Islamisation in Modern Sciences: The Way Forward
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Abstract
This article provides an important framework for the development of Islamisation in general and Islamisation in sciences in particular. Islamisation as a scientific activity and process that takes place in a university context requires more than conceptualization and theorization. It demands strategisation, planning, implementation and evaluation. Hence, whatever is our conceptualisation of Islamisation the important message is what value or impact that may be added or created from this scientific activity. This article used textual analysis to introduce the concept of Islamisation and Islamisation in science stressing the need for more in-depth articulation of the activity from epistemological, methodological and education perspective. The article concludes that there is a need to enhance science education from an Islamic perspective so as to create a conducive environment for the development of Islamisation activities. Furthermore, the Muslim mind needs to engage in serious intellectual efforts to develop an Islamic epistemology and methodology for the development of scientific thinking and its applications in various disciplines.

Introduction
Ever since its inception Islam has always been a champion of balanced civilizational development. One of the major features of Islam is its appreciation and encouragement of intellectual efforts leading to the understanding of man, life, universe and creation at large. In fact, from the early days of Islam, knowledge and learning became one of the key drivers of Islamic life and culture. Through enhancing the enterprise of knowledge and creating the environment for knowledge construction, dissemination and application, the Islamic society embarked on civilizational development paving the way for scientific, intellectual, economic, cultural and social progress.

This Islamic orientation has helped in creating and expanding a body of knowledge covering disciplines related to physical, metaphysical and
human sciences. The legacy of Islam stands as a testimony of the dynamism of the Muslim mind and its contribution to the development of the realm of knowledge and civilization. Indeed, the capability of the Muslim mind goes beyond mere transferring the knowledge and wisdom of other civilizations and people to creating new realms of knowledge and disseminating the Qur’ânic wisdom across civilizations and cultures.

The originality of the Muslim mind appears clearly in its ability to develop a new knowledge worldview which laid down the scaffold for a new theory of knowledge and epistemology. This unifying Islamic epistemology becomes the driving force behind the achievement of the Islamic enterprise of knowledge in history and civilization.

Today, the world is in need for the Islamic worldview and epistemology so as to reclaim back balance in the process of knowledge construction, dissemination and applications. The domination of the positivist and materialist ideologies and paradigms in the enterprise of knowledge created a huge gap between the revealed knowledge and reason and between the spiritual and material. This gap is detrimental to the development of human life and civilization.

In this situation of sophisticated and complex imbalance in the enterprise of knowledge, Islam has to play its role in regaining back this equilibrium. Hence, the project of Islamisation, among many others, is one endeavor towards this end. This article sheds some lights on the importance of the Islamisation project and its role in providing solutions to real problems affecting daily life of people to the more abstractive and epistemological forms of intellectual endeavour. What is of more interest is to know that there are many aspects of Islamisation in general and Islamisation of knowledge in particular. To name few, Islamisation of knowledge may be perceived as 1) an Islamic response to the supremacy and domination of the western paradigms of knowledge and styles of life which somehow ignore the question of values and ethics in the body and process of knowledge creation and application; 2) a methodology to approach knowledge matters from an Islamic stand point; 3) an epistemology (theory of knowledge, sources of knowledge, a system of thinking…etc); 4) a framework for knowledge production and application based on the Islamic worldview and values; 5) a process of de-positivisation and de-materialisation of contemporary western philosophy of knowledge stressing the need for balance between science and conscience, reason and revelation and religion and politics; 6) renewing the theories and methods of dealing with the Qur’an, Sunnah, Islamic heritage and contemporary western knowledge; 7) re-constructing the Islamic heritage showing its relevance in the contemporary milieu; 8) a new educational philosophy leading to an Islamic system of education laid upon the Islamic worldview; 9) a body of general values and virtues that need to be taught, disseminated and inculcated within the Islamic general learning environment; 10) a systematic activity to creating favorable environment and conditions for the development of knowledge within the Islamic frame of reference; 11) a process of reconciliation / harmonization between the western knowledge and Islamic principles and theories; 12) a process of inculcating Islamic ethical, moral and spiritual injunctions into the personality and well-being of individuals and groups; 13) a process of reviving the qualities of Ijtîhâd including bringing up individuals with qualities like; holistic vision, critical and analytical abilities, ethical orientation leading to the formation of new ideas in various branches of knowledge…etc.

