Theologians with Engineering Degrees: A New Theology School Model Integrating Religion and Science

Süleyman OKTAR[1]

Abstract

The Islamic civilization was more advanced than other civilizations in science and technology in the Middle Ages. By the 16th century, it lagged Western civilization scientifically and politically. Initially, Muslims considered the sciences as holistic and studied the religious and rational sciences together. The exclusion of rational sciences from the curriculum during the spread of madrasahs as higher education institutions was a consequential mistake that led to the decline of science and technology. Contrary to expectations, however, the religious sciences-centered understanding of education did not result in religious progress, and it inadvertently led to bigotry and dogmatism. Theology faculties were established instead of the madrasahs closed in the modern period. The mistake made in madrasahs was not corrected when establishing theology faculties; rational sciences were not added back to the curriculum. Today, besides religious sciences, culture, and formation courses, which are sub-branches of social sciences, are taught in faculties of theology. What needs to be done now is to add rational and experimental sciences to the curriculum in theology faculties. It would be appropriate to include engineering sciences, which are the rational, in theology education. We suggest that this program, which we call theology-engineering dual degree education, should be implemented in a few pilot faculties. The student admissions exam should be based on balanced numerical and verbal science scores. It would be best for the selected faculties of theology to specialize only in students in a dual degree program. We think that students will prefer the dual degree program more than the independent theology program, as it is expected to be a superior program in terms of both job opportunities and scientific and cultural competence. Graduated "engineer theologians" will have higher self-confidence and stronger motivation. In addition, they will look at events more holistically, their problem-solving skills will increase, and they will think more rationally about the issues. This new generation of theologians with more proficiency in the language of science will be accepted more in society as religious officials, teachers, or spiritual advisers. Society will adopt religious values more efficiently and give more support to scientific thinking. Thus, as Muslims, we will be able to reach our goal of realizing "revolutionary inventions" in a shorter time.

Keywords

Islam • Science • Theology • Engineering • Dual degree

---

[1] Süleyman Oktar, Konya İl Sağlık Müdürlüğü, Konya, Türkiye. Eposta: suleyman.oktar@yahoo.com ORCID: 0000-0003-0151-5981

Mühendislik Formasyonlu İlahiyatçılar: Din ve Bilimi Birleştiren Yeni bir İlahiyat Fakültesi Modeli

Süleyman OKTAR

Öz

İslam medeniyeti Orta Çağda bilim ve teknolojide diğer medeniyetlerden daha ileriydi. 16 yy. itibariyle bilimsel ve siyasi olarak Batı medeniyetinin gerisinde kaldı. Müslümanlar başlangıçta ilimleri bir bütün olarak görmekteydi, dini ve rasyonel bilimleri birlikte tahsil etmekteydi. Medreselerin yüksek eğitim kurumu olarak yaygınlaşması sırasında önemli bir hata yapıldı ve rasyonel bilimler müfredattan çıkarıldı. Rasyonel bilimlerin eğitimden dışlanması bilim ve teknolojide gerilemeye yol açtı. Dini ilimleri merkeze alan eğitim anlayışı ise beklenenin aksine dini ilerlemeyle sonuçlanmadı. İstenmeyen bir şekilde taassup ve dogmatizme yol açtı. Modern dönemde kapatılan medreseler yerine ilahiyat fakülteleri kuruldu. İlahiyat fakülteleri kurulurken medreselerde yapılan hata düzeltilmedi yani müfredata rasyonel bilimler ilave edilmedi. Bugün ilahiyat fakültelerinde dini ilimler yanında sosyal bilimlerin alt dalı olan kültür ve formasyon dersleri okutulmaktadır. Yapılması gereken ilahiyat fakültelerinde rasyonel yani deneysel bilimlerin de müfredata eklenmesidir. Bunun için rasyonel bilim olan mühendislik bilimlerinin ilahiyat eğitimine dahil edilmesi uygun olacaktır. İlahiyat-mühendislik çift lisans eğitimi adını verdiğimiz bu programın birkaç pilot fakültede uygulanmasını önermekteyiz. Öğrenci kabul sınavının ise hem sayısal hem sözel bilim puanlarının dengeli bir kombinasyonunu esas alması gerekmektedir. Belirli ilahiyat fakültelerinin sadece çift lisans programına tabi bir öğrenci topluluğu üzerinde uzmanlaşması en doğrusudur. Öğrencilerin çift lisans programını müstakil ilahiyat programından daha fazla tercih edeceğini düşünmekteyiz. Çünkü hem iş imkânı açısından hem de bilimsel ve kültürel yeterlilik açısından daha üstün bir program olması beklenmektedir. Mezun olan "mühendis ilahiyatçılar" daha yüksek özgüvene, daha güçlü bir motivasyona sahip olacaktır. Ayrıca onlar hadiselere daha bütüncül bakacaklar, problem çözme becerileri artacak ve meseleler hakkında daha rasyonel düşüneceklerdir. Bilim diline daha fazla hâkim olan bu yeni nesil ilahiyatçılar din görevlisi, öğretmen veya manevi danışman olarak toplumda daha fazla kabul göreceklerdir. Toplum dini değerleri daha kolay benimseyecek, bilimsel düşünceye daha çok destek verecektir. Böylece Müslümanlar olarak "devrimsel buluşlar" gerçekleştirme hedefimize daha kısa zamanda ulaşabileceğiz.

