Consilier Le Corant et La Science Moderne*; 3). *Reconcilier l'Islam et La Science Moderne*; 4) *Itsbat al-Shuhûr al-Hilâliyah wa Musykilah al-Tawqîti al-Islâmi*; 5) *Qishshah al-Qawni*; 6) *Applications of Astronomical Calculations to Islamic Issues*. Nidhal Guessoum, "Science, Education, Philosophy, and More" (Guessoum, 2008, 2010a, 2010b, 2011, 2012, 2014b).

In the late 1990s, Nidhal pursued science, religion, and philosophy. First, Nidhal systematically explores Western science, religion, and philosophy. He read essential works by Barbour, Peacockem Polkinghorne, and Ruse. Nidhal did not forget Islamic philosophy, from al-Ghazali and Ibn Rushd to Iqbal and Nasr. In 2000 together with his colleague Karim Meziane collaborated on a comparison of three variables, namely between cosmology developed by medieval Muslim philosophers, contemporary Islamic thinkers, and modern science. This article attracted much public attention and Nidhal was invited to many workshops and seminars on the relationship between science and Islam (Hanif, 2018; Makiah, 2021; Rofiq & Hasbi, 2021; Soleh, 2018).

According to Nidhal, the common thread of all his intellectual and educational work is that it consists of the following intertwined parts: 1) science is fundamental and relevant to Islam (and to other cultures), 2) science can help to make progress not only materially, but also intellectually, culturally and religiously 3) Science continues to develop and theology must also be so. 4) If we look carefully, there is no pure materialism that opposes the connection between Islam and science (Bigliardi, 2018; Daud, 2019; Ghazali, 2021; Guessoum, 2018a, 2018b, 2020, 2021; Guessoum & Bigliardi, 2023; Hanif, 2018; Herlina, 2023; Huda & Habibi, 2022; Lohlker & Wetchy, 2021; Prastowo et al., 2023; Santi, 2022; Soleh, 2018; Wijaya, 2022; Zulfis, 2019).

Nidhal Guessoum's Quantum Approach as a Basic Integration

The quantum approach that Nidhal Guessoum gave rise to on the integration of religion and science is a pattern of back-and-forth movement based on three principles, namely the principle of non-conflict, layered interpretation, and theistic falsificative (Soleh, 2018).

Non-Conflicting Principles

The quantum approach emphasizes that religion, philosophy, and modern science will never contradict each other because they are "bosom sisters". As Ibn Rushd stated the teachings of theology, philosophy, and science are in harmony, not contradictory. This teaching of harmony by Ibn Rushd occurs in sources, objectives, methods, and content (Makiah, 2021).

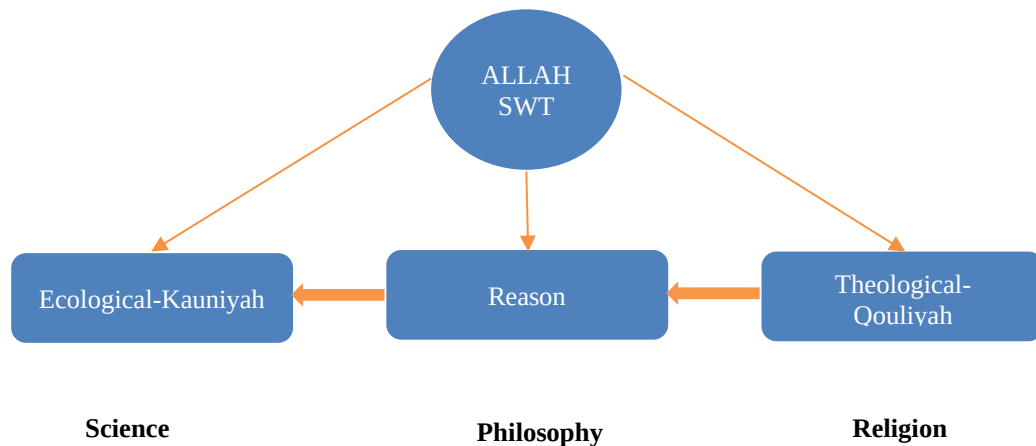


Figure 1. *Nidhal Guessoum's quantum approach model*

Layered Interpretation

The principle of the quantum approach of layered interpretation emphasizes that the interpretation of Qur'anic verses must be carried out in stages, according to one's level of reasoning, so there is no single interpretation. Layered interpretation is inevitable because the level of human reason is indeed different, it cannot be imposed with a single interpretation or only in one perspective. The effort to bring together religion and modern science becomes very open with layered interpretation.

