Our Education System Is Failing

What Must Decision- and Policy-Makers Do about It?

By Marwan Tarazi

Students enter a very risky and challenging world after graduation. The relentless and irresponsible depletion of Earth's natural resources is leading to rapid environmental degradation and will most certainly have direct consequences in terms of food security, increased water scarcity, and frequent environmental disasters that will impact everyone, everywhere. The region is expected to suffer massive job losses and further unemployment among youth due to a failure of educational systems to equip youth to join the "fourth industrial revolution," where AI, robotics, and various technological developments will be taking over traditional jobs at an exponentially increasing rate. The region's very limited capacity to capitalize on the new opportunities created by this digital economy or to compete in it means that youth will inevitably fall behind. This comes at a time when the region already faces devastating political challenges and instabilities.

This very gloomy outlook requires nothing less than an immediate transformation of the educational systems and/or access to high-quality education in order to support youth, their families, and future societies to navigate their way through a high-risk future. The Palestinian educational system continues to underperform considerably at every stage, from early childhood to elementary-level and higher education, and practically all stakeholders deal with this reality as "business as usual" – the government, educational leaders, teachers, parents, business and community leaders, and the students themselves.

A very strong indicator of this failure is the standard examination that the Ministry of Education conducts periodically for grades five, nine, and ten in science and math. The results reveal extremely low educational performance by school children as shown in the table.

Grade 9	Average grade for all students	Percentage of students who obtained grades that are:		
		below 50	between 50 and 70	above 70
Science	33%	81%	15%	3%
Math	32%	71%	25%	4%

■ "Primary Results of the National Assessment Study in Math and Science for the Fifth and Ninth Grades in the Scholastic Year 2017/2018," Palestinian Ministry of Education, available (in Arabic) at http://www.moehe.gov.ps/general-education/general-education/Brochures-and-Studies.

These figures have been more or less consistent for at least two decades, without any changes on the ground. Practically speaking, an average of 30 percent means that over half the students do not have the slightest clue about sciences or math. They probably can't even understand the questions on the exam, and some possibly can't even read them.

■ Photo by Mohammad Zaanoun.

This comes at a time and in an age when general scientific and mathematical knowledge is more essential than ever before. AI systems and smart devices are becoming increasingly part of our daily lives and increasingly smarter. They are actively interacting with us and our networks and influencing our decisions, thoughts, and behavior. We are becoming just another connected "device" within this supersmart global society; constantly monitored and bombarded with enormous amounts of conflicting information and data, much of which is designed to influence our decisions and manipulate our thinking. In order to maintain control of our lives

and decisions, we need to interact with this supersmart ecosystem scientifically, analytically, and responsibly. We must think like the experts who design these systems, understand the biases that may be built within, and know how and when to benefit from them and when to protect ourselves. And most importantly, we must know how not to be pushed aside by technology and become idle and irrelevant, but how to remain active intellectually, socially, politically, and economically while maintaining our values and humanity within this huge transition.

The current educational system is incapable of preparing our students for this reality. The standardized tests in math and science mentioned earlier indicate that our educational system is producing a population that is almost completely illiterate in science and math. To believe that it is possible to flip these learning outcomes during the last two years of school or university is to fool ourselves – and this is exactly what seems to be happening! Instead of taking radical corrective measures after at least two decades of consistent

failure, the Palestinian government seems to be dealing with this failure by masking the results of the final school matriculation exam (*tawjeehi*). In the 2019 *tawjeehi*, for example, the average grade for students that passed the scientific track was around 85 percent and in the humanities track, 75 percent. It is very difficult to find a reasonable justification for the fact that when only 1 percent of students obtain an average of 80 or above in the science and math exams in grade 9, the *tawjeehi* average of most students reaches 80 percent. The only reasonable explanation

is that the Ministry of Education prearranges for higher grades at scale. Many argue that it is better to mask the grades in order to give schoolchildren a chance to go to university and improve their chances for a better life. So they pass the buck to the universities … and the universities comply!

They accept students into the various academic programs, including sciences, engineering, and technology, knowing full well that that the basic educational system has failed to adequately qualify

them for such specializations. Universities know, however, that if one university raises its academic admissions standards, students will enroll in other universities, given that there is a greater supply of university seats than demand, and that there is a marginal difference between one academic program or university and another. Furthermore, universities have been absolutely unable to either raise tuition, because of powerful student unions, or cut down on expenses, because of powerful teacher unions. The Palestinian government has not lived up to its obligations and financial commitments to universities. So in order to make ends meet, universities decided to significantly increase the number of students per classroom. As a result, faculty members today are faced with classrooms bulging with students with low academic standing and bad attitudes towards learning. To make matters worse, if faculty members were to decide to raise their academic standards, they would be required to fail a significant percentage of the students, who would either create havoc for the teachers and the administration through the powerful student unions or go to other universities. Either option would seriously threaten the university's fragile sustainability/business model! Universities have thus opted to lower their standards to match those of the basic educational system. As expected, then, when students graduate from universities, most are either unable to find work or are forced to work as unskilled laborers in fields not related to their studies, including the 2,000 or so graduates who have specialized in computer and IT. In general, only about 400 of them find work in their

field. This is a very strong indicator of the quality of higher education, considering the unlimited local and global demand for *qualified* IT graduates.

