

Toward authentic reform of education in Lebanon

A working white paper

Ibrahim A. Halloun

H Institute

P. O. Box 2882, Jounieh, Lebanon & 4727 E. Bell Rd, Suite 45-332, Phoenix, AZ 85032, USA

Email: halloun@halloun.net & halloun@hinstitute.org

Web: www.halloun.net & www.hinstitute.org

By the turn of the 21st century, unprecedented changes and challenges began facing us constantly in the job market and various aspects of everyday life, at local and global levels. Information and technology have been mushrooming around and since then at excessive rates leading to wide disparities among nations, communities, and individuals, and jeopardizing human rights that people have long fought for around the globe. The prime role of formal education in turning things around favorably has been recognized by concerned international agencies that emphasize, like in the 2015 Incheon Declaration¹, that “education is a public good, a fundamental human right and a basis for guaranteeing the realization of other rights. It is essential for peace, tolerance, human fulfilment and sustainable development”.

Traditional education that prevails in Lebanon and numerous parts of the world cannot fulfill this role. Such education is governed by a 19th century philosophy and carried out in archaic settings and under unfavorable conditions, thus leading to flawed instruction and poor learning. It has long been hampered by pedagogical and organizational myths and unwarranted premises. Among many others, pedagogical fallacies repudiated by research in cognitive science and especially neuroscience about the workings and development of the human mind and brain² include: student mind is a tabula rasa that can be filled with canned knowledge, students learn by listening quietly to the teacher, student emotions and dispositions cannot be the object of teaching, testing provides reliable assessment of student knowledge and induces meaningful learning. The plethora of organizational fallacies repealed by international comparative studies of educational systems and schools³ includes, especially in Lebanon: centralized authority ensures efficacious governance, teachers and school administrators ensure high achievement when they go religiously by the authority book, teacher and teaching quality has nothing to do with teacher authority and compensation, state exams guarantee quality.

Traditional myths and premises have led to and governed many misconceptions including the defunct 2-4-6 model that is still being dearly held by the overwhelming majority of teachers and other players in education. According to this model, true knowledge can be canned between the 2 covers of a textbook, and then unpacked and delivered through lecture and demonstration to students sitting quietly between the 4 walls of a classroom during 6 (or 7) packed periods a day under one-size fits all curricula. The model in question and sweeping detrimental practices like teaching to the test, be it school, state, or other high stakes exams, can lead only to rote, short-term learning and never to meaningful learning sustained in long-term memory, especially not to the development of 21st century skills and dispositions.

1. UNESCO. (2016). *Education 2030. Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4. Towards inclusive and quality education and lifelong learning for all*. Hamburg, Germany: UNESCO UIL document ED-2016/WS/28. [p. 7].

2. See, for example, Halloun, I. A. (2017). *Mind, Brain, and Education: A Systemic Perspective*. Working paper. Jounieh, LB: H Institute. This and related pedagogy and policy papers are available at: www.halloun.net.

3. See, for example, Mourshed, M., Chijioke, C., & Barber, M. (2010). *How the world's most improved school systems keep getting better*. New York, NY: McKinsey & Company.

Perhaps the most damaging myth of them all has been in Lebanon that our educational system is one of the best around the globe. Advocates and believers of this myth keep bragging about the success of Lebanese students who pursue university and especially graduate education abroad. These deceived and/or deceiving people seem to forget that the students in question succeed and excel not because of their educational background, but primarily because of their high motivation and determination to seek *better* education and job opportunities *abroad*, and, subsequently, of the high efforts they deploy abroad for their majors, and especially for making up for what they have missed in their Lebanese education. The same people seem also to ignore or turn the blind eye to comparative research and studies that keep showing that we lag behind most countries around the globe when it comes to student meaningful understanding of what our curricula were supposed to cover⁴.

Fallacies governing our educational system have prevented it from fulfilling its supposed mission, and will certainly not allow it to “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” as called for in Goal 4 of the UN *2030 Agenda for Sustainable Development*⁵. Comprehensive reform of education is urgently needed in Lebanon to bring about and sustain development in accordance with the new realities of the 21st century. The due reform begins by disposing of traditional pedagogical and organizational fallacies, and of ensuing traditional concepts of educational system, pedagogy, curriculum, school, student, teacher, administrator, educational authority, and other entities in education. Alternative, substantiated foundations, concepts, structures, and practices that are authentic to the Lebanese and global realities should then be instituted in virtually all respects with the concerted efforts of all stakeholders.