Falsifikatif Theist

The principle of the theistic falsificative quantum approach is closely related to the methodological problems and metaphysical choices it follows. According to Nidhal, it is one of the most essential parts of how science works about methodology. This aspect gives the rules of the game on how science should work (Santi, 2022).

Historically, the scientific method as a way of working science outlined above has been practised since the heyday of medieval Islam. Muslim scientists such as Ibn al-Haytham (965-1040 M), al-Biruni (973-1048 M), and Ibn Sina (980-1037 M) In fact, it places a strong emphasis on experimentation and observation in the way science works and develops. The doctrine of the scientific method then moved and developed in Europe and found its momentum during the Renaissance, especially in the revolution of Nicolaus Copernicus (1473-1543 M) and Galileo Galilei (1564-1642 M) (Soleh, 2018).

Ziauddin Sardar stated that it was from Islam that Europe learned to do logical reasoning, conduct experiments, invent medical ideas, and reinvent Greek philosophy (Herlina, 2023). Most of the components in algebra, geometry, trigonometry, astronomy, mechanics, optics, chemistry, and others that form the foundation of

European science are Islamic. In addition to the scientific method that must be falsifiable, science is also related to the metaphysical aspect or worldview. This aspect becomes the fundamental principle on which a science is built.

Monument of Integration of Modern Islamic Education

Nidhal Guessoum is a Muslim figure who in his time has contributed significantly to the development of modern Islamic educational thought. To face the challenges of the times and integrate Islamic values with the development of science and technology, Muslim thinkers and scholars conducted various research and studies that led to the renewal of Islamic education. A critical aspect of the development of modern Islamic educational thinking in this era is the emphasis on an inclusive and comprehensive approach.

Guessoum argues that Islamic education should include religious and scientific aspects and skills relevant to the modern world (Aghajani, 2023; Amin, 2019). Paradigm aims to form a generation of Muslims who have a strong understanding of religion and the ability to adapt and contribute to a complex and ever-evolving society, which becomes a necessity. Meanwhile, there is an emphasis on using effective and contextual teaching methods (Guessoum, 2018a).

Modern Islamic education is directed to use an evidence-based approach, utilize scientific methodology, and promote critical thinking and intellectual independence (Karim, 2022). Thinkers such as Guessoum stressed the importance of engaging students in active learning processes and providing opportunities to develop a deep understanding of Islamic teachings. The use of technology in learning is an essential focus through digital media, online resources, and distance learning platforms that have been increasingly manipulated in recent times. Guessoum and other scholars highlight the potential of technology to improve the accessibility of Islamic education, facilitate interactive learning, and provide more engaging and impactful learning experiences.

The development of modern Islamic education thought according to Nidhal Guessoum also includes strengthening the role of women in education. Guessoum highlighted the importance of providing equal opportunities for women to access education and develop their potential (Bigliardi, 2018). She stressed the need to overcome gender stereotypes and discrimination in Islamic education so that women can play a full role in community development. Various new approaches were introduced and contributed by thinkers such as Nidhal Guessoum. Modern Islamic educational thought is increasingly developing and relevant to the dynamics of Muslim society today. These ideas provide a strong foundation for efforts to update and improve the quality of Islamic education so that Muslims can face the challenges of the times with a more comprehensive and relevant understanding of religion (Ulum et al., 2023).

In addition, Nidhal Guessoum sees the importance of modern Islamic educational thinking that emphasizes individual empowerment through a skill- and competency-oriented approach (Lohlker & Wetchy, 2021). Guessoum and other scholars recognize the importance of developing 21st-century skills in Islamic education, such as critical thinking, creativity, cooperation, and problem-solving skills (Ghazali, 2021; Guessoum, 2018a, 2018b).

This reflects a paradigm shift in Islamic education that is more likely to empower individuals to face the complexity and dynamics of the modern world. Through his contributions to modern Islamic educational thought, Nidhal Guessoum has left

valuable traces of thought in enriching Islamic education's academic discourse and practice. His innovative and inclusive works have inspired many to update Islamic education's paradigm according to the demands of the times (Solikhudin, 2016).

