

TEACHING CHILDREN

A MORAL, SPIRITUAL, AND HOLISTIC APPROACH TO EDUCATIONAL DEVELOPMENT

ANN EL-MOSLIMANY

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FOREWORD

The current education system dates back a hundred years or more, and is in desperate need of a 'reboot', whilst at the same time it needs to reconnect with teaching methods and principles long since forgotten in the name of progress and modernity. What we have today consists broadly of a set number of pupils, moving from one classroom to another, fed a conveyor belt of unconnected and unrelated facts, using uninspiring books and methods, to then regurgitate these in endless exams, the resulting scores of which are used next to assess intellectual ability and 'mastery' of a subject. Competitive, stressful, boring, and soulless, it is tragically emulated by most so-called Muslim faith schools worldwide. Assembly lines of children emerge at the end of it, but have they really been taught to 'think' or to 'act'?

Ann El-Moslimany, an experienced teacher who has taught for decades and run her own Islamic school, joins a growing chorus of respected voices both in the East and West, calling for an educational philosophy and approach that is holistic, and which gives full spiritual meaning to all that a child learns.

To understand the why of this is to begin with a fundamental premise – that each and every child is born with a spiritual, moral, and intellectual purpose, the function of which is not simply to seek knowledge to pass exams, but to know the Divine, its own nature as well as place in the universe, and ultimately to translate this into good actions that benefit humankind. Thus, to enhance the entire learning experience it is this perspective that should guide the development and evolution of a viable education system.

Nurturing a child's moral understanding of the universe together with a holistic worldview, connection with all that has been created, awareness of civic responsibility to make the world a better place, and ability to co-exist and work in collaboration with others, contends the

Foreword

author, is vital to the growth and progress of each and every child, allowing for greater realization of their given potential.

The author goes on to explain that away from the competitive dictates of streaming, grading, reward and punishment (a ruthless system that undermines children's confidence and creativity and of whose efficacy there is little or no proof) children will flourish. And that furthermore, fossilized facts are to be lifted away from textbooks and brought to life by relating them to real-life situations and activities, in order to see their broader underlying and multi-layered contexts utilising a theme-based approach, to give the child a fuller understanding of key issues (and abstract ones) thereby allowing for the development of their understanding on vital emotional and social levels.

The work also calls for the use of the latest innovative tools and technologies to make the educational experience an inspirational one. This would make of the actual learning environment (the class-room, and school) a dynamic and interesting place, wherein the teacher is not a 'site foreman' but a wise role model able to nurture the best in the child.

And finally for Muslim schools, the Divine should always be at the heart of what is taught, not in a mechanistic rigid way as is current practice, but in a manner which elicits deep love and appreciation both for Him, His prophets, revelations to mankind, and the Qur'an, and in which children are taught to see His working in all things. Mixing with children of other faiths, and being taught to respect the beliefs of others, as well as the rights of all people, children are to be given not a bi-polar version of reality, but a multi-faith, and multicultural perspective, which allows for integration in the wider society whilst maintaining a strong identity.

This work is being published in conjunction with IIIT's current emphasis on advancing education in Muslim societies, to give value to intellectual development, and take knowledge beyond passive reception to application that will seek the betterment of humanity. What matters essentially is to return spirituality, morality, and vitality to a system ever focused on material advancement as the aim of all that is learned and considered useful. It is hoped the exposition presented will increase awareness of the issues discussed, and benefit readers from the perspective offered.

Where dates are cited according to the Islamic calendar (hijrah) they are labelled AH. Otherwise they follow the Gregorian calendar and labelled CE where necessary. Arabic words are italicized except for those which have entered common usage. Diacritical marks have been added only to those Arabic names not considered contemporary. English translations taken from Arabic references are those of the author.

Since its establishment in 1981, the IIIT has served as a major center to facilitate serious scholarly efforts. Towards this end it has, over the decades, conducted numerous programs of research, seminars and conferences, as well as publishing scholarly works specialising in the social sciences and areas of theology, which to date number more than seven hundred titles in English and Arabic, many of which have been translated into other major languages.

We would like to thank all those who were directly or indirectly involved in the completion of this book, including Susan Douglass, Ann H. Redding and Emily C. Smith for their editorial work. May God reward them for all their efforts.

> HISHAM ALTALIB Advancing Education in Muslim Societies

> > January, 2018

1 Introduction

Muslim parents have enthusiastically welcomed the increasing availability of full-time Islamic schools in Muslim-minority countries. Salah is a part of the day; children learn Arabic and Qur'an; usually classes are small with a sense of belonging among both staff and students evoking a family atmosphere; and confusion due to various popular cultural and moral issues is mitigated.

However, we still have a long way to go. We need to think deeply about applying our fundamental Islamic principles, not only to *what* we teach but also to *how* we teach. To revitalize a paradigm of Islamic educational philosophy will require forward-looking, informed analysis: ijtihad (independent reasoning). This means challenging the status quo; approaching the customary with skepticism; and scrutinizing the history of why and how the prevailing methodology common to the vast majority of schools of all kinds came to be.

We generally have the right to teach according to our own pedagogy, but we cannot take advantage of this right until we clearly define our purpose, vision, and goals. This requires assuming the role of an outsider; separating ourselves from the educational culture that we have effortlessly – and perhaps thoughtlessly – absorbed from our surroundings; looking closely and critically at the kind of education that we are perpetuating; and questioning if the purpose, the worldview, the vision and the mission are grounded in Islam.

The school of today is often based on conventions that are unquestioned simply because they have become established as a part of normative school culture – pervasive, deeply held presumptions and practices have taken root, becoming what Jerome Bruner called "Folk Pedagogy"¹ and David Tyack and Larry Cuban the "grammar of schooling."² It is imperative that we critically examine such assumptions. It is never easy – and even risky – to step outside the box. So sometimes we tend to cling to the outmoded factory-style methodology that has been discarded by those who are committed to best practice models; or we emphasize memorization of material that does not inspire or encourage further understanding and is of little relevance to those we teach.

Some parents and teachers primarily rely on discredited and un-Islamic behaviorism. There are teachers who, in contrast to Prophet Muhammad (ṢAAS)*, discourage questions, treat children with disrespect and in general are poor role models. Some schools – even purpose-built schools – have small, cramped classrooms that leave no space for any cooperative, hands-on, or experiential learning.

Usman Bugaje aptly summed up the state of Islamic education today when he lamented:

Having quit the frontiers of knowledge, Muslims were gradually reduced from being producers of knowledge to being consumers of knowledge. Having absconded from the cutting edge of history, they receded from their position as makers of history to victims of history, where they have since remained.³

Before we can move back into a position of leadership, even of our own, we must examine the systems that we have chosen to adopt, and we must examine them based on Islam. It is my prayer that by embracing our role as responsible human beings dedicated to making the world a better place, we will once again leave a lasting moral, spiritual legacy for our children.

Muslim educators have made considerable progress in recent years largely through the efforts of Karen Keyworth and the Islamic Schools League of America; CISNA (the Council of Islamic Schools in North America); Nadeem Memon and his Islamic Teachers Education Project in Toronto (Razi Education); the work of Abdullah Sahin and

^{*} *Sallā Allāhu ʿalayhi wa sallam*. May the peace and blessings of God be upon him. Said whenever the name of Prophet Muhammad is mentioned.

Jeremy Henzell-Thomas in England; and a number of individual leaders in Islamic schools. God willing, we will continue to build on their very important work.

My consciousness evolved over many years, much of it at the expense of our own children, beginning with negative experiences in weekend schools and a three-year period during which we moved to Saudi Arabia and enrolled them in Saudi schools. It was during our trials with the Saudi school system that the idea of an American Islamic school first occurred to me. I wanted something for Muslim children other than what we had so far experienced.

Several years later – after our own children could no longer benefit – I, along with four other convert women, opened the Islamic School of Seattle. We had only intended to *start* a school. None of us had planned to run it. I had recently completed my Ph.D. in a scientific field and was busy with consulting, publishing papers, and teaching. But like many others who have established schools will attest, the sheer significance of the task can quickly take priority over a previously framed notion of lifework.

During a crisis that occurred, my husband and I stepped in to keep the school in operation.

We continued to work together until a few months before his death in 2003. I had taught for several years at all levels and had developed my own philosophy of teaching, but I cannot say that during those intervening years I had formulated a specific understanding of what an Islamic school should be. However, having made my choice to focus on the education of Muslim children. I knew that I had to employ the same diligence I had applied to my scientific studies. Throughout my journey I have drawn heavily on the work of individuals who, though firmly rooted in traditional Islam, also have deep connections to the West and are thus able to apply thoughtfully the principles of ijtihad, to living as Muslims in today's world. The works of these scholars, both male and female, have thankfully largely replaced an 'Orientalist,' version of matters, and returned meaning and accurate analysis to issues pertaining to Islam and Muslims. Their work was becoming available to the general public just as our little school was being established – and it was available in English.

Today, we are blessed with libraries of thought-provoking materials that relate Islam to life – and education – in the world in which we live. John Esposito and John Voll have discussed the increasing influence of these Muslim intellectuals in their book *Makers of Contemporary Islam*, describing them as activists who have created transformational programs of political and social reform far beyond the traditional establishment.⁴

I was particularly struck by the words of the late Ismail al-Faruqi when he first laid out the rationale and plan for the Islamization of Knowledge project in 1982. His discussion on the first principles of Islamic methodology⁵ inspired me with a passion to determine how *tawhīd* (the unity of God), and the ensuing unity of creation, of humanity, of truth and action, and related principles could be applied to how we teach.

Thinking Muslims have recognized these principles as fundamental to Islamic philosophy, but teaching from these foundations will require continuing prayer, introspection, study, and conversation. How can we as educators ensure that our Muslim students leave our schools not simply prepared for financial success but fully grounded in their love of God, understanding of creation, and a commitment to fulfill their collective and individual roles of life on earth? God willing this book will help stimulate discussion and inspire others to come forward with their thoughts and ideas.

Many Muslim educators recognize Dawud Tauhidi as the one contributing the most to reforming Islamic education in North America. When he returned to the United States after his studies at Al-Azhar in Egypt, he began to look closely at Islamic schools. He noted that Islamic education often simply taught children facts about Islam, without teaching them to *be* Muslim.⁶ He spent the rest of his life studying and promoting his vision of educating future generations of thinking, actively participating American Muslims living their Islam fully. It is indeed unfortunate that due to his untimely death the bulk of his work has remained unpublished.

Abdullah Sahin is another individual who has contributed to the development of Islamic education. Sahin began his work in the United Kingdom, focusing on the construction of identity among British Muslim youth using an empirically based research model. His findings convinced him that it was essential to reject the teacher- and text-centered education that characterized Islamic education in the United Kingdom and move toward a more exploratory system leading to what he called critical faithfulness.⁷ Subsequently he established a master of education degree program to train faith-based teachers of Islam who would employ a student-centered, open, critical, and dialog-based methodology.⁸

Many other scholars important to the development of Islam in today's world are referenced throughout, as is the work of non-Muslim educational leaders whose pedagogy is founded on best practices and whose ideas are compatible with Islam.

Knowledge of every kind is God's gift to humanity and we must seek to understand how children best learn wherever this insight may be found. Just as Muslim scholars of the past not only preserved the knowledge of other civilizations but also did their best to infuse it with an Islamic perspective, we must scrutinize what modern educational theory has to offer, discarding what is contrary to Islamic values and systematically rebuilding the best around a *tawhīdic* framework.

2 Expanding Our Choices

As Islam flowers here in the West, Muslim educators sometimes choose between two very different ways of teaching. They may take as their model the religious schools, called madrasas in many parts of the world, where the emphasis is on the memorization of ancient texts; or they pattern themselves on the competitive, mainstream, secular schools found not only in the West, but also, now, throughout the world. In such schools 'Islam' is often just another subject with a similar methodology to other courses taught in modern-day schools. Often they choose a combination of the two - a remnant of postcolonialism – with 'Islamic' subjects taught madrasa-style and 'secular' subjects using the methodology, curriculum, and texts of Western education – an apparent solution with its own set of problems. We must scrutinize methods of education that seem to discourage reflection, critical thinking and creativity, and also avoid incorporating the myth of the essential superiority of secularized schooling. We must also take a long, hard look at the common practice of incorporating the two of these impaired systems into a dualistic framework that separates religion from real life.

There is a contingent of individuals and groups that is fearful of losing the moorings of the past and clings to the opinions of earlier scholars. This way of thinking, *taqlīd* (imitation), is in opposition to *tajdīd* (renewal or revival). *Tajdīd* is based on the understanding that since the Qur'an was given to us for all time and all places we must constantly seek to apply its principles to current circumstances through the process of ijtihad (independent reasoning). If we are to reform education, clearly we must utilize ijtihad. However, it is important to understand the rationale of those who are committed to *taqlīd*. *Taqlīd* has been defended by Mufti Muhammad Sajaad: *Taqlīd* means following the legal opinions of a scholar without gaining knowledge of the detailed evidences for those opinions. The non-scholar is compelled to do this as he is unable to encompass the evidences to assert his own view on any particular detailed issue related to the dīn. This process is known in Islam as the Ijazah system and all Muhaddithin and jurists have had to undergo this process in order to gain any kind of recognition amongst the scholars of Islam. There are several ways by which the system ensures that the ummah has true scholars leading the unlearned. This amazing tradition consists of identifying the teachers from whom one has gained his or her knowledge and secondly their authorization of him or her as a competent teacher of the science. Thus, in this manner the scholar could rightfully claim that the knowledge he was providing to the people had the authorization of a chain of transmission that eventually went back to the Messenger of Allah.⁹

Taqlīd keeps us mired in the past. Because the Qur'an is the word of God and applies to all time and all places, we need to be able to use it to solve problems and apply to cultures that were never anticipated. British scholar Ziauddin Sardar declared that *taqlīd* "disenfranchises concerned, thinking, dedicated Muslims from engaging in earnest and reasoned debate with the Qur'an, while it leaves a stultified, closed system of education unchecked, producing obscurantist scholars who have little knowledge of the complexities and problems of the modern world."¹⁰

A common perception is that *taqlīd* set in after the 'gates of ijtihad' were closed during the early centuries of Islam when the scholars agreed that all of the important questions had already been answered. AbdulHamid AbuSulayman suggested that such terminology is a metaphor for the stagnation of thought caused by the political leadership's loss of commitment to Islam that drove the *'ulamā'* deep into the "recesses of their mosques."¹¹ Numerous scholars are in agreement with AbuSulayman that ijtihad ceased being viewed as applicable to all of life and became limited to ritual and personal matters.¹²

Surely *something* brought to an end the vibrant, if tumultuous, days of early Islam described by Sardar as a time in which Muslims were "totally obsessed with knowledge: with seeking it, acquiring it, talking and arguing about it, defining it, building institutions for dispensing it, writing about it, reading about it, collating it,

disseminating it."¹³ Wadad Kadi described a period when "whole markets of booksellers emerged in all urban centers; scholars traveled enormous distances and endured real hardships in search of knowledge; compilation was viewed almost as a form of worship; and litterateurs sang the praises of books."¹⁴ Yedullah Kazmi characterized this period as a true culture of learning in which there was a universal desire to become literate, a large numbers of libraries, and a proliferation of *madhhabs*.¹⁵

This unique culture of learning may have come to an end, but several exemplary qualities of the educational system continued into the pre-colonial period. Parents and students selected their teachers. Beyond the primary level, subject matter, too, was subject to choice. Students progressed at their own pace, according to their individual ability, interests and background.

Of all of the earthshaking changes that occurred in the Islamic world during the time of colonialism, there may have been none more important or significant than the impact on the educational system, which encouraged and introduced the establishment and formation of secular government schools which took little or no account of spiritual development. Alien subjects and teachers were appointed, enrollment was formal, age-based, and impersonal, and promotion was based on exams, grades and specified spans of time rather than on individual mastery.

This led to the emergence of a certain elite class. Referring to an unpublished report of Abdullahi Smith, Sulaiman described this class as Muslim to the extent of carrying out rituals, but with a Western cultural orientation affecting their ways of thinking and lifestyle. He remarked that the members of this elite minority have until today continued to hold the positions of authority.¹⁶

However, it was not only the children of the elite who were educated in such schools, the educational process also filtered to a blue collar work force with concomitant results. Local leaders anxious to modernize – the Shah in Iran, Mohammed Ali in Egypt, and Ataturk in Turkey – eagerly embraced the new way of teaching, assuming it to be a superior method of education. Al-Faruqi remarked on those who so eagerly embraced both it and its philosophical assumptions: Little did they realize that the alien humanities, social sciences and indeed the natural sciences as well were facets of an integral view of reality ... alien to that of Islam. Little did they know of the fine and yet necessary relations which bind the methodologies of these disciplines, their notions of truth and knowledge, to the value system of an alien world.¹⁷

William Boyd, historian of Western education, candidly called it "astounding" that non-Europeans might accept Western education as a "perennial and universal prescription."¹⁸

When colonialism formally came to an end, education throughout the world had been drastically and apparently irreversibly changed. A secular, humanist outlook now dominated government schools and mainstream education, with religious schools preparing the 'ulamā' only. The children of the elite continue to be educated in exclusive, private, foreign schools - or so-called international schools where they learn a materialistic approach to ways of thinking. Indeed, Muslims today generally have separate classes in religion where they learn the rituals of Islam, but the rest of the day they continue to be trained to think and behave in the narrow confines of a secular humanistic outlook. Al-Faruqi described the result as a mere caricature of the modern, developed world model, declaring that in the two centuries of secularized education, the Muslim world has not produced a single institution of learning nor a generation of scholars that match the excellence and creativity of the West. "There is no genuine search for knowledge without spirit and the Western spirit is precisely what cannot and should not be copied. It is generated by its own vision of life and reality."19

The madrasa-type and the Western, purely secular, systems continue to exist together not only within Muslim-majority countries but also wherever Muslims have settled. How very confusing it must be for young people who are taught one set of ideas and values during the school day and another in after-school or evening programs or on weekends! The more progressive *culamā* within the full-time madrasas concerned that modern knowledge is essential to worldly success, have adopted this same conflicting combination of secular knowledge alongside their traditional texts and treatises.²⁰ Although they speak of integration, the term seems to imply only that 'secular' and 'religious' subject matter is offered within the same institution. The impression remains that there is an opposing and distinct dichotomy that separates Islamic knowledge from 'modern' knowledge.

This contradiction persists even within many full-time Islamic schools when part of the program is based on the curriculum, texts, and philosophical perspective of an irreligious world, and the other on an antithetical point of view. The *`ilm* we seek to instill in our children cannot be a combination of two diametrically opposed views of life, but a unified vision of the truth. Education that is based on the retention of facts, passively received from authoritarian teachers and texts, does not prepare youth to live their Islam. Pairing this with information that is premised on a world without God merely intensifies the discord – a most unfair burden to place on our youth who often feel compelled to choose between what they see as two opposing visions of reality. Truth is from God and we cannot isolate any part of it from His purpose for us and the ultimate end of living our lives in obedience, worship, action, and justice.

3 From Factory School to the Standard Management Paradigm

Powerful groups within a society build institutions, including schools, to serve their own purposes. Just as a primary intent of the one time colonial powers was to train clerks for imperial administration, the public schools in industrialized Europe and North America adopted a system that would train workers for their factories.

John Taylor Gatto, New York City Teacher of the Year in 1989, 1990, and 1991, and New York State Teacher of the Year in 1991, became so disillusioned with the educational system in the United States that he left the classroom and devoted his life to exposing the true objective of compulsory education. He showed that the primary purpose was to train lower-class youth to accept their roles as subservient to the industrial elite. He cited numerous books and documents spelling out the methods they used and the goals they set.

Raymond Callahan, professor of education at St. Louis's Washington University, wrote extensively about the reasons the U.S. public schools adopted the factory as a model. He concluded that this was the result of the unfortunate combination of both the cultural strength of business ideology and the weakness and vulnerability of school administrators who often seemed to have made decisions not on educational grounds but merely to appease their critics. He noted several factors, related to the amazing prestige and widespread veneration of the paragons of the industrial world and their values, among them (1) a strong current of anti-intellectualism and a move away from 'booklearning' toward material, practical education; (2) the domination of school boards by businessmen, who dictated how schools should be run; (3) the use of McGuffey readers that stressed stories of material success and whose heroes were bankers and other wealthy role models; (4) the initiation of sensationalism by the widely read, muck-

raking magazines by exposing or inventing problems before beginning reform campaigns. (When these magazines turned against the schools, the solutions were to introduce more practices from business and manufacturing.); (5) an eagerness to compete with the increasing industrial success of Germany, a success attributed to having planned its educational system with the purpose of promoting their manufactured goods.²¹

All of the above factors were important in modeling the public schools on industry, but by far the most important element was the mania that took the country by storm around what was called scientific management or Taylorism. Frederick Taylor, a mechanical engineer and efficiency expert, revolutionized factories with closely supervised, assembly-line control. Application was generalized into every arena of national life - including schools! As in the factories, this would require that students, and teachers, produce not by their own initiative, but execute the orders of management. Taylorism required enforced standardization of methods, materials and working conditions to optimize efficiency and speed. James Monroe, who portrayed himself as an industrialist-educator, suggested that because this required applying improved technology, only engineers were competent to carry out these reforms. These engineers would make a thorough study of the raw material (the students); of the factory (the building); the directorate (the school board); the work force (teachers); and the markets (industry and society).²²

Taylorism was first applied to schools in the industrial city of Gary, Indiana, and thus became known as the Gary Plan. It reinforced the impersonal top-down decision-making and authority initiated in the Prussian model. To make sure that spaces within the school were always in use, the same thing would be taught over and over to groups of children moving through the building according to strictly scheduled periods of time.²³

The days of the big factories are over, but the demands placed upon the century-old, factory-modeled schools for efficiency, close topdown supervision, measurable outcomes, and standardization are the very demands that have led to our schools of today. It's the system that matter – not the teachers or students, who are merely cogs or raw materials. Of primary importance is that children learn to follow directions; regurgitate what the teacher has said – no need to understand or think – learn exactly what everyone of the same age learns at exactly the same time and exactly the same order; keep quiet and listen; be fed everything in small, unrelated pieces. There is a hierarchy in which both students and teachers take their orders from above. Subject matter remains fragmented, isolated from life, and strictly scheduled.

