

# ETHICS OF ENGINEERING EDUCATION

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# CONTRIBUTIONS OF ISLAMIC UNIVERSITIES TO PROFESSIONAL ETHICS: A CASE STUDY OF INTERNATIONAL ISLAMIC UNIVERSITY, MALAYSIA AND CRESCENT UNIVERSITY ABEOKUTA

Ibrahim Olatunde Uthman

## ABSTRACT

This paper studies about the absence of moral and religious ethics in the formulation of professional ethics that is responsible for the Islamic ethical development. For this reason, this paper as a matter of urgency will in the remaining sections attempt to assess the Islamic teachings as it affects professional ethics, the contents and contexts of the syllabi and the curricular that make up the study of Islamic universities and the approaches adopted in teaching in order to demonstrate how Islamic Universities in particular impact on professional and moral ethics in the training of scientists, engineers, financial experts etc. The teaching of Islamic ethics is today offered in Islamic universities like International Islamic University Malaysia and Crescent University, Abeokuta in Nigeria. This paper examines the objectives of teaching courses on Islamic ethics within the broader goals and objectives of the University system as well as the Teaching Methodology employed in teaching these courses. In addition, it examines the overall academic context in which the courses are taught in these Islamic Universities.

## 1. INTRODUCTION

In a recent presentation (Uthman, 2008), the author argues that it is the study of secular sciences along Islamic ethical principles that can make them Islamic. This is what distinguishes Islamic Civilization which reached its zenith and peak in the middle ages, the same period that is depicted as the dark ages in European History. The remarkable achievement attained by the Islamic Civilization was to shake Europe from its slumber (Lewis, 1973). According to D. M. Dunlop (1958), the contributions of Muslim scholars to modern education started appearing in Europe from the tenth century and by the thirteen century, there were the wide publications of the works of Muslim scholars in almost all branches of knowledge. These Muslim scholars were known as *hukamā* or wise men under the tutelage of the Caliphs. They were so called because according to S. H. Nasr (1968), they were indeed universal scholars who mastered many fields of physical, natural, human and revealed sciences. They were also guided by ethical considerations in their works. It is these ethical considerations that are missing in the development of contemporary science and in fact the conduct of contemporary professional in various fields such as engineering, biomedicine and the financial industry. Consequently, the lack of ethical conduct has led to a lot of human made problems as can be seen in the next section.

## 2. CONSEQUENCES OF UNETHICAL CONDUCT

Despite the advancement of contemporary society in almost all ramifications, human and non human lives as well as huge resources and wealth have been wrecked and destroyed by some of this same advancement because of unethical conduct of many professionals in spite of acclaimed technical, economic and scientific achievements. In a recent study (Sofihu, 2007) it has been

shown for instance that the natural disturbances that do occur which are erroneously depicted by some disasters' analysts as wicked disasters, aside alleviating the hungers and thirsts of all creatures and endowing the universe with the capability to sustain human, non human and other constituents of the universe's needs etc also do not equate the death toll from human made disasters. Even such human disastrous occurrences as death which is a divine natural means of maintaining balance in the world, also do not equate the death toll from human made disasters. It is when humans tamper with the natural means of maintaining balance in the world and the sustainability of all the species of beings that catastrophic disasters of unimaginable magnitude are inflicted on the entire environments and its differing and teeming communities. This can be seen in the manner, human made disturbances such as wars, WMD, toxic wastes; pollution, diseases, global warming, desertification, soil degradation and erosion are now gradually destroying the equilibrium of the ecosystem. The emergence of modern technology and industrialization marked the beginning of the prevailing catalogue of ecological problems. The inventions of science have made wars, which is a portent medium of earth degradation more horrible and destructive. During the Second World War, the cities of Hiroshima and Nagasaki were completely obliterated by American atomic bombs. This unwholesome development for humanity and other inhabitants of the biosphere is the fallout of an unethical mindset. Similar problems to the above have also been identified in the financial industry. According to Prof. Dr. Shamsheer Mohamad (August 2002), the failure of large corporations can be traced to financial fiascos or resulting in huge financial losses and erosion of public confidence in the financial system. These scandals that have rocked and are still likely to rock the financial markets making Chief Executive Officers (CEOs) and the management of various firms to make huge fortunes at the expense of their clients, some of whom lose all their life savings, point to unethical conduct in financial markets (March 2005). He argues that since all the financial scandals have called into question the ethics involved in the financial behavior of the top management of the above firms, there is a dire need for ethical behavior for professionals in the financial industry since the industry cannot function without the elements of transparency, justice and prudence. It is therefore, the contention of this paper that it is the absence of moral and religious ethics in the formulation of professional ethics that is responsible for this development. For this reason, this paper as a matter of urgency will in the remaining sections attempt to assess the Islamic teachings as it affects professional ethics, the contents and contexts of the syllabi and the curricular that make up the study of Islamic universities and the approaches adopted in teaching in order to demonstrate how Islamic Universities in particular impact on professional and moral ethics in the training of scientists, engineers, financial experts etc. The teaching of Islamic ethics is today offered in Islamic universities like International Islamic University Malaysia and Crescent University, Abeokuta in Nigeria. This paper examines the objectives of teaching courses on Islamic ethics within the broader goals and objectives of the University system as well as the Teaching Methodology employed in teaching these courses. In addition, it examines the overall academic context in which the courses are taught in these Islamic Universities.