Anahtar Kelimeler

اللاهوتيون الحاصلون على درجات الهندسة: نموذج جديد لمدرسة اللاهوت يدمج الدين والعلم

Süleyman OKTAR

الملخص

كانت الحضارة الإسلامية أكثر تقدمًا من الحضارات الأخرى في العلوم والتكنولوجيا في العصور الوسطى. بحلول القرن السادس عشر ، تخلفت عن الحضارة الغربية علمياً وسياسياً. في البداية ، اعتبر المسلمون العلوم مقدسة ودرسوا العلوم الدينية والعقلانية معًا. كان استبعاد العلوم العقلانية من المناهج الدراسية أثناء انتشار المدارس الدينية كمؤسسات للتعليم العالي خطأ تبعيًا أدى إلى تدهور العلوم والتكنولوجيا. على عكس التوقعات ، لم يؤد فهم التعليم المتمحور حول العلوم الدينية إلى تقدم ديني ، مما أدى عن غير قصد إلى التعصب والعقيدة. تم إنشاء كليات اللاهوت بدلاً من إغلاق المدارس في العصر الحديث. لم يتم تصحيح الخطأ الذي وقع في المدارس عند إنشاء كليات اللاهوت ولم يتم إضافة العلوم العقلانية إلى المناهج الدراسية. اليوم ، إلى جانب العلوم الدينية ، يتم تدريس دورات الثقافة والتكوين ، وهي فروع فرعية للعلوم الاجتماعية ، في كليات اللاهوت.

ما يجب فعله الآن هو إضافة علوم منطقية وتجريبية إلى المناهج الدراسية في كليات اللاهوت. إن تضمين العلوم الهندسية ، الأكثر عقلانية ، في تعليم اللاهوت سيكون مناسبًا. نقترح أن هذا البرنامج ، الذي نسميه التعليم اللاهوتي والهندسي ذو الدرجة المزدوجة ، ينبغي تنفيذه في عدد قليل من الكليات التجريبية. يجب أن يعتمد اختبار قبول الطلاب على درجات علمية متوازنة في العلوم العددية واللفظية. مرة أخرى ، يعتبر قبول الطلاب فقط من ثانويات الإمام الخطيب (مدرسة الأئمة والخطباء) أمرًا ضروريًا لتحقيق الانسجام بين الطلاب. ألا يكون هناك برنامج آخر غير برنامج الشهادة المزدوجة في الكلية. خلاف ذلك ، سيكون الأساتذة أكثر اهتمامًا بالطلاب في البرنامج الآخر. سيكون من الأفضل لكلية اللاهوت أن تتخصص فقط في الطلاب الحاصلين على درجة مزدوجة. نعتقد أن الطلاب سيفضلون برنامج الدرجة المزدوجة أكثر من برنامج اللاهوت المستقل ، حيث من المتوقع أن يكون برنامجًا متفوقًا من حيث فرص العمل والكفاءة العلمية والثقافية. سوف يتمتع "اللاهوتيون المهندسون" المتخرجون بثقة أعلى بالنفس وحافز أقوى. بالإضافة إلى ذلك ، سوف ينظرون إلى الأحداث بشكل أكثر شمولية ، ويزيدون من مهارات حل المشكلات لديهم ، ويكتسبون انضباطًا عاليًا في الحياة. سيتم قبول هذا الجيل الجديد من اللاهوتيين ذوي الكفاءة الأكبر في لغة العلم في المجتمع أكثر كمسؤولين دينيين أو مدرسين أو مستشارين روحيين. سيتبنى المجتمع القيم الدينية بشكل أكثر كفاءة وسيقدم المزيد من الدعم للتفكير العلمي. وهكذا ، كمسلمين ، يمكننا أن نصل إلى هدفنا المتمثل في تحقيق "الاختراعات الثورية" في وقت قصير.

الكلمات المفتاحية

الإسلام • العلوم • علوم الدينية • الهندسة • شهادة مزدوجة

Introduction

The Islamic world has lagged European civilization in science and technology since the 16th century. There have been numerous discussions and publications over the last few centuries on the causes of the decline. Today, we are still behind the West (Hamid, 2015). Contrary to what some may think, it is unlikely for us to catch up with the West anytime soon (Oktar, 2021). The first attempts to catch up with the West included establishing schools and engineering schools. The madrasahs, which were the traditional educational institutions of the Muslims, were left to their own fate. With the closure of madrasahs in the Republican era, schools were transformed into primary and secondary education institutions and universities (Cebeci, 2004). Western-origin schools opened before the Republic had the character of secular educational institutions. Today, universities in Turkey and most Islamic countries apply a Western education model with a secular character (Mimouni, 2015). Despite a 100-200-year secular education tradition covering the last period of the Ottoman Empire and the Republic period, Turkey still has not caught up with the West in science and technology.

