Don't be confused by Nobel

Declining education system is the real threat to our existence
Ehud Keinan

Great news: Only five years passed since the last Nobel Prize in Chemistry was awarded to an Israeli scientist. On Wednesday, Professor Ada Yonath joined the club, where Professors Aaron Ciechanover and Avram Hershko of the Technion are already members. Finance Minister, Dr. Yuval Steinitz, said a few days ago that maintaining the State of Israel’s scientific and technological superiority is his top priority. But before rushing to pat ourselves on the back, we should admit that these three Nobel Laureates have won the prize not because they are products of our education system, but rather, despite the Israeli government’s approach to scientific education.

Data published by the Ministry of Education show that in 2009 our high school system yielded 116,415 graduates. Only 9,362 of them studied some chemistry, 13,021 were exposed to biology, and 11,273 took physics classes. Because there is much overlap between these groups, the significance of these data is that over 80% of our high school graduates have never been exposed to any scientific knowledge. In other words, our education system produces citizens who are devoid of any knowledge in science, citizens who have no idea what is a molecule, what is energy, what is an electric current, how does a magnet work, what is electromagnetic radiation, what is a crystal, what is salt, acid, base, what is an amino acid, what is a protein, what is a living cell, what is our genetic material, how a laser work, and what makes the solar system - the list is endless.

The vast majority of Israeli citizens are inferior, in terms of scientific knowledge, to the citizens of South Korea, Japan, Hong Kong, Taiwan and Eastern Europe. We are rapidly approaching the current situation in developing countries, including our neighboring states. We are neither light unto the nations, nor beacon unto the Jews, nor candlelight unto Israelis; just nothing. All we have is darkness and plenty of groundless arrogance.

For the young and skeptic among us it is worth mentioning that in June 1981, two days before the 10th Knesset elections, senior Likud politician Yaakov Meridor, who was considered a realistic candidate to succeed Prime Minister Begin, announced a revolutionary invention in the field of energy production: "23 kilocalories produce 17 thousand kilocalories. It's like taking a regular household light bulb and that bulb produces sufficient energy to illuminate an entire city like Ramat Gan." Meridor said more: "Our invention is equal in importance to the invention of the wheel. The invention may make all the Arab oil wells unnecessary, and the Arabs will drink their oil if they like."

Ignorance affects our chances of survival
In a country where only few people have heard about the law of conservation of energy, a ruthless charlatan like Meridor cannot only enter the Knesset, but also join the cabinet as
minister of economy and determine the fate of Israel. Those who think that such a delusional story is extremely unlikely to reoccur should remember that in 1981, science studies were mandatory in Israeli high schools. Today the situation is much worse because in 2009, science is a luxury. In a country where most citizens do not know the difference between kilo calorie and kilo bandora, the number of charlatans and crooks will grow and all of them will enjoy increased income, fame and political strength.

The growing ignorance in Israel affects us not only as individuals, but also our chances to survive as society in this part of the world. It is hard to see how we can seriously deal with the Iranian threat when most citizens, including many of our politicians, army commanders and economic leaders do not know the difference between enriched uranium and a rich tycoon, or between plutonium and washing machine detergent. It is difficult to see how we can deal with complex problems when we can easily buy into all sorts of fraud and amazing nonsense, starting from “scientific evidence” that smoking is beneficial to health, through expensive food supplements, which will cause us to be younger, more beautiful, healthy and wise, through hundreds of wonderful methods of alternative medicine, which will save us from any sickness, to the Higher Light, which our sweet kids, the graduates of high schools and combat units, have discovered in their journeys around the world, from India to Cush.

Ignorance is a bad thing but it produces something much worse - misconception. Daniel Boorstin wrote in his book “The discoverers” that the Europeans could embark on their discoveries centuries before Columbus because they possessed the technological capabilities to do so. Their great obstacle was not ignorance but the illusion of knowledge misconception. We have been paying dearly for misconceptions, and we are likely to continue paying tenfold in the future.

Our education system produces intellectually disabled citizens. Most of the future citizens of Israel are rolling out of our school gates into the 21st century on wheelchairs, so to speak. This is the real threat to Israel's existence, a threat which Israel’s greatest enemies did not even dream of.

Still, there is reason for cautious optimism. The current government is blessed with a new minister of education, who is very strong politically, and is likely to sit one day in the PM’s chair. This reality, which is quite rare in the political landscape of Israel, raises expectations and hopes that the situation might change. Indeed, this could be the finest hour of our Education Minister, Mr. Gideon Saar.

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