

New Perspective for the Philosophy of Education: Education Components, Education System Administration, Ideal Education Construction, and Engineering Education

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In this work, history of education is expressed and evaluated generally/specifically by considering the related concepts. Definition and types of education explained with specific approaches in the literature. Early childhood development briefly defined and the correlation with education systems outlined. Five education evolution phases expressed with its basic concepts. The meaning and importance of philosophy of education are then defined according to the general approaches. Some of the important philosophers of education and their philosophical/scientific interests are compared and expressed with a table. New perspective of the philosophy generally defined by considering new era philosophy, eight basic philosophies, and hybrid philosophies. R-Philosophy, R-Science, R-Information, R-Education, and R-System new disciplines are shortly expressed. New perspective for the philosophy of education defined as sub-branch of philosophy of information and explained regarding the basic information on the related theories. 17 education components are defined for continuable/sustainable education, and efficiency, effective use, and improvement/development of each of the components expressed specifically. Performance of the education components for a country-X is given with a figure as an example. Relation between education, values, and basic senses is interpreted. Evaluation of the education due to 17 specific perspectives is generally mentioned. Then, evaluation of the education from philosophical, academic, and administration perspectives is specifically explained. Continuable/sustainable education administration system for a world country is defined with figures. Education system administration is defined with bloc diagrams accordingly. Ideal political/nonpolitical education construction for a progressive world country is outlined with 5x5 table, and related explanations done. Then importance of education due to 39 subjects of services is expressed with a table. Categories of education programs outlined. Digital education & digital tools and engineering education and related five industry evolution phases are defined as special education programs. New proposal is given for Education 5.0 and Engineering Education 5.0.

Keywords: philosophy of education, philosophy of information, philosophy of science, education components, information science(s), education systems, education system administration, ideal education construction, science education, engineering education

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Introduction

In general, defining subjects, disciplines, and/or branches may be sufficient for some people, experts, or scientists. This may also be good or correct within the scope of “science for science’s” sake. However, it is important to consider all the people that can be involved with the subjects to be able to give necessary and sufficient information to all related sides.

In general point of view, subject of education can be considered as a discipline, as a branch, as a concept, as a doctrine, as a teaching, as a life perspective, as a system where necessary.

In one point of view, history of education may be important for some people, for some others the historical development of education, the date education started, the subject in which education started, the branch/discipline in which education started, who gave the first education, what the education effects, who supported the education, who acted against education, and/or whether education was available in all subjects, and other questions may be important.

In classical perspective, one can ask the following questions regarding the starting of education: why education started, when education started, where education started, about what the education started, who started the education, how education started. It is possible to extend these questions and questioning to a wider spectrum.

Here, author evaluated almost all of these points of view through his theoretical knowledge and practical experiences and considered to start his evaluation from expressing the importance of education, and then continued with the concept of history of education.

The subject of education is important and necessary for sustainable education, sustainable life, sustainable management, sustainable control, sharing, justice, balance, continuity, social development, technological development and for many other sustainable purposes in the family, group, society, country, and in the world. In this context, author considered that, taking into account the purposes of science, purposes of education and of all other disciplines is good education approach for more detailed evaluation. Although the aims he takes into consideration are clearly stated in his other works, the author foresees that touching upon the issues from an educational perspective here is a requirement of his philosophy of education.

In the first section, the history of education, different definitions and meanings of education and the evolution phases of education are considered as introductory information in this context. The meaning and importance of the subject of this study is further expressed through studies/works that are reconstructed and/or newly defined in other following sections.

History of Education

It is meaningful to examine the definition, meaning, and history of education in the literature to evaluate the related subjects, concepts, disciplines and to perform new perspectives by considering this information as well.

With this respect, author evaluated the literature generally/specifically and noticed that there are different, various, similar approaches about history of education.

In one point of view, the history of education extends at least as far back as the first written records recovered from ancient civilizations in the world. However, as of today, historical studies have generally covered almost every nation.

There are some handbooks about history of education, where these handbooks offered a global perspective on the historical development of educational institutions, systems of schooling, ideas about education, and educational experiences.

Besides this, history of education is defined by some authors as a specialized branch of study that examines the development and institutionalization of educational systems.

Some thinkers/experts defined the history of education as a dynamic saga of human intellectual evolution, societal changes, and the relentless pursuit of knowledge.

Some other experts proposed that history of education is the history of writing (Hoskin, 1993), where some others considered history of education as the history of civilization.

Civilization is defined as a term applied to any society which has developed a writing system, government, production of surplus food, division of labour, and urbanization, where these concepts are so called characteristics/components of civilization.