Islam and Science

What were Muslims doing before they lagged behind Western civilization? How were they at the level of civilization in science and technology? When we look at the history of Islam, we see that Muslims left their mark on a period called the Islamic Golden Age (Starr, 2013). In the Golden Age, Muslims valued science as much as modern people (Dallal, 2010). The scientific knowledge that civilizations encountered through conquests and commercial relations was immediately transferred to Arabic through translations and libraries (Gutas, 2012). People used to travel from city to city to learn science and attended the lecture circles of the scholars in mosques and libraries. Books were lent in libraries, and copies were sold in bookstores. According to some researchers, the Golden Age covers the years 700-1200 and 700-1500 (Saliba, 2007) (Sezgin, 2016). Great scholars became a source of Western civilization in intellectual sciences, such as Ibn Sina, Ibn Rushd, Farabi, Biruni, Ibn Nefis, Harezmi, Cezeri, Ibn Heysem, Battani, Fergani were raised in that period (Starr, 2013). The number of great scholars trained in religious sciences and produced significant works in the Golden Age was much higher than the later scholars. While many great scholars emerged in the field of religious sciences in the 800-the 1200s, the number of great scholars trained between 1200-1900 was much less. Bukhari, Muslim, Abu Hanifa, Imam Shafii, Malik bin Enes, Ahmed ibn Hanbal, Maturidi, Ashari, Ghazali, Tabari, Fahreddin Razi, Zamakhshari, and many other religious scholars were trained in the Golden Age ('Tefsir,' 2022).

What was different in the Golden Age? Then what happened so that the Muslims were left behind? In our view, the answer is this: in the Golden Age, all sciences were one. Those who studied science did not consider the sciences separate from each other. They were trying to learn anything that contained information. Any information was legitimate. Books that did not comply with Islamic teachings were also translated, seeking wisdom (Gutas, 2012). Although the sciences were classified as religious and rational, there was no evident hierarchical superiority. The student could learn religious and rational sciences from the same scholar or sometimes from different scholars. In addition, books on all sciences were open to everyone in science houses and libraries (Makdisi, 2019). Such a scientific environment facilitated the emergence of great scholars in both religious and rational sciences. However, later, religious sciences took precedence over rational sciences in the hierarchy. The transition from the masjid, library, and course circles to the madrasah and the institutionalization of education within the madrasah caused a pause in education (Chaney, 2016). In the beginning, the curriculum in madrasahs included rational sciences and religious sciences. Over time, rational sciences began to take less place in the curriculum. For example, the experimental method was abandoned in rational sciences such as mathematics and astronomy, and education continued only at the theoretical level (İzgi, 2019). It is seen that some of the great scholars who grew up after the 1200s, rather than concentrating on madrasah education, attended the course circles of different scholars as in the old period. Indeed, the scholars who passed the madrasah education participated in many scholars' lesson circles to improve themselves ('Tafsir,' 2022). After the spread of madrasahs, two branches of science continued scientific superiority: medicine and astronomy (Sezgin, 2016). This may be attributed to medical science being carried out in the hospitals established next to the madrasah. Likewise, astronomy continued in independent observatories (Yakuboğlu, 1996). Mathematics, optics, history, geography, philosophy, and other rational sciences, which could not be done separately and remained in the madrasah, declined over time. Ultimately, the educational philosophy and horizon of the madrasahs have not changed much from the classical period to the present day; education programs focused on religious sciences, especially fiqh (Kenan, 2013).

The reduction or removal of rational sciences from the madrasah curriculum explains the technological regression. However, how to explain the religious decline that almost paralleled the technological decline? All primary and secondary education institutions and madrasahs in the Islamic world were almost entirely focused on religious education. Due to the spirit of the period, religion dominated all areas of life, and the expectation was that religion would dominate all institutions (Kenan, 2013). Despite the dominance of religion in all areas and the madrasah curriculum filled with religious sciences, a religious decline was being experienced. Many researchers attribute this decline to the madrasahs not providing formal education, increased arbitrariness, and a consequent decrease in the quality of education (Cebeci, 2004). George Makdisi, on the other hand, attributes the decline of the madrasahs to two grounds: First, the madrasahs were dependent on the foundation act and were not suitable for new regulations according to the conditions of the time, as they did not have legal personality. Secondly, the official appointment of kadis by the state since the 13th century caused the madrasahs to lose their importance in raising highly qualified lawyers (Makdisi, 2018). For the reasons listed, the quality of scholars decreased, the teaching staff weakened, and the madrasah turned into a simple high school. In our opinion, the main reason for the decline in science and technology accompanying the decline in religion is the separation of religion and rational sciences. The gradual abandonment of rational sciences in madrasahs was the main reason for the lack of scientists in the field, but it also led to the training of religious clergy (Nursi, 2014). Thus, the quality of religious scholars decreased. In other words, the cause of religious decline is the abandonment of the rational sciences rather than the declining quality of religious education.

