

International Conference on Islam, Law, and Society (INCOILS) Conference Proceedings 2024

Modernization of Islamic Religious Education Learning Based on Science at SMA Trensains Muhammadiyah Sragen: Ismail Raji Al-Faruqi's Perspective

Zainal Arifin¹, Sa'adi², Muhammad Aji Nugroho³, Ruwandi⁴

1,2,3,4Program Doktor Pascasarjana UIN Salatiga

arifinzamann3@gmail.com¹, saadi@uinsalatiga.ac.id², khoira2013@gmail.com³,

pakruwandi8@gmail.com⁴

ABSTRACT:

The Islamization of science echoed by Ismail Raji al-Faruqi is contradictory. Some opinions state that science and Islamic education are two elements that cannot be combined because they have different foundations. Science is identical to western culture and doctrine, while Islamic education is more inclined towards the aspect of religiosity. This study aims to describe the pattern of education at Trensains and to find out the Islamization of science by Ismail Raji al-Faruqi at SMA Trensains as well as the implementation and implications of the Islamization of science at SMA Trensains ragen. This study is a field study with an ethnographic approach. The data collection process uses interviews, observations and documentation. The results of the study show that the education Pattern at Trensains uses a unification curriculum that integrates Science and religion. Furthermore, the approach to education based on science and religion in schools is in line with Ismail Rajis opinion by emphasizing mastery of science, study of Al-Qur'an interpretation related to natural phenomena, and learning the history of Muslim scientists. The implementation of the Islamization of science is reflected in the planning and implementation given by teachers such as providing contemporary examples in learning. The implications of Islamization in Trensains include several aspects, namely curriculum development, contextual and spiritual teaching methodology, and the formation of critical student character based on the values of monotheism.

Key words: Islamization of Knowledge, Sains, Islamic Education

INTRODUCTION

The echo of the decline of Islam was marked in the 13th century coinciding with the Ottoman Turks. The decline occurred in aspects of learning, learning culture, and even thinking. The lack of knowledge about Islam and errors in its application were the main causes of the decline of Islamic education during the Ottoman era. Ijtihad stopped, which resulted in the way of thinking becoming frozen, rigid, and stagnant. As a result, when Europe advanced with various scientific and industrial discoveries, society became hesitant to adopt or not what came from the West(Hasnahwati, 2020). The condition of decline is so drastic that it gives rise to jealousy and mirage dreams towards the development of Western scientific knowledge. (Suyadi et al., 2022). As a result, Muslims turn to literalism and legalism, jumud, blind faith, or submission to their leaders or other authority figures. Muslims view Western progress as something truly extraordinary.

Islam's admiration for the West, then gave birth to plug and play Western thinking which was simply left alone (Firman, 2023). As a result, Muslims have adopted various Western viewpoints without any filtering. Al-Faruqi asserts that the Islamic education system and the daily life of society show dualism as a result of "malaism." Nevertheless, Muslims have taken advantage of the secular education system in the West(Daulay et al., 2024). Scholars and Muslims in academic circles have not been able to create anything that can match the ingenuity and splendor of the West. This problem is caused by the absence of Islamic insight, or the spirit of vertical insight, throughout the Islamic world. Al-Faruqi experienced what is known as "lack of vision" as a symptom of this. Losing something real that needs to be fought for until it is achieved. However, the most striking problem is actually, Muslims in viewing Education, do not fulfill its epistemological dimension. So that an idea that is born relies solely on the subjectivity of civilization.

Al-Faruqi felt that improvements in the field of Islamic philosophy were needed to realize a better future. This meant that Muslims needed to master the fields of contemporary science as well as science that had been abandoned by Islam. Islamization of science, or combining new knowledge with Islamic tradition by eliminating, changing, reinterpreting, and modifying its constituent parts according to Islamic principles, was one of his methods.(Ismail Al-Faruqi, 1982).

The decline of the Islamic world in the field of education after the golden age is often considered to be the result of various external and internal factors, including military attacks, unstable politics, and changing attitudes towards science and philosophy. However, in the midst of this decline, a number of Muslim philosophers continued to show concern and tried to save and develop science. They were not only active in intellectual discussions, but also in the formation of institutions, writing scientific works, and fighting against intellectual stagnationl(Fauzi Muhammad, 2017). Several Islamic philosophers who were concerned with the decline of Islamic education developed education from several aspects, one of which was Ibn Kemal. The decline of the Islamic world in the field of education after the golden age is often considered to be the result of various external and internal factors, including military attacks, unstable politics, and changes in attitudes towards science and philosophy. However, in the midst of this setback, a number of Muslim philosophers continue to show a caring attitude and try to save and develop science. They were not only active in intellectual discussions, but also in the formation of institutions, writing scientific papers, and fighting against intellectual stagnation. Apart from that, in the following periods, Islamic thinkers such as Naquib al-Attas, Ismail Raji and others developed with the development of the Islamization of Science(Ahmad Suryadi, 2024).