In middle and high schools, bells still ring every forty to fifty minutes and, "just as with Pavlov's salivating dogs, children shift out of their seats and lurch toward yet another class."²⁴ Although younger children may move from one place to another only for specialty subjects, their day, too, is segmented into separate subjects devoid of unification. "Put away your reading books now. It's time for math." It is, indeed, very much as if our children are on a conveyor belt. As they pass each workstation of unrelated topics, a forty-five-minute measure of facts predetermined by the powerful is poured into their heads. Testing assures quality control.

Education professor John Goodlad discussed the purpose of public education in the United States in a book that has since become a classic, *What Schools Are For.*²⁵ In the preface to a second edition published fifteen years later, he considered whether the stridency with which he had originally approached the subject was too extreme.²⁶ He concluded, "Were I to rewrite today I would do so with an even greater sense of urgency and even more passion." Goodlad went on to direct an in-depth analysis of one thousand U.S. classrooms. It is the largest study of on-site schools ever completed. He found that almost all classrooms were teacher-centered with students sitting passively. About 85 percent of the day was given to lecturing. The rest of the time students sat and did worksheets. He described the teachers as unenthusiastic, the students as passive, and the classroom atmosphere as emotionally flat. His team observed very little reading or writing.²⁷

Marion Brady has referred to the ongoing reforms of today as corporatization of the schools.²⁸ Henderson and Gornik have called it the Standardized Management Paradigm (SMP),²⁹ described by Pamela Joseph as focused on "an engineered, goal-driven, and segmented, disciplinary curriculum."³⁰ Jeremy Henzell-Thomas similarly described education in Britain as "an oppressive and soulless target-driven regime derived from alien corporate models and control-obsessed managerialism ... an agenda geared to economic performance, competition, and efficiency above all else."³¹

There is actually very little difference between the factory model and the SMP model described by Joseph and Henzell-Thomas. Both were designed and put into place not by educators but by the powerful corporate world through their financial alliance with government. The Standard Management Paradigm is epitomized by the high-tech classrooms promoted by Pearson and the Gates Foundation. Students use their tablets to learn predetermined material. The role of the teacher is little more than a functionary to keep order in the classroom. Is the financial benefit to Microsoft and Pearson simply incidental?

The educational publishing industry is utterly huge. The more entrenched the catchy government and corporate clichés become -No Child Left Behind, Common Core, Stem, Race to the Top, Every Student Succeeds, Educate to Innovate, Desirable Learning Outcomes - the harder the test-publishing industry lobbies. The British publisher, Pearson, which operates in seventy countries, publishing under many different names, was awarded a contract of "unprecedented scale" by one of the two large state-testing consortiums in the United States to take charge of the standardized testing for the Common Core.32 They develop the computerized and written tests, analyze scores, report results, and with the states in the consortium develop the performance standards. And of course they also publish the textbooks, scripted lesson plans, pretests and other materials to prepare the students for these same standardized tests. The politicians they lobby, whether on local school boards or those making state or national policy, are not only lacking in knowledge of how children learn but also have goals that differ from those in the classrooms. This makes it easy for those who pay their campaign expenses to convince them that what the schools need is more of the same - newer, up-todate textbooks, more tests, tougher standards, more management based on the factory/SMP model. "In one of the great ironies of human affairs, the massive rethinking the schools require would cost so much less than we are spending now that powerful interests cannot afford to let it happen."³³

Henzell-Thomas has described the culture of standardization as quantitative as opposed to the qualitative education that nurtures the full extent of human potential. He has decried the expropriation of qualitative education by "a soulless regime of target-driven 'technomanagement' which reduces human beings to conforming and performing cogs in the industrial machine."³⁴

It is indeed unfortunate that many of those who control our Islamic schools have bought into the prevalent ideas of the politicians, insisting that we have no choice; that if our children are to truly be successful in this society then we have to go along with the ideas of teaching to the test; excessive competition; extrinsic motivation; moving away from perceived time-wasters such as physical education and the arts; and embracing a curriculum that is not simply lacking in Islamic values, but often contrary to them.

Are we truly giving our children an Islamic education or just a slavish copy of what has been designed with a view of human nature and with goals that are contrary to the principles on which Islam is based? Sadly, we have often internalized and made our own, education that is based on an alien worldview. We must look at the cultures of our classrooms and schools and try to truly understand just what we are promoting. We *cannot* blindly accept the present circumstances as acceptable. We must wake up and try to understand the powerful forces that are controlling how we educate children. Islam is a complete and comprehensive way of life. An Islamic education must be much more than the simple accumulation of facts or preparation for adult work.

If God wills we can do better than to adopt, adapt, or combine these failed systems of education. We must take care neither to accept pedagogies simply because they have been established by the West nor because they are in line with how children are educated in the Muslim world. Generally, we are given a very broad berth in which to plan our curricula as well as our pedagogy. Let us take advantage of this blessing and strive to make our schools and classrooms truly Islamic.

Joseph pointed out that most schools perpetuate unquestioned, norms, habits, values, and goals.³⁵ She emphasized that schools must carefully define their specific cultures based on a unified, articulated vision.³⁶ We *have* a vision; we have *the* vision! And our vision is unified as it is based on the foundational Islamic concept of *tawhīd*. We have dedicated our lives to teaching Muslim children. We have a strong spiritual and intellectual Islamic foundation and have embraced the roles that God created us for, always struggling for justice for humanity and all creation. We have access to the ideas of numerous Muslim intellectuals, as well as to knowledge of established educational research on how children best learn. It is up to us to apply our vision within our schools.

Thinking deeply, consulting, questioning, reading, reflecting, and discussing will put us on the road to success in determining whether or not the systems we are following are consistent with our Islamic ideals. The principles that have been developed so fully in Islam through the Qur'an and the teaching of our Prophet are universal principles, principles that are accessible both through revelation and through the use of human reason. I cite numerous educators who are not Muslim but through the use of observation and intellect have come to conclusions that epitomize the concepts that we may call Islamic. Educators of conscience, Muslim and others, are speaking out. It is up to us to listen and contribute to the conversation.

4 Unleashing the Power of *Tawhid*

There is no god, but God. This statement, so simple yet so profound, is the basis for everything that we, as Muslims, believe and how we are expected to live our lives. Belief in the unity of God acknowledges Him as the sole creator and executor. Awareness of the one God, Allah, absolutely must pervade the atmosphere, the curriculum and the overall functioning of an Islamic school. This internalized belief will result in practices and attitudes that are clear and obvious. As we plan our lessons; as we establish rules and traditions; as we relate to our students and staff, there must be a conscious effort to remember that we are obligated as Muslims to keep this concept of *tawhīd* as our guiding principal.

By remembering the simple practice of prefacing each deed with the words *bismillāh*, we can become increasingly aware of keeping our words and actions truly God-centered. By saying these words aloud, we remind the children and anyone else in our environment that we are making a strong effort to focus on God and to encourage them to do the same.

The unity of God is the essence of the message, God's message, delivered by the Prophet to the world. We recognize that everything that has happened and will happen is according to His will. He is the source of the laws of history, of nature, as well as the laws of morality. Belief in one God is inherent to humanity. It is fundamental to our human nature, our *fitrah*. This yearning for God remains, to one degree or another, throughout each of our lives. As teachers it is incumbent upon us to build on this basic gift providing the children in our care the framework for the Islamic way of life.

Some of the attributes of God as stated in the Qur'an emphasize His absolute power, uniqueness, divine perfection, and majesty. We are reminded that He is beyond our limited human perception. Yet the Qur'an also tells us that He is as close to us as our jugular vein; that He cares for each of us, indeed for all of His creatures; that He is accessible, compassionate and full of mercy.

If My servants ask you about Me, I am near; I respond to those who call Me, so let them respond to Me, and believe in Me, so that they may be guided. (Qur'an 2:186)

Balance! Such an important concept in Islam! As educators we must always remember to present a balanced point of view, and nowhere can it be more critical than in helping children in the development of their concept of God with the same sense of wonder and curiosity encouraged in other topics, looking through Muslim eyes at every part of their day.

Tawhīd is a statement of belief, but it is far more than a passive article of faith. We have been blessed with a comprehensive worldview that guides us to a vision of unity. It requires the recognition that our own creation has the purpose of serving God who has no equals or partners; to serve Him not only through the performance of rituals but also by committing ourselves to a vision in which action is part of faith; to a lifelong struggle against injustice and oppression. Tawhid affects every aspect of Islam beginning with the oneness of God and extending through the wholeness and interrelatedness of His creation. The precision, the harmony of each component demonstrates the unity of the Almighty who has created patterns that are purposeful and consistent throughout time and space. Humanity too is a rich mosaic of individuals - all from a common origin, but who became geographically separated to form distinct populations and cultures, superficially different but meant to know and learn from one another. Nor is there a religious truth separate from that which has been discovered through the efforts of human initiative. All knowledge belongs and originates with the one God. It is only how people apply this knowledge that has been given to us as a test.

Because God is beyond human comprehension, we must be ever conscious of avoiding even the least amount of confusion between Creator and creation. At present the greatest danger is less from images and symbols and more from alternate ways of life such as putting undue importance on any human being; on material success; or the various '-isms' that can so easily take precedence over our total commitment to one God.

The belief in one God prescribes taqwā (God-centeredness). Exposure to Islamic principles, values and practices absolutely must be experienced in a warm, loving atmosphere. The mercy and compassion of God are mentioned in each surah of the Qur'an and it is these attributes that should be stressed. Islam is best promoted through the wonder of God's creation, an appreciation of His limitless love, kindness, and compassion and the realization that He guides us through the Our'an to live the best possible life for our own sake. Sardar explains *taqwā* as "the reasoning conscience,"³⁷ a definition that is preferable to the more common "God-fearing." God-fearing may seem to sanction judgment. God is our judge and no one but God, Himself, should ever threaten another with hellfire, particularly not one who has authority or power over another. As teachers it is not our role to frighten children into submission, but to give them the tools to develop their reasoning conscience. Muhammad Asad perceptively stated, "God-fearing excludes the positive content of the term *taqwā*, the awareness of His all-presence and the desire to mold one's existence in the light of this awareness."38 Henzell-Thomas, expanding on this, pointed out that the word *taqwā* combines the meanings of consciousness and awe of God with that of being vigilant in guarding oneself from whatever is spiritually negative or harmful. It is *taqwa* that guides us to behavior that exemplifies our reason for being, encouraging us to apply the principles elucidated in the Qur'an to how we live our lives. To put God at the center requires teaching everything from a perspective that embraces this concept. Nothing that we do, nothing that we teach or learn, can be separated from our knowledge.39

To put God at the center in a school environment is often difficult even for committed Muslims because, unfortunately, most of us have lived our lives within the materialist paradigm that demands an absolute separation between the material and the transcendent, a worldview that focuses so intensely on the senses that the holistic view

of life has been eroded, causing an unconscious internalization that religious belief must be kept separate from that which can be physically observed. When God is not recognized as the center of our reality we are in danger of promoting a secular worldview. Having unconsciously adopted this way of thinking, it will take determined effort to re-center our thinking on Him. Restoring the central core of Islam, *tawhid*, to our way of life requires us to cast aside the practice of looking at every aspect of existence as a separate, discrete entity, learning instead to look critically through the lens of unity.

The Qur'an is the guide that God has given to humanity. There is one God and His word, as well as His creation, must be taken as a whole. Muhammad Asad, in the preface to his translation of the Qur'an, speaks of the Qur'an's interweaving of spiritual teaching with practical legislation. "The message of the Qur'an is that problems of the flesh and of the mind, of sex and economics, of individual righteousness and social equity are intimately connected."40 How often do we isolate a verse from the Qur'an and use it to justify or confirm our own opinions! Fazlur Rahman, one of the most thoughtful Muslim intellectuals of the twentieth century, has emphasized the importance of situational, temporal, and cultural context of Qur'anic verses. If taken individually without considering the frame of reference, then the message may be misunderstood. He emphasized that while undoubtedly "the Qur'an is revealed in its entirety" the Qur'an itself proclaims "that it is a highly integrated and cohesive body of teaching."41 Sardar has also stressed the unity of the Qur'an, agreeing with Rahman that a thematic approach in which one follows the interconnected revelations related to a specific theme is the way to understanding, emphasizing that verse by verse exploration can obscure broader most basic concepts.42

Note, a key tool employed by Islamophobes who have caused us so much grief, is division, not only of the Qur'an – by misquoting and/or converting a few words taken out of context into a sound bite – but also with the insistence that Allah is a God who differs from the God of the Christians and the Jews. From there they proceed to all that they assume separates us from the rest of humanity.

The concept of tawhid encourages us to look at apparently

conflicting ideas not as opposites, but as complements to one another. Apparent duality is more correctly portrayed as polarity - two complementary dimensions of a single reality - rather than opposition. As an example, Sardar emphasized that doubt and certainty are not diametrically opposed because reasoning through doubts is the only way to certainty.⁴³ In Wholeness and Holiness in Education: An Islamic Perspective, Zahra Al Zeera discussed at length what she called the "dialectics of tawhid."44 Sachiko Murata compared the way that Islam deals with these contrasting ideas to the yin and yang of Chinese religion, describing how seemingly contrary forces are interdependent and give rise to one another.⁴⁵ Henzell-Thomas stressed that dialectical thinking and the intellectual connectedness it promotes, is an important part of a holistic education, enabling learners to link with their innermost selves, to develop empathy, and to connect with others and the society in which they live.⁴⁶ Thinking through these apparent contradictions is a powerful tool that leads to the understanding that what appears as paradoxes are often different views of the one whole, and that this way of thinking develops the mind and soul for the struggles of living in modern society.

Rahman remarked on the close relationship in Islam between the unity of God and the unity of humanity:

Monotheism was from the beginning linked up with a humanism and a sense of social and economic justice ... whose intensity is no less than the intensity of the monotheistic idea.... The Prophet seems to insist: one God – one humanity.⁴⁷

In an environment or community where everyone is Muslim it is easy to fall into a sense of exclusivity, to think of Allah as being God only of the Muslims or of having a preference for those of us who have been born into or have voluntarily entered the fold of Islam. Yet, twelve different times in the Qur'an, God specifically addresses the whole of humanity. Clearly, Allah loves all of His creation and is the God of everyone. He created each of us for the same purpose and cares for us equally. The unity of humanity is a cornerstone of our faith. No person, male or female, Muslim, Christian, Jew or nonbeliever, is

more beloved by God than any other, and within each individual man, woman, or child the physical, spiritual, and intellectual components complement one another, working together to form a unified personality. The gift of Qur'anic revelation is not ours alone, but a universal gift.

Isolation can never provide the answer to the needs of Muslims in non-Muslim communities. It is contrary to the spirit of the Qur'an to separate into self-imposed ghettos. Of course we want to keep our children and ourselves safe from the harmful parts of the dominant culture, but to focus too intently on negative aspects such as alcohol, drugs and sexual promiscuity is counterproductive. Many ways of Western society are positive, sometimes more Islamic than what is practiced in Muslim countries. Furthermore, there are numerous individuals and organizations striving for justice. They are allies – actual or potential.

The question of isolation has important implications for those of us involved in Islamic education in the West. If we are truly meant to "know one another" why then should we seclude our children within a learning environment that is so separate from the rest of the society in which we live? The more or less exclusive atmosphere of any Islamic school stands in stark contrast to what children will be forced to experience later in their lives. For this very reason, many Muslim parents have chosen not to put their children in an Islamic school, having decided that a less socially restrictive experience will better prepare their children for the lives they will ultimately live if they are to be a part of the larger society.

Because the family is by far the most important factor, some Muslim children do quite well in a non-Muslim school. They will learn and will experience a broader range of society. There will be expectations that they behave properly. The problem is that their behavior is divorced from the existence of God and this separation, regardless of what they are taught at home or in a weekend school, cannot help but reinforce the dichotomy between religion and the rest of life. Whilst the positive influence of the family is of the greatest importance, it is not always enough. Those who are in an Islamic atmosphere on a full-time basis avoid the confusion of being exposed to a culture separate from God during the long periods of time spent in school. Children are fragile and easily influenced. When we put them into an alien environment we do it with the understanding that they will sink or swim. Of particular concern is the ignorance and animosity that often causes negative attitudes and outright bullying. Indeed, a child well-grounded in his faith and with a strong personality may be empowered by his ability to stand up to negative encounters. But what is the effect on those who feel humiliated or who hide their faith in an attempt to fit in?

Our children have an uncertain future. How will they relate to others? How will they explain Islam? How will they live their Islam without isolating themselves? What is their role within the world in which they almost certainly will spend their lives? The time that a child spends in a full-time Islamic school can be thought of as a sort of incubation period that will, if God wills, give him/her the strength of character to comfortably assume a role in the world in which we live. Merry, who has studied Islamic schools in several non-Muslim countries, concluded that the cultural coherence experienced by children who attend schools that are consistent with home values is important for identity formation and psychological health.⁴⁸ He cited several other non-Muslim scholars who are in agreement. In a more recent book he expanded this to include other vulnerable minorities as well as Muslims. He argued that voluntary separation as opposed to integration is more likely to promote self-respect and opportunity and may be the most effective way to encourage civic values, equality, and citizenship.49 Our task, then, is how to imbue this self-respect and still prepare our children for their roles in the larger society. The blessings of Qur'anic revelation are not ours alone, but a universal gift. As Muslims we have an obligation to do what we can to promote Godconsciousness within the community in which we live. It is our sacred duty to equip the next generation to assume this role. Our primary purpose must not be protection - but preparation - preparing our children to be an integral, God-centered part of the greater society. We must be vigilant in directing our children away from any feeling of exclusivity, reminding ourselves and our students that the Prophet Muhammad was the last of many. His example and the Qur'an he

delivered were for all of humanity, a humanity of which Muslims are only a part. This is not an easy task. To avoid the feeling of separation from the real world and yet to give our children a strong background and understanding of how to live their Islam in a culture where many behavioral norms are contrary to our beliefs takes thoughtful planning and prayer.

We can only come to know others and have them come to know us when we are accessible. Ideally, an Islamic school should have non-Muslim children within the student body. That, of course, requires a welcoming environment and a program that can potentially attract non-Muslims as well as Muslim families. If Islam is integrated throughout the curriculum the question of excluding non-Muslims from religion classes ceases to exist. As pervasive as the present climate of suspicion and fear of Islam and Muslims may seem, there are non-Muslims who will choose to enroll their children in an Islamic school. For many years the Montessori preschool at the Islamic School of Seattle served as a magnet daycare program for neighborhood preschool children with fees paid by the city or the county. Because they had become comfortable with the school and their children were happy, those who could afford it sometimes chose to extend the enrollment of their children into the elementary program. It is a source of pride that after 9/11 a church that was predominantly African-American chose to give the money they had collected in memory of those killed in the attacks on the World Trade Center to the Islamic School of Seattle in thanks for our work with the neighborhood children!

Even if our schools are 100 percent Muslim we *must* ensure that they are truly multicultural, multiethnic, and exclude no one. It is a sad fact that our masjids and many of our schools are based on ethnicity and sect. Of course this is not to imply that any Muslim would be intentionally excluded, only that the particular school or mosque has come to be seen as Arab, Turkish, Shiite or African-American. Some parents choose an Islamic school primarily because they want their children to remain tied to their own culture of which Islam is a part. It is no doubt a comfort to socialize with others who share your dress, language, and other ways of being human, but how much richer school becomes when children understand and appreciate that there are many Muslim cultures. It takes a conscious effort to reach across ethnic and sectarian boundaries to the whole community of Muslims. Each of our cultures must not simply be present, but celebrated. Children need to see that even within Islam there is diversity. It is only in such an atmosphere that our youth can develop an appreciation of others and can begin to distinguish what within their own way of being is specifically Islamic and what is merely cultural.

The unity of humanity requires that our education be socially just. Oakes, Lipton, Anderson and Stillman addressed social justice in *Teaching to Change the World* – the very title of the book suggests an Islamic approach. They define a socially just education as one that accomplishes three goals: (1) considers the values and politics that pervade education; (2) asks critical questions about how conventional thinking and practice came to be, and who in society benefits from them; and (3) pays particular attention to inequalities associated with race, social class, language, gender, and looks for alternatives.⁵⁰

One important practice, widespread in schools, is that of ability grouping, variously known as tracking, streaming or leveling. This involves sorting children according to a perceived innate capacity for learning. The methods used – test scores, teachers' perceptions, grades, and parental pressure – do not accurately predict academic achievement, but are shown to primarily separate children according to race, social class and family education. It is anything but socially just and has no place in any school and particularly not in an Islamic school. This practice will be discussed in more detail in chapter 9.

To adapt to living in a country of many cultures it is important seek out those who are knowledgeable in traditional Islam, but have also studied and lived in countries where Muslims are not a majority. To depend on jurists who base their conclusions on the past can result in confusion and make it appear that Islam is not capable of facing issues of today.