The Integration of Religion and Science

It is an ontological mistake to exclude rational sciences that differ from religious sciences from the madrasah. Because a person is a whole: the body, mind, heart, emotions, and spirit should be fed in a balanced way. If we overfeed one and underfeed the other, a well-balanced person will not grow. "The light of conscience is religion, and the light of the mind is science. When the two come together, the truth emerges." (Nursi, 2014). Today, this fact is neglected from our schools' lowest to the highest level. Only rational sciences are taught in pre-university schools and universities, and religious studies are rarely included. To solve this problem, we proposed a new Islamic higher education model that integrates religion and science, inspired by the madrasah and university (Oktar, 2022b). In this institution, which we call a "madrasity," a "core religious education" curriculum will be added to engineering, health, agriculture, and biological sciences undergraduate programs. Theology undergraduate education is planned to be carried out with the engineering or biological sciences undergraduate program. This madrasity model is not yet in the implementation phase. Besides, we do not find it appropriate to establish the madrasity model by transforming existing institutions. It is more reasonable to preserve successful secular universities and establish madrasity from scratch (Oktar, 2022b).

The subject of this article is the restoration of theology and Islamic sciences faculties within the university rather than the theology schools within the madrasity. Why should theological faculties be restored? Because the madrasahs in the past have been replaced by theology faculties within the universities today. While a single scholar teaches all courses in the madrasah, a traditional scholar-centered institution, there is a separate scholar for each course, such as fiqh, tafsir, and hadith in theology (Ören, 2019). Instead of madrasahs, theology faculties offer a formal education as they are modern bureaucratic institutions with legal personalities. However, theology faculties preserved the fundamental flaws in the madrasah curriculum. The madrasah curriculum consists almost entirely of

basic religious sciences and is freed from rational sciences. Today, theology faculties continue the mistakes made in the past and do not include rational sciences in their curricula. Basic religious sciences are included in the curricula of theology and Islamic sciences faculties at 50-60%. The remaining curriculum does not cover rational or experimental sciences but includes general culture and teaching formation courses, which are sub-branches of social sciences (Genç, 2017). Considering that the ratio of basic religious sciences and social sciences is half, it can be said that undergraduate theology education lags the madrasah in terms of religious content. When Europe's leading Catholic and Protestant theology faculties are examined, it is seen that the weight of the curriculum is similar to the Islamic theology faculties (Genç, 2017). This situation makes us think that the faculty of theology was modeled from the wrong source. What needed to be done was to replace the deficiencies: experimental sciences, which were called rational sciences in the past, had to be included in the curriculum.

The Current Situation of Theology Faculties

Today, there is a faculty of theology or Islamic sciences in almost every city of Turkey. Although there are shortcomings in academic staff, most of them have a sufficient number of scholars (YÖKAkademik, 2022). In Turkey, theology faculty students generally are from middle-low-income families, and most of them live in rural areas and small settlements (Kırman and Demir, 2018). On the other hand, as urbanization increases, the number of city-originating students in faculties naturally increases (Uçar, 2017). The students' families have a low education level, and most mothers are housewives. These indicate that the social base of the Faculty of Theology students is at a lower socioeconomic and sociocultural level (Kirman & Demir, 2018). Moreover, students' willingness to participate in professional and academic activities is low, and they mostly prefer to be active in student societies (Uçar, 2017). In our opinion, students are much more enthusiastic about social and cultural activities specific to the younger generation, where they can improve their relationships with their friends.

Most of the students go to the theology faculty voluntarily, and most of them are graduates of Imam Hatip High School, which provides religious education (Uçar, 2017; Okumuş, 2007). It is seen that students are hopeful when they start the faculty but experience serious disappointments when they graduate (Genç, 2017). They complain that basic religious sciences are not included enough in the curriculum, that the lessons are taught monotonously, and that the instructors provide little guidance (Uçar, 2017). In addition, some scholars' unconventional thoughts undermine students' trust in their scholars (Okumuş, 2007). Students do not have the habit of systematic study (Kirman and Demir, 2018). Besides, students see lessons not as a curriculum to be learned but as an exam that they must pass (Okumuş, 2007). Evening students regret not spending their free time well enough, not reading extracurricular books, and not studying regularly (Uçar, 2017). The researchers have not investigated whether students felt the need for science classes. Indeed, theology teachers and students have never faced such a question before. However, it is evident that the students of the faculty of theology find the education they receive incomplete, and they are not very satisfied with their situation.

The Engineering Education in Theology Faculties

How can rational sciences be incorporated into the curriculum of the faculty of theology? Will the goal be achieved when science courses such as physics, chemistry, and biology are added? Today, we believe that this will not be enough. Because students are already taking science courses such as physics, chemistry, and biology

in primary and secondary education institutions, adding these courses to the faculty curriculum may not bring anything new to the student.