Islamic Religious Education and Science are indeed very diferent, both have their own backgrounds in the practice of their knowledge. Islamic Religious Education is identical in its relationship with Middle Eastern teachings, both from social and cultural perspectives. While Science is more inclined towards Western things which are also identical to western thinking both from social, religious and Western culture perspectives (Arifin Zainul, 2008). Many people doubt that Islamic religious knowledge cannot be combined with Western science because they are afraid of a mixture of sciences which is feared to cause a long-term problem. Some groups also consider that religion and science are DIFERENT because religion is willing to accept supernatural and uncertain things based only on observable factors from faith and belief, while science relies on empirically supported data to determine what is real and what is not (Rusdiana, 2014).

Some Muslim scholars and philosophers, especially from traditionalists and *fiqh* experts, have the view that Islamic religious education cannot be combined with other sciences, especially secular or rational sciences such as philosophy, science, and mathematics. They argue that religious science has different characteristics, goals, and

methods from rational sciences, so combining them will cause confusion and can even damage the spiritual values contained in Islamic education (Dzilo, 2012).

One example of the opinion of scholars is Al-Ghazali, in his work *Ihya Ulum al-Din*, emphasizing that the sciences related to religion have a higher position because they are related to the afterlife. He even stated that the sciences of philosophy, logic, and science only have limited value, and if not used properly, can lead someone to doubt or even astray. As a result of this, Islamic education seems to be an education that is left behind the times (Syamsul Rizal, 2018). Another example is Kemal Atatürk who adopted the Western education system and reduced the role of traditional *madrasalis*. Conservative scholars considered that this secular educational approach would erode faith and damage the morals of the young generation of Muslims. As time went by, Islamic thinkers such as Amin Abdullah, the Integration-Interconnection Paradigm, which aims to reunite or make these two sciences interrelated with each other, did not stand alone. His thinking was greatly influenced by M. Abid al-Jabiri who initiated the trilogy of epistemology, namely: bayani epistemology, *'irfani* epistemology, and *burhani* epistemology. Al-Jabiri was a famous philosopher in his time (Masyitoh et al., n.d.)

Islamic education in Indonesia is growing rapidly following the development of technology and science. Several educational institutions in Indonesia have begun to introduce science-based programs in learning. The science program that has been echoed lately is a progressivism from the previous one, namely the interests in schools equivalent to high school (Unik et al., 2022). Previously there were program interests such as Science, Social Studies and Language, even in Madrasah schools there were interests such as Religion. The progressivism of Science which is currently booming has developed again into an Educational Institution that focuses on Science, one of which is SMA Trensains. This Islamic boarding school-based school includes Science learning at school and in the dormitory, educational institutions like this can produce Muslim intellectual figures who can understand Science and religion with the interconnection and integration therein. Islamic education which has been lagging behind for decades has begun to follow suit by carrying out the Islamization of knowledge. With this explanation, the researcher is interested in seeing and analyzing Islamic schools based on Science from the perspective of the Islamization of Knowledge of Ismail Raji 'al-Faruqi.

Methods

The type of research used is the Qualitative Descriptive method with an ethnographic approach. Qualitative research method is a way used to answer problems

related to data in the form of narratives source from interview activities, observations and document excavations. Research methods are research plans and procedures that include steps ranging from broad assumptions to detailed methods in collecting, analyzing and interpreting data. (Creswell, 2019). The data collection techniques in this study used several methods, namely interviews, observation and documentation (Narbuko, 2015).

The data analysis technique used has several stages, the first is data reduction, which is a process of critical and sensitive thinking and the breadth of understanding of the results of the research conducted, in this case the Islamization of science in SMA Trensains Muhammadiyah Sragen. The next step is data presentation, after being carefully and critically reduced, the data is presented in the narrative form, brief descriptions or charts that have relationships between categories. The last is data verification using triangulation techniques to verify that the data obtained can really be said to be valid.