Anwar Ibrahim, former deputy prime minister of Malaysia, rejected the divisive paradigm of the clash of civilizations, calling instead for a civilizational dialogue recognizing and welcoming the ethnic and religious diversity that is characteristic of Malaysia as well as of

many other countries.⁵¹ He recommended that primacy be given to social and economic justice and equality, noting that these are universal values. He further stated that Islam, being a religion of the middle path, provides a basis for pluralism. He does not see civilizational dialogue as an end, but as a means for achieving the kind of *convivencia* that characterized the harmonious and enriching experience of the three religious groups living together in Muslim Spain.

The tribalism and self-interest condemned by Islam can take many forms but includes that of religious identity. Within our schools we absolutely must reach beyond our own Muslim communities. It is essential that the children entrusted to us learn to appreciate how much good exists beyond those who call themselves Muslim. History, biographies and current events are replete with examples that anyone can learn and benefit from. Beyond this, there must be a conscious effort to provide opportunities for children in an Islamic school to interact with non-Muslim others. This could be through community service; partnership with other schools; participation in community events, and so forth. The children in the Islamic School of Seattle participated in the citywide Martin Luther King Day activities every year, sometimes carrying the banner at the front of the parade. They also marched in demonstrations and participated in celebrations with other groups of children. Each year they held a very successful carnival for both neighborhood children and the Muslim community.

Most Muslim adults and many of our children have experienced prejudice. We cannot predict the future but at the same time it is essential to be aware that the world our Muslim children will be experiencing will not always be welcoming. How can we prepare them to maintain dignity and respect for themselves and for Islam in the face of discrimination and virulent Islamophobia? And just as important, how can we use the knowledge or experience of prejudice and persecution to emphasize the unity of humanity and the absolute necessity of standing for justice even against ourselves (Qur'an 4:135)? The last thing we want is for our children to be drawn into the same trap of prejudice and hatred toward non-Muslims. This problem cannot be addressed in isolation. Prejudice encountered by our children directly or through the experiences of friends and family is devastating. There are several ways to prepare them for such an experience, preferably in advance. Opportunities to learn the importance of tolerance are everywhere. History as well as current events can provide numerous examples that emphasize the brotherhood of humanity.

There are also some outstanding examples of Muslims coming to the aid of Jews during the Holocaust. A picture book, *The Grand Mosque of Paris* tells the story of how Jews were secretly given refuge and sheltered within the mosque during their persecution by the Nazis.⁵² Albania, the only Muslim majority country in Europe, was also the only European country that was successful in protecting its own Jewish citizens as well as numerous Jews fleeing Nazism from other European countries. This was accomplished primarily by providing documentation that enabled them to move freely among the population not merely through hiding them away. When Albania became occupied by the Germans and was ordered to turn over a list of Jews they refused to do so.⁵³

Using the examples of Muslims standing against injustice toward Jews has the additional benefit of opening a discussion of Judaism. Because of the situation in Palestine, it is important to be sure that our own children learn not to stereotype or to hold prejudices against members of an entire religious or ethnic group. Introducing them to the growing number of Jewish organizations that are standing against injustice toward Palestinians even against their own is especially helpful.

The Zinn Education Project offers numerous examples of individuals whose lives embodied a commitment to justice throughout U.S. history.⁵⁴ This approach drives home the realization that it was people just like us who did the hard work that changed the world for the better, people of many backgrounds who came to understand that it was their duty to risk their lives, futures, and dreams to stand for justice. There are many stories from both Western and world history that can serve as either positive or negative examples of behavior that teach Islamic values. It is also important to remind our students that although we are blessed with having the Qur'an to guide us, those of other religions have had their own revelations and each individual person is given the gift of *fitrah* and an intellect. Students readily relate to the role of other minority groups in the United States and the difficulties that they faced and overcame. Focusing on minorities and their role in building this country can help to overcome prejudices. An additional benefit is the abundant material available in the form of non-fiction books and historical novels. For instance, see Laurence Yep and his series of novels depicting the long and often painful history of the Chinese in America. The African-American experience is very rich in all sorts of media and of course includes the largest part of the history of Islam in America – as well as a substantial and significant portion of U.S. history. See example of themes in appendix B for a theme based on the Irish potato famine and the immigration of the Irish to America.

The oneness of God is reflected in His creation; a creation that is purposeful, integrated, and highly ordered. The interconnectedness, the precision, the harmony of each component demonstrates the unity of the Almighty who has created patterns that are maintained throughout time and space and beyond. Only one God could have created a universe that follows specific laws so consistently. The Creator in His infinite wisdom established a role for every entity that exists. Whether we look at the perfect meshing of the systems of the body; the mind-boggling structure of a single cell; the precision of an atom; or the order of our solar system, we cannot help but know that all of this is the result of a plan. Even more incredible is that each of these is connected in numerous ways to one another. Nature is so much more than the physical, each of its wonders is an *āyah*, a sign, of the one God.

The unity of creation has implications for all aspects of the curriculum, but becomes particularly important in the study of sciencerelated materials, subjects that often are very fragmented. A science text for younger children is often made up a series of disjointed topics with little relationship to one another other than that they are all considered 'science.' Each subject is quickly finished so that the class can move on to the next, robbing the children of the time it takes to see and appreciate the interconnections that bind Allah's creation into a marvelous whole. It takes time to think, contemplate, and wonder at the signs of God in the world.

Teaching Children

Science is, after all, nothing more than the physical laws of God. Nearly every reference to these signs of God in the Qur'an is followed by a statement urging Muslims to consider, think, contemplate. Over and over again we are commanded to look at this creation of His, to reflect on its astounding complexity, order, balance and how it all fits together into a marvelous whole and to remember the one God who created it for us.

And among his wonders is the creation of the heavens and the earth, and the diversity of your tongues and colours: for in this, behold, there are messages indeed for all who are possessed of [innate] knowledge! (Qur'an 30:22)

The universality of scientific laws indicates a plan that is so elegant and coherent that it demonstrates the best of Planners to anyone without a preconceived notion of everything occurring merely by chance. Because contemplating creation should lead to the Creator, it is our sacred duty as educators to remove the division between the Creator and His creation; to link the physical to the metaphysical; and to restore a vision of God's plan. The Qur'an itself urges us over and over again to seek knowledge of the magnificent creations of God, to think, to study, to contemplate and to reflect upon the $\bar{a}y\bar{a}t$ of the world.

He it is who has created for you all that is on earth, and has applied His design to the heavens and fashioned them into seven heavens; and He alone has full knowledge of everything. (Qur'an 2:29)

It is difficult to get our minds around a creation that extends indefinitely outward to the furthest reaches of the universe, or inward to the minutest of subatomic particles, and yet we know that beyond the physical, in some way, potentially observable parts of creation, there is *al-ghayb*, the unseen and unseeable. Children often question the true nature of God; of time; of the purpose of the universe; of spiritual entities. Young children in particular are likely to assume that the adults *know* the answers. That is why we never simply brush off such questioning, but work to encourage the sense of wonder and awe in their realization that some things will always remain beyond the range of human understanding.

Since our own senses are limited we can never directly perceive more than a partial view of reality. Above all of creation is the Creator, the one God who rules it in its entirety. To a believer, the cosmos includes the entire creation, everything but God, Himself. It includes the unseen – Heaven and Hell. It includes the jinn and the angels. It includes the special qualities endowed in humanity when God breathed the souls into the first human man and woman, giving them free will and intellect, and at the same time charging them with the responsibility of seeing to the business of God on earth. Creation occurred *only* because God willed it, and this will also be the case in the final death of the physical world.

Physical creation is for the use of humanity, but we are warned not to corrupt the earth. We have been given the task of overseeing the use, maintenance and protection of the environment, for the sake of all of creation, and for the part of humanity that lacks access to adequate natural resources that some of us enjoy.

For, He it is who has made you inherit the earth, and has raised some of you by degrees above others, so that He might try you by means of what He has bestowed upon you. (Qur'an 6:165)

It is our duty, then, to impress upon those we teach that it is the obligation of those of us who may have been in some way raised "by degrees above others" to assume the responsibility of actively caring for God's creation. The technology that was the result of the immoderate use of God's creation has resulted in the current situation of global warming, pollution, destruction of habitats and loss of diversity. Those who introduced the technologies that have caused such devastation did not intentionally set out to destroy the earth, but any positive intentions were soon consumed by recklessness, greed, excessive wealth and power in the hands of a few, weapons of terrible destructive power, and a culture of consumerism.

Many if not most of our children will be involved in developing future technologies that we cannot even imagine. Let us encourage them to think deeply about the problems of today so that they may, if God wills, be in a position to prevent or overcome adversity.

5 The Unity of Truth

Say: "Behold, God's guidance is the only true guidance." And, indeed, if you should follow their errant views after all the knowledge that has come unto you, you would have none to protect you from God, and none to bring you succour. (Qur'an 2:120)

Occasionally a visitor came into the Islamic School of Seattle and ingenuously asked, "Do you teach both the religious and secular subjects?" At those times, it was difficult to keep myself from jumping up on my soapbox and shouting, "No! No! No!" The concept of secular is alien to Islam. The separation of 'Islamic Studies' from the 'regular' subjects in a school setting only feeds into the mentality that sees religion as something separate from life. When the Prophet said that the ink of the scholar is holier than the blood of the martyr and when he put learning above prayer, he did not distinguish between so-called secular and religious knowledge. It was left to humanity to discover the details of the unity, order, and intricate connections within creation to discover how relationships occur and are sustained.

Read! In the name of your Lord Who created: created man from a clinging form. Read! Your Lord is the Most Bountiful One. He Who taught (the use of) the pen. Taught man that which he knew not. (Qur'an 96:1-5)

This, the first revelation received by Prophet Muhammad, was the beginning of a revolution of thought that led to the quest for knowledge that revolutionized the known world. The word *`ilm*, although generally translated as 'knowledge,' is actually more complex including wisdom and understanding. Sardar compares the concept of *`ilm* to the concept of *`adl* (justice).⁵⁵ Both are distributive. Neither can be confined to an elite group but must be widely available. Moreover, neither justice nor knowledge can attain their purpose in isolation from one another. Knowledge that does not lead to positive action but has as its purpose wealth or power for the few cannot be considered *`ilm*. Seeking knowledge requires responsibility because we are here as trustees of God and the knowledge we seek must be for the good of humanity and, in fact, of all creation.

I have in my library a true gem, *The Dawn of Modern Science* by Thomas Goldstein.⁵⁶ His book is not an attempt to document each detail of the history of science, but rather delves into the philosophical and intellectual underpinning of this phenomenon. It is particularly gratifying that as a non-Muslim he was so appreciative of those qualities that made the period of Islamic science so amazing that he was able to overlook the division, hostility and tensions that occurred. He appropriately described the attitude of the Muslim thinkers as they purposefully sought knowledge:

Science in the Muslim world was inspired by the pleasurable observation of nature's diversity and the uses of its bounty for the enhancement of life... (and) had little concern for establishing the mastery of the mind over nature through tight philosophical systems or for proving human power through the relentless technological transformation of the natural environment.... Islamic science was the pragmatic product of a religious culture that looked at the earth as a garden not as a testing ground for the power of the human race.⁵⁷

It is so-called secular knowledge that is based on the very signs of God that we are reminded to contemplate. When the early scholars of Islam sought knowledge throughout the known world, they did so not to replace Islam with alien philosophies or beliefs, but to enrich it. They may not always have been successful, but their intent was not to simply import and translate, but to obey the Qur'anic commands to see, behold, consider, think, and to incorporate the knowledge gained into the unified structure of *`ilm*. There was a very intentional process of examination, sorting, classification and Islamization. Insisting on the validity of both revelation and reason, the entire body of knowledge, physical and philosophical, was bound into a unity based on the Qur'an.

Islam is not a blind faith. Yet in spite of the commands urging Muslims to reflect, consider, contemplate, there are many Muslims who are afraid to think, afraid that wonder and questioning will damage their faith. If there appears to be some contradiction between Islam and material science, if strands of knowledge seem to be contradictory, it is only because our understanding is incomplete. The notion that there are two truths, one that we gain through revelation and another that comes through reason, is contrary to the central Islamic concept of *tawhīd*. *Allāhu al-ʿAlīm* has real meaning for *only* God is All-Knowing. Although our understanding changes individually throughout our own lifetimes and collectively throughout history, human knowledge is limited and will *always* be limited – by the unknown, and the unknowable. The pathway through which knowledge reaches us varies, but all truth is from the one God.

He [alone] knows that which is beyond the reach of a created being's perception, and to none does He disclose any of the mysteries of His Own unfathomable knowledge. (Qur'an 72:26)

Our ultimate role cannot be to isolate, but to prepare our children to contribute Islamically to the society in which they live. We are sending them out into a world that is full of danger to their religion. We do them *no* service by discouraging them from grappling with the questions they have or from insisting that they should not think – just believe. Questioning and faith are not opposed. What seem as contradictions provide an opportunity for discovering and learning and understanding.

At times revelation and reason may *appear* to contradict one another, but the contradiction is only apparent. This should inspire us to think deeply and creatively, but not to necessarily discard either of two seemingly conflicting realities. As Muslim teachers we are required to instill this realization in our students. When the teacher is asked a question regarding what may seem to be a conflict between reason and revelation a teachable moment has occurred. Seize this opportunity! Such confliction is due either to our misunderstanding of revelation or our faulty reasoning. For a child to hear an adult say "I don't know" is, in itself, a most powerful learning experience. We want our children to be life-long learners, to appreciate that for all of us there is still so much to be learned. Keeping our youth ignorant will not protect them. Emphasize that when something is unsettling we have been given an opportunity to learn. It becomes our duty to do our best to seek understanding, emphasizing that the unknown and the unknowable exist. We want our students to appreciate that some things are beyond the understanding of the human mind – either individually or collectively.

It is a large part of our role as teachers to help our students develop the tools to think, reflect, discuss, and understand from a perspective that is moral, ethical and Islamic and to remind our students – and ourselves – that God is our center, not the materialism that is the creed of today. Henzell-Thomas has reminded us that the Qur'an is addressed to those who believe in the existence of that which is beyond the reach of human perception:

Above all, we must cultivate the capacity for awe and wonder in the face of mysteries which are inaccessible to the rational intellect...we need to encourage a mentality which can escape from the literal, which is comfortable with analogical thinking, metaphor, and symbolism, with fable, parable and allegory.⁵⁸

Knowledge (*`ilm*) is not an accumulation of facts, nor is education the passive acceptance of what is presented as truth. It requires respectful exchanges of opinion, disagreement, a give and take of thoughtful ideas. When students are expected to accept without questioning, we are encouraging them to disregard the frequent Qur'anic commands to think, reason, ponder. Reason and revelation are God's gifts to humanity and they are complementary to one another. The results of questions and discussion may sometimes be unsettling, but even disturbing ideas best occur among teachers educated in Islam and fellow students seeking to understand through Islamic eyes. Consider that when children ask difficult questions they are taking risks. It is up to the teacher to handle such incidents in such a way that their risk-taking is not discouraged either by classmates or the teacher. Questions related to conflicts of faith can be particularly difficult to verbalize.

Thinking students are those who have been encouraged to take intellectual risks. We need to promote questions and exploration. Waghid has emphasized the importance of encouraging risk-taking and what he calls "talk-back," emphasizing that engaging with others and encouraging the habit of $sh\bar{u}r\bar{a}$ thwarts disrespect and allows teachers and students to accept one another as fellow participants in the learning process, promoting creativity and the realization that there is always something new to be discovered.⁵⁹ Such learning is deep and can only occur by questioning.

To instill true understanding is a task that will require intense spiritual and mental work, work that simply cannot be left solely in the hands of scholars. It is educators who through training and experience have learned to relate to young people and who will play an important role of molding the future of Islam in the West. Children, surely the most treasured resources of our ummah, have been placed in our hands. It is imperative that we take this responsibility seriously, educate ourselves and look deeply at our pedagogy to ensure that we are doing everything in our power to return knowledge to its proper position. To do this we will need to understand the origin and role of modern, Western science. The role that Muslim science played in the origins of the European scientific revolution can be a source of pride, but it is essential to understand the fundamental differences that separate the two modes of thought:

The people of Western civilization surrendered to science the ultimate control over their minds and lives...a passion for the concrete objects on this earth replaced the transcendental visions. Mystic intuition gave way to the rigors of consistent, rational thought. Instead of turning their eyes to the limitless orbits of the divine universe, early modern Western people had decided to stick to the carefully limited piece of specific reality. What the step from a Medieval to a modern version amounted to was a spectacular narrowing of the focus – a sharpening, and at the same time a coarsening – in our perception of the world.⁶⁰

These words clearly describe the way of perceiving the world that developed during the past few centuries. Release from the overbearing authority of the church provided the motivation, and expansion through colonization and capitalism to the rest of the world provided the physical, financial and psychological means for the virtual explosion of knowledge that has come to be known as the Scientific Revolution. Unlike the Muslim scholars who developed their learning within the broad scope of revelation, Western Renaissance scholars quickly learned that any apparent conflict with the all-pervasive church would not be allowed. A tacit agreement was reached. The new form of knowledge – science – would avoid anything that might involve matters of faith, focusing only on phenomena that were directly observable through the senses. Science as it developed in the West is the result of a rich and creative use of reason, but it lacked revelation. Goldstein remarked on the cost of the adulation of reason, comparing the antagonism toward the church to an adolescent rebelling against a parent. This led to resentment of *any* authority and to the excessive individualism that came to dominate society:

Philosophy, religion, politics and social thought, all were affected. Western civilization eventually surrendered to materialistic science the ultimate control over their lives and minds. The rational or 'scientific' methodology that first raised its voice against transcendental restrictions has become a panacea for our most personal problems.⁶¹

Western scientists have not necessarily discarded religion. Earlier revelation, our inborn gift of *fitrah*, and our ability to reason can and does lead to the knowledge of God. Nevertheless, the unequivocal separation of religion from science has been damaging. This split has become so pervasive that it has managed to influence the way that most of us perceive knowledge.

Historians and philosophers of science have shown unequivocally that modern science is neither pure truth nor is it value and ideology free. It has as its foundation its own worldview, philosophical ideas, values, and understanding of nature. Seyyed Hossein Nasr described a new and alien science "bound to a single level of reality and closed to any possibility of access to higher states of being or levels of consciousness ... even when attempting to deal with the farthest reaches of the heavens or the depth of the human soul."⁶² Biologist Stephen Jay Gould emphasized that science is socially embedded, that it changes according to the changing culture – not because it moves closer and closer to the truth⁶³ – an assessment that he suspected many practicing scientists would discount but one with which science historians would readily agree. Gunnar Myrdal wrote that "Cultural influences have set up the assumptions…with which we begin; pose the questions we ask; influence the facts we seek; determine the interpretation we give those facts; and direct our reaction to these interpretations and conclusions."⁶⁴

If even physical science is not free of ideology, but is firmly grounded within its culture of origin, then how much more dangerous scientism becomes in the attempt to apply it to complex fields of study such as human behavior with the goal of organizing society on reason rather than on religious principles. The result is what have become the social sciences: anthropology, economics, political science, psychology and sociology. William James, considered the father of American psychology, is known to have referred to his field as "a nasty little subject" because of the disinterest in what is of real importance "that which lies outside the bounds of empirical research - the things that make us truly human."65 The so-called science of behaviorism, which has demeaned our consciousness, minds, souls and free will as nothing but illusion, has itself caused considerable damage when applied to how we raise and educate our children. When the concept of the survival of the fittest, the explanatory principle of natural selection, was applied to social sciences the result was justification for wanton disregard of less powerful individuals, ethnic groups, businesses and other organizations.

There are numerous examples of the pernicious impact of culture when attempting to use science to explain human behavior. Gould's book details how, in spite of the overwhelming genetic similarity among humans, racist and sexist 'science' was used to rationalize the superiority of men over women and those of white skin over those of dark, indeed, to even show the basic superiority of Americans of Western European origin over Eastern and Southern Europeans, as well as the innate inferiority of the lower classes, validating (1) the forced sterilization of those determined to be intellectually or morally deficient; (2) the prediction of criminality based on genetics; and (3) determining the guilt of murder suspects by their measured physical characteristics.⁶⁶ Racism played a very important historical role in eliminating any compunction regarding imperialism, exploitation and even the enslavement of those deemed to be a lower form of humanity. This arrogant attitude that assumes an inherent superiority of specific ethnic, racial, religious, and economic groups has become institutionalized and continues to dominate the world of today. Concentration of wealth in the hands of a few, perpetual war, continued theft of natural resources through neo-colonialism and genocide, have continued unabated. The funding of the U.S. public education system is set up so that educational opportunity is significantly impacted by one's race and class, with those from higher classes provided with the best facilities, materials and teachers, while schools in the poorer areas are neglected.⁶⁷

The Prophet is reported to have said, "Wisdom is the lost property of a Muslim; wherever he finds it, it is his." No one would suggest dispensing with the extensive factual base given to us through Western civilization, but we must remember that all knowledge is from God and can never be separated from His purpose for us, and the ultimate end of living our lives in worship, obedience, justice and action.