### **3. PROFESSIONAL ETHICAL BEHAVIOR AND THE TEACHINGS OF ISLAM**

While the terms ethics and morality are usually used in day to day conversation interchangeably, the term ethics which comes from the Greek word, *ethos* refers to a set of behavioral precepts, principles and concepts that are central to the life of a community, people and race. The term morality on the other hand, which is derived from the Latin word, *mores* refers to peoples'

conduct, practice and custom (William, 1972, Asaju, 1997 and Pojman, 2002). In short, ethics in reality is the theoretical study and reflection of morality; it asks value laden questions so as to establish normative concepts and precepts for morality or human behavior and conduct. In Islam, Islamic Scholars have used different terms to refer to both ethics and morality as *khulq*, *tahdīb*, and *adab* (See Hughes, 1885, *Encyclopedia of Islam*, 1983, Al-Ghazālī al-Misrī, 1980). All these Arabic words reveal the comprehensiveness, richness and holistic perspective of ethics and morality in Islam, *Khulq* is used to describe a person's innate character and behavior just as *khulq* denotes its outer attributes, shape and physiognomy. It is in this sense that the Holy Prophet of God (SAW) used the plural of *Khulq* or *al-aKhalāq* when he declared that part of the divine purpose in sending him as a prophet was to perfect good morals (Al-Ghazālī al-Misrī, 1980). He was therefore commissioned as a prophet so as to instruct and guide humanity through his own personal conduct moral perfection. The terms *tahdīb*, and *adab* on the other hand implies disciplining, training, nurturing and grooming a person in the mind, soul and outward disposition. Hence the term *adab* is seen by Gibb (1979) as a synonym of *Sunnah*. This is in line with the *Hadīth* of 'A'ishah who once described the *Sunnah* as the Qur'ān in practice (Al-Ghazālī al-Misrī, 1980).

*Adab* however reflects the culmination of the process of learning and transmission of knowledge which as explained by al-ʿAttas is the perfect man (*insān al-Kāmil*). The individual which the Islamic educational structure seeks to produce is one that is refined, cultured and disciplined and can therefore be instrumental in restoring Islamic leadership and scientific, moral and spiritual values. To him, *al-adīb* or the well-educated, cultured and disciplined global scholar recognizes the proper places of things in the divine scheme and the ability to relate to all things in existence in a just manner (*al-'adl*) and with just and appropriate comportment (*al-adab*). [18] The definition of *al-adīb* or *al-ālim* (the scholar) can therefore be located in the qualities and characteristics of a Muslim scholar. According to Al-Ghazālī, the scholar's autonomy and independence categorizes such scholar as *ālim al-sū* or not. He upholds the commitment of scholars to knowledge regardless of remuneration, love for teaching, attachment to asceticism and disdain for the worldly attractions as sound qualification of Islamic intellectualism. [19] Thus the goal of education in Islam is to lead humankind to become true *'ibād* or servants of Allah which is translated into *khilāfah* or vicegerency of Allah. So the search for knowledge in Islam is not essentially for material but divine pursuits and the attainment of perfection, orderliness and balance in the order of creation. In the same manner, knowledge is therefore meant to serve humanity as part of creation. [20]

So the development of the perfect man (*insān al-Kāmil*) in all fields of learning must form the objectives and goals of the Islamic university and any university that falls short of these noble goals cannot be regarded as a true Islamic university. This must have informed the establishment of Islamic universities in various parts of the Muslim world as would be revealed shortly.