Guessoum put forward the idea that modern Islamic education should be able to combine traditional heritage and the challenges of the times. He stressed the importance of understanding religious teachings contextually and relevantly in an era of turmoil and dynamics (Guessoum & Bigliardi, 2023). In Guessoum's view, modern Islamic education should prepare individuals for the complexities of an increasingly globalized world, promote critical thinking, and encourage active participation in society (Agoramoorthy, 2022; Guessoum, 2018b). Nidhal Guessoum's contribution to modern Islamic educational thinking is reflected in his thought-provoking works and provides a new outlook on education based on Islamic values and modern science (Guessoum, 2013, 2014a, 2018a, 2018b, 2020, 2021). To formulate a paradigm of Islamic teaching that is by the times, Guessoum's thought has become an essential reference for Islamic education thinkers, practitioners, and academics.

Guessoum stresses the importance of a rational and critical approach to understanding and interpreting Islamic religious texts (Faizin, 2020). He argued that Islamic education should encourage critical and analytical thinking that enables Muslims to understand religious texts contextually and relevant to today's conditions. In his view, modern Islamic education should prepare individuals to face the complexities of the modern world and become active contributors to society (Guessoum, 2022). Islamic education has undergone a significant transformation along with the changing times and the demands of contemporary culture (Esposito & Shahin, 2016). Nidhal Guessoum, as a dedicated scholar, has gone to great lengths to formulate Islamic educational thinking that is appropriate to today's context (Huda & Habibi, 2022). He advocated the importance of adapting Islamic education to the development of science, technology, and internationally recognized universal values (Khan, 2022). Modern Islamic education results from transformation and adaptation in response to the demands of the growing times (Halim & Amril, 2022; Jubaidah et al., 2023; Miswanto & Halim, 2023). This education relies on tradition and integrates religious values with modern science.

One of Nidhal Guessoum's significant contributions is promoting inclusive and tolerant education (Guessoum, 2018a; Sabiq, 2022). He argued that modern Islamic education should open doors to plurality and respect societal differences. Guessoum stresses the importance of building a framework of thought that enables interfaith dialogue and values the positive contributions of different traditions and thought (Al-Attas, 2021; Zulfis, 2019). In his thinking, Guessoum raised the importance of integrating Islamic values with modern science and technology in Islamic education (Herlina, 2023). He invited me to see Islamic education as an opportunity to strengthen the roots of Islamic tradition while remaining open to the development of science and social changes that occur. Thus, modern Islamic education does not only focus on ritualistic aspects, but there are efforts to develop academic potential, social skills, and contextual understanding of world reality.

Guessoum views modern Islamic education as an essential means of forming Muslim individuals who are competitive, critical, and have a deep understanding of religious teachings and scientific thought. He stressed the need to develop education that enables young Muslims to contribute actively to building a just and harmonious society and respond to the times' challenges with wisdom and wisdom (Santi, 2022).

In addition, Guessoum highlighted the need to strengthen character education in modern Islamic education (Hashim, 2020). He stressed the importance of developing moral and ethical traits in education, such as integrity, fairness, and empathy (Kamali, 2021). According to Guessoum, quality modern Islamic education does not merely go beyond the academic aspect but includes the formation of a strong and responsible personality (Sid-Ahmed, 2023). This approach reflects the importance of seeing modern Islamic education as a means to form individuals who are not only believers but also able to adapt and innovate in a diverse and ever-changing society.

Guessoum encourages a balance between religious and scientific aspects in modern Islamic education. He stressed the importance of strengthening the foundation of religious teachings in education while making room for knowledge and innovation from modern science (Guessoum & Bigliardi, 2023). In his view, modern Islamic education should not be trapped in backwardness but should be progressive and by the demands of the times. Through his critical and innovative thinking, Nidhal Guessoum has significantly contributed to the development of modern Islamic educational thinking (Said, 2021). In today's global challenges, Guessoum's thinking is a source of inspiration for Islamic education educators, thinkers, and practitioners in formulating comprehensive, inclusive, and progressive education.