Unfortunately, there has been very little effort to learn from the mistakes and successes of the past when Muslims boldly and bravely confronted the knowledge of several civilizations with very different belief and value systems. In spite of major struggles, disagreements, and setbacks, Muslim intellectuals were ultimately successful in integrating the vast body of translated knowledge into a unified – but not uniform – body of *'ilm*. This was a task that was difficult, often dangerous and not universally successful, but the Islamic – yet worldly – intellectuals of that time were undeterred in their efforts, described by Muzaffar Iqbal as an ordering of ideas in the light of revelation:

...a sublimation of the received materials an act which required generations to complete and which created schism, debates, disagreements, polemics even indictments and judgments. The end result was...a tradition that examined, explored and synthesized its own unique perspective on nature and the human condition, perspectives that were distinctly Islamic though not monolithic. 68

The Muslim world embraced Western knowledge passively and indiscriminately. Europe quickly became the center of thought, due largely to the great wealth that poured into it through expansion and capitalism, with non-European regions becoming profoundly aware of Europe's resulting military and economic achievements. The arrival of modern knowledge caused great excitement and a rush to emulate it. When the notable Islamic reformers, Sayyid Ahmed Khan, Muhammad Abduh, and others, promoted the introduction of Western education and science into the Muslim world they were convinced that science was value neutral. To their minds, Islamic scholars had provided knowledge to Europe where it continued to flower. Now it would be reclaimed, along with all of its advancements, and the Muslim world would benefit in the same way that the West had previously benefited from Islamic knowledge.

Obviously this has not happened. Instead of being the panacea that was expected, it plunged the Muslim world into an abyss of confusion in the attempt to separate belief from the 'reality' of science. Europeans had transformed science into a new way of thinking based entirely on the senses, a system in which the human, on his own, was able to understand laws that govern humanity and the universe. Since God cannot be physically observed, it is assumed that everything in nature including the origin of the universe, the formation of simple molecules, the living cell, the highly coordinated physiological processes of the higher plants and animals and culminating in the phenomenal intellect of the human was due merely to happenstance. The real, the actual could be determined only by man. Those who believe in God have generally taken great care to keep God and this perception of knowledge carefully separated. This mechanistic view of reality in which only that which can be directly experienced through the senses truly exists has resulted in reductionism, in which the whole is thought to be understood only by the study of its individual parts. This ever-increasing compartmentalization is the very opposite of the Islamic vision of unity.

Seyvid Hossein Nasr has perhaps done more than any other scholar to contrast the integrated view of knowledge that is fundamental to Islam and materialistic Western thought. Nasr began his studies as a student of physics at MIT but became intrigued by the philosophy and history of science initiated by a talk he heard by Bertrand Russell. He has devoted his life to studying Islamic philosophy of science and cosmology, including comparing modern science to the worldviews of all religions that have not been stripped of their spirituality by rationalism. He has spent a lifetime doing what he could to convince the Muslim world that the wholesale adoption of godless materialistic science continues to cause irreparable harm. The sheer reach of modern science and technology; their essential role in structuring and dictating lifestyles, habits, and human relations; their insidious way of affecting traditional cultures; their destructive impact on nature; and their ability to transform and reshape civilization are rapidly destroying the fabric of traditional societies everywhere in the world. When we, as teachers, can understand and appreciate this history we will not teach our children using materials that assume the nonexistence of whatever is not observable and quantifiable, that describe the world we inhabit as a place where everything has occurred – and can only occur - by chance and the efforts of humankind.

A friend recently expressed her concern about her adolescent son. "His teacher has convinced him that nothing is true unless it can be experienced with your senses. Now he no longer believes." This boy is in public school, but we Muslim educators are often guilty of indirectly passing on a similar message by using material designed for an understanding of knowledge that is contrary to Islam. By teaching our youth from texts and curricula that assume that the world is distinct and independent of God we are in danger of instilling in them a foundation of understanding that is contrary to everything that we, as Muslims, believe about reality. It is of fundamental importance to understand the gulf that separates traditional Islamic thought from the worldview that is presented in modern curricula. We simply cannot expect to properly educate our next generation by injecting a little Islam into the various subjects or pointing out the amazing contributions of long-dead Muslim scholars. We must go back to the basics and design a whole new foundation for what and how we teach.

It is not only the presentation of the physical that deviates from the Islamic worldview, but also the portrayal of events through time. For Muslims the study of history is for the specific purpose of guiding humanity by example – both positive and negative. God is in complete control and in His ultimate wisdom shapes circumstances in response to humanity's moral conduct. This point of view is in complete discord with textbooks that ignore His existence and focus exclusively on material causes of the past. "A venture to establish the kingdom of God on earth, to enjoin good and forbid evil,... an ongoing enterprise with its successes and failures, can easily form the backbone of an alternative vision of history."⁶⁹

Each past incident related in the Qur'an is portrayed purposefully to teach one or more lessons, not to simply relay facts. A striking comparison of the biblical and Qur'anic sources of history is given in the book *Lessons from the Stories of the Qur'an.*⁷⁰

Unless faith is reflected in action and in particular, social action - it has no real value. From the time of the Prophet the primary task of the scholars was to guide the Muslims in the practical aspects of life. It was this practice that explains the achievements of Islamic civilization, and conversely it explains, "why the Muslim world was bound to decline as soon as its religious leaders ceased to think creatively about these fundamentals of Islamic ideology."71 Muslim scholars stopped short of developing educational and other social sciences, an unfortunate lapse that has been discussed by a number of scholars. While acknowledging that education must have been successful to explain the heights reached by Islamic civilization in pre-modern times, Kadi stated that education never developed into a field of specialization in the way that other disciplines did.72 AbuSulayman blamed this on "the separation of the committed intellectual leadership from all real forms of authority."73 "Owing to this division the principles dealing with texts were developed into highly complex sciences while the "secondary" principles were essentially ignored. ... this explains why no economic, educational, political, communications or administrative sciences were ever developed."74 Yedullah Kazmi wrote:

When by the ninth century the distinction was made between religious and secular knowledge and only religious knowledge was deemed worthy of

being pursued...the dialectical relationship between the Qur'an and the world was broken....The understanding of the Qur'an was divorced from the understanding of the world, and as a result the understanding of the world, since it was denied ethical justification and robbed of legitimacy, was marginalized.⁷⁵

Although education may not have developed into a specialty in the way that astronomy or medicine did, obviously in a society where seeking knowledge was taken so seriously and where every scholar was also a teacher, the process and principles of education must have been discussed. Although many manuscripts specifically or incidentally dealing with education no doubt have been lost, destroyed, or are, as yet, undiscovered, considerable pedagogical wisdom has been found buried within manuscripts focusing on other topics.

One academic, Sebastian Günther, has dedicated more than a decade to seeking out the medieval manuscripts dealing with educational ideas. He has noted several principles supported today by research-based evidence. These include the unified nature of thought; treating students with kindness and respect; the importance of emotion and motivation; focusing on the individual – building on interests and preexisting knowledge; the encouragement of critical thinking and open discussion.⁷⁶

Knowledge is not exclusive. It belongs to all who seek it. However, the context in which it is defined, acknowledged, approached, and utilized differs. Those who developed Islamic science approached knowledge in relation to the role of humanity on earth. A similar approach can provide the basis that may bring about the unification of what have come to be seen as separate truths. Alalwani has emphasized that this will require the building of a unique framework beginning with a critical review that define the differences in the sources and rules that govern the two realms of knowledge and then retaining the elements of Western knowledge that are suitable and either transforming or rejecting those that are not.⁷⁷ It is significant that with Alalwani's recent passing the group of individuals who initiated the Islamization of Knowledge Project is becoming smaller and smaller. Although the criticisms of the project discussed extensively elsewhere should be taken seriously and thoughtfully, it is important to remain aware that, whatever the shortcomings, it was a bold beginning, a concerted effort by some of the brightest and best of our ummah to reassert an Islamic perspective to knowledge.

It is well to remember that the civilization of Islamic thought grounded on revelation but incorporating knowledge from other sources did not occur in a single generation but was built over time. God willing, appropriating the tremendous body of modern knowledge into Islamic thought will eventually come about. We have a wealth of tools, background knowledge and information – so much more than was available to the early Muslims! May God grant us the will and the faith to meet this challenge.

6 The Mind, Brain, and Education Science

Our Creator designed our brain so that guided by revelation we could use our intellect to pursue knowledge and understanding. The more we know of His design, the more we can teach in line with His plan. The burgeoning information on how the human brain functions has led to the work of several outstanding scientists who have specifically related this to teaching methodology.

Western science has always struggled with the nature of the soul, the self, the mind, consciousness, and the non-physical heart. These concepts simply cannot be contained within the boundaries of materialistic, reductionist science. The solution has been either to disregard these obviously real phenomena as illusions or as notions that can potentially be explained by interactions among actual material entities. A non-materialist neurologist, Mario Beauregard, has said, "the fact is materialism is stalled. It neither has any useful hypotheses for the human mind or spiritual experiences, nor comes close to developing any."⁷⁸ As evidenced by the very term, *Mind*, Brain, and Education Science, we have, however, begun to move beyond the earlier reductionist scientism that taught that the human mind was simply equivalent to the physical organ we call the brain.

Although we are committed to an understanding beyond that of science, we are mandated to seek knowledge of God's creation and put that knowledge to use for the sake of humanity. As Muslim teachers impacting the lives of our next generation it is essential that we learn as much as we can about the brain, particularly when we consider it in concert with the thinking, learning mind.

With the rapidly expanding science of neurology and the promise that understanding the brain holds for teaching and learning, it is not surprising that teachers have gravitated toward what has been called

brain-based education. As this interest grew, numerous writers, publishers, and naive educators jumped onto the bandwagon. Everyone wanted to do all that they could to enhance learning and adopted various ideas that have since been shown to be bogus. I remember a neighbor who enrolled in a training course in how to teach her own six-year-old and other children to crawl, absolutely convinced that the child's apparent learning disabilities were caused because he skipped crawling before walking. I also remember an elaborate and expensive reading program by a major educational publisher that was 'brain-based' but when independently studied was proven to be ineffective. Brain Gym (a nonprofit corporation) and the notion that people are either predominantly left-brained or right-brained are two well entrenched but faulty notions.

The past decades have been a very lucrative time for writers, publishers and originators of programs promising the application of how the brain incorporates learning – and a rather embarrassing time for educators who eagerly embraced ideas that were subsequently shown to be based on little more than wishful thinking and are today considered brain-myths, defined by Tracey Tokuhama-Espinosa as "attractive and highly marketable concepts about the brain and learning that have little or no evidence behind them reflecting their promoters' unintended ignorance...or sold to the public by unscrupulous consultants."⁷⁹

This pop neurology put the 'brain-based' movement in disrepute. In response, the serious scientists in the field have begun to use the term Mind, Brain, and Education (MBE) Science. It was felt that in order for progress to occur the field had to be interdisciplinary. Each recognized expert should be highly trained in at least two of the contributing fields, mind (psychology), brain (neurology), or education. The result is a new academic discipline making use of all of the above, but focused on education.⁸⁰ One of the most important developments that has propelled the study forward providing neurological evidence to support educational and psychological research has been the design of a brain-imaging technology, optical topography, that does not require constraint and can be used in any environment.⁸¹ Rather than totally withdrawing from applying 'brain-based' learning in the classroom due to the earlier problems, it is our responsibility to seriously look at the tremendous body of well-documented studies on how the human brain is designed to learn. Among many important scholars who write material for educators are Eric Jensen, Robert Sylvester, Tokuhama-Espinosa, and Judy Willis.

Most of what I outline here was taken from *Mind*, *Brain*, *and Education Science: A Comprehensive Guide to the New Brain-Based Teaching*, a book I highly recommend. The author looks very critically and comprehensively at the vast amount of research that has been done in recent years, classifying it into four categories: (1) what is well established; (2) what is probably true; (3) what is still intelligent speculation; and (4) neuromyths and misunderstandings. Categories two and three include many ideas that are widely accepted by educators, and often psychologists. They can therefore be classified as best practice but may be difficult to study neurologically and so still need additional validation.⁸²

She then discusses in some detail the principles that have been clearly established or "probably true" and verified by research in at least two of the fields of psychology, neurology, and education. Based upon these two groups of well-documented principles, she suggests applications to teaching and learning.

Although the basic structure of brains is similar, each person is highly unique. There are a number of factors that influence learning and affect each physical brain differently. These include genetics, physical activity, nutrition, sleep patterns, motivation, humor, stress, and anxiety. Each one of us constructs his or her own meaning, establishing patterns within the brain that are specific to the individual. Because no two children learn in exactly the same way, teachers must put time and effort into understanding the individual ways his/her students construct knowledge and offer a variety of experiences. Although learning-style preferences may differ, Howard Gardner's multiple intelligences theory lacks empirical evidence and is not accepted by most MBE scientists. Nevertheless, his suggestions work in the classroom because each person uses different processes at different times for learning. The more ways that information is delivered the more likely it is that any individual child will retain what is being taught at any particular time.

Differentiation (individualized learning) is widely encouraged. The evidence in favor comes primarily from classroom-based research but is recommended by Tokuhama-Espinosa, not only because within any classroom there will be a broad range of knowledge and skills, but also because of varied interests and backgrounds. For the same reasons she supports moving away from product-focused assessment and evaluation toward a more balanced approach. There are a wide variety of assessment techniques that can and should be used in the classroom. Assessment should be ongoing and include regular feedback.

The brain is complex, efficient and extremely flexible, changing on a day-to-day basis. This is true throughout the lifespan. The connections within networks of neurons are strengthened with use while less-used connections are pruned to conserve resources. There are sensitive periods in which children learn with less effort, but there are no critical periods after which learning cannot occur. We don't learn by memorizing rules. On the contrary, natural learning occurs when the information with which we are continuously bombarded is automatically organized within the brain according to the embedded prior knowledge, constantly comparing incoming information with what it already knows. With additional related knowledge it automatically self-corrects, rearranging and modifying previous patterns.

Susan Kovalik remarked, "The ability...to gradually sort out an extremely complex, changing world is...astounding. And it is natural...we learn from input presented in a completely random, fortuitous fashion unplanned, accidental, unordered, uncontrolled, the polar opposite of didactic classroom teaching."⁸³ As an example she cited the obvious ability of preschool children to formulate rules of grammar from the very random speech they hear and engage in:

We hear such expressions as sheeps, and deers, plurals plainly not picked up from adults and older children. The added s makes it unmistakably clear that the small child has extracted a general rule for plurals – end with the s sound – and is applying it even to what will later be learned as special exceptions. In the same way, most youngsters will use such constructions as "Tommy hitted

me," or "I falled down," showing that they have extracted the pattern of past tense and the use of the ed sound, again even where there are common exceptions.⁸⁴

Because new material is organized within the brain to previously learned material, subject matter needs to be relevant to the familiar. It is important for the teacher to find a way to relate new experience to the life of the student. Pre-assessment can inform the teacher of prior knowledge in a specific skill or knowledge base, preventing boredom in more advanced students, and frustration in those with less background knowledge. By pacing new knowledge we can make sure that the student has something to build upon and that there will be continuing progression. Expanding, questioning, or offering a slightly different perspective of any given concept will help to modify patterns as well as to encourage the interconnections of existing networks. Allowing the children time to reflect and to hear the ideas and questions of their peers stimulates pattern modification.

Although the brain is engaged in patternmaking and relates new facts to prior knowledge it also seeks novelty, suggesting that teachers be creative in the ways they teach. Not all students interpret novelty in the same way. For some children change can be stressful, emphasizing that teachers should put real effort into knowing and understanding the individual differences among their student and teach accordingly.

Prior knowledge is closely linked to environment. In schools where children are tracked (relegated to classrooms based on their 'ability') it is very likely that the most important factor in determining the placement is not innate intelligence, but prior knowledge. A child who is talked to and read to from an early age; hears advanced, stimulating conversation; travels routinely; visits places of interest – a zoo, the aquarium, a farm, science centers, and so forth – will enter school with a great deal of prior knowledge. Children of poverty will almost never have the benefits of children from educated and financially secure families. Due to the extreme plasticity of the brain, children can and do catch up and should never be written off. In fact, there is strong evidence that attitude, motivation, and a feeling of competence are more predictive of academic and other success than any other factor, including presumed innate ability.⁸⁵

How a student feels emotionally has a great impact on how he or she learns. Depression impedes learning by affecting the hippocampus, the part of the brain that is involved in long-term memory. Hormones produced under stress can physiologically hinder learning, even causing certain areas of the brain to deteriorate. Test anxiety can become so severe in some students that it blocks access to memory. Obviously, the effects as well as the causes of stress will vary from one person to another. Alertness is maintained by challenge, suggesting that low levels of stress can be positive. Yet, what is simply challenging for some students will be too stressful for others, emphasizing once again the importance of knowing our individual students. Teachers should be aware of their own facial expressions and tone of voice as both are quickly and involuntarily judged for threat level. Humor and laughter enhance learning although the mechanism through which this occurs is not known.

The classroom environment above all must provide children with a sense of emotional security. There should be respect among students and between the teacher and students. Students must feel free to express themselves without fear of ridicule or discouragement. Negative classroom experiences strongly affect the ability to learn. Collaboration should be the rule. In sharing ideas conceptual understanding is augmented. Teachers need to take the time to design interactive activities, some of which include children of similar abilities, and others with a range of abilities to encourage peer teaching that can benefit both the teacher and the other students. Teacher-centered activities should be kept to a minimum.

Although learning and memory are linked they are not the same thing. Memory is the storage of information and learning is the process of taking that information in and making it a part of the brain. Memory is very complex, but perhaps the most important thing to know is the difference between short-term and long-term memory. Most things we remember for only a short period of time. Unless a memory is reinforced it will disappear. Only by giving it attention, connecting it with pre-existing knowledge, and reinforcing it by revisiting it, will it become part of long-term memory. Different senses move information into the brain through different pathways so it is helpful to teach in ways that stimulate various senses. Learning requires attention, the selective processing of information. Concentration is energy intensive and cannot be sustained indefinitely. Few students are able to focus their attention for more than twenty minutes, particularly under teacher-centered, lecture-type conditions. Any sort of change or activity that allows a short break will encourage refocusing. Movement has a positive effect on learning, perhaps due to the refocusing that a break allows, or to the increased oxidation that movement causes. Even when the children are interested in the activity they need to be given time to reflect both individually and as groups, particularly after any sort of intense concentration.

It is nearly universally recognized today that there are innate qualities that are not the result of our positive or negative experiences but are there from birth. The child's mind is not a blank slate and knowledge cannot to be spoon-fed or forced onto an individual, but only encouraged through active and student-centered environments within which students construct their own learning through the continuous modification of patterns within the brain. MBE science thus supports developmental and constructivist learning and the rejection of behaviorism.

The understanding of how a person incorporates knowledge into the long-term memory can be summarized as follows:

- No two individuals learn in exactly the same way.
- Learning is based upon pre-existing knowledge.
- Child-centered learning is more effective than teachercentered learning.
- Content should be relevant.
- Learning requires reflection.
- Movement positively affects learning.
- Learning occurs best when more than one of the senses is involved.
- Emotions have a powerful affect on learning.
- True learning must be individually constructed.

7 Toward a *Tawḥīdic* (Unified) Curriculum

The systemic nature of reality, the seamless way the brain perceives it, the organizing process that aids memory, the relating process that creates new knowledge, the conceptual networking that yields fresh insights, the meshing of two seemingly unrelated ideas that underlies creativity – all rely on holistic, systemically integrated and related thought. And it's not being taught.⁸⁶

God designed the human brain to be compatible with the unity of knowledge. As we have seen, new information is organized within the brain itself, first absorbing the whole and then making its own unique connections forming patterns based on individual background, family, ability and especially prior knowledge. The connections made will later be re-enforced, modified or even removed. The conventional methodology of imparting knowledge is based on assumptions that are incompatible with both the design of the brain and the unity of truth.

The philosophy of reductionism diminishes a complex entity to a sum of its parts. When applied to education this results in a systematic degradation into smaller and smaller bits of information. When this perception of knowledge is applied to education the result is a curriculum that is fragmented, sequential, and standardized, obstructing the pattern making that is essential to learning:

Ironically we do this with students who need special help. If they are slow, conventional wisdom has dictated that the task be broken down into smaller and smaller pieces...pieces that are so small and so 'easy' that there is no longer any pattern to perceive.⁸⁷

The *tawhīdic* curriculum is focused on the unity of God and on the reflection of this unity onto the whole of His creation. Faith and knowledge must work in concert with one another for either to progress. We must go beyond adding some classes on Islam, but we must *also* do more than integrating Islam into a series of individual, disjointed lessons. Instead of a huge array of facts stored in the short-term memory just long enough to succeed on a test, a thematic unit of study that is truly integrated allows an increase in the depth and breadth of learning, leading naturally from one topic and field of interest to another.

Tlm can only result from the integration of revelation and reason. Numerous Muslim scholars have condemned the artificial fragmentation of knowledge, the conflicts between religion and science, and the advancement of one kind of knowledge at the expense of others.⁸⁸

When philosopher and science historian, Seyyed Hossein Nasr, who has been called one of the great intellectual figures of recent times, was invited to consult in Saudi Arabia regarding a proposed science museum he cautioned against the negative effect this project would have on the young visitors. He pointed out that a building in which "one room is full of dinosaurs, the next room full of wires and the third full of old trains," would create a dichotomy in those who have been taught about the unity of God, the universe and knowl-edge.⁸⁹ Tauhidi emphasized the importance of what he called the "macroview," focusing not on superficial coverage of unrelated topics, but on major themes, stressing that there should not only be topical integration but also integration across time and place, and between values and action.⁹⁰

These views are not confined to Muslim thinkers. Nearly a century ago the notable philosopher Alfred North Whitehead referred to the fragmented knowledge still prevalent in schools today as "fatal disconnection."⁹¹ He insisted that the two problems in education were teaching too many subjects and teaching superficially. Today the most thoughtful and respected educators understand that the segmentation of knowledge is artificial and counterproductive. In a scathing essay entitled, "The Futility of Trying to Teach Everything of Importance," Grant Wiggins has described the curriculum in use in

most schools today as based on a "medieval view of knowledge":

To subscribe to the myth that everything of importance can be learned through didactic teaching amounts to a premodern view of learning. The pejorative simile of the school as factory could only have taken hold in a culture which already believed that knowledge is facts passively received. The view that learning is non-problematic, and inactive is the persistent residue of a medieval, static, and sectarian tradition.⁹²

In most schools the curriculum is tied to texts that thinly cover an encyclopedic amount of material, preventing students from delving deeply into topics that are the most relevant to their own lives and interests and prevent the teacher from focusing on authentic learning that will become a part of the student's long-term memory. Howard Gardiner, the Harvard professor best known for his theory of multiple intelligences, identifies the major problem with our schools as the attempt to 'cover' everything:

The greatest enemy of understanding is coverage. As long as you are determined to cover everything, you actually ensure that most kids are not going to understand. You've got to take enough time to get kids deeply involved... so they can think about it in lots of different ways and apply it – not just at school but at home and on the street.⁹³

Note that "covering" only means that the material has been presented, through lectures or reading. Even if the student has absorbed it into his or her short-term memory long enough to regurgitate it on a test, few will make the connections within the brain necessary to become a part of long-term knowledge or understanding.

