

Solving Global Inequality in Education by Developing “International Basic Education Standards”

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Education is indeed the most important and powerful tool that one has to benefit from at all stages in life from cradle to grave. It is a fundamental human right, promotes individual's freedom, enhances quality of life, and in particular assists in solving national, regional and global inequality. The inequality in education is mainly due to unavailability and/or uneven distribution of academic resources in part or as a whole in all stages of a national education cycle. Having qualified and experienced teachers, effective education organizations, availability of books, and relevant tools and methodologies are some of the main requirements of academic resources. In particular, lack of awareness of high government officials and decision makers with no or fragmented provision of priority to education at all levels of a national education cycle, among other things, is one of the main causes of national, regional and global inequality.

While an effective national education is widely recognized in most countries, lack of support for consistent development and implementation of efficient education requirements and programs by those concerned among other things has developed inequality at all education levels, in particular in most developing countries. From the 17 Sustainable Development Goals (SDG) ratified by the United Nations General Assembly in 2015 on which 2019 Report has been recently issued [1], quality education (aiming to ensure inclusive and equitable quality education and promoting lifelong learning opportunities for all) and reducing inequalities (within and among countries) have been two important SDGs. In this context, it is important to learn that Grant M [2] has developed a data base and Friedman J, et al. [3] has developed a model to project inequalities in education around the world to 2030 [2,3], or other mechanisms to be developed in order to standardize education requirements worldwide.

Grant M [2] in order to assess the SDG for education by 2030 assembled a database of 3,180 nationally representative censuses and surveys from 195 nations and territories, as a tool to achieve the goal of the project. Also, Friedman J, et al. [3] developed a model to assess within-country distribution of years of schooling, and used this model

to explore educational inequality since 1970 and to forecast progress towards the education-related 2030 SDG targets. They presented distributions and inequality metrics to provide frameworks that can be used to track the progress of each country towards the SDG targets and levels of inequality over time. In particular, Friedman J, et al. [3] have shown that the world is largely on track to achieve near-universal primary education by 2030, but substantial challenges remain in the completion rates for secondary and tertiary education [2].

The above-stated developments however require to be advanced also in higher education areas through university degrees as well as professional and public education and training. In fact, significant inequality exists at university bachelor's degree levels even in the developed countries. For example, due to significant inequality in university undergraduate education quality in European countries, the Bologna Process has created the European Higher Education Area under the Lisbon Recognition Convention [4]. This is being achieved through a series of ministerial meetings and agreements between European countries to ensure comparability in the standards and quality of higher-education, the last gathering of which was held in Paris in 2018 [4]. The inequality in the university education quality is indeed highly serious in many developing countries. On the other hand, inequality exists in education at each stage of life in a national education cycle even in developed countries [5,6].

Solving inequalities in the quality at all levels of education in a national education cycle in any county worldwide requires attention and efforts by developing effective mechanisms, programs, and approaches for advancing fundamental education standards to be developed and implemented [5,6]. While education standards exist in most developed countries, they have been lagged behind in most developing countries. Even in developed countries, education standards are rather partitioned and fragmented with no continuity and connection in the national education cycle. This shortcoming is in particular enhanced in many developing countries which is believed to be the main cause of a country's lagging behind on economy,



Figure 1: A model representing the Education Standards and Standards Education Process in a National Education Cycle.

health care, adequate social welfares and quality of life. Presently, the ISO 9001:2015 seem being the main international standards using some standard management requirements to any organization including those involved in training or certifying others [7]. However, an international education standards document (s) to standardize education at national, regional and international levels seems missing.

In order to solve the global inequality in education, an international document, as I call it “International Basic Education Standards” (IBES), is required to be developed and established by an international standards organization and ratified by its member states [5,6]. The IBES is an international standards document which is proposed to be developed by relevant international organization (s) such as International Standards Organization together with other relevant organizations. Such a document may include all the fundamental and general requirements of items to be standardized in education such as qualified and experienced teachers, administration and administrative procedures, effective educational organizations, staff education and training, space requirements, etc. at all levels of a national education cycle [5,6].

The IBES can be used as a blueprint for developing “National Basic Education Standards” (NBES) to be promulgated by the parliament in each country by foreseeing a National Education Standards Authority (NESA) to be established [5,6]. The NBES when established can be used to establish the NESA through an Education Standards and Standards Education (ESSE) Process in National Education Cycle [5,6]. This national education cycle expands from early mother care, embryo care, nursery school, kindergarten, primary school, high school, university, post graduate studies, vocational training, and public training, and return back to the cycle again on which a model representing the cycle is shown in figure 1.

Being a faculty member at the Amirkabir University of Technology in Iran with half a century education development and efforts at national, regional and international levels and also associate member of the Iranian Academy of Sciences, I have recently hypothesized development of the IBES and the NBES to be established and implemented through the ESSE process in national education cycle at a National Education Standards Authority in order to harmonize education and training of individuals in a standardized manner from

cradle to grave [5,6]. On this topic, the 1st National Conference on ESSE Process in the National Education Cycle at the Iran Academy of Sciences was organized by me at the Iran Academy of Sciences in Tehran from November 26 to 27, 2014, as supported and represented by all national organizations involved in education and training in different levels of national education cycle [5,6].

A similar major effort experienced internationally has been developing and implementing the “International Basic Safety Standards (BSS)” for Radiation Protection and Safety of Radiation Sources by the International Atomic Energy Agency (IAEA) in cooperation with other relevant international organizations in its original version in 1996 and its newer version in 2014 [8]. The “lessons learned and experiences gained” from this international standards model can assist in better understanding of the education standards development concepts proposed here. These IAEA fundamentals, guidelines and requirements of the BSS [8], have provided blueprints for establishing national standardized radiation safety infrastructures in over 100 IAEA Member States. In fact, I have been a part in this highly successful endeavor at the IAEA as an international expert and/or regional manager on establishing national radiation protection infrastructures in the member states for years during which I developed and implemented a policy paper on education and training in the year 2000 in order to meet the relevant requirements of the stated standards in the Member States by 2020. The BSS also served as basic safety standards for developing national radiation protection standards as well as IAEA regulatory and technical documents to facilitate meeting the requirements; a highly successful IAEA achievement in its member states which seems to have been partially instrumental in being awarded the IAEA Noble Prize in 2005.

The author strongly believes that the IBES if established by relevant international organizations and in turn the NBES is developed by each country, promulgated, and implemented through the ESSE process in the national education cycle can be highly instrumental in solving many national, regional and global inequalities in education. In particular such efforts standardize individuals’ knowledge, ensure sustainable development, and promote quality of life and welfare worldwide. It also provides individuals to study and work anywhere

in the world within standard criteria, and provides mutual understanding and cooperation between nations to promote human welfare and peace. It is understood that this is a highly important international, regional and national endeavor requiring a long time to be gradually achieved for which starting it today is better than tomorrow.

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