This working white paper is meant to solicit and help focus discussions among various stakeholders about the urgently needed educational reform in Lebanon (and elsewhere) in order to empower our young generations to enjoy decent life on Earth and make it a continuously better globe to live on. It would ultimately serve policy and decision makers to bring about and reify alternative educational premises and concepts fit for the 21st century, and put together long-term strategies and plans for authentic reform of education. The paper complements two previous position papers on the urgent need to reconsider national diplomas granted solely on the basis of a single set of exit exams⁶. It draws on international declarations like UN’s *2030 Agenda*⁵ and related UNESCO’s and OECD’s declarations and action programs⁷, as well as on acclaimed, seminal comparative reports like the 2010 McKinsey report on “*How the world’s most improved school systems keep getting better*”³.

4. See, for example, OECD. (2016). *PISA 2015 Results (5 Volumes)*. Paris, France: OECD Publishing.

5. United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. UN Resolution A/RES/70/1. [p. 14].

6. Halloun, I. A. (2016). *Upholding our conventional exit exams is a crime against students and society*. Jounieh, LB: H Institute.

Halloun, I. A. (2016). *Premises for authentic diplomas in the context of reformed curricula and educational systems*. Jounieh, LB: H Institute. Both papers are available at: www.hinstitute.org/Site/blogs.

7. See, for example:

OECD Directorate of Education and Skills. (2018). *The Future of Education and Skills. Education 2030*. Paris, France: OECD Publishing.

OECD. (2016). *Trends Shaping Education 2016*. Paris, France: OECD Publishing.

Schleicher, A. (2015). *Schools for the 21st-Century Learners: Strong Leaders, Confident Teachers, Innovative Approaches*. International Summit on the Teaching Profession. Paris, France: OECD Publishing.

UNESCO. (2015). *World Education Forum 2015 Final Report*. Paris, France: UNESCO.

UNESCO. (2014). *UNESCO Roadmap for Implementing the Global Action Programme on Education for Sustainable Development*. Paris, France: UNESCO.

The paper briefly offers some premises and recommends reform measures about seven major aspects which formal education (education for short hereafter) is supposed to serve or conform to: equity and quality, lifelong learning, global citizenship, human mind and brain, technology, profession, and systemism. The presentation of each aspect begins with a general premise detailed in a set of five statements. The first statement is of quasi-axiomatic nature and offers some established facts from which derive the following four principle-like corollaries. The presentation ends with another set of five statements that recommend certain practical measures for authentic reform of education. The seven aspects, along with their premises and recommendations, are neither exclusive nor exhaustive. They have been chosen for being most crucial and critical to attend to at this point, and presented so as to hopefully contribute some viable building blocks on the long journey of the sought reform.

Education must be not a marketable commodity but a quality public good that is equitably, wisely, and generously invested in school-age youngsters, as most important national assets, for individual fulfillment and significant sustainable development at the local and national levels.

1. Quality education for all, and all for quality education

All school-age youngsters must have access to quality K-12 education that enables them to fully develop their potentials and empowers them to run decent and successful lives, and all productive people and bodies must contribute to this national investment.

- 1.1 Education is a right for all people according to the Lebanese constitution and many international charts, treaties, resolutions, and declarations which Lebanon subscribes to in one form or another.
- 1.2 Education must attend to a person as a whole and enable individual people not merely to pass school, state, and other tests and exams, but to fully develop their mental and physical potentials for their own well-being and fulfillment and the collective welfare, and for empowering them for decent and successful life.
- 1.3 Every person must have access to quality education, and not just any education, in K-12 and beyond, and come out with sustainable meaningful and productive knowledge, rational and sensorimotor skills, dispositions, and other aspects or traits that make up individuals' mental and physical profiles fit for the 21st century.
- 1.4 Every person must be able to afford quality education irrespective of income or any other factor be it mental, physical, or demographic (including but not limited to nationality, gender, race, ethnical and social background).
- 1.5 Education must be not a marketable commodity but a public good commonly owned by all people in a given community and nation, and a significant investment in national dignity and power, wealth and welfare, and growth and development in all sectors, especially production sectors.

The following measures should be taken accordingly:

- 1.6 Set and continuously revise major profile traits that should be the prime target of K-12 education, with a focus on personal and collective welfare, and an emphasis on generic

traits of success and excellence like progressive mind, productive habits, profound knowledge, and principled conduct in all aspects of life (referred to hereafter as 4P profiles²).