John Taylor Gatto, in his acceptance speech as the 1991 New York State Teacher of the Year, caustically and sarcastically described how we educate our children, "The first lesson I teach is confusion. Everything I teach is out of context. I teach the un-relating of everything. I teach disconnection."⁹⁴ Peter M. Senge, author of *The Third Discipline*, commented: "From a very early age, we are taught to break apart problems...we pay a hidden, enormous price. We can no longer see the consequences of our actions; we lose our intrinsic sense of connection to a larger whole."95 John Goodlad, analyst of the exhaustive study documented in *A Place Called School*, wrote, "the division into subjects and periods encourages a segmented rather than an integrated view of knowledge. Consequently what students are asked to relate to in schooling becomes increasingly artificial, cut off from the human experiences subject matter is supposed to reflect."96 Brady referred to the core curriculum, in near-universal use in American schools and throughout most of the world, as "a random mix of specialized school subjects that ignores the integrative, mutually supportive nature of knowledge."97

It may be useful to consider why, when, and how the standard core curriculum in use today originated. It was instituted through the Committee of Ten chosen by the National Education Association in 1892 and achieved in just three days. The only purpose was to standardize the various courses taken by the *very* small percentage of students who at that time were planning to continue their education at the college level:

The goals and objectives of education were not on the agenda of the Committee of Ten...the committee didn't discuss the organization of knowledge, didn't talk about learning theory, didn't reflect on the needs of the republic, didn't speculate about the trends of the era, didn't warn of adopting a static curriculum in periods of rapid social change. Those and other matters relevant to what schools should teach never came up.... Multilayered bureaucracies quickly froze the committee's work in rigid place.⁹⁸

As widespread as this standard curriculum is, commitment to integrating knowledge into a coherent whole, nevertheless, has a long history. As the 'school as a factory' model took hold, others tried to promote curricula based on the developmental interests of children and adolescents, instituting democracy and projects.⁹⁹ I, myself, attended an elementary school with an integrated curriculum. As early as 1932 enough schools were experimenting with this model that the classic "eight-year study" could be carried out. Students from high schools with an integrated curriculum were compared to those from separate-study schools. 1475 pairs of students were followed through

high school and college. Each pair was composed of one student from innovative schools with an integrated, student-centered curriculum and one from a standard, teacher-directed, separate-study school. The result showed that students from high schools with a thematic curriculum outperformed those from separate-study schools in college on all measures of social and academic success. It is of particular note that students from the schools with an integrated curriculum were found to be more intellectually curious, more motivated, more resourceful and more concerned with world affairs.¹⁰⁰ Following the publication of this study nearly half of all junior and senior high schools were following some sort of an integrated curriculum.¹⁰¹

Beginning in the mid-forties, however, such schools became the targets of right-wing critics. During the McCarthy era, attacks escalated. Progressive education of any kind was labeled Communist.¹⁰² Integrated, thematic education in the public schools has still not recovered.

Among educational specialists it would be difficult to find more than a very few who actually support the standard curriculum in use in almost all of our public schools today. Unfortunately, however, there appears to be little hope of any widespread move beyond the ineffective, century-old division of subjects. Beyond that of inertia, several difficulties stand in the way of returning to thematic-based curricula. (1) Teachers have been trained and have earned their status by pursuing subject-based endorsements through hard work and expensive graduate school. Obviously, they hold onto their acknowledged expertise tenaciously. (2) The colleges of education train teachers to teach using the separate-subject curriculum because almost all teachers in certification programs will be teaching in schools that are wedded to this entrenched way of teaching. It is understandable that teachers are educated within the conditions under which they will be required to teach. (3) Teachers automatically fall back into the way in which they themselves were taught. (4) By far the most important factor is political. The control that politicians, administration and special-interest groups have over the classroom has been discussed in some detail in chapter 3. In the name of educational reform, powerful business and industrial leaders shove educators aside and with the help of their political allies take over the schools. In recent years this has resulted in a plethora of standardized testing that forces teachers to teach to the test and discourages holistic learning.

It is important to note that these stated problems are the problems of government-operated schools. Identify the most respected, private schools in your area, those that serve the elite. Look at their web pages. You will find that many specifically characterize their curriculum as thematic or integrated. These exclusive private schools are not under the control of special interest groups politicians, publishers of textbooks and standardized tests, or school-district administrations. It is the parents of the children that they cater to that they must please. These parents are paying for the very best pedagogy and will not settle for anything less.

Islamic schools, like other private schools, are also not under the control of these special-interest groups, yet most persist in taking the public schools as the standard. Our children deserve more. We cannot only do just as well, but better than exclusive private schools because our thematic curriculum will be centered on God, embracing the principles that He gave us in the Qur'an, principles that will benefit the future generations of the ummah, serving to enrich and guide their lives as leaders in both the Muslim and the larger communities of which they will be members. Our thematic curricula will encourage critical thinking and the use of reflection, intuition and other deeper ways of knowing.

There are, of course, Islamic schools that are pursuing an integrated curriculum. An example is Medina Montessori in Virginia (previously Nur Montessori). One thematic project was based upon their garden. They budgeted, advertised, and raised money through yard sales and auctioning their artwork. They bought garden supplies, including a worm composter and a rain barrel. Their physical education was tilling the soil, pulling and digging weeds, carrying water and acting out seed germination to music. Their art was designing and making ceramic steppingstones and markers, learning to arrange flowers, using sketching for recording. They tested soil, measured the area and perimeter for fencing and soil. They studied seed parts and life cycles of plants and pollinators and investigated controversies around pesticides and GMO organisms. They researched (1) which parts of various plants are edible, (2) which plants discourage pests, (3) the global spread of edible plants, and (4) the use of the 'three sisters' – corn, beans, and squash by the native Americans. This way of studying what today we largely classify as 'science' exemplifies the Islamic (and Montessori) view of creation, the intricate cause and effect networks that exist among all physical entities – the $\bar{a}y\bar{a}t$ (signs) of God; signs that the Qur'an urges humanity over and over again to seek, contemplate, understand.¹⁰³

Certainly the textbooks that have been prepared for schools that *by law* put materialism not God at the center, cannot be the foundation of a school that is truly Islamic. It simply is not reasonable for a Muslim teacher in an Islamic school to teach from a prescribed syllabus that deliberately and totally eliminates *Al-Khāliq*, the Creator. Surely, this not only dishonors God but is also an injustice to the children for whom we are responsible.

Tamim Ansari, a former textbook editor in the United States, described the sorry situation resulting from the politics of textbook production for the public schools:

They are processed into existence using the pulp of what already exists, rising like swamp things from the compost of the past. The mulch is turned and tended by many layers of editors who scrub it of anything possibly objection-able before it is fed into a government-run 'adoption' system that provides mediocre material to students of all ages.¹⁰⁴

Following is a quote from Bill Bigelow of Rethinking Schools. He discussed the textbook representation of the potato famine that resulted in so many deaths by starvation and the immigration of large numbers of Irish to the United States. I chose this as the example because I have based a sample theme on the same topic (see appendix B).

Holt McDougal's U.S. history textbook *The Americans* devotes a flat two sentences to "The Great Potato Famine." Prentice Hall's *America: Pathways to the Present*...calls the famine a "horrible disaster," as if it were a natural calamity

.... Houghton Mifflin's *The Enduring Vision* blames the "ravages of famine" simply on "a blight."...We encounter no injustice, no resistance...students will be unlikely to seek to learn more about events so emptied of drama, emotion, and humanity. But today's corporate textbook-producers are no more interested in feeding student curiosity...than were British landlords interested in feeding Irish peasants....Multinationals like Pearson have no interest in promoting critical thinking about an economic system whose profit-first premises they embrace.¹⁰⁵

Using a *tawhīdic* curriculum, students will not be presented with a series of facts to be sequentially fed, memorized, and cycled back to the teacher without thought or reflection. This means that any typical textbooks including those that might be designed specifically for use in Muslim schools are ineffective, except perhaps as a reference. In a typical textbook-oriented course, material will be taught as several discrete topics, each of which must be completed over a relatively short period. Often the time becomes even more truncated when the end of the year approaches and the book has not been finished. Moreover, the practice of teaching from a textbook is based on the patently false assumptions that each child in the classroom has the same prior knowledge, interests, and skills as every other child of the same age and therefore will or should learn in unison with one another.

Books *real* books are essential, of course, but not everyone will read or learn from the same book nor will they necessarily read all the material available to them. Instead of rushing through a multitude of prearranged facts, each student will be able to take the time to build upon his/her prior knowledge, follow his/her own interests and seek answers to his/her own questions and truly come to understand that which is most relevant to him/her. What is needed is a plethora of interesting books of all types and at various levels.

There are numerous books and other material that address the advantages, principles and methodology of thematic or multidisciplinary teaching. Obviously, they differ in details, but there is general agreement among these educators of several important factors.

(1) The teacher must have a deep, underlying goal for the theme(s) presented. Proponents have used different terms for this underlying

goal – broad conceptual understanding, essential questions, organizing centers, the big picture, overarching goals, powerful ideas, conceptual structure, enduring understandings. I am recommending that these overarching goals be specific principles of Islam. It is preferable that the students are led to discover for themselves and internalize the relationships between the subject matter and these broad Islamic principles, but it is the role of the teacher to guide them to this understanding.

Jay McTighe and Grant Wiggins have outlined their requirements for what they call "essential questions."¹⁰⁶ Of specific interest are the basic characteristics they give for choosing these. They recommended that such questions:

- Be open-ended, typically without a single, final correct answer.
- Be thought provoking and intellectually engaging.
- Point toward important ideas that are transferable.
- Raise other question that will encourage further inquiry.
- Require support and justification not simply an answer.
- Result in understanding that can (and will) be revisited over time.

(2) Students should be included in planning. Almost all who have promoted an integrated curriculum agree on the importance of the role of the students in planning. Students and teachers should work together to identify topics, gather information, pose questions and design activities, projects and field trips. Prophet Muhammad was the direct recipient of the word of God, the teacher *par excellence*. And yet he was ordered by the Qur'an to consult with those to whom he was superior in every way. "And take council with them in all matters of public concern" (Qur'an 3:159). Abū Hurayrah reported, "Never have I seen anyone more prone to seeking council than was the Messenger of God." An atmosphere of freedom and truthfulness within the environment promotes the desire to develop the alacrity to exchange opinions and advice freely and truthfully.

Not every student will be expected to participate in every activity that is developed. One of the most important advantages of an integrated curriculum is that it allows for differentiated instruction. There must always be a level of choice as individuals or groups of children work according to their unique ways of learning, their specific needs, and to more deeply pursue their own interests and questions.

(3) Learning must be relevant. Kovalik has emphasized that learning best occurs through "being there - the here and the now."107 This is in line with how the brain bases new learning on pre-existing knowledge and how networks of thought processes become interconnected. This does not mean delving into popular culture unless it ties in with something more significant. Beane emphasized that planning should be around *substantive* issues that affect young people and their lives, not fads; based on concerns, not mere interests.¹⁰⁸ Learning must be subject to modification depending on the social and political environment in which we find ourselves, or on some event that occurs unexpectedly in the classroom or school. A situation in the lives of our students in or outside of school is often more worthy of reflection and inquiry than whatever else we might be studying. The personal significance of attempting to understand a situation that is impacting their lives cannot only offer immediate insight, but also can provide a foundation that will serve them in future circumstances. Sometimes we are living through an event that will be nothing short of historical, yet it passes over the heads of most of the children - indeed, of us adults without giving it the deep thought that it deserves. How does this affect our own lives? What can it be compared to from the past? And most importantly what is the Islamic point of view? What better example can we have than how our Prophet taught. Almost every lesson was in response to a situation that was actually occurring. An important aspect of understanding the Qur'an was to relate the words of God to the events that were unfolding within the environment.

(4) The conceptual understanding that we seek to achieve differs from the subject matter and even the theme. However, the subject matter and theme have to be carefully developed to lead naturally to the overarching goals. Facts and skills are tools. They should be taught neither in isolation nor for their own sake. The teacher must carefully embed the skills, theme, and subject matter – including the Islamic subject matter – into the overarching goals so that there is a synergism among them. (5) Sufficient time is fundamental. For lasting understanding students need the opportunity to reflect, to discuss, to ponder, to allow time for the new skills and subject matter to be related to prior knowledge. Sufficient time has been shown to be an essential quality in the ability to think creatively, whether it is in solving a problem, developing an invention or creating a new art form. Within a *tawhīdic* curriculum there should never be a rush to move on to something new. Facts hastily learned and tossed back without input of thought or creativity will seldom be remembered for long. Children should be given the precious gift of time, time to think, to explore and enjoy.

(6) Forget the notion that knowledge comes only through text and listening. We are aware from what we know of the brain that the more senses involved in the process of learning the more likely it is that the knowledge will become part of our permanent memory. Projects, research, role-plays, independent study, field trips and guest visitors all present a variety of learning experiences.

It is of significance that none of the many educators who have written about thematic teaching have mentioned anything about the teacher himself being an expert or even particularly knowledgeable in the chosen subject matter. Teaching is especially fulfilling when you can learn right along with the students. Expertise other than that of the teacher can be in the form of YouTube videos, specialized colleagues, books, guest speakers, field trips and students themselves as they pursue the passions that develop.

The Qur'anic verses and hadith remind us over and over again that we are expected not only to believe, but also to confirm our beliefs with good works. Believing and obtaining knowledge is not enough. Belief and knowledge must lead naturally to action. Students should be encouraged to participate in public gatherings, visit public officials, write letters, make phone calls, circulate petitions. Community service has become common in schools and it requires special attention in our schools. Almost any of the Islamic concepts we choose as our overarching goals will lead naturally to community participation.

How can we as Muslim educators design themes based on Islamic concepts that will benefit the future generations of the ummah, concepts that will serve to enrich and guide their lives as leaders in both the Muslim and the larger communities of which they will be a part? Everything is related to God, but each of the curricular units we design should have its basis in one or more Islamic concepts, values or practices. It is up to us to assume the task of designing curricula that will prepare the next generation of Muslims curricula that are truly tawhidic. Every theme that we choose should be consciously linked to tawhid, as well as to the purpose of our lives, to worship God and do His will on earth. It is these Islamic principles, essential to living as Muslims that should serve as the foundation, with the content of the theme itself built around these concepts. Some themes will have a clear and extensive relationship, linking obviously to the Islamic principle. Others may require more effort by the teacher to assimilate. It will take a conscious effort to relate what may basically seem like a 'secular' theme to serve as the flesh of an Islamic concept. With practice this becomes easier. Of course, these Islamic concepts our overarching goals can and should be revisited at different levels.

The concept of justice can be addressed in many contexts, as can the unity of humanity, establishing peace, forgiveness, seeking knowledge, cooperation, honesty, relationships, the detrimental effects of tribalism and nationalism, dealing with adversity, as well as migrating for the sake of God. The end goal is to instill God-centered habits of mind that will enable our students to look critically at every problem, idea, event, and controversy that they will experience in relationship to His guidance for how to live their lives on earth.

8 *Fitṛah* or Behaviorism?

This (*fitrah*) is the natural disposition God instilled in mankind – there is no altering God's creation... (Qur'an 30:30)

Fiţrah is a gift given to each of us by the Creator, a gift that is maintained to some extent throughout our lives. Yasien Mohamed, in his book on *fiţrah*, looked closely at the works of both classical and modern Muslim scholars and their richly diverse interpretations.¹⁰⁹ Based on a combination of linguistic and religious explanations, he defined *fiţrah* as "an inborn natural predisposition which cannot change, and which exists at birth in all human beings...that is inclined toward right action and submission to Allah, the one God." He speaks of *fiţrah* as original goodness as opposed to original sin, the doctrine of original sin being irreconcilable with the Islamic concepts of divine mercy and human responsibility. He has observed that *fiţrah* is a human quality, endowed in each of us by God, which, though subject to environment, cannot be totally extinguished.

Actualizing our *fiţrah*, assuming the role that God intended for us, should be the goal of every human being. The intellect and free will that distinguish us as humans either complement and build upon the pure human nature with which we have been endowed or oppose it. Our intellect allows us to distinguish between right and wrong and our free will to choose which path to follow. Over and over again, the Qur'an addresses the Muslim as those who believe *and* do good. These God-given characteristics *fiţrah*, free will, and intellect provide the basis on which we, as educators, will achieve our mission and raise righteous individuals who love God and strive for justice.

This concept – that we are created completely pure with the potential of growing into the ideal individuals that God intended – is so basic to Islam and so evident in the way that Prophet Muhammad treated children that it must take a central role in the Islamic way of teaching. Since the child's *fitrah*, pure at birth, is clearly subject to the influence of the environment it is our responsibility to see that the child is nurtured within an environment that is truly Islamic.

Educators have no more important task than to contribute to building the Islamic personality of the children we teach and to aid in the development of their understanding of the purpose of their time on earth, the actualization of their *fitrah*.

Even without the guidance of revelation, reason and contemplation can lead to an understanding and appreciation of human nature with which each of us have been endowed. The poet William Wordsworth shared his own understanding of *fitrah* in his long poem *Intimations of Immortality* when he wrote:

Our birth is but a sleep and a forgetting: The Soul that rises with us, our life's Star, Hath had elsewhere its setting, And cometh from afar: Not in entire forgetfulness, And not in utter nakedness, But trailing clouds of glory do we come From God, who is our home: Heaven lies about us in our infancy!

Strictly through meticulous observation, Maria Montessori also came to appreciate what we call *fitrah*. Her commitment caused her to base her entire pedagogy on the concept of the essential purity of the child.

It is important to recognize that the Islamic conception of intellect denoted by the word *aql* not only encompasses both reason and insight, or conceptualization through language and direct spiritual perception, but also includes a moral dimension. The conception of excellence expressed in the Arabic word *ihsān* is in fact inseparable from goodness and virtue.

We must ask ourselves if our understanding and appreciation of *fitrah* guides our relationship with those precious ones in our care if it

truly determines how we teach. Are we, as teachers, respecting the close relationship that naturally exists between the child and God? Are we providing an orderly, inviting environment in which they can explore and experiment, an atmosphere to allow them to fully blossom? Are we guiding and nourishing their *natural* tendencies to love God, to learn, to be the very best they can? Or are we assuming the worst, convinced that it is our job to rescue them from laziness and evil tendencies through regular, unrelated payoffs? Are we attempting to fill 'empty' minds with our own 'superior' wisdom, demanding silence and acquiescence while discouraging creative thinking, questioning and discussion? Are we, perhaps unknowingly, trying to pound round pegs into square holes to force their God-given natures into our own preconceived ideas?

During their days of childhood and adolescence children must be given the opportunity to learn to make choices and to use their reason to make these choices. It is the role of the teacher to prepare them for the difficult decisions they will be required to make in a future that we cannot even begin to imagine. Children growing up in an environment that is overly strict, controlling and judgmental in regard to belief and behavior, are inclined to either adopt a similar attitude or to rebel against what they come to feel has been forced upon them. Free will means choice. Our role is to provide the children with the environment and the guidance to be able to make the choices that are pleasing to God. God has given us the gift of free will, but those who have power over others sometime assume the right to take it away. How can it be that we, as mere humans, could have the authority to take away that God-given right? The worship of God and behavior that is pleasing to Him means little if it is imposed. In a free society individuals must have the right of choice as long as that choice is not negatively affecting the rights of others.

Behaviorism is based on the notion that the conduct of an individual is due solely to the rewards or punishments that he has received in response to his behavior. It originated with the study of Pavlov who found that by ringing a bell when his dogs were fed, they became conditioned to salivate upon hearing the bell even if no food was offered. John B. Watson established behaviorism as a science, studying and promoting his ideas on animal behavior, child rearing, and advertising. B. F. Skinner became interested in behaviorism when he came into contact with Watson at Harvard and studied behaviorism for his Ph.D. Skinner went on to further develop the study and was instrumental in establishing behaviorism in the classroom. Behaviorism came to dominate the field of education during the first half of the last century and has become so deeply entrenched that it has remained the method of choice in teaching and classroom management.

Mohamed noted that behaviorism cannot explain human nature because behaviorists do not even believe that we *have* a nature!¹¹⁰ Behaviorism denies the existence of both intellect and free will. An empathetic, generous person gives only because of his stimulus responses or reinforcement history. Ideas prevalent in behaviorism are (1) that humans and animals differ only in the behavior that they display and that the study of animals will therefore elucidate an understanding of human behavior; (2) there is no such thing as free will; (3) humans are born with a 'tabula rasa' (blank slate) and their development is determined strictly by the environmental stimuli to which they are exposed.