Moreover, students have too much free time and cannot use it. The faculty of theology does not have a clear place in the student's mind. The students do not know what level of religious education they will receive. One of the reasons why the students did not find what they expected was that they thought they would grow up as religious scholars. It is necessary to clearly explain to the students that it is not possible to become a religious scholar with only 4-5 years of education. Why should a student study theology if not going to be a religious scholar? Therefore, we propose the restoration of the theological faculty. In other words, undergraduate and postgraduate education objectives need to be renewed. The theology undergraduate education should give education at the level of a religious officer, not a religious scholar. The purpose of undergraduate education should be to train teachers/religious officials. We divide postgraduate education goals into two: raising experts and raising scientists in the field. For example, the Presidency of Religious Affairs trains specialist religious officials from undergraduate theologians in its higher specialization centers. Specialization training meets the need for expert religious officials for preachers, muftis, and other high-level positions (Coşkun, 2010). A methodology similar to that in medical faculties can be adopted here. The undergraduate program of the Faculty of Medicine offers basic medical education, and the graduate is given the title of a general practitioner. Their duty areas are emergency services and community health centers where basic medical practices are performed. In order to become a general practitioner a family physician, they then receive three years of specialization training in main medicine branches such as internal diseases, pediatrics, and gynecology. These family medicine specialists serve in family medicine centers. We can compare this training to the training in the Religious High Specialization Centers. If a general practitioner wants to become an internist or pediatrician, he or she must complete five years of specialized training. We can analogize this education to graduate academic education. In other words, theology faculties should have an "expert" training program, as in Diyanet specialization centers. In the specialization training program, it is aimed that the student will reach the level of "expert" in basic religious sciences such as hadith, fiqh, and tafsir. Those who want to specialize in any branch of religion at an academic level should continue according to the current postgraduate education system.

Undergraduate education will be carried out in two branches. The student will receive undergraduate education in an engineering branch such as electronics, computers, machinery, and theology undergraduate education. Thus, the student will graduate with a bachelor's degree from two branches. Currently, many universities implement dual degree programs (Hopcan, Polat, and Adigüzel, 2014). The basis of this program is that the student receives a second diploma in a branch similar to undergraduate education. For example, Business Administration and Industrial Engineering are similar branches; undergraduate education and diploma can be obtained from these two simultaneously (Atasoy and Girginer, 2006). In other words, a student receiving a bachelor's degree in science receives a second bachelor's degree in a similar branch of science. This is also true in the social sciences.

On the other hand, we suggest combining the undergraduate education in theology, a social science, with the undergraduate education in engineering, a rational science. A somewhat similar program is carried out at the Turkish Military Academy within the body of the National Defense University. In addition to military education, students are required to receive undergraduate education in one of the fields of basic sciences, engineering, and

social sciences ('National Defense University Military Academy Regulation,' 2021). Military academies train with soldiers engineering, history and international relations diplomas. Likewise, we plan to train "engineer theologians" from faculties of theology.

The Administration of Theology-Engineering Dual Degree Program

The student will receive both theology and engineering education at the same time. Both undergraduate studies are carried out independently in the current dual degree programs. The students themselves follow the courses of each degree and attend the courses that they choose. It is impossible to graduate from the other degree program without completing the first program. In other words, the condition for graduating from the second is to graduate from the first. If the student can graduate from the first, he or she can also get the second undergraduate diploma in the same time frame. If there are missing courses, they can be completed within one year ('Çift Anadal Program Yönergesi', 2022). In the model we propose, it is essential to conduct the theology and engineering undergraduate programs independently of each other. However, if both undergraduate and dual degree students attend the theology faculty, engineering students will have to continue their education for the rest of the day. Alternatively, vice versa, students will have to attend one program during the day and another in the evening. The sustainability of this for 4-5 years is doubtful. To manage such an intense program, the student will have to put in much effort. The other problem is that both theology and engineering professors will choose between individual undergraduate students and dual degree students. Since professors tend to have low expectations of dual degree students, they will prioritize single degree students. Both theology and engineering programs should accept only dual degree students to prevent this situation. Thus, coordination among faculties will increase, and the most appropriate program and curriculum will be developed for their students. Faculties will gradually specialize in this new educational formation and student population. More importantly, the new student population will replace both faculties. The perspectives of theology teachers who teach in the field of religion will improve, and the attitudes of academics who teach in the field of engineering towards religion will change positively. For example, teachers' perception of school culture in IHL high schools given science education is significantly higher than teachers in IHL not given science education. (Artun, 2022). A positive school culture has a positive effect on the performance of students and other stakeholders in a school. Conversely, weak school culture will negatively affect school success (Ohlson, vd, 2016).

The integration of religion and science is an issue that is especially emphasized in far eastern Islamic countries such as Malaysia and Indonesia. Islamic universities in Indonesia and Malaysia require a high school religious education, as in IHL, for some undergraduate programs. In addition, religious education partially continues during undergraduate education. In those countries, the focus is primarily on the integration of religion and science in the learning dimension (Gumiandari and Hasanah, 2019). In this text, how this new faculty will be managed, how the faculty members will be chosen and how the courses and the curriculum will be organized are not discussed. These issues on the theology-engineering dual degree program need to be discussed details by theological scholars, religious engineers, and religious scholars interested in natural sciences. This study mainly focused on the theoretical background of the integration of religion and engineering education at the university.

Student Admission

Since 2016, science programs have started to be implemented in project Imam-Hatip schools. These students receive both religious education and intensive mathematics, physics, chemistry, and biology education in the curriculum. The project aims to raise people committed to national and spiritual values in science (Karaman, 2021). As expected, the university preferences of these students are branches that accept students with science-test scores, such as health, engineering, and biological sciences. Something unusual is happening here. Because a student who receives basic religious education and science education in high school only receives engineering or medicine education at university. In other words, after attending university, the student no longer receives religious education. However, the equivalent of the science Imam-Hatip high school should have been the faculty of theology, which provide engineering education at the university. Thus, the student would receive both theology education and engineering education. In the current circumstances, the goal of raising quality people with national and moral values in science branches such as health and engineering is not realized. Even worse, Imam-Hatip students who receive science education are lost in secular undergraduate education such as engineering and health.