- 1.7 Institute and strictly implement national quality standards for all aspects and levels of education so that individual students may fully develop their potentials through 4P profiles.
- 1.8 Reconsider the public-private school dichotomy in favor of a new concept of “Universal School” that would bring the two sectors together in fair partnership and make equity and quality synonymous in education.
- 1.9 Reconsider the general-vocational education dichotomy in favor of a new merger concept of “Universal Education” so that all K-12 students develop profiles fit for the job market of the 21st century and sustainable development at the local and national levels.
- 1.10 Invest creatively all subventions of student tuitions by state and private agencies and mutual funds in a reformed taxation and budgetary system to subsidize quality education for all, turn it into a truly public good, and provide incentives for significant funding of educational research, development, and innovation.

2. *Essential education for lifelong learning and profile development*

Education must focus on profile traits that empower individual students for lifelong learning to meet emerging needs and challenges in our rapidly changing world.

- 2.1 The human brain is plastic and ready to learn at all ages and we live in a rapidly changing world, which warrants that every willing person be afforded to learn anything s/he desires and needs at any point of life and thus to continuously develop her/his profile.
- 2.2 K-12 education must have the prime objective of helping individual students learn how to learn whatever they are up to at a given point of schooling, and develop in the process efficient and generic learning habits that may ultimately be readily adapted to personal, professional, and collective needs in everyday life and the workplace.
- 2.3 Learning habits that K-12 education must bring about should incorporate skills to decide what to learn to meet emerging needs and challenges, as well as dispositions and skills for efficient engagement with others, and with various information media and resources, for the ultimate goal of lifelong profile development.
- 2.4 K-12 education must concentrate on generic and productive profile traits and thus balance between the breadth and depth of covered academic fields and disciplines, and focus on the very essential and meaningful knowledge in accordance with the “less is more” motto.
- 2.5 A seamless transition must be maintained from one level to a higher level in formal education, and especially from secondary to tertiary education (undergraduate and graduate university majors, postsecondary technical and vocational certifications), in order to foster sustainable learning habits at these stages of life and beyond.

The following measures should be taken accordingly:

- 2.6 Make the development of reasonable profile traits, including the development of generic learning habits, the prime objective of K-12 education, and focus to this end on academic essentials that meet the realities of everyday life and the job market.

- 2.7 Focus, in profile traits, on patterns of excellence that cut across different professions, and, in academic essentials, on basic literacy and convergence among traditionally distinct disciplines.
- 2.8 Put students in conducive learning ecologies, with them at the locus of control, rather than in intimidating and alienating conditions, and avoid to this end all sorts of authoritarian sanctions and obstructive climates and practices like competition among students.
- 2.9 Rely on “assessment” as means of sustainable, meaningful, and productive learning rather than on “testing” of rote learning for the limited and adverse sake of ranking students and preparing them to pass state and other high stakes exams.
- 2.10 Induce students at all levels to value and convincingly implement high standards of achievement significantly more for personal satisfaction than for meeting others’ expectations, requirements, and criteria.

Dichotomies of public-private school and general-vocational education with one size fits all, discipline-specific curricula must be disposed of in favor of “universal” school and education with systemic and dynamic, cross-disciplinary curricula that empower individual students for lifelong learning in a rapidly changing world.

3. Education for global citizenship

Education must bring about well-rounded, creative and innovative value-driven citizens actively sensible to local and global causes and issues.

- 3.1 People and nations cannot live and foster independently of each other, and our globe is increasingly becoming one all-encompassing ecosystem where the impact of individuals and groups’ actions may not be limited to those who interact with each other and not confined to fixed boundaries.
- 3.2 Education must empower students to appreciate and live by duly acclaimed values and ethics, engage constructively with their surroundings, and foster individually and collectively in peaceful and all-embracing climates.
- 3.3 Education must empower students to embrace and foster diversity peacefully within and across communities, while holding on to, sustaining, and enhancing their own identity, culture, and heritage.
- 3.4 Education must empower individual students to sustain an affinity to human, ecological, socio-economic, and all sorts of local and global issues and causes, and a spirit of responsibility regarding their resolution.
- 3.5 Education must empower students to ascertain critically popular ideas and hailed accomplishments, and to appreciate and strive for creativity and innovation in tackling personal and collective issues.

The following measures should be taken accordingly:

- 3.6 Instill a culture of creativity and innovation at all grade levels with a diversified and fair reward system for teachers, school administrators, and students.