As Muslims, we know that humanity has a relationship with God that places us more than a notch above other animals. We are specifically created to worship God and carry out His will on earth. Beginning from birth, and probably even earlier, the human individual has a relationship with God. He is curious with an innate motivation to explore and learn. This drive to improve skills and understanding is part of our human nature, our *fitrah*. Our role and purpose would be meaningless if we fulfilled our role automatically as other created entities do. As humans, we have the choice of how or even *whether* to live our lives to carry out our roles as servants of God.

Thankfully, during the past half-century psychology has moved away from the science of behaviorism. By the late 1950s, "bringing the mind back in became the battle cry for a whole generation ... the primary objects of study were not stimulus strengths and response patterns, but mental actions attending, thinking, understanding, imagining, remembering, feeling, knowing."¹¹¹

Can we modify behavior through punishment and rewards?

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Certainly, but the effects are likely to be short-term and will negatively influence the overall support and development of positive attributes. It is widely accepted today that the mind is far more than a physical entity where facts are stored. The human is not a passive victim of his environment, but a thinking rational being. Free will, humor, creative thinking in which understanding that can be applied to other areas of concern, connection to others – these attributes cannot be reduced to responses to stimuli.

To encourage learning, teachers are often urged to focus on rewards and avoid punishment. However, Alfie Kohn cites numerous studies that demonstrate that rewards that are extrinsic to the action that is being rewarded actually *detract* from the enjoyment or interest of that task:

Behind the practice of presenting a colorful dinosaur sticker to a first grader who stays silent on demand is a theory that embodies distinct assumptions about the nature of knowledge, the possibility of choice, and what it means to be a human being.¹¹²

The focus on rewards has become ubiquitous in contemporary Western-oriented cultures, undermining the natural processes that serve to keep us responsive to our environment and in touch with our real needs, replacing community, tradition, and values.

The psychologists who have been the leaders in developing the alternative to behaviorism note that rewards can indeed be very effective but at a terrible cost! "Although tangible rewards may control immediate behaviors, they have negative consequences for subsequent interest, persistence and preference for challenge, especially for children."

In many cases rewards are used explicitly to try to get individuals to do what does not come naturally, work absurdly long hours, ignore interests and relationships, or engage in unvalued behavior....Imposed reward contingencies are, to an increasing extent, replacing...internalized values and natural consequences.¹¹³

They compared the executive who makes millions of dollars a year,

but neglects his health and family, to the story of a rat focused so strongly on rewards that he was the darling of his experimenters. One morning he was found disoriented from exhaustion with the only sign of life a weakened paw still reaching for the bar to tap just one more time for a final reward. Indeed, there is a severe cost to organisms human and otherwise when they become focused on rewards that do not satisfy real needs, and obscure the drives that should guide them toward spiritual, mental, and physical health.

To fulfill our mission, we must become acutely aware of our own tendencies to overlook the influence of popular thought on our way of life, and question practices that are based on assumptions that may be contrary to the Islamic paradigm. Behaviorism can be particularly damaging when used in combination with competition. Teaching competition as a social value, in which one wins at the expense of others who, incidentally, lose, is beyond the realm of what Islam teaches. Instead we should be encouraging cooperation and collaboration. When children are expected to work together and to help one another a spirit of community naturally develops that is far superior to the dog-eat-dog atmosphere of many classrooms.

In an effort to look good in relation to other students, competition often encourages dishonesty. Several years ago I received an email from a writer for a local Islamic publication. She asked me several questions about my recommendations for addressing the problems of cheating. My response is given below:

Cheating has never been a problem at our school. All people not just children are inclined to cheat when it is or seems to be necessary to avoid some kind of punishment. The punishment may be looking (and feeling) bad in relation to others or disapproval of parents or teacher. In general our students are encouraged to work together and help one another. On the rare occasions when work must be done independently, the students are informed that the purpose is to see how much they have learned or perhaps what they already know, where they need help and how we can improve on our teaching, so that at this particular time it is very important to work only by themselves. There is no incentive to 'cheat.' As any good educator can tell you, there are many, many alternative assessments to testing that do not encourage cheating.¹¹⁴ The excessive competition of today is the result of the extreme emphasis on individual rights that is attributed to the revolt against authority during the European Renaissance, the Protestant Reformation, the overthrow of absolute monarchies, and the rise of capitalism. Islam as the religion of the middle way looks at the apparently conflicting ideas of individualism and community not as opposites, but as complements. Individual rights are not absolute or isolated but are upheld in relationship with others, the group recognizing and supporting the well-being, rights, and growth of the individual, and the individual fulfilling his responsibility to the group.

The approach in which the rights of individuals are given precedence over harm that may result to the community or other individuals is unacceptable. Most of the serious problems of society are the result of the undue emphasis on individual rights; the exploitation of the weaker members of society, destruction of the environment, obsessive materialism, and hedonism, including sexual promiscuity, alcoholism, and drug abuse. The insistence of the powerful gun lobby on the *right* to bear arms has resulted in the easy acquisition of deadly weapons not only by gangsters, terrorists, and mass murderers, but also by the mentally ill and children. Individualism has culminated in the social, political and economic extreme of capitalism - epitomized by the United States. Over a period of time capitalism has become so dominant that according to Michael Sandel the United States has moved from *having* a market economy to *being* a market society. Citing everything from college admissions, to the right to kill endangered species, and paying to upgrade your jail cell, he notes that almost everything has a price. He questions how we can protect the moral and civil goods that "markets do not honor and that money cannot buy."115

A reoccurring post on Facebook tells of an anthropologist in an African village who proposed a game to the boys. He put a basketful of fruit near a tree and told them that whoever got there first could have all of the sweet fruits for himself. When he said "Go," they clasped hands and ran together, then sat sharing and enjoying their treats. When he reminded them that the winner could have had all the fruits for himself they said: "*Ubunto*, how can one of us be happy if all the

Teaching Children

other ones are sad?" *Ubunto* can be defined as the belief in a universal bond of sharing that connects all humanity. This story, reposted over and over again, soon became viral. Although likely a fabrication, I wondered at its appeal. Was it perhaps a reaction to the individualism that so permeates our society?

9 Self-Determination

We are human beings who possess natural curiosity about ourselves and our environment, who search for and overcome challenges, who try to master skills and obtain competence, and who seek for new levels of complexity in what we learn and do If the capacity for responsible action, the natural love of learning and the desire to do good are already part of who we are then the tacit assumption to the contrary can be seen as dehumanizing.¹¹⁶

There is recognition by modern psychology, as well as within Islam, that the child begins life not with a tabula rasa, but with characteristics that will serve as the foundation of his later life. Considering that the command to seek knowledge is emphasized so strongly in the Qur'an, it is not surprising that an innate drive to learn would be part of human nature, of *fitrah*. Entrusted with the hearts and minds of our most precious resource, it is imperative that we critically examine assumptions that are unquestioned simply because they have become established as a part of school culture.

Numerous psychologists today are concentrating their research on motivation or on the related topic, interest. I will refer most often to Edward Deci and Richard Ryan, who originated what they call the self-determination theory, and their summary report of 2000,¹¹⁷ as well as to a more recent review.¹¹⁸ With their various graduate students, these two have devoted more than three decades to studying intrinsic versus extrinsic motivation, noting the natural inclination of humans to learn and explore, to be curious and self-motivated with an inherent desire to master new skills and to share and apply their talents. They note that babies are born with an intense initiative to learn, a fundamental part of human nature. The self-determination theory is compatible with free will, reason, and *fitrah*, characteristics behaviorists dismiss as nonexistent. Intrinsic motivation is present when something is inherently interesting or enjoyable. It promotes a love of learning, higher quality learning and understanding, increased creativity and a positive attitude. The opposite, extrinsic motivation, refers to doing something because it leads to a separable outcome. We have all seen intrinsic motivation at work in small children and may have questioned why the attitude toward learning undergoes a dramatic change after the preschool years. It has, in fact, been demonstrated that intrinsic motivation progressively diminishes each year during the first eight years of school.¹¹⁹ Excitement that came from understanding or being able to do something new seems to have vanished. What had been interesting and fulfilling is replaced by drudgery and boredom. It is as if the God-given energy that motivated the young child has evaporated. Brady has stated:

the human need to understand, to know, to make sense of the world, is one of the most powerful of all human drives, but the institutions we've created to meet that deep human need would close their doors if it weren't for mandatory attendance laws, social expectations, and institutional inertia.¹²⁰

This loss of motivation is not inevitable, but like other qualities inherent to human nature, intrinsic motivation must be nurtured in order for it to continue to grow and bloom.

Deci and Ryan have identified three psychological factors that encourage the growth of intrinsic motivation: (1) autonomy, (2) feeling competent, and (3) relatedness.¹²¹ When these needs are not met, intrinsic motivation diminishes. Obviously, not every task is intrinsically rewarding to all people. There is a continuum between behavior that is entirely intrinsic and that for which there is no motivation at all. Often, required tasks are not all that interesting, but a skilled teacher can move an extrinsically motivated task closer to the intrinsic end of the scale by encouraging the same psychological conditions that promote intrinsic motivation. When the goal of extrinsically motivated tasks is more self-endorsed and less related to external control an uninteresting task becomes more self-determined.

The term autonomy literally refers to regulation by the self.

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Autonomous people experience their behavior as self-endorsed and congruent with their values and interests.¹²² Autonomy is supported by challenge, choice and opportunity for self-direction, and is essential for motivation to be intrinsic. Autonomous behavior results in more creative learning, lower stress, increased energy and vitality and positive socialization and relationships.¹²³ In response to critics, Ryan and Deci discussed in some detail the construct of autonomy as it applies to the self-determination theory. Philosophically discounting the die-hard behaviorists and others who deny the existence of free will, they focused on the claims of cultural relativists who suggest that autonomy is a Western value and does not apply to non-Western cultures. They referred to numerous studies demonstrating the benefits of autonomous as opposed to controlled regulation of behavior regardless of culture or other divisions. They stressed that when defined accurately, autonomy has been clearly shown to be "essential to the full functioning and mental health of individuals and optimal functioning of organizations and cultures."124 They emphasized that autonomy is not defined by the absence of external influences, constraints, or demands, but only by the personal endorsement of the action. Such personal endorsement can be and, indeed, often is the desire to conform to family - and religious - values. Individualism and independence are not equated with autonomy. Choosing to fit in, acting according to tradition, or following the guidance of parents or other respected mentors does not in any way detract from autonomy. Moreover, they cited numerous studies that show that autonomy and relatedness work synergistically and that support of autonomy increases the strength of relationships.

Autonomy is undermined by control and perceived control in the form of orders, threats, deadlines, competition, contingent rewards, grades, certificates and even by praise. All of these factors directly cause the purposefulness to become more dependent upon external control rather than on self-regulation. In several studies, teachers were separated into two groups according to whether they were controlling, endorsing the use of punishments and rewards; or autonomy supportive, eschewing external rewards and concentrating on the choices and interests of the children. In every case the children of the controlling teachers were less intrinsically motivated. They were less curious, less desirous of challenge, and had lowered perceived competence. Other comparisons, based on tasks that were seen to have either controlling limits or autonomy-supportive limits, resulted in similar results with the autonomy-limited tasks resulting in more intrinsic motivation. It is not surprising that studies have shown that the pressures teachers experience in the present-day climate of imposed curricula, high-stakes testing and performance standards, undermines their own autonomy, negatively affecting their positive energy and creativity.¹²⁵

Deci, Koestner, and Ryan reviewed several studies on the affect of rewards on intrinsic motivation, distinguishing among the age of the subject; as well as between different types of rewards and methods used to measure intrinsic motivation. Tangible rewards, including money, prizes, trophies and certificates undermined intrinsic motivation for both college-aged students and children, but the decrease in intrinsic motivation was significantly greater for children. Studies on verbal rewards that were presented in a way that seemed controlling were reviewed separately from those that were presented as positive feedback. Verbal rewards can increase intrinsic motivation if they are perceived as feedback, but have a negative effect if they seem controlling. However, all verbal rewards have a negative affect on the intrinsic motivation of young children.¹²⁶

Competence, the feeling that one gets when one's performance is successful, or is perceived as successful, also enhances intrinsic motivation. It is essential that a student feels challenged but also has the understanding, and the skills needed to succeed. Children differ in their preexisting experiences, understanding and skills that they bring to the classroom and teachers must avoid the comparison and competition that detracts from their feeling of competence.

Few teachers today actually use the bell-shaped distribution for determining grades, but even when we don't grade 'on the curve' there is nevertheless often an expectation that there will be only a relatively small number of students who have actually met the expectations of the curriculum. In fact, even those in the A and B grade sections of the curve have often not really learned the material. Instead they have mastered the art of test taking or of cramming a lot of facts into their short-term memory. The majority of students have simply not been able to truly learn what we have been attempting to teach.

It is essential for children to remain confident that they are basically competent and will progress. Yet how much apparent mediocrity or failure can an ordinary child take before giving up? The child who never attempts her assignments is quitting before she even gets started. The child who hates math, or dreads school, or considers himself "not very smart" certainly does not feel competent, nor does the child of perhaps superior intelligence who comes from a family background with little opportunity to have entered school with the expected prior knowledge and is plunked into a special education class or a low reading group.

The feeling of competence may be the factor that is most difficult even for teachers with the best of intentions to regulate because it is so heavily influenced by time. Teachers themselves are rigidly controlled by the designated hour or less that it takes to complete a lesson; the predetermined period allotted to cover a single unit; the nine months in which a child is expected to learn everything that must be learned in a specific grade-level. Wood, one of the founders of the Responsive Classroom Program, has focused on the importance of time as essential for keeping children engaged and motivated.¹²⁷ As teachers we are committed to the idea that all children can achieve, just not necessarily at the same rate. If children are to be and feel competent they must be allowed the time to achieve, to achieve not only intellectually, but also spiritually, to reflect, to question, to contemplate and to use their intuition, imagination and connect with their deeper selves.

Feeling competent is largely based on what Carol Dweck has called mindset. As a young researcher, Dweck, today a leading authority on motivation, designed an experiment that changed the course of her career – and her life! Her goal was to study how children coped with failure, but what she learned was something entirely different. Children were given progressively more difficult puzzles until they became impossible to solve. To her surprise she found that there were some who didn't *need* to cope because they didn't experience their inability to solve a problem as failure: Confronted with the hard puzzles, one ten-year-old boy pulled up his chair, rubbed his hands together, smacked his lips and cried out, "I love a challenge!"...Another, looked up with a pleased expression and said with authority, "You know, I was hoping this would be informative!"...They obviously knew something I didn't and I was determined to figure it out – to understand the kind of mindset that could turn failure into a gift.¹²⁸

She did figure it out. She found that those who feel competent – even in the face of extreme difficulty or apparent failure - have what she has called a growth mindset. They appreciate that talent, ability, and intelligence can be cultivated through effort. A growth mindset enhances intrinsic motivation because of the understanding that competence is related to struggle and effort. Those with a fixed mindset who believe that "either you've got it or you don't" cannot deal with challenges and are more likely to give up. Having a fixed mindset, therefore, undermines intrinsic motivation. This is true regardless of innate intelligence and is every bit as damaging to a child of high native ability or intelligence. When learning has always come very easily, a gifted child with a fixed mindset is inclined to give up when the inevitable problem arises that is difficult or interpreted as failure. Those with a growth mindset tend to see difficulty or failure as lessons to be learned. Because these attitudes are primarily established during childhood, Dweck's findings have important implications for educators. Placing a child in a lower reading group, or giving him a low grade can help to promote a fixed mindset.

The good news is that no one is stuck with a fixed mindset. Mary Ricci offers ideas and resources to build the growth mindset in children, and perhaps more importantly, in parents, teachers and administrators.¹²⁹ Anything or anyone that labels a child as inherently smart or slow; good or bad; talented or not will encourage the fixed mindset that can prevent facing the challenges and struggles that are the stimulus for learning and improvement of every kind.

In particular, an understanding of the flexibility of the brain and emphasizing how the act of learning itself causes an increase in intelligence by strengthening the connections between neurons can help children, and their teachers, appreciate their potential. Many educators, perhaps even most, have not really gotten past the erroneous misconception of earlier science that intelligence is predetermined.

Ricci found that just as intrinsic motivation decreases as children progress through school, so does a fixed mindset.¹³⁰ She studied children from kindergarten through third grade. The two classes of kindergarteners that she studied displayed 100 percent growth mindset. By first grade this fell to 90 percent, by second grade 82 percent and by third grade 58 percent. Another study in a suburban Washington, DC, school found that only 40 percent of children in sixth grade had a growth mindset.¹³¹

Relatedness refers to the extent that the behavior adds to a sense of belonging or connectedness to those the individual feels or would like to feel connected. Relatedness, or a sense of belonging, has been less intensely studied in relation to intrinsic motivation than autonomy and the feeling of competence, probably because it is widely recognized as a basic, compelling human need and therefore more obvious and less controversial. There have, however, been a number of studies that measured relatedness in the classroom and its specific link to intrinsic motivation. There are three key results. (1) The findings are positive across all age groups; (2) the teacher has a critical role in encouraging a sense of community; and (3) cooperation and connection enhance the sense of autonomy. Relatedness can cause a task to be more internalized as one identifies with those to whom he or she is or wants to be related – an important concept in defense of Islamic schools.

Relatedness is easily implemented by the classroom teacher, but only if the teacher is aware of the need for children to feel a sense of community and acceptance. Classrooms where teachers encourage participation by all of the students, focusing on cooperation and individual mastery, as opposed to competition, are most likely to exhibit a strong sense of community. In a school or classroom context this highlights the importance of a student feeling respected and cared for by teachers, parents and classmates.

The role of the teacher is not merely to encourage a sense of community among the children. Students also benefit from a close, personal relationship with their teachers. When teachers encourage students' autonomy and competence and are perceived as warm and supportive, providing assistance but holding high expectations, a sense of community prevails. Parents who exhibit these same qualities also encourage intrinsic motivation.

Autonomy, competence and relatedness positively affect one another, providing self-determined motivation in many very different cultural contexts. Choice and a role in decision-making increase relatedness and a feeling of competence, while a sense of community increases autonomy. People feel most related to those who support their autonomy. The following chapter will discuss how relatedness within an Islamic environment contributes to the effect of role-model education on the actualization of our students' *fitrah*.

Studies comparing extrinsic and intrinsic orientations toward religion among Christians can also be applied to Muslims. An individual intrinsically oriented toward religion is described as "having embraced a creed, the individual endeavors to internalize it and to follow it fully. It is in this sense that he lives his religion." Extrinsic motivation may be related more to personal instrumental and utilitarian goals, "to provide security and solace, sociability and distraction, status and self-justification."¹³²

Through encouraging autonomy, relationship, and competence we can help move the motivation for living as a Muslim to be closer to the intrinsic end of the scale.

Ability grouping, the sorting of children according to a perceived innate capacity for learning, has been conclusively shown to be destructive of both growth mindset and intrinsic motivation. It is based on the following several assumptions *each one of which is both erroneous and damaging*:

- Intelligence is established by age five or six and is easily determined.
- Only gifted children will benefit from active, self-regulated, rigorous learning.
- Low-ability children need to be taught to accept their status.
- Low-ability children need simplified bits of information delivered with authority.

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- Low-ability children will feel inferior if they are in the classroom with high ability children.
- High achieving children will be held back by those who with less ability.

In a transformative book based on the extensive data collected during Goodlad's exhaustive on-site study of U.S. schools,133 and on a later study that included six thousand classrooms in twelve hundred schools, Oakes has clearly shown that separating children based on test scores, grades, perceived ability, parental pressure or other questionable processes is capricious, unfair and a disservice to the entire school population. The result of sorting children in this way does not result in a valid hierarchy of mental ability, but merely magnifies the disadvantages between those children who are minorities and from lower-class, less educated families, and children whose families are affluent and more highly educated.¹³⁴ Generally this sorting results in a very public situation in which teachers, parents and the children themselves are aware of the status awarded students assigned to a class of high achievers or alternatively to what is too often called "the dumbbell class." The documented decline of the growth mindset and intrinsic motivation is inevitable as children accept the position assigned to them, apparently seeing "themselves and their own inadequacies as responsible for their current roles and future positions in the hierarchical structure."

This feeling of incompetence comes not only from a child knowing that she has been determined as less capable than her peers but also from the inevitable lowered expectations of the teacher. Numerous studies, beginning with the classic work of Rosenthal and Jacobson, have demonstrated the powerful impact of the teacher's largely unintentional attitudes on the developing self-concept of a student.¹³⁵ Oakes found that teachers of these low-stream classes are often less qualified and in general more authoritarian, coercive, and punitive. A negative feedback system comes into play. Teachers have low expectations for their students and focus on the most uninspiring kind of learning, memorization of disjointed facts, filling in the blanks on endless worksheets and listening to lectures. Students, bored and apathetic, act out and teachers react by allowing even less choice, freedom, and interaction with peers. Thus a lack of autonomy and positive relationships among peers and between teacher and students further erodes the classroom atmosphere destroying intrinsic motivation.¹³⁶ Moreover, students placed within a lower track generally became stuck there for the remainder of their time in school resulting in lowered academic achievement. It has been conclusively shown that those in lower tracks experience *no* remediation but simply fall further and further behind causing the children who often have the least in their lives outside of school to get the least from their school experience as well.¹³⁷

Kovalik, who had been a long-time teacher of gifted children, related a story that caused her to realize that all children deserved the advantages of the kind of learning often reserved for those considered exceptionally intelligent. She and her fourteen-year-old son, who had *not* been identified as gifted, were at dinner with her colleague who was acclaiming how the two teachers were addressing the needs of the highly gifted children they both taught. After listening patiently for some time, Kovalik's son spoke up, "Do you really believe that the only kids who want a great teacher and something exciting to learn are those that score the right number on a one-hour test?" This question caused Kovalik to realize that she had been neglecting the vast majority of children. Subsequently, she committed her life to developing engaging, whole, thematic-based curricula for all students.¹³⁸

10 Islamic Civic Engagement

We offered the Trust to the heavens, the earth, and the mountains, yet they refused to undertake it and were afraid of it; mankind undertook it – they have always been inept and foolish. (Qur'an 33:72)

Such an honor, but what a responsibility! Our role is to carry out God's will on earth. We are blessed with the riches of creation, but these blessings come with serious commitments. We are charged with guarding and managing these bounties, but also with doing everything we can to assure that they are used for the good of all creation, now and in the future, and that justice prevails on earth. As members of humanity we are entrusted to worship God and to assume responsibility toward the whole of humanity as well as to the rest of creation.