The Contribution of Nidhal Guessoum's Thought to Modern Islamic Education

Nidhal Guessoum has made valuable contributions to modern Islamic educational thinking through his innovative works and thoughts. Guessoum's thought covers various aspects of Islamic education, from integrating religion and science to applying Islamic values in social and global contexts (Guessoum, 2018a). One of the most important contributions of Guessoum was its emphasis on integrating faith and science. He encouraged a holistic approach to Islamic education by combining religious understanding and rational scientific knowledge (Makiah, 2021). Guessoum argues that the strength and superiority of Islam as a religion is its ability to dialogue with modern science and enrich the understanding of the universe and humanity (Duderija, 2019; Prastowo et al., 2023). Guessoum's contribution in this regard has inspired many thinkers and educators to integrate religion and science in the context of modern Islamic education.

In addition, Guessoum also focuses on applying Islamic values in complex social and global contexts. He encouraged Islamic education that teaches religious doctrine and promotes human, scientific, cultural, justice, equality, and peace values (Guessoum, 2019). Guessoum argues that Islamic education should prepare individual Muslims to become agents of positive change in society and contribute to the building of a better world (Abdullah, 2020). His contribution has paved the way for the development of Islamic education, which is responsive to the social and global issues facing Muslims today (Suresman et al., 2023). Guessoum also significantly contributed to promoting a critical approach to modern Islamic education. He encouraged Muslims to develop critical and analytical thinking skills in understanding religious teachings, inviting them not to take it for granted without deep reflection and research (Ghazali, 2021; Guessoum, 2018b; Lohlker & Wetchy, 2021). Guessoum's contribution in this regard has built a generation of Muslims who can understand religious teachings with critical thinking and can face intellectual and moral challenges in everyday life.

Guessoum also pays special attention to science education in the context of modern Islamic education. He promoted the integration of religion and science and stressed the

importance of understanding and applying science principles in interpreting religious understanding. His contribution to strengthening the link between science and religion in modern Islamic education has opened new horizons for educators and academics in developing inclusive and holistic learning approaches (Ghazali, 2021; Guessoum, 2018a, 2018b). In his thinking, Guessoum encourages dialogue and mutual understanding between Muslims and non-Muslims. He championed constructive and respectful interreligious dialogue to build harmonious relations between religious communities and overcome frequent polarization and conflict (Rofiq & Hasbi, 2021). Guessoum's contribution has impeded efforts to build mutual respect and cooperation among religious communities in modern Islamic education.

In addition, Guessoum also makes an essential contribution to promoting an inclusive approach and respecting diversity in modern Islamic education. He stressed the need to overcome narrow and stereotyped understandings of Islam and Muslims and encourage intercultural dialogue and positive interaction between Muslims and non-Muslims (Huda & Habibi, 2022). Guessoum's contribution has helped create an inclusive educational environment where all individuals, regardless of cultural and religious background, can participate and contribute to the learning process (Wangid et al., 2018).

In addition to his contributions to modern Islamic education, Nidhal Guessoum also made essential contributions to promoting moderate thought and tolerance in the Islamic context. She seeks to address extremism and intolerance that often occur in Muslim societies by championing inclusive understanding, interfaith dialogue, and respect for diversity. Guessoum stressed the importance of establishing harmonious relations between Muslims and the global community. He encouraged Muslims to develop an open, inclusive, and responsive understanding of Islam in changing times and to contribute positively in an increasingly connected global context. Guessoum's contribution in this regard has helped broaden the horizons of Muslims and opened up space for dialogue and cooperation with non-Muslim communities.

In addition, Guessoum is also active in promoting intercultural dialogue and positive interaction between religious communities. It seeks to overcome misunderstandings and stereotypes between the two sides by building bridges of understanding and mutual respect. His contribution in strengthening intercultural relations has helped create a more harmonious and respectful environment between religious communities (Kusumaputri et al., 2021). Through his thoughts and contributions in promoting moderate thought, tolerance, and dialogue, Nidhal Guessoum has become essential in building an inclusive understanding of Islam and strengthening harmonious relations between Muslims and the global community. His work and efforts to tackle extremism and build a sense of mutual respect have significantly contributed to responding to challenges and opportunities in an increasingly connected world.