- 3.7 Engage students in various courses and at all levels in value-driven discussions and activities aimed at helping them develop and live by a sound value system with clear performance indicators and judgment criteria about various issues, including scientific and technological developments.
- 3.8 Engage students in group work in all courses and at all levels with the prime objectives of making team work second nature to them and inducing them to care for each other instead of competing with each other, and to reach for success and excellence collectively and not at the detriment of others.
- 3.9 Incite teachers, schools, and professional organizations to sustain communication and cooperation channels, and to set appropriate platforms for students and teachers from different schools and communities to collaborate on projects of mutual interest and develop in the process the habit of constructive engagement with different others.
- 3.10 Institute educational standards that imbed a value system that transcends ethical and religious differences and geo-cultural boundaries among communities and nations, and that allow seamless social and pedagogical mobility of students of all levels across communities and nations.

4. *Mind and brain based education*

Education must be adapted to the human mind and brain as revealed in neuroscience and cognitive science for sustainable, meaningful, and productive learning.

- 4.1 Learning and ensuing profile development are primarily cognitive processes of the human mind (conscious thoughts) that engage and transform various parts of the brain (neural networks), and the efficiency of those processes and sustainability of their outcomes in long-term memory depend on how well they respect and take advantage of the natural workings and development of the human mind and brain.
- 4.2 Education, and especially curriculum design, deployment, and refinement, must be governed not by unsubstantiated popular beliefs but primarily by pedagogical frameworks with viable tenets, principles, and rules that cognitive science and especially neuroscience provide us about perception, conception, and memory formation, sustainability, and retrieval, as well as about student potentials in these respects at specific schooling ages, learning management and the role of student emotions and attention, and various other aspects of learning and instruction.
- 4.3 Education must attend equitably to all four dimensions of the human mind and brain in order to foster sustainable, meaningful, and productive learning, notably the epistemic dimension of conceptions, the rational dimension of reasoning skills, the sensorimotor dimension of dexterities or physical skills, and the affective dimension of emotions and dispositions.
- 4.4 Education must help students become consciously aware of how the brain works and evolves, and manage efficiently various brain parts, especially those dealing with metacognitive controls and with memory formation, sustainability, retrieval, and deployment.
- 4.5 Teacher education, like student education, must be governed by mind and brain based pedagogical frameworks for efficiency and sustainability purposes, but especially to maintain coherence and consistency within and between teacher and student education at all levels and throughout life.

The following measures should be taken accordingly:

- 4.6 Institute regulations, mechanisms, and professional development programs that let all actors in education, from policy makers to teachers and textbooks authors, take full advantage of what relevant research in neuroscience and cognitive science tells us about sustainable, meaningful and productive learning at all schooling ages and related effective teaching practices.
- 4.7 Put together and systematically deploy sound pedagogical frameworks that conform to the workings and development of the human mind and brain to govern K-12 education and beyond consistently, including pre-service education and continuous professional development of teachers and all other actors in education.
- 4.8 Put in place dynamic curricula with programs of study that match students' potentials and promote reasonable cognitive (epistemic, rational, and affective) and sensorimotor development of individual students at each grade level.
- 4.9 Prescribe in reformed curricula how students and teachers may design experiential learning ecologies that take advantage of cognitive and sensorimotor differences among students, and provide relaxed and conducive climates that ward off negative emotions like stress, anxiety, intimidation, and alienation.
- 4.10 Mandate that any resource (textbook, digital media, equipment, etc.) for any educational level come with explicit student and teacher guidelines on how to help students take full advantage of their cognitive and sensorimotor potentials and avoid practices stemming from long-standing pedagogical fallacies.

Education stakeholders must dispose of mythical and obsolete 19th century foundations in favor of systemic pedagogical frameworks twinned with efficient technology and mandating mind and brain based tenets, principles, and rules of experiential learning for the development of 21st century student profiles.

5. Pedagogy and technology twinning

Education must judiciously adapt technology and pedagogical frameworks to each other for meaningful learning and not merely adopt available technology as add-on for efficiency purposes.

- 5.1 Technology, and especially information technology and portable electronic devices, is nowadays an integral and indispensable part of our daily life and is inevitably but inefficiently becoming so in school life.
- 5.2 Educational technology must benefit from entertainment and especially gaming technology for conforming to the workings and development of human mind and brain, and especially for sustaining students' interest and attention and engaging them meaningfully and productively in the learning process.
- 5.3 Technology must not be adopted under traditional pedagogical frameworks (or even adapted to such frameworks), including those that claim to be student-centered and to

promote various forms of active or interactive learning, for it may hardly then induce or significantly contribute to meaningful learning.