Education Pattern of Muhammadiyah Sragen Trensains High School

SMA Trensains is a modern Islamic boarding school that is characterized by science and research and implements a unified curriculum. Vision of SMA Trensains: "The birth of a generation that holds fast to the Qur'an and As-Sunnah, loves and develops science, and has philosophical depth and moral nobility." The mission as an elaboration of the vision is, a) Organizing an educational process that instills an understanding and love for the Qur'an and As-Sunnah. b) Providing an environment for the development of scientific attitudes, logical philosophical thinking and responsiveness and exploring nature, both material and immaterial, with its various phenomena. c) Leading students to pursue higher levels of education in the field of nature.

This educational institution has a grand vision to produce a generation that not only excels in science, but also has a deep love for the Qur'an and As-Sunnah as a foundation for life. Through an integrated educational process, this institution instills religious values while encouraging students to develop a logical, philosophical, and reflective scientific mindset. By providing an environment that supports exploration of natural phenomena, both material and immaterial, students are invited to understand the greatness of the Creator through science. In addition, this institution is also committed to guiding students to continue their education to a higher level, especially in the field of nature, so that they are able to become a generation that not only understands theory but also has a real contribution to the development of science based on spiritual values. Through this holistic approach, it is hoped that people will be born who are responsive to

the challenges of the times, have noble morals, and are ready to provide benefits to the people and the world.

The Unification Curriculum serves as the foundation for SMA Trensains Muhammadiyah Sragen. The following definitions and characteristics apply to the Unification Curriculum: The term "unificative" or "unification" refers to combination or unification. Integration is another term that complements unification. Trensains' main concept of returning the Qur'an as the epistemological foundation for science and its relationship is seen embodied by the terms "unification" and "integration." Technically, the Unification Curriculum is an adaptable curriculum that combines the standard pesantren curriculum with the national education curriculum. The purpose of this adaptation is to provide Trensains with a clear curriculum model and teaching methods to achieve its goals. Philosophically and in terms of content, the Unification Curriculum consists of three main components:

- a. Quran material (Quran curriculum)
- b. Science material (science curriculum)
- c. Language material (language curriculum)

Some activities that support the Islamization of Science at Trensains High School include: (Kurikulum Trensains Muhammadiyah Sragen, n.d.)

- a. Kegiatan Riset dan Obserfasi
- b. Fismath Camp
- c. Tahajud Fisika (Midnight)
- d. MIPA Club
- e. Bimbingan Atlet Olimpiade
- f. Kuliah Umum dan Seminar
- g. Training Motivasi

Trensains Muhammadiyah Sragen has a unique curriculum that integrates the values of the Qur'an with modern science and language, known as the Unification Curriculum. This curriculum is designed to build a generation of Muslim scientists who are not only academically superior, but also have a strong spiritual foundation. This curriculum consists of three main components: Qur'anic material, which provides a deep understanding of Islamic values as a guide to life; science material, which encourages students to explore and understand natural phenomena as signs of the greatness of Allah; and language material,

which aims to equip students with communication skills, both in Indonesian and international languages, to support mastery of science. In addition to the academic curriculum, Trensains also organizes various activities that support the Islamization of science. Research and observation activities provide students with the opportunity to apply the theories learned through direct research in the laboratory or surrounding environment.

Fismath Camp is an intensive program that integrates physics and mathematics in a collaborative and fun atmosphere, building deep understanding through practice. Physics Tahajud, a unique activity where students contemplate the wonders of physics in a spiritual atmosphere at night, strengthens the awareness that knowledge is part of worship. Students can also join the MIPA Club, where they can deepen their knowledge of mathematics and science through discussions, experiments, and innovations. For talented students, there is guidance for Olympic athletes to prepare them for national and international academic competitions. In addition, public lectures and seminars present experts in the fields of science and religion to broaden the students' horizons. Motivational training programs are also held periodically to build enthusiasm, self-confidence, and a focused vision of life.

Islamization of Science by Ismail Raji al-Faruqi at Muhammadiyah Trensains High School in Sragen

SMA Trensains Muhammadiyah Sragen is one of the educational institutions that strives to implement the concept of Islamization of science, especially science, in the curriculum and learning. This approach aims to integrate modern science with Islamic values, in accordance with the ideas put forward by Ismail Raji al-Faruqi. Al-Faruqi is a Muslim intellectual figure who popularized the concept of Islamization of science, which emphasizes that science must be reformulated and aligned with Islamic teachings. The approach applied at SMA Trensains Muhammadiyah Sragen shows that there is harmony with the concept of Islamization of science put forward by al-Faruqi. Some of the concepts of Islamization of Science according to Ismail Raji al-Faruqi that are implemented at SMA Trensains are prioritizing mastery of modern science, including physics, biology, and mathematics, which are the first steps in the process of Islamization of science according to al-Faruqi. This school provides ample space for students to explore scientific phenomena while still linking them to Islamic values. However, one of the challenges faced is how to ensure that modern science teaching remains consistent with Islamic teachings, especially when dealing with theories that are considered contrary to religious doctrine, such as the theory of evolution. In this case, the learning curriculum at SMA Trensains filters material from western teachings and doctrines in the material.