In his thoughts, Guessoum also stressed the importance of strengthening understanding and love for Islamic intellectual and cultural heritage. He encouraged Muslims to study and appreciate the scholarly heritage of Islam, as well as to explore their intellectual potential in fields such as science, philosophy, literature, and the environment. Guessoum's contribution has impetus to the renewal of Islamic education by enriching the curriculum and learning approaches to cover broad intellectual and cultural aspects (Siswanto et al., 2019). In addition, Guessoum also advocates an educational approach based on ethical and moral values in an Islamic context. He stressed the importance of strengthening character-building and universal values such as justice, empathy, and

integrity in modern Islamic education (Kusumaputri et al., 2021). His contribution in this regard has helped develop a more holistic educational paradigm, which not only focuses on the academic aspect but also shapes good morals and creates a generation of responsible and ethical Muslims. With his various contributions to modern Islamic educational thinking, Guessoum has left valuable traces of thought in updating and developing Islamic educational approaches that are relevant to the times. Its innovative and inclusive thinking provides a solid foundation for promoting deep understanding, critical thinking, and attitudes responsive to social and global change.

IV. CONCLUSION

Guessoum's thinking shows modern Islamic educational thought emphasizes an inclusive and comprehensive approach. The approach is evidence-based and scientific and emphasizes critical thinking and intellectual independence. Guessoum emphasizes the importance of involving students in an active learning process and providing them with opportunities to develop a deep understanding of Islamic teachings. Combining religious understanding with scientific and rational knowledge, the strength and excellence of Islam as a religion is its ability to dialogue with modern science and enrich the knowledge of the universe and humans. The contribution of Guessoum's Thought to Modern Islamic Education covers various aspects, from the integration of religion and science to the application of Islamic values in social and global contexts. Guessoum emphasizes the need for the integration of religion and science. He encourages a holistic approach to Islamic education by combining religious understanding and rational scientific knowledge. Guessoum views Islamic education as a teaching of religious doctrine and includes humanitarian, scientific, cultural, justice, equality, and peace values. Guessoum argues that Islamic education should prepare Muslim individuals to become agents of positive societal change and contribute to building a better world.

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VI. REFERENCES

- [1] Abdullah, W. M. N. W. D. (2020). *Progressive Muslims and Islamic Education: The Responses and Contributions of the Gulen Movement*. London: Routledge.
- [2] Aghajani, J. D. (2023). Muslims' lifeworld during the pandemic and humanistic interpretation of Religions. *Contemporary Islam*, 0123456789. <https://doi.org/10.1007/s11562-023-00530-z>
- [3] Agoramoorthy, G. (2022). India's outburst of online classes during COVID-19 impacts the mental health of students. *Current Psychology*, 41(10), 7429–7430. <https://doi.org/10.1007/s12144-021-01745-0>
- [4] Al-Attas, S. M. N. (2021). *Islam and Secularism*. Kuala Lumpur: ISTAC.