Islamisation: A Big Project with an Added Value

Islamisation: Scientific Activity and Renewal Process

The project of Islamisation of knowledge is still enfolding. The first general comment on the project is that this activity is of many dimensions ranging from the Islamisation of the self and providing solutions to real problems affecting daily life of people to the more abstractive and epistemological forms of intellectual endeavour.
Whatever is the focus of Islamisation, it is obvious that it is a scientific activity and a process of renewal of the intellectual and civilizational efficacy of the Muslim mind and society. As such, this activity and process need to grasp the essence of the current context of knowledge creation and application which is influencing and shaping our human life and civilization.

**Islamisation and Educational Excellence: Understanding the Current Context**

Vying for educational excellence is not only a noble mission and strategic objective of our communities at large but also a key driver of sustainable development and creation of value and opportunities for all. In the current situation it is obvious that the forces and dynamics of globalisation, knowledge society, artificial intelligence, emotional and spiritual intelligence, stakeholders’ economy, sophisticated management systems, novel governance and leadership models, ICT applications, human capital engineering, creativity and innovation in sciences and technology are becoming more prevalent and influential in our progress and development. As such, for a fast developing world, in which balanced eco-system, socio-economic and civilizational development is a priority, education, knowledge, creativity and innovation are among the vital catalysts of sustainable development. Accordingly, there is a need to grasp the essence and impact of the paradigm shift that is taking place on the world educational scene so as to cope and respond effectively to the new demands and challenges of sustainable development.

Strategically speaking, it is important for our educational institutions and centers of learning to grasp the essence and dynamics of education in a knowledge economy and society milieu. In general terms, this new context is characterised, among other things, by 1) fast growing interest on enhancing high quality programs and delivery system, 2) globalizing the value added of research and inventions, 3) creating opportunities and transforming possibilities into values and wealth, 4) effective use of information and technology in enhancing quality, 5) capitalising on human capital, 6) creating world educational networks and alliances, 7) increasing high academic competitiveness and 8) most importantly addressing all the above elements from the angle of creativity and innovation. In this context we are addressing the questions of Islamisation and integration be it in science based disciplines or humanities or criterial studies.

**Islamisation in Our Context: the Added Value**

No doubt that the business and enterprise of Islamisation is crucial and instrumental to the question and process of reforming the intellectual and civilizational efficacy of the contemporary Islamic society and civilization. If we agree that, in principle, knowledge is power that is directly affecting the development and growth of people, cultures, societies and civilizations, then, it is only fair and right to acknowledge that Islamisation of knowledge activity is worth taking and adding value to our efforts.

Obviously the activity of Islamisation of knowledge takes place within the bigger context of the renewal of the Ummah stressing the need for intellectual reform which requires, among other things, developing an Islamic contemporary epistemology and methodology for knowledge creation, dissemination, application, evaluation and valorisation. Hence, any discussion on the project of Islamisation of knowledge would require by necessity and by its own very nature developing this epistemological structure and methodological tools within the framework of the Islamic worldview and its ontological, teleological, theological, axiological and value system. Indeed, all our deliberations on the activity of Islamisation shall stem from our common understanding that the reference point of the activity is not the western body of knowledge and its epistemological structures and ideological orientations rather it is the Islamic epistemological structure and historical, cultural and social demarcations. This, of course, does not imply ignoring the contemporary western legacy and contribution to the cosmos of knowledge, but mainly refers to the point of reference so as to ensure the right start and direction of the whole activity.

It should be clear that despite the fact that the western knowledge structures and their applications in science, technology and all other spheres of human, behavioral and social sciences are dominating and influencing the contemporary
body and enterprise of knowledge, we shall allude vehemently that more weightage and efforts need to be directly linked with the Islamic epistemological structure and reference point. I am even encouraged to go further suggesting that the success and realization of the Islamisation of knowledge project bears heavily on our success in developing and applying the Islamic epistemological structure, system and methodology in our contemporary educational system right from early days of education up to the highest levels of learning.