#### 4. OBJECTIVES OF ACADEMIC STUDY IN THE MUSLIM WORLD

Considering the above Islamic philosophy of education, Muslim scholars agreed on the need for the establishment of International Islamic Universities for the academic study of Islam which is directed at addressing the dilemma created by the bifurcation in Muslim education. This bifurcation had led to the emergence of two different sets of graduates in Muslim countries, graduates of secular institutions that could articulate modern concerns of human rights, pluralism, globalization and equality etc without knowledge of Islamic traditional sciences and graduates of Islamic traditional institutions that are well versed in Islamic traditional sciences but failed to grasp the intricacies of the above modern concerns. This approach by the International Islamic

University Malaysia and other Islamic Universities on the scientific study of Islam based on a adequate conceptualization of Islamic epistemology or theory of Knowledge and which gave birth to the Islamization of knowledge movement was both a rejection of the inadequacies of secular and traditional institutions that produced half baked intellectuals and westernized Muslims who became authorities on Islam.[21] The above epistemological inadequacies according to Fazlur Rahman (d. 1988) can be overcome by nurturing the growth of a genuine, original and adequate Islamic intellectualism.[22] This is "Islamization of knowledge" which is now widely accepted all over the Muslim world. The aim of Islamization is to bring the epistemological and philosophical foundations of modern science in line with the teachings and principles of Islam. It calls for an all-embracing study of secular sciences and their applications – technology – based on revealed knowledge or in other words an integration of revealed knowledge with the whole body of human knowledge. This elective approach must be employed to select from both the traditional Islamic and western approaches that which is most sound and correct and welded together to form an Islamic intellectual structure. Many Muslim scholars such as al-'Attas, al-Faruqi and Hussein Nasr and institutions such as the International Institute for Islamic Thought and the International Islamic Universities have pioneered studies in this area.

##### **5. TEACHING AT INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA (IUM) AND CRESCENT UNIVERSITY, ABEOKUTA**

This approach is what has been adopted by the International Islamic Universities established for the scientific study of Islam. Based on the need to recapture this Islamic intellectualism, as defined and articulated at the first and subsequent conferences on Muslim education, the International Islamic University Malaysia for instance teach Islamic traditional sciences like *usul al-Din*, *fiqh*, *Qur'an Hadith* and ethics as part of a General Studies programme to all students in the Human and Science, Engineering, Business and Management subjects etc. in an integrated curriculum. This exposes students to a broad, balanced and holistic curriculum and orientates them not only to memorizing and reporting Islamic theoretical heritage but also methodological gathering, analyzing, questioning and critiquing Islamic texts and contemporary issues. The curriculum inculcates in students the ability to relate the sacred to the profane, theory to practice and religious to the secular. At IUM, the Islamization of knowledge is implemented through students majoring in one of the Islamic traditional sciences like *usul al-Din*, *fiqh*, *Qur'an* and *Hadith* and doing their minor in any of the social sciences or humanities. They may also combine Islamic Law with Common Law and specialize in Finance which includes Islamic Finance as part of the core courses. These major and minor courses constitute core University requirements designed to realize the well defined aims, vision and mission of IUM.[23]

The experience at Crescent University is similar to the above. Crescent University which takes after the International Islamic University Malaysia is engaged currently in teaching Islam both as a general university course and with other subject combinations. Students are open to offer B.Sc. degree in Islamic Religious Studies programme with Computer Science, Banking and Finance, Actuarial Science etc. At the end of their studentship, these students will be awarded combined Honours degrees in Islamic Studies with any of the above subject disciplines. These combinations are designed in order to produce Islamic Scholars who also possess professional and basic knowledge of their second field of study. Consequently, students who have registered for the B.Sc. combined Honours in Islamic Studies will be exempted from all the general courses on philosophy of Islam and beginners Arabic, which they are expected to fully, study as part of their core courses in Islamic Studies. This brings us to the general courses on philosophy of Islam and beginners

Arabic, which in addition to the above; the researcher was responsible for introducing, designing and has been teaching at the nascent Crescent University for three academic sessions. The courses on Philosophy of Islam 1 and 2 as well Arabic for beginners 1 and 2 are taken by the entire University students. They constitute the cornerstone of Crescent University's vision, philosophy and mission and spawns about a typical sixteen week semester during with an average of a week spent on each topic within the courses' outlines. At Crescent University, Islam is taught in order to produce Scholars who possess professional general and basic knowledge of other different fields of study and also possess core knowledge of Islamic Studies as well as Islamic ethics by taking the general courses on philosophy of Islam and beginners Arabic, which they are expected to fully, study as part of their core courses in the University. Ultimately the students in the Islamic Universities learn that Islam has an essence and core. Its core and essential unifying dynamic that binds together Muslims of diverse socio-economic, political and cultural realities includes not only faith both most importantly Islamic ethical behavior. A fundamental teaching of Islamic ethical behavior is the concept of goodness. *Kayr*, *Birr* and *Ihsan* in Islam are some of the terms for anything, action, utterance and behavior that is beneficial and useful not only to the doer but also to everybody and thing (Qur'ān2:177, 180 and 3:192). The concept of goodness from the above verses implies that faith and piety are meaningless unless they make a person refrain from acts that are harmful to others and therefore undesirable. Hence the averting of harm takes precedence over the acquisition of benefits, hence all human actions that lead to the above problems and precipitate harmful impacts such economic frauds and scams, environmental damage and pollution, and are forbidden no matter the personal and selfish gains derived by their perpetrators.