- [5] Ali, N. (2019). Pengorganisasian kurikulum dan pembelajaran pada sekolah kejuruan di lingkungan pesantren. *J-MPI: Jurnal Manajemen Pendidikan Islam*, 4(1), 48–59. <https://doi.org/10.18860/jmpi.v4i1.7433>
- [6] Amin, A. B. (2019). *The Reconstruction of Religious Thought in Islam: Encountering the Modern World*. New York: Palgrave Macmillan. <https://doi.org/10.30997/jgs.v8i1.5045>
- [7] Amril, M. (2021). *Pendidikan Nilai Akhlak: Telaah Epistemologis dan Metodologis Pembelajaran Di Sekolah* (1st ed.). Depok: Rajawali Pers.
- [8] Amril, M. (2023). Meraih Kecerdasan Spiritual. In *RiauPos.co* (Dikuti pad). <https://riaupos.jawapos.com/petuah-ramadan/08/05/2022/250365/meraih-kecerdasan-spiritual.html>.
- [9] Bigliardi, S. (2018). Review: The Young Muslim's Guide to Modern Science By Nidhal Guessoum. *Zygon*, 53(4), 1149–1151. <https://doi.org/10.1111/zygo.12465>
- [10] Daud, I. (2019). Islam dan Sains Modern (Telaah Pemikiran Nidhal Quessoum Dalam Karyanya Islam's Quantum Question, Reconciling Muslim Tradition And Modern Science). *Jurnal Al-Muta'aliyah STAI Darul Kamal NW Kembang Kerang*, 4(1). <https://core.ac.uk/download/pdf/229128413.pdf>
- [11] Duderija, A. (2019). *Constructing a Religiously Ideal "Believer" and "Woman" in Islam: Neo-traditional Salafi and Progressive Muslims' Methods of Interpretation*. Leiden: Brill.
- [12] Esposito, J. L., & Shahin, E. E.-D. (2016). *The Oxford Handbook of Islam and Politics*. Oxford: Oxford University Press.
- [13] Faizin, F. (2020). Kisah Al-Qur'an dalam Tinjauan Sains (Studi atas Serial Tafsir Ilmi Kementerian Agama RI). *Al Quds : Jurnal Studi Alquran Dan Hadis*, 4(1), 77. <https://doi.org/10.29240/alquds.v4i1.1106>
- [14] Ghazali, Z. (2021). Literasi Informasi Dalam Memahami Pemikiran Nidhal Guessoum Tentang Integrasi Antara Sains Dan Agama Islam. *Syi'ar: Jurnal Ilmu Komunikasi, Penyuluhan Dan Bimbingan Masyarakat Islam*, 4(1), 33–48. <https://doi.org/10.37567/syiar.v4i1.535>
- [15] Guessoum, N. (2008). The Qur'an, Science, And The (Related) Contemporary Muslim Discourse. *The Qur'an, Science*, 43(2), 411–431.
- [16] Guessoum, N. (2010a). n Guessoum, "Science, Religion, And The Quest For Knowledge And Truth: An Islamic Perspective. *Cult Stud of Sci Educ*, 5, 55–69. <https://doi.org/10.1007/S11422-009-9208-3>
- [17] Guessoum, N. (2010b). Religious literalism and science-related issues in contemporary islam. *Zygon*, 45(4), 817–840. <https://doi.org/10.1111/j.1467-9744.2010.01135.x>
- [18] Guessoum, N. (2011). Islam Quantum Question: Reconciling Muslim Tradition and

Modern Science. *I.B.Tauris and Co Ltd*, 7823–7830.

- [19] Guessoum, N. (2012). Issues and agendas of islam and science. *Zygon*, 47(2), 367–387. <https://doi.org/10.1111/j.1467-9744.2012.01261.x>
- [20] Guessoum, N. (2013). *Astrophysics: Time for an Arab astronomy renaissance*. <https://doi.org/10.1038/498161a>
- [21] Guessoum, N. (2014a). Science and Religion: Christian and Muslim Perspectives. Edited by David Marshall. *Journal of Islamic Studies*, 25(2), 252–255. <https://doi.org/10.1093/JIS/ETT073>
- [22] Guessoum, N. (2014b). Science and Religion: Christian and Muslim Perspectives. In *Book Reviews* (Issue Juni, pp. 397–400). American University of Sharjah, UAE.
- [23] Guessoum, N. (2018a). Is Liberal Arts Education a Good Model for Arab Universities? *Universities in Arab Countries: An Urgent Need for Change: Underpinning the Transition to a Peaceful and Prosperous Future*, May, 1–317. <https://doi.org/10.1007/978-3-319-73111-7>
- [24] Guessoum, N. (2018b). Science and Religion Issues in Higher Education. *Universities in Arab Countries: An Urgent Need for Change: Underpinning the Transition to a Peaceful and Prosperous Future*, May 2018, 1–317. <https://doi.org/10.1007/978-3-319-73111-7>
- [25] Guessoum, N. (2019). *Reformist Muslims in Europe: The Emergence of a Euro-Islamic Public Sphere*. New York: Palgrave Macmillan.
- [26] Guessoum, N. (2020). Let Arab space programmes create more space for Arab scientists and students. *Nature*. <https://doi.org/10.1038/d41586-020-02096-9>
- [27] Guessoum, N. (2021). *Randomness in the Cosmos*. https://doi.org/10.1007/978-3-030-75797-7_4
- [28] Guessoum, N. (2022). *Reimagining Islamic Education: Towards a Contemporary Paradigm*. London: Routledge.
- [29] Guessoum, N., & Bigliardi, S. (2023). Islam and Science. *Routledge Companion to Religion and Science*, 45–57. <https://doi.org/10.1017/9781009266550>
- [30] Halim, A., & Amril, M. (2022). Kurikulum Pendidikan Agama Islam Dalam Pusaran Problematika Kelompok Reformis/Modernis Dan Implementasinya Terhadap Pembelajaran. *Arriyadhah*, 19(2), 21–31. <https://jurnalstaiibnusina.ac.id/index.php/ary/article/view/127>
- [31] Hanif, A. (2018). Nidhal Guessoum Dan Alternatif Perkembangan Sains Islam. *Al-Adabiya: Jurnal Kebudayaan Dan Keagamaan*, 13(1), 102–124. <https://doi.org/10.37680/adabiya.v13i01.6>
- [32] Hashim, R. (2020). *Islamic Education in the 21st Century: Transformations and Challenges*. In *Abingdon: Routledge*. Abingdon: Routledge.