As a matter of fact, the Islamisation activity in the last thirty years or so had opened horizons and opportunities for intellectual and methodological redress in our contemporary educational system which is marred by duality and lack of unifying worldview and epistemology paving the way for more isolation of the Islamic core value system and orientations in the body of contemporary knowledge.

Strategising Islamisation as a Scientific Activity and Process
In the present stage of the development of Islamisation project as a scientific activity and process, there is a need to move from theorization and conceptualisation to implementation and evaluation. As such, one should perceive it as a process that requires strategic thinking and planning so as to achieve its objectives.

In order to advance the idea and project of Islamisation there should be a clear strategy and plan to infuse the Islamic elements into the core activities of the learning processes. The integration of Islamic values, educational principles, learning guidelines and approaches of teaching into the body of activities in the university is one important step towards Islamisation. In this respect, there is a need to design a clear framework for the planning of the entire activity of Islamisation at all levels. Accordingly, this paper suggests the adaptation of the model of quality management system to enhance the process of implementing and monitoring the process of Islamisation in the university so as to ensure its success.

This model assists in developing a model approach to the implementation of Islamisation. The illustration bellow looks at Islamisation as a quality process consists of inputs, processes, outputs and feedback for continual improvement. In this framework, the component of Islamisation or Islamic perspective shall be integrated in all the inputs, processes and outcomes so as to ensure that this is institutionalized and become part and parcel of the entire activity of learning. In the Inputs, Islamic worldview and values, Islamic environments, Islamic curriculum and Islamic guidelines, policies and principles of learning are integrated. Likewise in the processes, the Islamic perspective is integrated and becomes the guiding element of the processes of teaching and learning. On the other hand, the outputs should reflect the Islamic perspective in the form of Islamised individuals, Islamised research outputs, Islamised services, Islamised products. Additionally, there should be feedback for continual improvement in the learning process and specifically scrutinizing the achievement of the Islamic perspectives. This would require monitoring, implementation and evaluation of the process of integrating the Islamic perspective into the learning activity. There should internal and external mechanisms to ensure the creation of Islamic learning environment.
The above illustration demonstrates, the various aspects of the processes of learning highlighting the integration of the Islamic perspective into the inputs, processes and outputs. The next illustration shows a more structured framework adopting the concept of quality. This model besides stressing the inputs, processes and outputs, it looks at the learning from the perspective of stakeholders, responsibility of management, satisfaction of the customers (learners), measurement and analysis of the activities of learning which imbued with the Islamic perspective.
On another level, the Islamic framework of quality learning emphasises the aspect of continual improvement to achieve excellence in all the inputs, processes and outputs. The illustration below highlights the various aspects required for the improvements of the learning.

By adopting this model one can scrutinise the various aspects that need to be prioritised so as to integrate the Islamic perspective as well as measure the development and improvements achieved.

Figure 2: Managing Quality Learning within the Framework of Islamisation Model of Learning within the Islamic Framework Perspective
It is so far clear that integrating the Islamic perspective or Islamisation in a university set up requires a systematic approach that views it as a process whereby quality standards and procedures can be adopted to achieve the aim of Islamisation. In the next section provides an example of implementing Islamisation in a university context.

Islamisation in a University Context: The Case of the International Islamic University Malaysia

Undoubtedly, there are many good universities in the world which undertaken the quality transformation process and showed excellence in many aspects such as; teaching and learning, research and innovation, leadership and governance…etc. However, there is scarcity in those universities which adopted the philosophy and mission of Islamisation and succeeded in implementing it in the context of an academic institution. One such university is the International Islamic University Malaysia. The International Islamic university Malaysia is a case of a university that developed a model of learning from an Islamic perspective. The 28 years old IIUM envision itself as a leading international centre of educational excellence, to restore the dynamic and progressive role of the Muslim Ummah in all branches of knowledge. Accordingly, the IIUM sets its mission as to achieve Integration, Islamization, Internationalization and Comprehensive Excellence.