- 5.4 Technology must be accounted for while putting together new mind and brain based pedagogical frameworks for curriculum development and deployment, and it must be developed in accordance with such frameworks for the cognitive and sensorimotor purposes set in the curricula and appropriately tested and corroborated before dissemination.
- 5.5 Educational technology must not impose cognitive, logistic, financial, or other demands that students, teachers, parents, and other stakeholders cannot afford.

The following measures should be taken accordingly:

- 5.6 Put together, validate, and institute pedagogical frameworks that mandate mind and brain based tenets, principles, and rules for judicious use of technological hardware and software.
- 5.7 Take advantage of best and relevant practices in game technology in the development of educational technology, and follow rigorous rules of scientific and educational research to validate such technology for the purposes set in the corresponding pedagogical frameworks and curricula.
- 5.8 Let students and teachers have a significant voice in setting the specifications of educational technology, and engage them actively in research leading to the development and validation of such technology.
- 5.9 Bridge the technological gap between teachers and students through appropriate pre-service and continuous in-service training and proper follow-up and support systems.
- 5.10 Make educational technology affordable to all schools and students and do not let it drive a wedge between those of different economic background.

6. *Education as a worthy profession*

Education, and especially K-12 teaching, must be a highly esteemed profession that highly dedicated and qualified university students consider worth getting into.

- 6.1 Educators, and especially K-12 teachers, are the prime agents of students' mental development (and physical development in certain respects), and they determine to a large extent the degree to which students develop their potentials and thus the quality of life they will eventually be able to afford and of their contribution to national product and pride.
- 6.2 Educators, and especially K-12 teachers, must be highly esteemed in society as leading figures, selected accordingly, trained in high quality institutions, and afforded work conditions that are attractive of high competence and conducive for continuous professional development and performance improvement.
- 6.3 High quality standards must govern pre-service and in-service education of teachers, administrators and other workers in the educational sector, especially the establishment and governance of tertiary institutions that offer such education.
- 6.4 Teachers must have the competence and authority to run their classes as they deem it appropriate to their students' potentials, needs, and interests, and they must not be demeaned to mere conveyor belts or transmission channels that blindly transfer canned knowledge to passive recipients or consumers.

6.5 School administrators must have the competence and authority to run their schools as they deem it appropriate with their teachers and community, and to duly evaluate, promote, and compensate teachers and all other school personnel in accordance with national standards and regulations.

The following measures should be taken accordingly:

6.6 Enforce national laws and regulations that turn K-12 education into a worthy and highly esteemed profession that attracts highly competent and caring people and keeps away university freshmen for whom becoming an educator is not a prime choice and university graduates who do not have an education major.

6.7 Enforce national laws and regulations evenly at all pre-service preparation and training institutions, and ensure that all K-12 educators get the same high quality pre-service education with due emphasis on clinical practice at appropriately structured and managed K-12 schools.

6.8 Institute the culture of continuous professional development (CPD) at K-12 schools and beyond, and enforce laws and regulations that make CPD a condition for promotion and pay raise.

6.9 Regulate teachers' syndicate like many others' (e.g., physicians, engineers, attorneys) to mandate and oversee the implementation of all professional matters, from induction into the profession to work compensation, fringe benefits, and retirement.

6.10 Let accomplished teachers and school administrators take a lead in educational reform in all respects and at all levels, from educational policy and legislation to curriculum design, deployment, and continuous evaluation and regulation.

Teaching must be a highly valued and compensated profession that attracts highly dedicated and competent people to be trained as leaders in high quality institutions with regulated clinical practice, and systematically informed and supported while in-service for continuous professional development.

7. Systemic education

Education must be conceived and managed in all respects and at all levels through a set of interacting dynamic systems of new structural and operational premises and concepts.

7.1 Education is a human and social enterprise that caters to individuals and communities that are systemic by nature, individually and collectively, i.e., that are interacting systems made of interacting components to serve specific purposes and bring about emergent properties and synergetic functions that no system (or system component) can have alone or bring about on its own.

7.2 Education must be systemic, and not a top-down or command-and-control enterprise, in order to conform to whom and what it caters to, and especially to empower students who are systemic by nature, from brain to a whole person, to readily engage with every person and thing they come across in natural systemic, efficient, and productive ways.