- [33] Herlina, L. (2023). Science, Methods in Science, and Contributions of Muslim Scientists to the Development of Science: Analysis of Nidhal Guessoum's Thought. *Jurnal Penelitian Pendidikan IPA*, 9(4), 1854–1860. <https://doi.org/10.29303/jppipa.v9i4.3661>
- [34] Huda, M. M., & Habibi, D. F. (2022). Nidal Guessoum Perspective on A Logical Synthesis Between Science And Islam. *Jurnal Studi Sosial Keagamaan Syekh Nurjati*, 2(2), 157–170. <https://doi.org/10.24235/sejati.v2i2.34>
- [35] Husein, S., Nik Abdullah, N. M. S. A., & Al-Hidabi, D. A. Y. (2022). Enhancing the Development of Students' Islamic Identity in Islamic Higher Education. *Progresiva : Jurnal Pemikiran Dan Pendidikan Islam*, 11(2), 87–103. <https://doi.org/10.22219/progresiva.v11i02.23094>
- [36] Jubaidah, S., Halim, A., Riduan, M., & Kadir, S. A. (2023). Konsep Universitas Islam Hamid Hasan Bilgrami & Syed Ali Asyraf Sebuah Pengembangan Pendidikan Islam. *Arriyadhah*, 20(2), 90–99. <https://jurnalstaiibnusina.ac.id/index.php/ary/article/view/224>
- [37] Kamali, M. H. (2021). *The Dignity of Man: An Islamic Perspective*. Petaling Jaya: Ilmiah Publishers.
- [38] Karim, P. (2022). *Muslim Education in the 21st Century: Asian Perspectives*. Singapore: Routledge.
- [39] Khalili, S. (2022). Characteristics of human agency in liberal and Islamic religious education based on the national core curricula of Finland and Iran. *British Journal of Religious Education*, 44(1), 53–65. <https://doi.org/10.1080/01416200.2021.1874874>
- [40] Khan, I. A. (2022). *Reformasi Pendidikan Islam di Era Kontemporer*. Bandung: Mizan.
- [41] Kurniawan, Z. (2023). Analysis of Employee Performance Through Islamic Work Environment Factors. *Al-Hayat: Journal of Islamic Education*, 6(1), 230–239. <https://doi.org/10.35723/ajie.v6i1.325>
- [42] Kusumaputri, E. S., Muslimah, H. L., Ahmad, A., & Nurwardani, M. (2021). Positioning indonesian islamic higher-education vis-a-vis globalisation: Organisational-resilience dynamics. *Cakrawala Pendidikan*, 40(2), 413–427. <https://doi.org/10.21831/cp.v40i2.39357>
- [43] Lohlker, R., & Wetchy, M. (2021). Colliding Epistemologies: Reflections on Nidhal Guessoum. *Interdisciplinary Journal for Religion and Transformation in Contemporary Society*, 7, 426–446. <https://doi.org/10.30965/23642807-bja10024>
- [44] Makiah, Z. (2021). Rekonsiliasi Islam Dan Sains Dalam Perspektif Nidhal Guessoum. *Khazanah: Jurnal Studi Islam Dan Humaniora*, 19(1), 61. <https://doi.org/10.18592/khazanah.v19i1.4150>
- [45] Miswanto, & Halim, A. (2023). Inovasi Dalam Kurikulum Pendidikan Islam untuk