The IIUM by adopting the mission of integration and Islamisation of knowledge set the platform for the creation of a positive environment for learning from an Islamic perspective. Looking at the development of the University and the activities leading to integration of the Islamic perspective into all
aspects one may note that the Integration of the Islamic perspective took several forms and adopted to various disciplines and faculties. In a first general observation there many aspects of infusing the Islamic perspective into the learning environment namely;
1- Harmonising between Islamic law and civil law.
2- Integrating Islamic worldview and values in the body of modern Knowledge.
3- Relating Islamic teachings and civilization to the present context. (Contextualization).
4- Producing Islamic alternatives and models in various fields of knowledge.
5- Inculcating and infusing Islamic values and morals in the learning process and students’ personality.
6- Making use of classical Muslim contributions to modern scientific fields of knowledge.
7- Critical reading and re-construction of history of ideas and knowledge accounting for Islamic contributions and perspective.

These aspects reflect the various processes undertaken to create a learning environment from an Islamic perspective. By adopting the above definition and Islamic perspectives, the learning and teaching in the university environment become more reflective of the Islamic perspective. In fact, all activities involving staff, students, administrators, teaching and learning, research, services, community engagement become more Islamic and based on the Islamic perspective.

The Islamic perspective becomes apparent in all areas including:
Research and publications outputs;
Curriculum and course outlines;
Teaching Methodology and delivery approaches;
Code of ethics and codes of conduct

In order to ensure the creation of quality learning from an Islamic perspective and the success of the processes of integration and Islamisation, the university identified the key performance indicators related to the integration of the Islamic perspective into the learning environment. Among others, these are some of the key performance indicators related to the Islamic perspective:

Percentage of research, publication and proceedings based on IOK that are produced in proportion to the total number of staff members.
Number of Master and PhD. theses completed based on IOK perspective in proportion to the total number of theses completed.
Amount of research and publication funds allocated for IOK projects in proportion to total amounts of money used for research and publication.
Number of nationally and internationally organized seminars, conferences, workshops and related activities based on IOK Perspective.
Level of success in integrating the Islamic values, concepts and perceptions in the curriculum and teaching and learning activities.
Number of programmes and course outlines developed based on IOK input/perspectives in proportion to total programmes and course outlines.
Level of effectiveness of academic and administrative services in enhancing and achieving the IOK mission.
Number of training and consultation on IOK provided internally and externally in proportion to the total number of related activities.

Adoption of Islamic Perspective in the Learning Environment: the Case of Kulliyyahs
The Kulliyyah of Engineering identified the Islamisation as infusing Islamic values in the general framework of its activities, whether administrative, academic, or those pertaining to students’ affairs, and curriculum development. As such, the integration of the Islamic perspective means internalizing professional ethical values and integrating the Islamic traditions into the curriculum and personality of the engineers so as to practice their work according to the Islamic guidelines and principles.

The Kulliyyah of Sciences asserted that integrating the Islamic perspective would mean looking at scientific knowledge from the perspective of the Islamic philosophy of science. Besides, instilling the Islamic vision of man, nature and ultimate reality by attaining mastery of viable knowledge and skills through articulation of life-long learning concepts based on the Islamic worldview and epistemology. This will
also include developing ethical attitude and revival of the research spirit and cultural legacy of our scientists. For the Kulliyah of Architecture, infusing Islamic perspective means integrating values in the Kulliyah’s courses and teaching methods and training. Additionally, nurturing a better Islamic environment within KAED.

The Kulliyah of Medicine envisaged the inculcation of the Islamic perspective as a process of infusing Islamic values into the existing body of medical sciences. While the the Kulliyah of Pharmacy visualized this the Islamic perspective to mean excelling professionally within the parameters of Islamic moral and ethical values which could only come through imbibing and practicing the traits of taqwa (piety) in one’s personal and professional life. As for the Nursing Department viewed it as infusing Islamic values and akhlaq (code of conduct) into the curriculum.

The Kulliyah of Laws viewed the Islamic perspective from the angle of harmonisation of the civil law and the shariah. This did not mean to make the shariah essentially compatible to the civil law. Rather the wisdom of the shariah/Islamic law is intertwined with the entire law syllabus, thus enhancing and enriching the curriculum. This would mean providing students with both disciplines, to qualify them to practice both disciplines and use comparative methods in dealing with real legal and Shariah situations.