For this reason, it is necessary to open theology programs that also provide undergraduate engineering education. Our suggestion here is not that all theology faculties provide engineering education. It will be sufficient to start a program with sufficient infrastructure to provide theology and engineering education in a few faculties.

Only students from Imam-Hatip schools should be accepted to faculties implementing a theology-engineering dual degree program. It is known that Higher Islamic Institutes only accepted students from Imam-Hatip schools in the past (Öcal, 1986). One possible reason for this is that it is difficult for students from high schools other than Imam-Hatip High School (IHL) to adopt and get used to the faculty of theology. Students who are not ready enough in religion and spirituality and are culturally distant from religion remain unfamiliar with the faculty and experience many problems. IHL graduated students, on the other hand, easily adapt to the theology environment, adopt the faculty quickly, and do not feel alienated (Osmanoglu, 2017). Here, our suggestion is to allocate some faculties to those who want to study theology from outside IHL to prevent alienation and facilitate the adoption of the faculty. Thus, faculties will also specialize in student resources. In other words, a faculty of theology that only accepts students from outside of IHL will update its curriculum according to the student profile. Scholars will also develop a new language based on the student profile. Since the students will be similar in terms of being outside of IHL, they will adapt to the faculty more easily and will have gone through the same process in the upper classes.

Successful students who are start a bachelor's degree program can receive a second undergraduate education in the second year. In other words, the student commences the business administration undergraduate program and is accepted to the industrial engineering undergraduate program in the second year (Atasoy & Girginer, 2006). When the student enrolls in the second undergraduate program, the grade of success in the undergraduate program -General Weighted Grade Point Average- is considered ('Çift Anadal Program Yönergesi', 2022). In our opinion, students should be admitted directly to the theology-engineering dual degree program at the entrance to the university admission exam. This will ask which type of score the student will take the exam. According to the current university entrance exam, engineering faculties accept students with science-test scores, while theology faculties accept students with verbal-test scores ('Yükseköğretim Kurumları Sınavı (YKS)

Kılavuzu', 2022). Student admissions can be made using several methods. First, a student can be admitted with an equal weight score that meets both the verbal and science scores to a certain extent. A student who is not tested in science courses here may lose interest in science courses in high school. Second, the student may be required to meet both qualifications. If a student provides the minimum success rank from one of dual degree programs, he/she can choose for the other as well. For example, candidates who pass the minimum success rank determined for engineering can apply the theology-engineering dual degree program. Then, those with the highest verbal scores will be accepted to the program. It can also be the other way around. Those who meet the minimum success rank of the undergraduate theology program can apply to the dual degree program, and those with high science-test scores will be deemed to have won. In our opinion, both options are not very suitable as they will lead to public debate.

Status of Graduates

Student who graduated from the dual degree program will become "engineer theologian" with theology and engineering degrees. The most significant advantage of the new generation of engineer theologians is that they will have more job opportunities. Thus, students will have less anxiety about finding a job and focus more on their education. One of the most critical concerns of students for the future is not being able to find a job and employment restrictions (Kirman & Demir, 2018). For instance, the primary reason for social studies teaching faculty students to participate in the dual degree program is the increase in job opportunities (Aykırı & Aktuna, 2021). Students enrolled in the dual program outperformed their peer's studying pharmacy or business alone in the South Carolina College of Pharmacy and The Citadel's School of Business Administration, and they had a high level of satisfaction with the dual degree program (Chumney and Ragucci, 2006). After all, having a second bachelor's degree is better for job opportunities than a single bachelor's degree (Plumber, 2021). In addition, a moderate-high level of professional emotional burnout can be experienced over time (Çengil, 2010). In this case, the person's productivity decreases, but he serves inefficiently as a religious officer or teacher for years because he cannot change his profession. We do not expect a theologian or engineer to experience burnout, but if such a situation arises, the person can continue his life as an engineer.

Here, one may object that an engineer will neglect his duty as a religious official. The issue of negligence and its follow-up is an administrative issue. However, it should be known that the mosque community considers the religious official's dealing with additional work, acceptable, provided that he does not disrupt his duties (Çanakçı, 2015). Moreover, most of the community that gave this answer consists of associate degree and undergraduate graduates. For example, while Abu Hanifa was busy with religious sciences, he was also doing trade. Thus, he was constantly involved in life and produced effective solutions to many problems he faced by using the method of comparison (Uzunpostalcı, 1994). An engineer religious official or an engineer religious teacher will be more aware of the problems of the society he serves and will reveal more effective solutions. Because when a theologian with an engineering degree takes part in a religious field, his knowledge, self-confidence, and motivation will be much higher. For instance, social studies teaching faculty students participating in the dual degree program state that it gives them self-confidence, enables them to look at events more holistically, increases their problem-solving skills, and provides motivation and discipline (Aykırı and Aktuna, 2021). Hence, the new generation of theologians will be much more influential and effective on the younger generation and more respected by the middle-aged generations. An engineer mosque clergyman will make the mosque a center of

attraction for the small and middle-aged congregation by giving lectures, such as computers, electronics, and religious studies.