- Meningkatkan Karakter dan Etika Siswa. *Journal on Education*, 06(1), 17279–17287. <https://doi.org/10.31004/joe.v5i4.4132>
- [46] Mustafa, A. (2020). *Sejarah Pendidikan Islam Modern: Antara Tradisionalisme dan Modernisasi*. Jakarta: Pustaka Pelajar.
- [47] Prastowo, A., Suharto, T., & Widodo, S. A. (2023). Harmonizing Knowledge Integration: Insights from Amin Abdullah and Nidhal Guessoum in Pesantren-Based Higher Education. *Al-Ishlah: Jurnal Pendidikan*, 15(3), 3110–3119. <https://doi.org/10.35445/alishlah.v15i3.3703>
- [48] Ridwanulloh, M. U., Huda, S., & Umam, R. (2022). Innovative Leadership Management: The Pattern of School Quality Development at SMP Muhammadiyah 2 Inovasi Malang. *Progresiva : Jurnal Pemikiran Dan Pendidikan Islam*, 11(1), 25–42. <https://doi.org/10.22219/progresiva.v11i01.20742>
- [49] Rofiq, N., & Hasbi, M. Z. N. (2021). Mendamaikan Tradisi Muslim dan Ilmu Pengetahuan Modern Kajian Eksploratif Pemikiran Nidhal Guessoum. *The International Journal of Pegon: Islam Nusantara Civilization*, 6(2), 1–16. <https://doi.org/10.51925/inc.v6i02.51>
- [50] Sabiq, S. (2022). *Iqra' al-Quran: Mengenal dan Memahami Metode Pembelajaran Al-Quran*. Yogyakarta: Pustaka Belajar.
- [51] Said, A. A. (2021). *Education in Modern Islamic Philosophy*. London: I.B. Tauris.
- [52] Santi, S. (2022). Islamic Cosmology in Sayyed Hossein Nasr, Zaghoul al-Najjar, and Nidhal Guessoum's Perspective. *Kalam*, 16(2), 131–156. <http://dx.doi.org/10.24042/klm.v16i2.8688>
- [53] Sid-Ahmed, M. (2023). *Islamic Education: Diversity and National Identity*. Leiden: Brill.
- [54] Siswanto, Karimullah, Prasetyawati, R., & Nurhayati. (2019). Environmental cultured education and its implication on the student's competencies in an adiwiyata school. *Cakrawala Pendidikan*, 38(3), 552–564. <https://doi.org/10.21831/cp.v38i3.23154>
- [55] Soleh, A. K. (2018). Pendekatan Kuantum Dalam Integrasi Agama Dan Sains Nidhal Guessoum. *Ulul Albab Jurnal Studi Islam*, 19(1), 119. <https://doi.org/10.18860/ua.v19i1.4937>
- [56] Solikhudin, M. (2016). Rekonsiliasi Tradisi Muslim Dan Sains Modern Telaah Atas Buku Islam's Quantum Question Karya Nidhal Guessoum. *Kontemplasi*, 4(2). <https://doi.org/10.21274/kontem.2016.4.2.403-422>
- [57] Suresman, E., Febrianti, F. A., & Dallyono, R. (2023). Implementation of i-Spring Suite to improve students' learning for critical thinking skills in natural science. *Cakrawala Pendidikan*, 42(2), 433–446. <https://doi.org/10.21831/cp.v42i2.53646>
- [58] Ulum, F. B., Halim, A., & Oktanovia, M. A. (2023). Pengembangan Pembelajaran

Pendidikan Agama Islam Berbasis Integrasi Islam Dan Sains Perspektif Hadis. *Arriyadhah*, 20(2), 79–89.
<http://jurnalstaiibnusina.ac.id/index.php/ary/article/view/223>

- [59] Wangid, M. N., Mustadi, A., & Putri, A. R. (2018). Fairy Storry Integration For Meaningful Classroom. *Cakrawala Pendidikan*, 37(2), 7823–7830.
<https://doi.org/0.21831/cp.v37i2.19516>
- [60] Wijaya, M. M. (2022). Integration of Science and Religion in Methodological Review: Analysis of Miracle Verses. *Nizham Journal of Islamic Studies*, 10(2), 36.
<https://doi.org/10.32332/nizham.v10i02.5449>
- [61] Zulfis. (2019). *Sains Dan Agama Dialog Estimilogi Nidhal Guessoum Dan Kel Wiber*. Ciputat: Sakata Cendekia.