Ismail Raji al-Faruqi emphasized the importance of mastering Islamic heritage as a basis for carrying out the Islamization of science (Paya, 2015). SMA Trensains Muhammadiyah Sragen, Islamic religious learning is carried out intensively, with a focus on the study of the interpretation of the Qur'an and hadith related to natural phenomena. This aims to build a strong foundation of Islamic knowledge among students, so that they can integrate science with an Islamic perspective. On the other hand, in learning there is still room to improve students' understanding of the history of Islamic scientific thought, especially the works of Muslim scientists such as Ibn Sina, Al-Biruni, and Al-Khawarizmi, who have contributed greatly to the development of science. This is important to strengthen the narrative that Islam has a rich and influential scientific tradition.

The approach taken at SMA Trensains Muhammadiyah Sragen in finding common ground between science and Islam is in line with the third step proposed by al-Faruqi. For example, in the subject of philosophy of science, students are invited to compare the Big Bang theory with the verse of the Qur'an which states that the heavens and the earth were originally one entity which was then separated (QS. Al-Anbiya: 30). This approach helps students understand that modern science can strengthen their belief in the truth of the Qur'an. The challenge that arises is the difference in interpretation of the verses of the Qur'an related to science. Some verses may not be explicitly in accordance with the latest scientific discoveries, so a more contextual and scientific interpretation is needed.

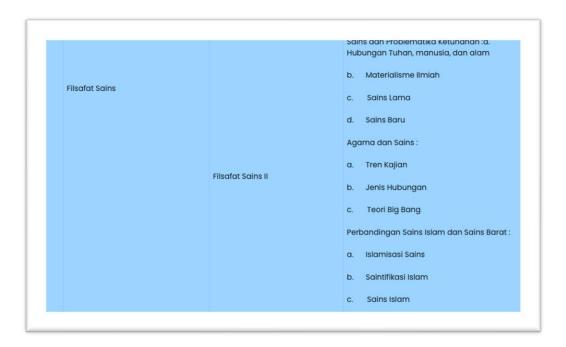
The process of Islamization of knowledge according to al-Faruqi is to disseminate knowledge that has been Islamized to society. SMA Trensains Muhammadiyah Sragen has started this step by becoming a model school that implements the integration of science and religion. They also participate in various forums and conferences to share their experiences and teaching methods. Several supporting activities such as Qoryah Thoyibah and Santri Mengabdi are a way for students to spread their understanding of Islamization in several aspects such as society.

Implementation of the Islamization of Ismail Raji al-Faruqi's Science in learning and curriculum at SMA Trensains Muhammadiyah Sragen

The curriculum is a set of rules that regulate subjects, learning resources, and techniques that function as guidelines in planning learning activities to achieve certain learning objectives by paying attention to the media used by educational institutions as a reference in achieving educational objectives so that students graduate at the end of the school year (Shofia Hattarina et al., 2022). Because the curriculum is a program designed

and implemented to achieve educational goals in accordance with the development of the times, education and curriculum cannot be separated. This is in accordance with the objectives of education. The curriculum, which was originally considered a collection of disciplines, then developed to include all educational activities or opportunities provided to students. This is because the curriculum has changed to follow the development of the times. To provide effective teaching and learning conditions, the curriculum as one element of education is strategically positioned to be a guideline in teaching and learning activities. The results of relevant curriculum assessments are used to create better learning tools (Gede Agus Siswadi, 2023).

The implementation of the curriculum in SMA Trensains is in accordance with Ismail Al-Faruqi's opinion regarding the Steps of Islamization of Science that must be implemented. In the Unificative curriculum implemented in SMA Trensains, it adapts to Mastery of modern disciplines and disciplinary review. In its implementation at SMA Trensains, interdisciplinary scientific mastery is taught to students, which can be seen in the materials and subjects available at SMA Trensains.



The learning material above is one example of the implementation of the integration between Science and Religion at SMA Trensains Muhammadiyah Sragen. There are several subjects that support the Islamization of science in this school.