One of the important problems of today is the dominance of a secular language in social life. Integration of religion and science is required to soften this secular language. Thus, the religious narrative may penetrate the scientific discourse, and religious values may be more accepted in society (Kwon, Cho, and Son, 2018). From this point of view, it is clear that the teaching method of the new generation of engineer-theologians, who are employed as consultants, religious officials, and teachers, will include more science and technology. Mutually, the language of religion will carry scientific elements, and the language of science will carry religious elements. This will incorporate a more religious narrative in life, allowing it to be adopted more easily. Also, religious elements of scientific knowledge will lead to greater ownership of science at the community level. Thus, the social and scientific conditions for the "revolutionary inventions" that Muslims need today can happen more quickly (Oktar, 2022a).

Conclusion

There was a time when Muslims were ahead of all other civilizations: the Islamic Golden Age. The most important feature of the Golden Age was that religious and rational sciences were considered as a whole. Thus, the student who wanted to learn science could learn without separating the sciences from each other. As a result, many great scholars such as Ibn Sina, Biruni, and Ghazali were trained. With the institutionalization of madrasahs, rational sciences lost their importance and were excluded from the curriculum. Theology faculties, which replaced the madrasah with the Republican era, continue to carry the similar traditional weakness. Only religious and social sciences are taught in the faculties of theology, not rational, experimental sciences. We suggest that the theology-engineering dual degree program be implemented in theology faculties to correct this mistake. Thus, "engineer theologian" will graduate from a new generation of theology faculties. It is expected that the graduates will have higher self-confidence and motivation and better problem-solving skills (Aykırı and Aktuna, 2021). It is estimated that these new generations will be much more effective in their duties as religious officials, teachers, or counselors. We recommend piloting the theology-engineering dual degree program in various theology faculties.

References

Artun, Hasan. 'İmam hatip liselerinde görev yapan yönetici ve öğretmenlerin okul kültürü algısı. ' Tezsiz Yüksek Lisans Projesi, Pamukkale Üniversitesi, Denizli. 2022.

Atasoy, Ö.A. and Girginer, N. (2006) 'Endüstri Mühendisliği ve İşletme Bölümleri Öğrencileri Arasında Program Tamamlama ve Yakınlaştırma Uygulamaları: Eskişehir Osmangazi Üniversitesi İİBF İşletme Bölümü Çift Anadal ve Yandal Programı Uygulama Örneği', 1(1), pp. 13–25.

Aykırı, K. and Aktuna, İ. (2021) 'Çift Ana Dal Programına Kayıtlı Olan Sosyal Bilgiler Öğretmeni Adaylarının Bu Programa İlişkin Görüşleri', *Uluslararası Sosyal Bilgilerde Yeni Yaklaşımlar Dergisi*, 5(1), pp. 216–231.

Çanakçı, A.A. (2015) 'Cami Cemaatinin Din Görevlilerine Bakışı: Balıkesir Örneği', *Balıkesir İlahiyat Dergisi*, 1(2), pp. 253–282.

Cebeci, S. (2004) 'Din Eğitiminde Medreseden Mektebe, Mektepten Nereye?', *Sakarya Üniversitesi İlahiyat Fakültesi Dergisi (SAUIFD)*, 6(10), pp. 197–201.

Cengil, M. (2010) 'Din görevlileri ve Kur'an kursu öğreticilerinin tükenmişlik Düzeleri', *Dinbilimleri Akademik Araştırma Dergisi*, 10(3), pp. 79–101.

Chaney, E. (2016) 'Religion and the rise and fall of Islamic science,' *Work. Pap., Dep. Econ., Harvard Univ., Cambridge, MA* [Preprint].

Chumney, E. C., & Ragucci, K. R. (2006). Student satisfaction and academic performance in a dual PharmD/MBA degree program. American journal of pharmaceutical education, 70(2).

'Çift Anadal Program Yönergesi' (2022). Hitit Üniversitesi.

Coşkun, M.A. (2010) *Geleneksellik ve Modernlik Ekseninde Diyanet İşleri Başkanlığı Hizmet İçi Eğitim İhtisas Kursları*. PhD Thesis. Marmara Universitesi (Turkey).

Dallal, A. (2010) *Islam, science, and the challenge of history*. New Haven: Yale University Press.

Genç, M.F. (2017) 'Avrupa ve Türkiye'de ilahiyat fakülteleri lisans programları', *Dinbilimleri Akademik Araştırma Dergisi*, 13(3), pp. 27–45.

Gutas, D. (2012) *Greek Thought, Arabic Culture: The Graeco-Arabic Translation Movement in Baghdad and Early'Abbasaid Society (2nd-4th/5th-10th c.)*. Routledge.

Hamid, T. (2015) *Report of Zakri Task Force on Science at Universities of the Muslim World*. London and Islamabad: The Muslim World Science Initiative.

Hopcan, S., Polat, E. and Adigüzel, T. (2014) 'Çift Anadal Programında Okuyan Öğrencilerin Görüşleri: Bir Değerlendirme Çalışması', *HAYEF Journal of Education*, 11(2), pp. 287–299.