Sardar has eloquently elaborated on the role of humankind:

The Qur'an again and again insists that the true testament of faith is harnessing all of our intelligence, energy and commitment for those things we can affect. It is...the true meaning of a life of faith, to work to change ourselves and the societies in which we live to ensure the dignity of every human being, and that we nurture and husband every part of God's creation....Godconsciousness, the motive force of faith, is about doing.¹³⁹

Muslims must exhibit both inner belief and outward action. No lesson we are able to pass on to our students is more essential. We have indeed transformed this physical world, but has it been to concretize the human purpose? When the intention is to attain power or individual wealth, humanity destroys the rich blessings that God has bestowed on us. It is the responsibility of each individual to see that the poor, downtrodden, and oppressed benefit from God's gifts along with those who are economically and politically secure. It must be a primary role as teachers to guiding the next generation to recognize their obligations and then prepare them to assume the tasks for which they were put on earth! For younger children, in particular, it is important to focus on the positive, remaining alert to examples of behavior that are representative of God's plan for us:

You who believe, uphold justice and bear witness to God, even if it is against yourselves, your parents, or your close relatives. Whether the person is rich or poor, God can best take care of both. Refrain from following your own desire, so that you can act justly – if you distort or neglect justice, God is fully aware of what you do. (Qur'an 4:135)

And if we don't succeed in securing justice? According to the Qur'an what is required of us is not to attain, but to always *seek* justice. If each of us – or even most of us – within the human family assumed this sacred duty, we would not be living in a world torn by misery, war, and injustice. We must encourage our children to be aware of the injustice around them and to appreciate that they can begin to actively improve their world here and now. Is a classmate being ridiculed or bullied? Does the news inform us about an innocent being treated unfairly? Is each one open to being there for a friend or an acquaintance in need? Let us stress to those we have in our care the message that is repeated over and over again in the Qur'an and the Traditions of the Prophet that belief without action is not enough; that worship without good works means little. It is most often the small incremental acts of justice done by many that can and have changed the world for the better.

We most often think of injustice in regard to individuals, but generally it is imposed upon an entire group of people, or upon an individual who belongs to a specific category. Abuse is regularly based on tribal, ethnic, religious or racial origin – anything that places the victims outside what is seen as the norm. We can think of pogroms foisted on Jews in Russia and the Holocaust in Germany; recent and ongoing ethnic cleansing and tribal wars in parts of Africa and Eastern Europe; the Palestinian situation of today; slavery and continuing discrimination against African-Americans; the Native Americans who were robbed of their land and their way of life; the Chinese laborers during the settlement of the west; the Japanese-Americans during World War II ... and of course, the current prevailing negativity toward Muslims. Our children need to be encouraged to search their own hearts to ensure that they harbor no negative feelings based on stereotypes or prejudice. They should not only be learning about the inhumanity that has occurred and continues to occur, but also be led to consider why such terrible brutality is allowed to happen; to place themselves in those, or similar circumstances; and to question what they would and should do. Would they change it with their hand? Would they speak out? Or would they condemn it in their heart? What are they doing *now* to counteract the atrocities that continue to be waged against innocent people?

"The servants of the Lord of Mercy are those who walk humbly on the earth" (Qur'an 25:63). It is *only* humanity that has been given the power and the responsibility to protect physical creation. God tells us in the Qur'an that He has spread out the earth for *all living things* (55:10) not for humanity alone; thus we must protect creation not only to better the lives of people everywhere and of generations to come, but also for the sake of the other living things with whom we share this world. Each part of creation has its rights given to it by God. It is not our prerogative to choose to take those rights away. We are given the privilege of controlling the bounties of the earth *only* under the condition of our protection, assuming stewardship, remaining aware of the needs of other created things, and submitting to God.

Perhaps the way in which creation benefits us the most is how closely it is tied to an appreciation of the One who created it. The Qur'an and nature both contain signs ($\bar{a}y\bar{a}t$) that complement one another and inspire in us the remembrance of the Originator of both. Creation provides us with physical needs, but it also feeds our souls. By contemplating nature we increase our understanding of God, of His wisdom, and His power. Let us lead our children to an appreciation of the wonder, of the fantastic network of relationships, the purposefulness of each created entity.

Everything in creation has a purpose and is Muslim in the sense that it is fulfilling the role God has assigned to it, and Muslim because "The seven heavens and the earth and everyone in them glorify Him. There is not a single thing that does not celebrate His praise" (17:44). As our students learn about the world around them, again and again, the facts that are presented must be seen in the context of the realization that each created entity obeys perfectly the laws that God put in place to govern it. All of creation is anchored in the divine with balance and measure that has been determined by God. We are required to maintain this measure and balance, not to disrupt it.

Humanity is part of nature. By assuming ultimate control and upsetting the balance that has been endowed in creation by God we are damaging ourselves. "any who transgresses the limits of Allah, does verily wrong his (own) soul" (Qur'an 65:1). Science bereft of God becomes science for the sake of selfish man. Technology bereft of God does not benefit His creation, human or otherwise. It may sometimes seem to benefit those who control it, but it grows to assume an evil nature of its own resulting in poverty, pollution, war, destruction, and death.

We are conditioned to believe that increasing the demand for more and more material gain will result in development and an increase in the standard of living. The economy is seen as the panacea that will benefit us all. This modern notion that life demands the accumulation of wealth and material possessions is affecting our children who are subjected to a constant bombardment of advertising kept alive through socialization. They are even more vulnerable than adults to the societal infection that emphasizes the right brand of various personal items. Can we help them to understand that the goal of attaining more and more 'things' results in the depletion of resources, the devastation of the environment, and the continuing impoverishment of those less fortunate? - conditions that we must be working to prevent, not to aggravate! To actualize the purpose for which we were created obligates us to knowledge and responsibility. The ability to think and be responsible can come only from the constant awareness of God. At our death God expects each of us to have done our best to leave the world in a better condition than we found it.

To reach our goals as educators we must contribute to building the Islamic personality of the children we teach as we help to further their

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understanding of the purpose of their time on earth, to worship God, and to assume the role God intends for them. To help young children understand *why* they are here is the most fundamental message we can deliver. For a child to understand that he can, himself, begin to plan and work toward spiritual success in life is positive and powerful much more effective than a list of do's and don'ts *ḥarāms* and *ḥalāls*. Obviously, the specific objectives will change frequently. The important thing is coming to understand the purpose of life. Becoming aware of the what, the why, and the how can provide the inspiration for a lifetime of belief, prayer, reflection, and hard work based on justice for all of creation.

Muslims are blessed with the most exemplary of role models in Prophet Muhammad. As educators, we can especially benefit from the example of his behavior and particularly how he dealt with children. The Prophet never struck nor spoke harshly to a child. He was patient, loving, and even respectful. Often, he responded to behavior that would ordinarily elicit a strongly negative response in a very positive way.

As children mature it is natural for them to seek attachments and role models outside the circle of family. These role models can come from friends, the media, youth leaders, and teachers. Rose described role-model education as being less based upon the delivery of information, but rather using the inbuilt tendency of attachment-seeking to instill attitudes of lifestyle, attitudes, and worldview from the example of others.¹⁴⁰ An excellent role model will fill the gap between the ideal values that children have been taught, and reality. When children see respected teachers actually living these values, they are more likely to accept them as part of their own lifestyles. In research on the views of young people, the Royal Society of Scotland found that "communication, enthusiasm, informality, friendliness and openness, and an approach that broadens horizons are important positive qualities in role models."141 The work of Deci and Ryan emphasizes the importance of a close relationship between child and teacher. Pretense becomes obvious and so it is very important to determine that the personality we want the children to observe is genuine and truly embodied in the adult. Requiring a non-Muslim or non-practicing Muslim teacher to assume the outward manifestations of Islam may do more harm than good.

Informal and experiential education demands a less formal relationship between student and teacher and increases the opportunity for role-model education. Project-oriented classrooms where cooperative learning is emphasized naturally result in the less formal relationships that role-model education requires, as do field trips, camps, practical-life experiences such as cooking or gardening, and involvement of the classroom teacher in extracurricular activities.

Teachers, however, must be able to balance the strengths of rolemodel education with the problems that lowering barriers too much can entail. I have had personal experience with an immature, nominally Muslim teacher who was so desperate for popularity that she felt the need to share intimate details of her personal life with her buddies – the students. A second concern is that the influence of a teacher with a very strong personality may detract from a student being able to think critically, develop self-realization, and form his or her own opinions.

Our students will often learn more from the examples of their teachers than from the information offered. My own children once went to an American school in an Arab country with young, progressive, non-Muslim teachers, most of whom made their classes interactive and interesting and treated their students with respect. The Arabic, Islam, and Qur'an classes, on the other hand, were, for the most part, completely teacher-centered and were often emotionally abusive. Which teachers do you think the children adopted as role models? It is easy to see what the students learn from this difference in approach to educating our young people. Unfortunately, this contrast continues to exist in some of our Islamic schools. AbuSulayman offers an explanation for this widespread, but "clearly inappropriate" and un-Islamic method for attempting to instill fundamental Islamic concepts seen in some Muslim teachers: "The manner used by the Qur'an and the Prophet to address the pagan Arab tribes (and Quraysh) is the one that has most influenced Muslim teaching."142 These verses were aimed at the arrogant oppressors from the tribe of Quraysh and their cruel pagan leaders who were killing Muslims, and waging war on them etc. So the verses are strong, and contain dire warnings, to bring them to their senses.

The social environment within the school extends beyond the ability of the teacher to be an appropriate role model. Particularly, as a child approaches adolescence, the relationships with his peers assume importance. The old adage "one bad apple can spoil the barrel" definitely is important to take with utmost seriousness. Teachers are usually altruistic by nature and ready to take on a challenging youth with optimism and the best of intentions. However, most of us have experienced the situation of admitting a rebellious child, perhaps fitting the pattern of parents expecting the school to make up for their own weakness in child-rearing. If other students admire the bravado demonstrated by the child or perceive the child as particularly 'cool,' the results can be disastrous and influence extends in the wrong direction. Another problem that can occur with this age group as they seek out peer attachments is the formation of cliques among girls and the manifestation of more overt bullying among boys. Individual discussion and open class meetings can help to counter these developments. Obviously, teachers need to closely observe the social interactions around them as well as to encourage trust on the part of both students and parents.

The Islamic personality that develops as the *fitrah* of the child is becoming actualized includes identity. The children in our Islamic schools are most often of diverse backgrounds, values, and experiences. The Muslims of the United States and Canada are far from being a monolithic society with a single culture. This can – and often does – cause Muslims to withdraw into their own cultural space where they feel safe. Yet this environment of multiculturalism presents an amazing opportunity to benefit and learn from others. *Alhamdulillāh*, here we have the opportunity to consciously consider a variety of practices and viewpoints that will enhance our appreciation of this religion. The tendency is to assume that the Muslim culture with which we ourselves identify provides the best model. Teachers must be particularly and consciously careful not to impose their own identity and culture onto the children. This necessitates looking closely and critically at our background and beliefs to distinguish what is Islamic and what is no more than a set of ingrained practices that we have come to equate with Islam.

Umar Farouq Abd-Allah of the Nawawi Foundation discusses what he has called the "cultural imperative," pointing out that as Islam spread, sacred law was harmonized with the culture of the indigenous Muslims of any given area:

Islam has been likened to a crystal clear river. Its waters [Islam] are pure, sweet and life-giving but having no color of their own reflect the bedrock [indigenous culture] over which they flow....Islam does not merely encourage, but requires the creation of a successful, indigenous Islamic culture.¹⁴³

He warns against "culturally predatory Islamist ideologies from abroad...rooted in ignorance of the dominant culture and a shallow parochial understanding of Islam as a counter-cultural identity religion." We must get past the notion that has been adopted by some converts that they should leave everything of their past lives behind and become completely different people. This is neither appropriate, nor, in the long run, possible. Because something is part of Western culture it should not necessarily be condemned or forbidden, and neither can a practice be assumed to be more "Islamic" simply because it belongs to a culture of a Muslim country.

We will be required to embrace the reality that our children will be Muslims who primarily identify with the country in which they have grown up. Culture is inevitably and effortlessly absorbed from surroundings – from family and close friends certainly, but also from acquaintances and associates, neighbors, and the media – and increasingly, social media. It is our duty to prepare our students for any situation that they might face in the future. We do this by giving them the tools to think critically about the most fundamental elements of the Qur'an and the examples of the Prophet, and their thoughtful application to unpredictable challenges. If we fail to raise committed, thinking Muslims, if we fail to develop the hearts and minds that have been entrusted to us, many of our brightest and potentially most effective leaders of the next generation will go astray as they inevitably feel forced to choose between what appear as mutually exclusive ways of life. The Prophet emphasized that the actualization of *fitrah* is largely dependent on the environment to which the child is exposed. Obviously, there is no part of the child's environment more important than the home. The family is paramount. Children raised in a home emotionally safe and filled with love for God and one another are most likely to become righteous men and women. Nominal Muslims may become inclined to send their adolescent or preadolescent child to an Islamic school to make up for what they have failed to instill in them. As educators we know how difficult it is to overcome the negative examples of those closest to the child and that building upon the example of a good home is nearly effortless.

Without parents who are motivated to investigate for themselves what a quality education entails, we cannot move forward. Unfortunately, few parents have undertaken the effort needed to understand the most rudimentary elements of how to educate a child to attain the potential that God intends. Thus, parent-education is an absolutely essential part in providing the proper environment for developing and expanding the *fitrah* of children.

The physical environment is important. The rooms of our schools should be beautiful, simple and orderly. Materials must be in easy reach, available for exploration, and should only include things that will facilitate the child's learning without being distracting or overstimulating. The spaces must reflect the fact that this is an Islamic school, but in a tasteful way. A few beautiful, simple pieces are preferable to the cheap, tacky decorations so readily available.

Most parents of Muslim children growing up in the West assume that it is a given that their offspring will grow into adulthood as active and practicing Muslims. Although the home environment and the example of understanding, loving parents is by far the most important factor, it is simply not enough. Many who have taken the important step of placing their children in an Islamic school overlook the environment outside of school. Television, social media, and video games can expose our children to the worst parts of popular culture. The appeal is strong and it is extremely difficult, if not impossible, to restrict children from participating. It has been estimated that 40 to 60 percent of children growing up in the United States raised in the home of practicing Muslims leave their religion in a quandary of confusion. Just as someone who has grown up in an irreligious home may choose Islam, a child from what seems to be the ideal Islamic home may become lost when exposed to the titillating, but forbidden, aspects of the greater society, reminding all of us, parents and teachers alike, that our goal is to prepare the child, not to merely protect and isolate her. The situation worsens when parents themselves are unaware of what their children are experiencing. Too often the adults in the child's life are apparently indifferent or ignorant. It becomes very easy for our children - and especially our adolescents - to assume one persona for their parents, teachers and other significant adults, and another for their friends and online activities. The solution is for parents and teachers to be as savvy - or nearly as savvy - regarding these activities as the children. Too often adolescents perceive of their parents and teachers as being unaware of the 'real' world. Teachers need to listen carefully, but unobtrusively, to the conversations around them, generally not interrupting nor intervening, in order to become mindful of students' experiences outside of school. Families should watch TV together followed by discussions of anything questionable. It is not unreasonable for parents to insist that they and their children be 'friends' on social networks and to be informed of cell-phone, computer, and social-media-site passwords. Our children need to understand that our fears are real. Open communication rather than top-down control is needed, helping children to recognize and appreciate that your concern is for their spiritual well-being, and that both parents and teachers are available to discuss their questions and uncertainties.

To actualize the purpose for which we were created obligates us to responsibility and knowledge. The ability to think clearly and be responsible comes from the constant awareness of God. Our teaching must always have an overarching goal of understanding all activities in light of God's expectations of humanity. Are His gifts used in a way that God intends? Are the actions undertaken with the intention of improving both self and others or the world physically? Morally? Spiritually? What are the results?

¹¹ Moving Forward

Clearly education everywhere is in need of reform. Schools are bound to norms that are well established, but unconscious and unexamined, and often discordant with good teaching and learning. Many common practices have been shown to be not simply ineffective but to actually have a negative impact on the children we teach. Moreover, the relentless move toward ever-increasing standardization makes it difficult for positive change to occur. Children are disrespected, required to sit quietly performing assigned tasks and absorbing information dictated from above. Sadly, the existing hierarchy disempowers teachers as well. The trust, respect, and appreciation to which they are entitled as professionals are often lacking and they are seen as mere technicians.

Curriculum is characterized by order and efficiency. Each unrelated topic is highly linear, taught within walled classrooms, and scheduled to strict time-specific periods with *everything* divided into manageable units – time, space, and even children. There is little opportunity to encourage or even to respond to individual interests. Cooperation is discouraged. Competition within a system of rewards and punishment is the norm, the result of the intense individualism characteristic of modern materialist culture.

All of this is well-recognized and there has been considerable effort to improve upon how we educate children. However, change does not come easily, particularly institutional change. In spite of initial success, there is a tendency for positive reform in schools to fade and to eventually disappear altogether due largely to the hierarchical governance of public schools.¹⁴⁴

Private schools have more freedom to provide genuine leadership in effective, state-of-the-art education, a role that is proudly assumed by many independent schools. However, far too often, Islamic schools meekly line up behind our mediocre public schools. Louis Cristillo remarked on how little difference he found between public schools and the New York Islamic school that he studied in depth. He noted that more that 85 percent of the curriculum was devoted to 'secular' subjects adopted entirely from the content and standards of the State of New York. Students took the same standardized tests and used the same textbooks as those in the public schools.¹⁴⁵

These pages stress the necessity of renewing our schools in the spirit of Islam, if we are to prepare coming generations as contributing, vibrant Muslims changing the world positively. Being outside the mainstream, we have considerable authority over what and how we teach. But this authority must be seized, treasured, and supported. It is unfortunate that in order to obtain financial support from our governments we often relinquish that control. In the United States, state and local governments do not subsidize any schools that are religionbased, and yet our goals often differ little from a state-supported public school.

As Muslims is it not our sacred duty to be the very best example for others to follow? Bugaje reminds us that we cannot rise to a position of influence or even be on a par with others as long as we are operating from the rear.¹⁴⁶ Allah has provided us with a pure, and God-conscious, nature. He has given us an intellect that encourages us to question our own purpose, indeed our very existence. He has given us guidance. And He has given us free will, the right to choose among the choices with which we are faced. With these gifts comes responsibility, the responsibility to understand and to apply His plan for how we are to live our lives – not simply the rituals of worship but of everything that we do including the process of teaching and learning. Think, reflect, contemplate, the Qur'an tells us; but it also tells us that we must then take action.

During my decades at the Islamic School of Seattle, I struggled to nurture a school that met the criteria that I have outlined in this book as being Islamic – not only in teaching Qur'an and Arabic, coming together for prayer and teaching the fundamentals of Islam – but in patterning our teaching on the basic principles that would prepare our students to truly live their religion. I spent thirty-two years searching for a visionary principal who would contribute to the objective of establishing a school based on these fundamental Islamic criteria. Unfortunately, the typical pattern of those we hired was an initial commitment to these goals that soon gave way to reluctant compliance, and almost inevitably ended up as effort to undermine these ideals through a resolve that our little Islamic school would become a 'real school' adhering to the 'grammar of schooling.'

We were more successful with a non-Muslim couple from the Harvard Graduate School of Education. They showed up at our door soon after the event of September 11, 2001, seeking to take an active role in countering the Islamophobia they were seeing. Their years of guidance served the Islamic School of Seattle well, leading to an appreciation of how our understanding of "Islamic" education merged with the cutting-edge pedagogy that was being promoted at Harvard.

Thankfully, state-of-the-art Western epistemology has generally moved away from a strict reductionism toward a more holistic approach, allowing several important concepts considered as Islamic in these pages to have become less discordant with Western thought today than in the past. Some of these are:

(1) The unity of knowledge. The tendency to fracture complex ideas into smaller and smaller fragments – basically no more than a series of facts separated into individual disciplines – is being replaced by the realization that all knowledge is interrelated. The brain itself is designed to learn by absorbing and registering a universe of sensations, then constructing its own unique individual patterns. It is the continuous modification of these patterns that result in learning.

(2) **The unity of humanity**. The world continues to suffer from the 'scientific' knowledge that purportedly supported the racism that propelled people to conquer, enslave, and demean those who differed from them physically and culturally. The Islamic view that members of the human race are inherently equal, fundamentally similar, and have a common ancestry is now widely accepted by educated, reasonable individuals.