1. Science and the Problems of Divinity

The Relationship between God, Man, and Nature: God created nature for humans to understand, showing His greatness. Scientific Materialism: A view that ignores God, considering all things to come from matter. Old Science: A mechanistic and closed approach to nature, such as Newton's theory. New Science: Considering spiritual and metaphysical dimensions, for example through quantum theory.

2. Religion and Science

Study Trends: Focus on the harmony and conflict between religion and science. Types of Relationships: Conflict, independence, dialogue, or integration between religion and science. Big Bang Theory: A scientific explanation of the origins of the universe that can be in harmony with the concept of creation.

3. Comparison of Islamic Science and Western Science

Islamization of Science: Integration of Islamic values in science to avoid materialism. Islamic Scientification: A scientific approach to Islamic teachings, such as the benefits of ablution or fasting. Islamic Science: Islamic scientific tradition that combines revelation and reason for the benefit of the people.

In the learning planning, the teacher prepares the material and all its administration into one file called the teaching module. Teachers at SMA Trensains also explained that the material had been planned before the learning took place. Islamic Science material is one example given by the teacher in processing learning materials. Science taken from many sources, mainly taken from the west, is filtered critically and sorted to be given to students at SMA Trensains Muhammadiyah Sragen. The sorting and filtering of this material is so that students can understand the view of science from an Islamic perspective and of course the teacher adjusts it to the development of students' critical thinking. This planning is in line with the process of Islamization of science explained by Ismail Al-Faruqi, namely modern discipline towards scientific disciplines. In addition to the sorting of material, teachers in planning the learning design always provide examples of contemporary Islamic treasures so that students can more easily understand and recognize the learning material (Ismail Al-Faruqi, 1982).

In the implementation of learning in the classroom, it was explained by the teacher of SMA Trensains Muhammadiyah Sragen that learning is in accordance with the current government policy, namely using independent learning. This independent learning process is still supervised and guided by the teacher so that students do not deviate from the boundaries that are outside the subject path. In addition, the teacher also directs each

student to be enthusiastic in developing the knowledge given so as to become an outstanding student. This motivation is also not just empty talk. The achievements of students at SMA Trensains have skyrocketed, often winning national and even international championships.

The implementation at SMA Trensains Muhammadiyah Sragen is illustrated by several subjects that are combined between Islamic and Science subjects such as Tren Kajian subjects, Big Bang Theory and Relationships. The Principal also explained that the implementation of the existing subjects is intended for students to be able to understand Islamic science and western science perspectives. Students can develop their scientific knowledge without leaving the understanding of Islam that they have learned. In addition to the integration of subjects in activities at Trensains, there are Science Seminar activities. Science Tahajud and other activities. This activity is in line with the Steps for the Islamization of knowledge explained by Ismail Al-Faruqi, namely the Dissemination of Islamized knowledge (Ismail Al-Faruqi, 1982).

SMA Trensains teaches its students various modern disciplines such as physics, biology, and astronomy. Materials such as the "Big Bang Theory" and the concept of "The Relationship between God, Man, and Nature" demonstrate mastery of the latest scientific concepts, which are then linked to Islamic values. This reflects the first step of the Islamization of science, namely understanding modern science in depth. This step is reflected in the filtering of Western science materials carried out by teachers. This process ensures that the scientific concepts taught do not conflict with Islamic principles. For example, material on scientific materialism is criticized to provide students with a balanced understanding of the Islamic worldview. This alignment is evident in the integration of science materials with Islamic values. For example, the study of science is linked to the greatness of God and ethics in managing nature. This approach is in accordance with Al-Faruqi's steps which emphasize that science must be directed to strengthen faith and provide benefits for humanity.

The process of disseminating knowledge at SMA Trensains is carried out through activities such as science seminars, physics tahajud, and thematic studies. This activity is a medium to internalize Islamic values into students' understanding of science, while at the same time disseminating Islamic scientific thinking. Teachers at SMA Trensains also provide materials by adjusting the development of students' critical thinking skills. This reflects the next step in Al-Faruqi's theory, namely instilling contextual understanding so that students can relate science to social and spiritual realities.