For the Kulliyah of Economics creating an Islamic learning environment means creating knowledge that is both consistent with Islamic worldview of Tawhid and compliant with the high objectives of the shariah (maqasid al-shariah). It is the integration of Islamic concepts, theories and guidelines with the conventional theories taught in the class. The Kulliyah of Islamic Revealed Knowledge conceived Islamization as a process or effort at making ‘things’ in line with Islam, and Islamization of knowledge as a process or an effort at making ‘knowledge’ in line with Islam. Accordingly, creating quality learning environment from an Islamic perspectives results from infusing the Islamic worldview, philosophy and epistemology in the current curriculum, integrating Islamic ‘elements’ in academic programmes and courses, especially in the Human sciences, making academic programmes and courses ‘relevant’ to societal needs, especially in field of revealed knowledge.

Islamisation in Modern Sciences: Engaging the Muslim Mind and Need for Science Education

Islamisation in Science: Engaging the Muslim Mind
The just concluded discussion has outlined a brief general framework for the study of the concept of Islamisation in general and Islamisation within the spectrum of modern sciences in particular. Furthermore, it provided a real example of the Islamisation process in a university context. To move one step further in stratigising the Islamisation activity in sciences it is important to engage the Muslim mind in the activity and process. By engaging the Muslim mind into a discovery journey of the scientific laws, perhaps, this will take him further to delve into a deeper inquiry of what is beyond the physical laws. In fact, this is the starting point of the Islamisation of science process. It commences when scientists discover the spiritual and ethical value of the physical laws and move therewith to discern the metaphysical implications of the scientific knowledge leading to unified and coherent understanding of the universe and its laws. In this regard, what the Islamic epistemological model provides is an integrated approach to the scientific knowledge where revelation becomes imperative and a defining factor for the scientific knowledge and its application in all spheres of life. What revelation offers is a way of thinking that helps escape the scientific dilemma of de-metaphysicization of scientific knowledge leading to value and spiritual free approach to science. This was the result of ideas such as western perspective of Laws of Nature, Copernicus, Copernicanism, and the “Infinite Universe”, Ideas of Bacon and Gilbert, Galileo and the idea of Mathematical Physics, Kepler and the Idea of Celestial Physics, Descartes, his “Dualism” and the “Mathematization of Space, Time and Matter”, Newton, The Principia, and the “Order in Nature”, The “Quantification of Nature” in the Eighteenth Century, Evolution; Darwinian and Neo-Darwinian, Modern Physics: Relativity and Quantum Mechanics, Order and Chaos;
Prigoginian View, Scientific Positivism and its Critique, With quantum mechanics the departure (5) of the understanding of order in nature from that of classical physics becomes more radical, and even the mathematical order that quantum mechanics shares with classical physics is different in that the latter accepts this order only in the statistical sense. Indeterminacy and uncertainty lie at the heart of quantum mechanics, going back to the question of the wave or corpuscular nature of light (6) and including the formal principle of uncertainty stated by Werner Heisenberg.iii

These ideas and others have immensely contributed to the narrowness of a big space of knowledge that is meant to be wide enough to absorb the essence of creation and provide a scientific worldview that is inclusive. Indeed, “our knowledge grows when we recognize diverse perspectives, when we go beyond the routine and narrow interpretation of events, when we look at broader picture. We can then see how stereotypical modes of thought have shaped our values, laws, and policies. We can also see ways to use positive and life-affirming visions to guide us acquire techniques to address oppressive practices.”xiii Making reason as the judge has reduced the spectrum of scientific knowledge to mere boundaries of the intellect and sense organs paving the way for the total marginalisation of revelation and its exclusion from the realm of scientific knowledge. Kayek has put differently asserting “It is well known that the popularity of this conception has forced many other branches of knowledge, such as sociology, education, psychology, economics, and even philosophy and religion, to seek legitimacy and academic acceptance through the methods of the narrow interpretation of science.”xiii All these developments led to the emergence of a new philosophy of nature that was based on the sciences of nature and thereby divorced from metaphysical principles, which in all traditional climates had provided the common principles and ground for discourse between the religious and scientific understanding of nature.xv

Given all these complexities and dilemmas xv of the philosophy of modern sciences, Islamisation endeavor is ought to assist us to re-cover and re-claim the supremacy of the Tawhidic unified approachxiv to the study of the physical and metaphysical realities in a more coherent and interconnected way. Only within this integrated framework, the Islamisation of science will find its meaning and provide the impetus to create new scientific knowledge with a purpose and direction. Additionally, the process of Islamising science should address the question of the “Scientist” (HIMSELF). The self of the scientist in this context involves directly his mind, heart, consciencexviii and spiritual, moral and ethical dimensions.