## 6. THE PLACE OF PHILOSOPHY IN TEACHING AT ISLAMIC UNIVERSITIES

Since ethics asks value questions, it is grounded in logic and reason. This is why it is a branch of philosophy. Though many scholars have argued that the teaching of ethics must be left to philosophy and not identified with any religion, it can be seen from the unethical conduct of many professionals today that in moments of conflict and selfish interests, it is very difficult to remain incorruptible and moral. No matter the regulations put in place, many people would not refuse to cheat and defraud if they have an iota of doubt they will be caught. It is for this reason that moral precepts can be inculcated through religion and faith. It is incorrect to claim that logical and critical methods are taboo in Islam. They might be taboo in some parts of the Muslim World but not in Islam. Islamic scholarship has always upheld intellectual honesty, integrity and objectivity as parts of its essential and core tradition. Hence Islamic scholarship must today confront theological postulations on larger sociopolitical, economic and environmental issues such as feminism, peace and conflict studies, citizenship, environmentalism and inter and intra religious dialogue. This is in line with the methods of deduction employed by Muslim predecessors in developing the early Islamic intellectualism. The methods include *jadāl*, (debates and dialectics), *munāzarah* (disputations and intellectual discussions). These methods provided the intellectual atmospheres for the growth and proliferation of over a hundred Schools of thought in early Islam. Most of these schools however died out when they ceased to produce scholars capable of defending their jurisprudential differences or *khilāf*. The sources of the *Sharī'ah* otherwise known as *masādir al- Sharī'ah* or *usūl al-Sharī'ah* include legal deduction or *Ijtihād* as sanctioned by the Prophet himself when he appointed Mū'āz Ibn Jabal as governor of Yaman. In addition, 'Umar Ibn al-Khattāb also gave Shūray, the Judge, a similar sanction when he ordered him to into what is obvious to him in the book of Allah before giving legal ruling on any matter and not to ask

anybody about it.[24] There is therefore a need for the sustaining of philosophy in the curriculum of the academic study of Islam. Al-Ghazālī, though a traditionalist, who is credited to have routed the philosophers, argues in support of what can be termed *tafsīr bil Istinbāt* (the facilities of deduction or personal opinion) which today is viewed as the prerogative to the modernists. Al-Ghazālī upholds the deductive method, because most of the sayings of Ibn ‘Abbās and Ibn Mas‘ūd were based on these two facilities, which made the two companions to hold at times irreconcilable views on the interpretations of some verses. Yet, the Prophet had prayed to Allāh to grant Ibn ‘Abbās a clear comprehension of His *Dīn* and knowledge of various methods for interpretation.[25] According to Nasr it is a means used by Al-Ghazālī to defend Islam against the philosophers themselves and can therefore be used for protecting the truth of Islam and repelling the attack of that may come from different sides. [26]

## 7. CONCLUSION

Since the goal of Islam is to lead humankind to become true *‘ibād* or servants of Allah which is translated into *khilāfah* or vicegerency of Allah and the search for knowledge in Islam is not essentially for material but divine pursuits and the attainment of perfection, orderliness and balance in the order of creation, the Islamic Universities have the potential to play a decisive role in training professionals that are well imbued with the proper ethical framework that is needed today. In the same manner, these universities would therefore help to serve humanity as part of service to Allah. As Allah’s representatives or *Khulāfā’* professionals trained by the Islamic Universities must work for the invention, use and development of what is beneficial, useful and desirable to the universe at large humans as well as non-humans and engender the well-being and happiness of humans, animals and other constituents of biodiversity in this world to ensure their happiness in the hereafter.

The first step of Islamic Universities in this direction should therefore be the education of the heart and mind to awaken Allah's consciousness and awareness of human's responsibilities to the welfare of humanity and human civilization starting from self, family, relatives and communities. They must also enable students discover who they are, where they live and how to live a life of Godliness. Muslim tertiary educational institutions could be in form of International Islamic university, Malaysia and Crescent University Abeokuta. One common factor to the teaching of Islam in these Universities is the inclusion of ethics, morality, logic, philosophy and critical thinking in their curriculum which is a major strong point that has contributed to the professional and moral ethical training of their students whether as social scientists, religious scholars, pure and applied scientists, engineers etc.

This approach affords students the opportunity of being brought up with Islamic ethics, immersing themselves in Islamic practice as well as sound scientific, social science and Business education etc. It is heartwarming that many of these Islamic Universities elective approaches are already producing excellent academic statistics with many of its graduates at the top of their countries local, state and national educational institutions and administration.

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