- 7.3 Systemic education must be carried out by systemic learning agents (teachers, administrators, parents, etc.) at systemic schools where all actors, students included, interact with each other and with various sectors in the community, other schools and universities included, for the purpose of bringing about systemic citizens with 4P profiles.
- 7.4 Under a systemic perspective, all players in education must share power and distribute responsibility as co-owners and true partners of an educational enterprise that serves national and local purposes, and local authorities and learning agents must be relatively autonomous in deciding and carrying out all pedagogical, curricular, structural, and operational matters related to their individual schools.
- 7.5 Systemic education must be carried out under systemic pedagogical frameworks that ensure continuity across various grade levels and mandate experiential learning in systemic learning ecologies for implementing systemic cross-disciplinary curricula whereby traditionally distinct fields and disciplines converge in the make-up of dynamic systems related to the job market and various other aspects of everyday life.

The following measures should be taken accordingly:

- 7.6 Adopt new, systemic concepts of educational system, school, curriculum, student, teacher, principal, and all other actors and entities involved in education, that serve best and maintain due balance between national and local goals and aspirations.
- 7.7 Enforce true systemic governance at various levels of the educational system whereby all actors, especially teachers, school administrators, and local authorities, are entrusted with the broad mandates necessary to serve the potentials, needs, and aspirations of individual students and their own communities in close collaboration with each other, and with parents and various stakeholders in these communities.
- 7.8 Institute systemic platforms to bring all actors systematically together for collaborative and cooperative ventures that critically benefit from well-established best practices around the globe, and put at their disposal viable communication and exchange mechanisms with all data necessary for informed and efficient decisions and propitious continuous professional and institutional development.
- 7.9 Put together and sustain viable local and national monitoring, feedback, and support mechanisms – and not mere inspection and accountability terms and protocols – for continuous evaluation, regulation, and improvement of various practices and outcomes at different levels of the educational system, and reward actors and schools that come up with efficacious and efficient, creative and innovative practices and initiatives.
- 7.10 Dispose of all obstacles and adverse incentives, like rigid mandates and national diplomas based on single sets of state exams, that prevent authentic, efficient instruction, sustainable meaningful learning, and the development of 21st century systemic, creative, and innovative global citizens.

Policy and decision makers must be visionary, audacious, and competent enough to break up with the current educational system and stop improvising unsubstantiated and hodge-podge measures, importing latest fads blindly, and sneaking in foreign programs and diplomas that are grounded in traditional pedagogy and that bring no significant added value to our education.

The Lebanese educational system is outdated in its philosophy, structure and governance (which by no means are systemic), curricula, state exit exams and diplomas, school mission and foundations, teacher education and certification, and various other aspects that the said system is about and mandates. The system cannot be reformed by continuously improvising unsubstantiated and hodge-podge measures, blindly importing latest fads, or sneaking in foreign programs and diplomas that are grounded in traditional pedagogy and that bring no significant added value to our education. Long due reform of the system should be insightful and incisive, thorough and comprehensive, in both pedagogical and organizational respects to come about as authentically as it should, and it would require radical and substantiated measures in all respects and at levels.

There is no silver bullet and no single, universal fix to reform education overnight. Yet, with a clear vision, far and keen sighted strategic planning, and unwavering determination, the aspired authentic reform can be realistically conceived and gradually carried out in reasonable time and with affordable cost. Appropriate legislation should be passed and enforced, and regulatory and overseeing commissions created, in order to secure smooth implementation and gradual transition to the ultimate state. Informing the general public, raising their awareness, and soliciting their support in the spirit of collective responsibility, beforehand and during the course of reform, are critical for success. All sorts of media and concerned organizations need to be genuinely involved in this campaign through competent, knowledgeable, and committed members. The future of our students, the welfare of our entire population, and the dawn of the true nation we have been longing for are at stake.

It takes though visionary, audacious, and competent policy and decision makers to bring about authentic reform of education along a secured, viable roadmap, and overcome all hurdles along the road, especially the special interests of those who are profiting of the current system and the reluctance of traditional educators and educationists to break away from their inertia and comfort zone.

It takes those who branded it to live up to their motto: “بالتربية نبني” (*with Education we Build [and Foster]*).

A culture of systemism and excellence must reign in society, with mutual trust and distributed responsibility among all stakeholders, for educational reform to come about authentic and systemic, and leave schools and local authorities with enough leeway and autonomy to serve best their students, communities, and nation.