Islamisation in Science: Importance of Affective Domainxx and Need for Science Education
In order to implement the project of Islamisation in sciences in a university set up, it is crucial to enhance “Science Education”xx capabilities and skills of both the teacher and learner. In fact, science education in general provides important guidelines, instructional and pedagogical inputs that are necessary for the development of any discipline in terms of addressing the pedagogical issues of teaching and learning and their requirements. This does not include only teaching, assessment, delivery, course design, learning outcomes but also issues related to teacher, learner, learning environment, use of technology, psychological, cultural, belief and social aspects of the teaching and learning of science.

Indeed, satisfying the three domain of the learner’s development; cognitive, psychomotor and affective is crucial. Therefore, within the framework of Islamisation in sciences developing these three aspects need to be stressed with greater emphasis on the affective domain.

Islamisation in sciences at the pedagogicalxxi and curriculum levels should stress developing the learner or individual in the three aspects: the realm of ideas, the realm of personality and the realm of tools, skills and objects. These three realms are essential in any pedagogical development and hence science education should address them. While the realm of ideas focuses on intellectual, cognitive and mind development in terms of possessing the abilities of memorization, thinking, understanding, applying, analyzing, evaluating and creatively engineering
new ideas; the realm of personality focuses on the behavior, character, attitude, belief system, virtues, values, worldview, and ethics as major components of one’s well-being. These two realms are supported by the realm of skills, competencies, know-how and tools. Taken together they assist in preparing the learner to mould his/her personality and prepare him for a career in life.

Within the context of Islamisation in sciences, it is crucial to stress the role of affective domain in the process of both Islamizing the scientific knowledge and Islamizing the person carrying this knowledge. That is why we stress here, that from an Islamic perspective the question of affective domain and values is crucial not only in the learning process and knowledge creation and dissemination, but also in the development of the well-being and personality of the teacher and learner as well.

At this stage of development of the Islamisation in science, besides, looking into the epistemological, methodological and academic curriculum development aspects, it is crucial to stress the dimension of heart, conscience, and ethical orientation of the owner of the activity. In today’s science education terms, we need to address the affective domain. Additionally, in order to implement the project of Islamisation of science in a university set up, it is crucial to enhance “Science Education” capabilities and skills of both the teacher and learner. In fact, science education in general provides important guidelines, instructional and pedagogical inputs that are necessary for the development of any discipline in terms of addressing the pedagogical issues of teaching and learning and their requirements. This does not include only teaching, assessment, delivery, course design, learning outcomes but also issues related to teacher, learner, learning environment, use of technology, psychological, cultural, belief and social aspects of the teaching and learning of science.

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No doubt, revealed knowledge and Islamic studies can play a crucial role in providing the necessary platform and orientations required for the Islamisation of science as well as the creating the ethical environment for the development of scientific knowledge.

Islamisation in Sciences: The Starting Point
As far as the activity of Islamisation in Sciences concerned it is important to note that Islamizing science, would require, among other things, activities and tasks such as:

- Understanding and articulating the Islamic principles and patterns of scientific thinking into a systematic model of analysis and synthesis of scientific knowledge aiming at developing integrated and coherent approach to the study of the universe and its laws within the Islamic worldview framework;
Re-defining the scope, goals and objectives of scientific knowledge within the Islamic framework and critically reviewing and re-assessing contemporary western knowledge orientations so as to adopt the positive elements and reject the negative ones.