Gumiandari, Septi and Hasanah, Uswatun. 'The Implementation of The Integration of Science and Islam in Curriculum Development in Indonesia, Malaysia and Brunei', Jamblang Cirebon: CV. CONFIDENT, 2019 (ISBN:978-602-0834-85-6).

İzgi, C. (2019) *Osmanlı medreselerinde ilim: Riyazi ve tabii ilimler*. Istanbul: Küre Yayınları.

Karaman, D. (2021) 'Yöneticilerine göre Anadolu İmam Hatip Liselerindeki program çeşitliliği ve proje okul uygulamasının değerlendirilmesi', *Türkiye Din Eğitimi Araştırmaları Dergisi*, (11), pp. 11–37.

Kenan, S. (2013) 'Türk eğitim düşüncesi ve deneyiminin dönüm noktaları üzerine bir çözümleme', *Osmanlı araştırmaları*, 41(41), pp. 1–31.

Kirman, M.A. and Demir, R. (2018) 'İlahiyat Fakültesi Öğrencilerinin Beklenti ve Sorunları: Mustafa Kemal Üniversitesi Örneği', *Antakiyat*, 1(1), pp. 1–21.

Kwon, S.-Y., Cho, N.H. and Son, M. (2018) 'Convergence education of medicine and theology in a secular age, *Education Sciences*, 8(4), p. 201.

Makdisi, G. (2018) *Ortaçağ'da Yüksek Öğretim*. Istanbul: Klasik Yayınları.

Makdisi, G. (2019) *Rise of Colleges*. Edinburgh University Press.

'Millî Savunma Üniversitesi Harp Okulları Yönetmeliği' (2021). Millî Savunma Bakanlığı.

Mimouni, J. (2015) *Should Religion Be Kept Out of the Science Classroom?* London and Islamabad: Muslim World Science Initiative, p. 83.

Nursi, B.S. (2014) *Münazarat*. Manila: Risale Press.

Öcal, M. (1986) 'İlahiyat fakültelerinin tarihçesi', *Uludağ Üniversitesi İlahiyat Fakültesi Dergisi*, 1(1).

Ohlson, M., Swanson, A., Adams-Manning, A., & Byrd, A. (2016). A Culture of Success--Examining School Culture and Student Outcomes via a Performance Framework. Journal of Education and Learning, 5(1), 114-127.

Oktar, S. (2021) 'Islam and Science: Integration of Religion and Science to Build a Second Islamic Golden Age', *Katre Uluslararası İnsan Araştırmaları Dergisi*, (12), pp. 3–25.

Oktar, S. (2022a) 'Islam and Science: Muslims Should Settle on Mars, Venus and Beyond Space.', *Turkish Academic Research Review*, in publishing.

Oktar, S. (2022b) 'Madrasity: A new model of Islamic higher education integrating religion and science inspired by madrasa and university.', *Katre Uluslararası İnsan Araştırmaları Dergisi*, in publishing.

Okumuş, E. (2007) 'İlahiyat Fakültesi Öğrencilerinin Problemleri-Dicle Üniversitesi Örneği', *Değerler Eğitimi Dergisi*, 5(13), pp. 59–94.

Ören, M.F. (2019) 'Dini Bilgi Üretiminin İki Farklı Konteksti: Medrese ve İlahiyatlar', in. *Uluslararası İslam Eğitimi Kongresi*, İstanbul, pp. 157–172.

Osmanoğlu, C. (2017) 'Türkiye'de Yüksek Din Eğitimi ve Kurumsal Yabancılaşma: İlahiyat Fakültesi Örneği', *Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 31(43), pp. 197–262.

Plumber, Ammar. Earnings premia of undergraduate single and double majors. Columbia Economic Review, 2021.

Saliba, G. (2007) *Islamic science and the making of the European Renaissance*. Cambridge: MIT Press.

Sezgin, F. (2016) *Tanınmayan büyük çağ: İslam bilim ve teknoloji tarihi'nden*. Istanbul: Timaş Yayınları.

Starr, S.F. (2013) *Lost Enlightenment*. Princeton: Princeton University Press.

'Tefsir' (2022) *TDV İslam Ansiklopedisi*. Ankara: Türkiye Diyanet Vakfı.

Temizyürek, K. and Derelioğlu, Y. (2004) 'Üniversite öğrencilerinin cift anadal-yandal programlarına ilişkin tutumları', *HAYEF Journal of Education*, 1(2), pp. 1–9.

Uçar, R. (2017) 'İlahiyat fakültesi öğrencilerinin profili, akademik eğilimleri ve aldıkları eğitime ilişkin memnuniyet algıları (inönü üniversitesi örneği)', *İnönü Üniversitesi İlahiyat Fakültesi Dergisi*, 8(2), pp. 105–178.

Uzunpostalcı, M. (1994) 'Ebû Hanîfe', *Türkiye Diyanet Vakfı İslâm Ansiklopedisi*, 10(131–138).

Yakuboğlu, K. (1996) *Osmanlı medrese eğitimi ve felsefesi*. Doktora Tezi. Marmara Universitesi.

YÖK Akademik (2022) *https://akademik.yok.gov.tr/*.

'Yükseköğretim Kurumları Sınavı (YKS) Kılavuzu' (2022). ÖSYM.