Implications of the Islamization of Ismail al-Faruqi's Science at Muhammadiyah Trensains High School, Sragen

Islamization of Science is a long-term project, the implementation of Islamization of science that is integrated-interconnected in SMA Trensains Muhammadiyah Sragen is certainly not just a discourse. Islamization of Science must be an implication for students and schools in implementing the integration of Science and religion in schools. Implications in the form of character and thought patterns that are expected to exist in every student at SMA Trensains Muhammadiyah Sragen. SMA Trensains Muhammadiyah Sragen has the concept of Islamization of science applied in the education curriculum that combines modern science with Islamic principles. This school seeks to provide students with an understanding that science does not conflict with religion, but complements each other. Science such as physics, biology, and mathematics are taught by including relevant verses of the Qur'an, so that students are invited to see natural phenomena as a sign of the greatness of Allah (ayat kauniyah). Some of the implications of the implementation of Islamization of science in this school, according to al-Faruqi's perspective, are as follows:

a. Implications for Curriculum Development

According to al-Faruqi, the implementation of Islamization of science will encourage the creation of a holistic and integrated curriculum. In SMA Trensains Muhammadiyah Sragen, this is realized through the Integration of Science and the Qur'an. Each science subject is linked to relevant verses of the Qur'an. For example, when discussing cosmology or the Big Bang theory, students are invited to study the verses of the Qur'an that talk about the creation of the universe (for example QS. Al-Anbiya: 30). Furthermore, the implications for curriculum development include the preparation of learning modules. Learning modules are developed with an integrative approach that emphasizes the importance of understanding natural phenomena through the perspective of monotheism. Thus, students are invited to see that modern science is inseparable from Islamic values.

b. Implication for Curriculum Departement

Al-Faruqi's view of the integration of rational science with faith demands a comprehensive and holistic approach to education that goes beyond the mere delivery of academic content. He emphasizes that knowledge should not be viewed in isolation from the broader context of spiritual and ethical understanding. According to Al-Faruqi, true education is one that nurtures the intellectual and moral dimensions of students, blending science with a deep awareness of divine reality. This methodology, which demands a synergy between rational inquiry and religious principles, transforms learning from a mere cognitive exercise into a means of worship and a deeper recognition of God's greatness in the world.

The educational approach at SMA Trensains embodies this vision by encouraging teachers to use not only rational and empirical methods but also to incorporate spiritual and contextual frameworks into their teaching. In doing so, the school fosters an environment in which learning becomes more meaningful, as students are encouraged to see knowledge not only as a tool for personal development but also as a path to recognizing the divine presence in every aspect of life. This methodology reflects a vision that links science and faith, rather than seeing them as two separate realms of understanding.

In the classroom, this blending of science and spirituality is reflected through project-based learning, which is a highly effective pedagogical model. The project-based approach gives students the opportunity to engage deeply with scientific concepts while encouraging them to reflect on their spiritual meaning. One example of this is seen in biology lessons, where students can study photosynthesis, not only understanding the complex biological process but also reflecting on how this process demonstrates the greatness of God's creative power. The complexity of natural phenomena, such as the mechanism of photosynthesis, becomes a point of reflection that makes students stand in awe of nature and realize their connection to the divine.

Integrating scientific interpretation with religious understanding is another important aspect of the teaching methodology promoted at SMA Trensains. Teachers are encouraged to connect modern scientific discoveries with Islamic teachings, especially through verses from the Qur'an that speak about nature. For example, in biology, physics, or chemistry lessons, teachers can quote verses from the Qur'an that

speak about the creation of the heavens and the earth, the development of life, or the order of nature. This scientific interpretation allows students to see modern scientific discoveries not as something that contradicts religious beliefs, but as an affirmation of the Qur'an's view of the world. Nature is a living proof of the truth revealed in the Qur'an, and scientific inquiry is a form of worship by seeking a deeper understanding of God's creation (Chandra, 2012).

This approach is closely aligned with Al-Faruqi's belief that science, when understood in the right context, should not conflict with faith, but rather enhance and strengthen it. He argued that knowledge is not neutral; it has the potential to bring one closer to the Creator or distance one from Him, depending on how it is applied and understood. The teaching methodology at SMA Trensains reflects this philosophy by ensuring that students not only learn about the physical world, but also develop a deeper understanding of its spiritual significance. Through this integrated approach, students are able to appreciate both the rational and spiritual dimensions of knowledge, empowering them to engage with the world in ways that are intellectually rigorous and spiritually enriching.