Integrating the Islamic model and approach of scientific inquiry to contemporary scientific knowledge;

Developing Islamic sciences curricula with emphasis on scientific thinking and applications of sciences as articulated in the Qur'anic text;

Infusing the Islamic principles and values of scientific inquiry into the pedagogical and science education programs;

Enhancing analytical, critical and scientific inquiry skills of the learners;

Applying the Islamic approaches and principles discovered from the Qur'an in practical and experimental situation so as to guide scientific inquiry in real contexts;

Disseminating the Islamic value system with the learning environment so as to ensure the presence of values and ethics;

Creating scientific knowledge focus groups made of scientists and scholars from the revealed knowledge and human sciences disciplines so as to create integrated models of scientific undertakings;

Actioning the Islamic epistemological system in all areas of scientific inquiry aiming to address the major questions posed before us by science today and perhaps going beyond to provide an Islamic model for the explanation of universe and articulation of science based disciplines to function with more value loaded and ethical environment for the betterment of humanity.

By undertaking these tasks, it is hoped that the process of Islamisation in Science will move one step further towards enhancing the proper environment for the creation and application of scientific knowledge within the demarcations and orientations of the Islamic worldview. Accordingly, one may consider that the first step towards Islamising science is to assist teachers, learners and researchers in science to grasp the laws and patterns of the physical realities within the framework of the meta-physical knowledge which the Islamic worldview provides.

Conclusion
We have nearly completed the task of providing a general framework to approach the project of Islamisation in general and Islamisation in sciences in particular. It is evident that Islamisation is a scientific activity and a process that is taking place in several Muslim institutions of higher education. What is important to stress is that there is a need to plan and strategies the project of Islamisation so as to achieve its objective in reclaiming back the supremacy of the Islamic worldview, values and epistemology in the enterprise of knowledge creation, dissemination and application.

Furthermore, the Islamisation in sciences requires the engagement of the Muslim mind in discerning the laws and patterns of Gold in the physical world taking into account the importance of revelation in this regard. What revelation provides is a guiding framework and approach to the study of the universe and its laws leading to coherent understanding and appreciation of creation.

In line with this, efforts need to be intensified to develop an Islamic epistemology and theory of knowledge as an important step towards the Islamisation in sciences. Without an Islamic epistemology our efforts will always remain selective and partial leading to more segmentation of the scientific knowledge and isolation of revelation from the spectrum of today’s enterprise of knowledge. The Islamisation epistemology is the key to the Islamisation in sciences and the regaining of the sense of unity and consistency of the scientific knowledge. Hence, we shall start here first.

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The concept of knowledge or Ilm is referred to in various Islamic sources as: a certain belief that is in accordance with the Reality; the impression of images coming from external objects in the mind of a person; a perception of an object as it is; removal of confusion from the object and it is therefore, antonym of ignorance; is indefinable; a rooted and fixed attribute through which a person perceives the general principles and particles; an achievement of the soul to determine the meaning of a thing; a particular correspondence between the intellect (al A`ql) and the comprehensive (al Ma`quil) Djurjani Ali Ben Mohammad Sharif (1340-1413), Kitab al Ta`rifat, Lebanon library, Beirut: 1990, p.160-161.


Islamisation of knowledge refers to: "recast knowledge as Islam relates to it.. i.e. to redefine and reorder the data, to rethink the reasoning and relating of the data, to reevaluate the conclusions, to reproject the goals - and to do so in such a way as to make the disciplines enrich the vision and serve the cause of Islam" (: 15). As he elaborates on the process through which these objectives could be attained, he describes the "necessary steps [which] must be taken, their logical order defines the order of priority belonging to each...". The three main components of the Islamization of Knowledge process could be simply paraphrased as follows:

1- Mastery of modern disciplines, and the critical assessment of their methodologies, research findings, and theories within the Islamic perspective.
2- Mastery of the Islamic legacy, and the critical assessment of Islamic scholarship against:
   a) a pristine Revelational perspective
   b)current needs of the Ummah, and
   c) modern advances in human knowledge.
3- Creative synthesis of the Islamic legacy and modern knowledge; a creative leap "to bridge over the gap of centuries of non-development". Al-Faruqi, Ismael Raji (1982) Islamization of Knowledge: General Principles and Work plan ( International Institute of Islamic Thought), p. 15.

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