(3) **The reality of** *fitrah.* The secular humanistic view insisted that the child is merely a blank slate automatically reflecting what his/her society imposed upon him/her. As Muslims we understand that each child is born hardwired for pure belief and love of his/her Creator. Within recent years there has been a growing realization that the child, indeed, begins life with an inherent spirituality and an intimate relationship with God ready to progress and move forward.¹⁴⁷

(4) The rejection of behaviorism and the affirmation of intellect and free will. Behaviorism, in which people were said to be controlled only through punishments and rewards, was the science du jour for decades but today has been largely repudiated. Allah gave us free will, the right and ability to choose to follow Him and to do good in the world – or not. Today, human individuals are seen as using complex mental models that involve reflection, judgment, and actions based on their free will.

Our Islamic schools often have their origins in the very real fear of parents that their children may not grow up as Muslims within a cultural context that eliminates God and in which they may even meet with animosity toward Islam and Muslims. Often when a school opens, the founders have only decided that it is to be an Islamic school, but often have not thought further on what this means. They hire certified teachers and/or those knowledgeable in the *caqīdah* of Islam, but who also may have given little thought to the deeper vision. This certainly was the case when we first opened the Islamic School of Seattle.

Parents often find it difficult to trust an Islamic school that appears to them as unconventional. In most parts of the country the majority of parents are immigrant Muslims who often resist change, never having really questioned the history of the education that they themselves experienced 'back home.' These can roughly be divided into two groups, the first of whom came to this country for their own studies and who see the primary purpose of education as preparation of their children for future financial success, and who especially value high scores on standardized tests – albeit within an Islamic environment. The high scores come from drill and the force-feeding of facts, leaving little time for developing the qualities important to maturing into the Muslims we need. A second group of immigrants is generally – but not always – less educated and may have come as refugees. They are often looking for a school similar to what they had back home, a school that stresses memorization of the Qur'an. Generally, these are supplementary schools that meet on weekends or evenings. However, in the Seattle area in recent years, several full-time schools of this sort have opened. In these schools, part of the day is devoted to a purely secular component – taken *directly* from the established state curriculum and often done online. Among the first group of immigrants it tends to be the Islam that is tacked on. Within the second group, fearful of anything that seems too far removed from the Islamic orthodoxy to which they are accustomed, it is the so-called secular subjects that are appended.

To my knowledge there has not been an intensive study on the effects of this type of religious education on the youth of North America, but the intensive research done by Sahin in the United Kingdom and elsewhere clearly shows that the dichotomy that is established by two conflicting epistemologies, each of which is presented as true, cannot help, but instead leads to confusion.¹⁴⁸

At this stage in our history we may not be able to appeal to the majority of Muslims, most of whom have never deeply considered what Islamic education should be, but there are those who are willing to look critically at established notions. In particular, Muslims who have grown up in this society - second and third generation Muslims, African-American Muslims, and converts are often more likely to question existing ideas. For several reasons, it is reflective parents and educators in the Western world who may be best positioned for renewing our schools everywhere in the true spirit of Islam. First, our Islamic schools are relatively young and less entrenched in the folk pedagogy or 'grammar of schooling' that is so deeply engrained in schools of today. Secondly, those who have grown up in the West are less likely to be encumbered by the feelings of inferiority that often plague those living in the neocolonialism of Muslim countries. Also, the prevailing culture of thoughtful and creative questioning of the status quo encourages our own acumen as well as acknowledging ideas of non-Muslim intellectuals, ideas that today often manifest as Islamic.

An initial step must be to bring together like-minded individuals who are ready to critically scrutinize the culture of our schools, the underlying philosophy, the history, the values, practices, and the vision – those who are committed to the changes that we need to fully prepare our children to live as steadfast, faithful Muslims, working for justice – vibrant activists living a life of true Islam.

A friend, who had an Islamic school for many years and went through one daunting experience after another with her board and the local mosque, eventually decided to give up the school and move on. She became trained as a Montessori teacher and eventually began a new school that is under her personal control and is very successful. Her advice is to avoid becoming bogged down in the kind of debilitating struggles from those wedded to the idea of either a 'religious' madrasa, or the kind of school spread throughout by colonialism, and to start from the ground up with a new model school that has strong support by a substantial group of parents, teachers, and others. Such a school can only thrive when parents understand, agree with, and commit to the deeper mission. If the founders are aware and clear about what they want to establish and do so with faith in Allah, commitment to Islamic principles, and dedication to preparing future Muslims, they cannot fail.

APPENDIX A

MONTESSORI: A MODEL FOR ISLAMIC SCHOOLS

Montessori's scientific investigations into how children learn many of which have been confirmed by current research;¹⁴⁹ her brilliantly designed teaching materials that are self-correcting and involve all of the senses; the mixing of ages; the insistence on child-sized furnishings; learning by doing; the importance of intrinsic motivation, are all testimony to her genius and are generally accepted by many educators today, particularly by those who educate the youngest of children. The methodology of Montessori, however, is only the apparent manifestations of the deeper spiritual and philosophical basis that has caused so many Muslim educators to embrace her pedagogy.

Several principles that she held in common with Islam include an understanding of human nature that corresponds to the Islamic concept of *fitrah*; a commitment to the unity of creation, of knowledge and of humanity; an emphasis on the role of humankind and a dedication to peace education.

Montessori had already distinguished herself as the first woman doctor in Italy and an advocate for women's rights when her interest in psychology and disabled children brought a new passion into her life – education. She began attending courses, visiting schools and reading extensively. She was appalled by what she observed in classrooms, specifically the enforced immobility and silence; the reliance on rewards and punishment to motivate the children; the disrespect shown them; and the role of the teacher as the center of the classroom and the dispenser of knowledge.

Further study, teaching, presenting at educational conferences and developing hands-on educational materials prepared her for the period of life for which she is still known today. While continuing her practice of medicine, she went to work teaching young children in a school she called Casa Bambina attached to an apartment house for low-income families. Using the materials of her own design, she studiously applied her keen mind and scientific background, observing the children closely to understand how learning occurred. Montessori

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found that allowing children choice, freedom of movement, and uninterrupted periods of work resulted in them taking responsibility for their own learning and behavior. The children taught themselves. The role of the teachers was only to guide them.

Montessori made the decision to resign from the medical profession and devote her life to educating children. She announced that she had committed to all the children of the world, born and unborn. She did not differentiate among culture or class. She believed that the primary role of education is to encourage peaceful cooperation and shed prejudices in order to achieve the will of God.

She noted in the children periods of profound concentration and a heightened sensitivity to order in the environment. Furthermore, it became obvious that the challenging work and learning, in itself, gave the children joy and satisfaction. These intrinsic rewards were all they wanted or needed in order to continue to progress. At the same time the feedback provided by the self-correcting materials was clearly more effective than verbal acknowledgements or rewards.

The system that she developed took the educational world by storm. Montessori schools opened throughout Europe and in many other countries of the world. Later, interest waned, largely due to her own possessive refusal to encourage testing, modification, or progress beyond what she had personally established. The Montessori method was popular at the same time the factory-based model of education was being promoted raising the question of how different education might have been had the success of Montessori continued.

Although her teachings have largely remained outside the academic departments of education, Montessori's system has withstood the test of time. When it was reintroduced to the United States in the sixties and seventies it once again began to achieve dominance as an important alternative system of education. And although she is seldom credited with their discovery, many of the ideas she originally developed have become a part of mainstream education.

Having become convinced that children were born close to their Creator, spiritually pure, and inclined toward what is good, she made this the basis of her entire educational system. Her constant admonition to "respect the child" went beyond the recognition that a younger person was as deserving of civil treatment as adults. As she worked with young children over the years she came to feel awe for the freshness of a new individual. She found that children do not need to be persuaded, punished or rewarded. God has endowed them with an innate desire to learn and to grow as whole individuals. She saw that they were a pure, untainted creation, still close to the One who had created them. Her astute, perceptive mind recognized that all people are created with the full potential of achieving the role that God intends for them. She was aptly describing *fitrah* when she said:

Hidden in their hearts is something deep, common to all. All have a tendency, however vague and unconscious, to raise themselves up; they aspire to something spiritual...there is a tiny light in the unconscious of mankind, which guides it toward better things.¹⁵⁰

This concept is reflected throughout the Montessori philosophy, explaining why there is such profound respect for the child. Gentle guidance within a thoughtfully prepared environment allows children to grow and thrive naturally. Montessori allows neither punishment nor rewards to detract from the intrinsic joy that comes from growing, learning, maturing and improving. Children are empowered through fostering independence; being trusted to choose their own work according to their needs and interests; and to learn at their own pace. She further understood the importance of the environment in allowing children to achieve their roles on earth.

She emphasized that everything in creation has a role, but it is only humankind who have been given the intellect and the free will to be able to have a choice in the matter. Plants, animals and inanimate things have been assigned what she called their "cosmic task." We sometimes say that these entities are 'Muslim' because they are fulfilling the role that God assigned them. She viewed humanity as God's prime agent with the responsibility to learn to do His work more effectively. She stressed that education should allow a child to be able to answer three questions about him/herself: Who am I? Where do I come from? And what is my "cosmic role"? The cosmic role being one's place in the amazingly intricate and interconnected whole of God's creation, or as a Muslim might say, actualizing our *fitrah*, in which a person comes to live his life as a true believer. Nurturing the child's understanding of and appreciation for the great cycles of nature – which maintain harmony and order while allowing for change and development – underscores Montessori's core value of community stewardship.

As a believer, Montessori had a cosmological view of the universe and developed her elementary curriculum around the goal of giving the child a vision of the unity and interconnection of all creation. "We shall walk together on this path of life, for all things are part of the universe, and are connected with each other to form one whole unity."¹⁵¹

In the preschool years, the child is introduced first to small, concrete ideas and skills that gradually widen into larger, more abstract, complex concepts. The same lessons are reintroduced as the child grows but taught with increasing complexity and abstraction. Montessori designed the elementary curriculum, referred to as Cosmic Education, as an integrated curriculum based on the dynamic interactions of the universe, nature, and the human experience, "in which all, consciously or unconsciously, serve the Great Purpose of Life."¹⁵² Cosmic education is based upon what are known as the Great Lessons, lessons that are easily integrated with Islamic concepts. They introduce a big picture view of the world as follows:

- The Story of the Universe
- The Timeline of Life
- The Story of Communication
- The Story of Numbers
- The Story of Civilization

The Great Lessons are novel and exciting, told by the teacher with props and great drama. The purpose is to elicit awe, awaken the imagination and inspire curiosity with a very broad-based story. The stories encompass the whole of life and lend themselves to an Islamic basis. God and creation were an integral part of Montessori's presentation, but are generally discarded by the secular Montessori schools of today. The Great Lessons differ from the primary (preschool) lessons where children concentrate on small, concrete skills. They are the focal point of the largest of possible ideas. After an introductory Great Lesson the children are inspired in different ways to explore further according to their own curiosity and interests. The teacher refers back to the story during the year when appropriate as various related topics come up. The Great Lesson stories are told again each year. The Montessori classroom differs from a thematic-based classroom in which lessons are often teacher-driven. A narrow theme that is chosen, planned and presented by the teacher with specific lessons hinders the intrinsic motivation that results from the freedom given to children to work independently according to their own interests.

The Islamic School of Seattle was once featured in a publication that focused on the choice of Montessori education in three religious schools, our Islamic school as well as a Catholic school and a Jewish school.¹⁵³ Montessori's mystical worldview is encompassed at the heart of the shared belief in a purposeful Creator and the conviction that humanity is His agent here on earth.

As mentioned earlier Montessori made the decision to resign from the medical profession and devote her life to educating children. She announced that she had committed to all the children of the world, born and unborn. Her influence was global. She did not differentiate among culture or class and her schools spread globally. To reiterate she believed that the primary role of education is to encourage peaceful cooperation and shed prejudices in order to achieve the will of God.

Her ultimate goal was peace and she was nominated three times for the Nobel Peace Prize. She believed that peace must start with the child who is free of the prejudices of adults.

Freedom of choice resulting in self-knowledge would allow the development of creativity and self-respect allowing each individual to recognize his or her function in life. This genuine self-respect would naturally lead to a collaborative, non-competitive relationship of understanding among peers, eventually expanding outward to include all of humanity as well as an appreciation for the whole and interconnectedness of creation. Peace education is stressed in a Montessori classroom, cooperation is promoted and competition discouraged.

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Children are provided with the space and time to settle differences peacefully and naturally.

Indeed numerous Muslim educators believe that Montessori has come very close to developing an entire system that embraces many very fundamental Islamic principles. Montessori has the additional advantage of being complete with training, specific materials and a century worth of thought and expertise from her followers.

APPENDIX B

EXPLORING THEMES WITH STUDENTS

Determine overarching goals: it is essential that the teacher has very clear overarching questions in mind that basically state the conceptual understanding that the students are expected to have developed over the time devoted to the theme. These are not stated specifically but should be indirectly elicited from the students during the course of the theme and further developed. Each should result in increasing broad Islamic understanding of principles, visions, problems and their possible solutions. The general topic of the theme may be suggested by students or determined by the teacher or established curriculum. Students, however, should be involved with planning topics, subtopics and activities – reading, writing, art projects, field-trips. Some basic materials – books, posters, other visuals, hands-on activities should be available in the classroom for exploration from the beginning and enriched throughout the course of the theme.

Begin by writing the topic – not the overarching theme – in the center of an interactive white board or any other large surface that is available and that can be maintained throughout the theme. Ask the students what they already know about the topic or questions they might have. The teacher can ask leading questions as well, but the answers are best left to research from the resources that have been brought into the room. If the topic was suggested by one or more students, they should have the opportunity to explain how they chose the subject. Write comments or unanswered questions on the periphery some with subtopics. This process may take up to a few days. During that time period different interests will emerge. Individual children should be encouraged to pursue specific individual interests.

All students should have a level of choice when assignments are made. This does not preclude assignments and activities assigned by the teacher to individuals, groups or the entire class. Students can be given topics or questions to reflect upon at home each day. Reflection topics or questions can elicit the responses related to the overarching goals (Islamic concepts). Fieldtrips, guest speakers, and so forth, add variety and maintain interest.

I have reluctantly used the terminology below of science-based and history- or social studies-based themes. My purpose was only to indicate some specific benefits of different sorts of themes. Such descriptions are not meant to be restrictive. Topical boundaries should not exist.

A Science-Based Theme

The overarching goals in any science-based theme must be to appreciate the signs of Allah as well as the amazing unifying interrelationships that are so characteristic of creation. God is one and creation is one. Everything in creation has a purpose and is Muslim in the sense that it is fulfilling the role God has assigned to it. The intention of tying science to God and His creation is the most essential way that Islam and science are integrated, but students can be assigned or encouraged to find the references to the subject under consideration in the Quran, Hadith or in work of the Muslim scientists.

Discuss levels of organization. This is a concept that demonstrates that creation is highly organized at every level from subatomic particles to the solar system, and the entire physical universe and within living entities to organelles (parts of a cell), cells, tissues, organs, organ systems, individual living animals or plant, populations of living entities of the same species, communities of species living together, ecosystems of living and non-living components, and so on. Complex organization that is maintained at each of these levels makes it impossible to assume that it all is due to chance.

The tendency to find explanations of modern science in the Qur'an a practice that is sometimes referred to as Bucailleism, should be resisted. The Qur'an is a book of guidance – not science. Science is always changing and the Qur'an is timeless. To tie a particular verse to a scientific 'fact' can have the opposite effect to what we have envisioned. Moreover, Qur'anic concepts had to be relevant and understandable to those who originally heard its message and may not always be supported by modern science.

A History or Social Studies-Based Theme

In a thematic-based school, historic events will not be studied sequentially. And yet it is important that students are able to have a vision of events as they have occurred in time. There are apps for various kinds of timelines, but most effective is to have a physical timeline that is as long as possible for the space available. A roll of white plasticized oilcloth-like material is excellent. Simply dividing the length of the material into centuries is a good math lesson and also lends itself to discussion of calendars. When the timeline is first displayed it will be blank and it can be useful to put what are determined to be the most important dates onto it. This can be a project of the entire school and these special beginning dates can be decided by consensus. It will be expected that the initial dates may include the "discovery" of America, hijrah, times of earlier prophets, and so on. Both hijrah years and common era years should be displayed. As events are discussed they can be added to the timeline as pictures or phrases.

Obviously, the time-line should be used with other sorts of themes too – dates of experiments, discoveries, and so forth; events in Islamic science should be added to the timeline as they are studied. Geological eras and periods will have to have a separate device divided into much longer periods of time. Montessori classrooms have developed several interesting ways of depicting geological time.

An Example: Irish Immigration to the United States

It is very important to consider why any specific theme should be chosen. The overarching goal of this theme is to bring students to an understanding of an Islamic approach to the problem of hunger as well as of other necessities of life, to appreciate that hunger is a problem caused by immoral political and economic practices that occur today as well as in the past.

Although the overarching goal must always be kept in mind, there are many other reasons to choose a particular theme. Below are some reasons one might choose Irish immigration as a theme and part of teaching rich Irish-American history:

- It involves considerable science.
- Although Caucasian the Irish were still seen as minorities and experienced inequality and stereotyping, both by the British, and later by the Americans.
- Resources are plentiful. A large number of books and other materials at all levels are available, fiction and nonfiction. There are at least two historical fiction series about the Potato Famine; one about the orphan trains; several historical novels about working girls in the eastern United States including several books at various levels about the Shirtwaist Factory fire; books on fungus and fungal infections.
- Relates poverty to negative social behavior. Allows the study of famine itself.
- Many students in Islamic schools are children of immigrants and this can encourage discussing family history. Some are likely to have Irish ancestors.
- Understanding why people immigrate and the difficulties of adjusting to a new culture.
- Obviously, this ties in very closely with the recent mass immigrations that are occurring and the resulting anti-immigrant uproar.

It is quite likely that the only thing that a class of students know about the Irish is St. Patrick's Day, but the books, articles, and YouTube videos that you have accumulated will fill in the blanks. The original mind-map will be pretty sparse, but by the teacher asking a few questions it can quickly expand. Questions should first be elicited from the class, but the teacher can add to this. Students should be encouraged to write in questions as the theme progresses. Each question added can obviously lead to new questions. Many will not be discussed, but that is OK! Remember – interests, depth, individual relevance, relation to Islamic concepts, problems, history, and so on, all will determine the direction the theme takes. Material on all of these topics at various levels is readily available.

SOME QUESTIONS:

1) Why did the Irish immigrate?

- 2) Where does exploitation occur today? Why?
- Prejudice ("...and made you into nations and tribes..." Qur'an
 49:13) Do you harbor any prejudices against a particular group? Why? What does Islam teach us about prejudice?
- 4) What is prejudice? Why are people prejudiced? What is a stereotype?
- 5) What is capitalism? Benefits? Disadvantages?
- 6) Why do famines occur?
- 7) What is an Islamic economic system?
- 8) Why has most immigration occurred?
- 9) Is the potato native to Ireland? If not, where did it grow wild and how did it end up in Ireland?
- 10) What is a monoculture? How did this contribute to the potato famine?
- 11) How does this relate to the importance of genetic diversity and lack of genetic resistance?
- 12) Are there monocultures in our region? Examples? Could this cause problems? How?
- 13) Can the problems relate to something other than a plant or animal disease? Examples?
- 14) Are there any famines going on now in the world?
- 15) Could global warming cause famines? How?
- 16) Why couldn't the Irish eat the other crops that grew there?
- 17) Who were the English landowners; why were they able to control the Irish?
- 18) What caused the division between Northern Ireland and the Republic of Ireland?
- 19) How was life in America different from Ireland?
- 20) How did the refugees get here? What happened at the border? How does immigration differ today?
- 21) Where are most current refugees from? Why did they leave their homelands?
- 22) In the past, why did only Europeans immigrate to the United States?
- 23) When did this change? How?
- 24) What kind of work did the Irish immigrants do?

- 25) What is a sweat shop?
- 26) What was the Triangle Shirtwaist Factory fire?
- 27) Why did so many people die?
- 28) How did this tragedy help to begin the labor movement?
- 29) Who was Mother Jones?
- 30) How did the Irish cope with poverty? (child labor, piece-work, orphan trains, theft).
- 31) What 'race' were the Irish? Why were they so despised by other white Americans?
- 32) What caused the problem of criminals and vagrants? How are such problems similar today?
- 33) How could these problems be solved?
- 34) What do the people in the classroom with Irish ancestry know about their ancestors? What percentage of their genetic material is Irish?
- 35) What two immigrations were important at the time of the Prophet? Compare them to the Irish immigration to America.

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The author explores education from the essential principles of *Tawhid* (Oneness of God, humanity, knowledge); *fitrah* (concept of human nature); and the role of humans as vicegerents of God on earth (responsibility and stewardship).

The current education system dates back a hundred years or more, and is in desperate need of a 'reboot'. In developing the industrialised society, the education system itself became like a factory, the end product being pupils who merely regurgitate facts, and themselves end up as cogs in the machine that is the wider industrial complex. The legacy of this is a soulless 'functional' educational system that fails to develop pupils to meet the present and future needs of individuals and their expectations. This failure inevitably impacts on society and humanity at large. Society has long since moved beyond the industrial revolution and into an age of global connectedness where the sum of human knowledge is freely available via the internet. It is an age where people are generally more well informed and on a variety of issues.

An effective holistic educational philosophy is required, one that gives full spiritual meaning to all that a child learns. It should equip children with spiritual awareness, morals and values, social responsibility and accountability, self-discipline and self-determination, self-confidence and empowerment, ambition and aspiration tempered with thoughtfulness and a sense of gratitude.

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