The educational philosophy espoused by Al-Faruqi and embodied in the teaching practices at SMA Trensains aims to cultivate students who are not only scientifically literate but also spiritually aware. By connecting rational science with faith, students learn to see the world through a lens that recognizes the divine in every aspect of creation, and in doing so, they achieve a deeper and more meaningful understanding of the natural world and their relationship with God(Adu et al., 2023). This holistic approach to education, in which science and faith complement each other, encourages students to view their learning not simply as an academic endeavor but as an act of devotion and a means of strengthening their relationship with the Creator.

c. Implications for Student Character Formation

Ismail Raji al-Faruqi believed that the ultimate goal of the Islamization of knowledge was to form human beings with Islamic character and a view of life that was in line with Islamic values (Mtani, 2022). SMA Trensains Muhammadiyah Sragen, this approach has implications for the formation of students' characters who have noble morals and critical thinking. Students are taught not only to accept knowledge for granted, but also to criticize and reflect on the knowledge in the context of Islamic teachings. This is expected to produce a generation that is not only intellectually

intelligent, but also has noble morals. Furthermore, the implications of student character formation are building awareness of monotheism. Through this integrative approach, students are invited to always associate science with the concept of monotheism. They are taught that studying science is part of an effort to know and understand Allah's creation, thus fostering a sense of gratitude and awareness of God's presence in every aspect of life.

Al-Faruqi's vision of the Islamization of science aims to revive the intellectual tradition of Islam, which thrived during the Islamic Golden Age. SMA Trensains Muhammadiyah Sragen embodies this approach by integrating science and Islamic values. Through this model, students are expected to excel in scientific knowledge while remaining grounded in their faith, creating a generation of Muslim thinkers who can contribute to the development of science and technology without losing their Islamic identity (Gunawan et al., 2022). The school achieves this by combining modern scientific education with Islamic teachings, helping students see the relevance of faith in their scientific studies. For example, biology lessons may include discussions on the signs of Allah's creation, while environmental science projects could link sustainability with Islamic principles of stewardship.

Teachers are trained to integrate both fields, fostering a learning environment where students develop not only scientific competence but also a strong ethical foundation rooted in Islamic values. This integrative approach prepares students to become intellectuals who contribute to society in meaningful ways, ensuring that their scientific advancements align with Islamic values of justice, responsibility, and respect for creation. By prioritizing the connection between science and religion, SMA Trensains Muhammadiyah Sragen provides a model for modern Islamic education that nurtures both intellectual and spiritual growth.

Conclusion

Islamization in Al Faruqi's view is not radical and blind, but more towards integration by combining, dialoguing, and providing alternative solutions. According to him, the Islamic Education system must be combined with the secular system. The combination becomes a new system to get both kinds of benefits from these systems.

The Education Pattern at SMA Trensains Muhammadiyah Sragen uses a Unification or unification approach. In its implementation, this Unification curriculum is implemented in classroom learning through learning materials and through activities in the dormitory or other extracurricular activities that can be maximized. Activities such as physics tahajud are one example of the Education Pattern at SMA Trensains Muhammadiyah Sragen

The educational approach at SMA Trensains Muhammadiyah Sragen shows a real effort in integrating modern science with Islamic values, in line with the idea of Islamization of science from Ismail Raji al-Faruqi. By emphasizing mastery of science, study of Al-Qur'an interpretation related to natural phenomena, and learning the history of Muslim scientists, this school seeks to build a balanced foundation of knowledge between science and Islamic teachings. Although challenges remain, especially in aligning modern scientific theories with religious doctrines, SMA Trensains has succeeded in becoming an educational model that implements the concept of science integration, and disseminates it through various community activities and forums.

The implementation of the curriculum that shows the Islamization of Science at Trensains Muhammadiyah is clearly visible from the planning and implementation. In planning, teachers sort and critically analyze the material that will be given to students. The planning process also includes examples of contemporary materials or problems that will be given to students. In the implementation process, teachers provide learning materials and provide full support to students in developing their academic potential, and the results obtained are achievements achieved by students.

The implementation of the concept of Islamization of science at SMA Trensains Muhammadiyah Sragen reflects a serious effort to integrate modern science with Islamic teachings in accordance with the ideas of Ismail Raji al-Faruqi. This implication is manifested in the development of the curriculum, contextual and spiritual teaching methodologies, and the formation of critical student characters based on the values of monotheism. SMA Trensains Muhammadiyah Sragen strives to show that science is not separate from religion, but complements each other, thus producing students who are not only superior in science but also have an Islamic outlook on life. Through this approach, it is hoped that a generation of Muslim intellectuals will be born who are able to contribute to the advancement of science without abandoning their Islamic identity.