Palestinian higher education today can be characterized mainly as a commodity being offered by a large number of providers that have high operating costs and very strong unions that resist any change. They offer products and services that are almost identical at a fixed price set by the government, with more supply than demand. Practically no one oversees or demands quality standards – neither the government nor the institutions nor the community at large. And all these institutions are either struggling to survive or under pressure from their investors to generate profit! It is an unregulated free market economy education with low-quality standards. There is no other higher educational track available locally. Any student who seeks higher standards will have to go abroad, and this option is only available to the privileged. Online higher education offered by international providers will soon become dominant in the local market.

The current status of Palestinian education MUST change, and there are urgent policy decisions that need to be taken immediately. These include four strategies.

A shift towards new learning paradigms in terms of content and learning approaches: Children must learn to think critically, learn independently, engage in research, develop a computational-thinking mindset, apply their knowledge in multiple contexts that are relevant to them, and most importantly, constantly innovate, create, and produce knowledge – because

this is what it will take for them to remain relevant and have an edge over intelligent machines. They must become aware of and literate with respect to data, AI, biotechnology, genetic engineering, coding, and other emerging disciplines. These topics must be integrated very early on within the educational system in a multidisciplinary manner, with strong emphasis on the humane aspects of these technologies and their impact on individuals, groups, and society, as well as related ethical considerations. Today, digital transformation demands changes to the classical educational jargon. STEM (science, technology, engineering, and math) education for example, in its "scientific" focus that targets "scientific minded" students (leaving the rest behind) is no longer an acceptable proposition. Teaching skills as stand-alone subjects is also no longer valid.

In addition, with all the technological advancement, ubiquitous connectivity, and artificial intelligence, and the related distractions that lead to shallow human interactions, super-stimulating gaming, readily available solutions and answers to almost any question, a tendency to conformity and ease of manipulation, etc., educational systems must ensure that the core essence of education is preserved even more diligently than before: deep thinking, questioning, debating, challenging, criticizing, developing intellectual opinions, philosophizing, etc.

Education must emphasize the often overlooked survival skills that include resilience in crisis management. Overpopulation, the depletion of natural resources, climate change, and the poverty gap that will grow exponentially as smart computers take over more and more jobs are serious factors that will necessarily lead to local, regional, and global crises and conflicts that will affect everyone. COVID-19 is a wake-up call for what is yet to come. Children need to learn how to live and be content with limited resources for short or extended periods of time. They need to know how to live when they are unconnected (in case of power or network disruption); how to survive and support each other within a stressed society and remain human; how to manage crises; how to lead a healthy life and be content with limited resources; and how to maintain physical and mental well-being.

Furthermore, the above-mentioned transformation also demands a transformation in the "service delivery" model. The concept of one standard learning pathway for all is completely outdated and no longer valid, e.g., the existing model. Technology provides unlimited access to education, formal and informal, anywhere, anytime, and for almost any skill or degree. The monopoly that ministries of education and universities have on education is very quickly eroding, first because the workplace no longer gives weight to academic degrees but rather to specific skills, knowledge, and attitudes that are assessed by the employers or the market (and not defined by degrees). Secondly, because technology and connectivity have made it easy to turn education into another data commodity that can and will be provided by global data giants such as Google, Facebook, and others. These firms will provide much more attractive, colorful, and appealing educational commodities that are more efficient and cheaper than our locally produced commodity, namely education, and much better aligned to the neoliberal market economy. If we Palestinians do not transform our educational models and delivery mechanisms and provide multiple learning pathways that make learning more relevant, interesting, and engaging, we will no longer have any say in what or how our children will learn. They will be swept away by a global educational system driven by large corporations and the values and the agendas that they promote.

The existing educational establishment has been completely unable to carry out any educational reforms, even within the traditional paradigm and even at a time when the political and economic conditions were significantly more favorable than what they are today. What is needed goes way beyond reform. There is a need to transform the educational system, and quickly, if we are to avert an almost certain social, economic, and political catastrophe – one that is even worse than what we currently face. The only way to do so is for educational ministries and educational institution leadership to open up and make room for others to step in and contribute to the transformation. This is necessary not only because they have failed to bring about any reforms in the past but also because the magnitude and rate of change that is needed to provide any future hope for a Palestinian educational system that includes a liberating Palestinian agenda demands the support and participation of everyone:

In any elections, educational transformation must be on the agenda of all candidates – because without transforming the educational system, the elected candidates will end up ruling an ignorant populace with huge unemployment rates, a poor economy, and massive social and political challenges. No politician would want to be in this situation!

educational institutions, all sector institutions (government, the private sector, and civil society), parents, and most importantly, the children themselves.

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