Bibliography

Adu, L., Rama, B., & Yahdi, M. (2023). ISLAMISASI ILMU PENGETAHUAN ISLAMIZATION OF KNOWLEDGE. In *Jurnal Studi Islam Lintas Negara* (Vol. 5, Issue 1).

Ahmad Suryadi. (2024). *Dinamika Pendidikan Islam: Perspektif Historis dan Tantangan Modern* (Vol. 6234987087). CV Jejak (Jejak Publisher).

- Arifin Zainul. (2008). MODEL-MODEL RELASI AGAMA DAN SAINS.
- Chandra, E. (2012). RELIGIUSITAS DALAM PENDIDIKAN KIMIA. In *JURNAL SCIENTIAE EDUCATIA* (Vol. 1, Issue 1).
- creswell. (2019). Creswell, J. W. (2019). Research Design Pendekatan Metode Kualitatif, Kuantitatif dan Campuran. Yogyakarta: Pustaka Pelajar. *Progress in Retinal and Eye Research*.
- Daulay, M. I., Maraimbang, M., & Junaidi, J. (2024). Islamisasi Ilmu Pengetahuan Menurut Ismail Raji al-Faruqi. *Asian Journal of Islamic Studies and Da'wah*, 2(2), 122–130. https://doi.org/10.58578/ajisd.v2i2.2705
- Dzilo, H. (2012). The concept of "Islamization of knowledge" and its philosophical implications. *Islam and Christian-Muslim Relations*, *23*(3), 247–256. https://doi.org/10.1080/09596410.2012.676779
- Fauzi Muhammad. (2017). Tokoh-Tokoh Pembaharu Pendidikan Islam di Mesir. *Jurnal Tarbiyah*, 04(2).
- Firman. (2023). Islamisasi Ilmu Pengetahuan. Edusociata Jurnal Pendidikan Sosiologi, 06.
- Gede Agus Siswadi. (2023). Merayakan Kemerdekaan dalam Belajar (1st ed.). Nilacakra.
- Gunawan, R. Z., Fatma, &, & Najicha, U. (2022). PERAN PENDIDIKAN KEWARGANEGARAAN DALAM MEMBANGUN KARAKTER MORAL PELAJAR DI ERA MODERN. *Jurnal Kewarganegaraan*, 6(1).
- Hasnahwati. (2020). PENDIDIKAN ISLAM DI MASA TURKI USMANI. Jurnal Andi Djemma | Jurnal Pendidikan, Volume 3 Nomor 2.
- Ismail Al-Faruqi. (1982). Islamisasi Pengetahuan, (Terjemahan). Pustaka.
- Kurikulum Trensains Muhammadiyah Sragen. (n.d.).
- Masyitoh, D., Dewi Mustika, R., Alfaza, A. S., & Hidayatullah, A. F. (n.d.). *AMIN ABDULLAH dan PARADIGMA INTEGRASI-INTERKONEKSI* (Vol. 4, Issue 1).
- Mtani, F. A. (2022). Integration of Knowledge: The Perspective of Bediuzzaman Said Nursi and Ismail Raj Al-Faruqi. https://doi.org/10.5281/zenodo.6861739
- Narbuko, C. dan A. A. (2015). Metodologi Penelitian. PT Bumi Aksara.
- Paya, A. (2015). A Critical Assessment of the Programmes of Producing 'Islamic Science' and 'Islamisation of Science/Knowledge.' *International Studies in the Philosophy of Science*, 29(3), 311–335. https://doi.org/10.1080/02698595.2015.1179043
- Rusdiana. (2014). INTEGRASI PENDIDIKAN AGAMA ISLAM DENGAN SAINS DAN TEKNOLOGI. *Journal Istek*.
- Shofia Hattarina, Nurul Saila, & Adenita Faradilla. (2022). *Implementasi Kurikulum Medeka Belajar Di Lembaga Pendidikan.* 1.

- Suyadi, Nuryana, Z., Sutrisno, & Baidi. (2022). Academic reform and sustainability of Islamic higher education in Indonesia. *International Journal of Educational Development*, 89. https://doi.org/10.1016/j.ijedudev.2021.102534
- Syamsul Rizal. (2018). AKHLAK ISLAMI PERSPEKTIF ULAMA SALAF. *Edukasi Islami : Jurnal Pendidikan Islam*, 7(01), 67. https://doi.org/10.30868/ei.v7i01.212
- Unik, H., Ariyanto, A., & fadhilah, H. (2022). *Implikasi Teknologi Terhadap Pendidikan Islam di era Globalisasi. 23*.