The term “civilization” is considered as difficult to define because not all “civilizations” include every one of the above facets. The term is often used by some authors, therefore, to suggest a highly developed culture.

The term “civilization” deeply related with the concept/term “civil”, both derived from the Latin word *civis* (“citizen”). The word “civil” means: (a) relating to ordinary citizens and their concerns, as distinct from military or ecclesiastical matters, (b) courteous and polite, (c) not military or religious, but relating to the ordinary people of a country, (d) relating to legal disagreements between people or businesses, rather than criminal activities, (e) caring about art, science, government, people’s well-being, etc., (f) relating to laws that describe a person’s rights rather than to laws about crime, (g) disarmament, being opposite of military.

Besides this, the word “civilization” has following meanings in the literature: (a) the condition that exists when people have developed effective ways of organizing a society and care about art, science, etc., (b) a particular well-organized and developed society, (c) a place that has the things that modern cities and towns have, (d) others.

The term “civilization” is also specifically used by some historians and anthropologists to categorize certain large-scale, complex societies, distinct from smaller, less complex societies like hunter-gatherer groups.

However, in one point of view, education is not dependent on size/scale of the community involved, one person, one group, one community, one country or the world can be targeted education/training audience.

One person or a small group can be more modern or developed among others. Here, one of the important things is to have necessary and sufficient numbers of educated people for all related disciplines, or to have all the people in a group, in a community, in a country, in the world be educated in short, mid, long period systematically for good and/or correct sustainable administration (Ramiz, 2010; 2016c).

In one point of view, the civilization concept proposed to remove, or suppress, or change, or decline, or decrease some subjects, branches, actions, behaviours, statues, cases, values or in general manner some concepts from the person, group and/or community life.

However, when looking at past history from a general perspective, it can be seen that concepts such as “security”, “protection”, “defense”, “attack”, “action”, “safety”, “development” etc. are potential effects/values/concepts that are always taken into account in human life, that is, these values/concepts/disciplines cannot be removed from the life of a person, group, community, or country. Author defined person’s nature to express the possible interactions in human life (Ramiz, 2025c).

As of today, there is a concept of developed countries or advanced countries, where such countries are considered that has a high quality of life, developed economy, and advanced technological infrastructure relative to other less industrialized nations. According to the International Monetary Fund (IMF) and United Nations (UN), there are developed countries, developing countries and least developed countries. Also, there are

Organization for Economic Co-operation and Development (OECD) (38 countries), Group of Seven (G7-Countries; an informal forum of seven advanced economies, intergovernmental political and economic forum), Group of Twenty (G20-Countries; brings together the countries with the largest economies in the world). G20 comprises 19 countries (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Türkiye, United Kingdom and United States) and two regional bodies: the European Union (EU) and the African Union (as of 2023).

Each of these countries' development history, alone or together with other unions, is specific subjects to study. Here, author considered EU as an example where it is taken as one of the modern civilization regions as of 2025 by some experts. It has been observed that some EU officials have made changes and displayed variable attitudes throughout their historical periods (1945-2025). However, according to EU official records there has been development always through the following periods (1945-1959 period, 1960-1969 period, 1970-1979 period, 1980-1989 period, 1990-1999 period, 2000-2009 period, 2010-2019 period, 2020-today). On the other hand, when some experts focus on the security, defense, etc. subjects mentioned above, one can notice that some EU authorities advocated the removal of borders, the reduction of armaments, the reduction of the military army size/number, and/or the transfer of military power to someone else. Today, as of 2025, they advocated the establishment of a powerful EU army, powerful EU security, powerful EU defense, etc. with "some" reasons.

Author made a new synthesis of all political/non-political subjects in other works (Ramiz, 2010; 2015; 2016d) to evaluate and propose solutions to all politic/non-politic problems, scientific/non-scientific, philosophical/non-philosophical, religious/non-religious, economic/non-economic, etc. problems in one point of view.

As a result of his R-Synthesis, the author defined the necessary and mandatory 39 subjects of services for a world country. This way, people of the country can learn that they must always live by these topics and related values and can understand the importance of passing this on from generation to generation.

In order to better evaluate where the world has come from the past to the present, it makes sense to look at the first civilizations in history.

In the literature, the first civilizations are expressed as Göbekli Tepe Civilization (Turkey region, 10000 BC), Indus Valley Civilization (3300 BC-1300 BC), Sumerian Civilization (3100 BC-539 BC), Mesopotamia Civilization (10000 BC-3 AD), Egyptian Civilization (3000 BC-700 AD), Ancient India Civilization (3300 BC), China Civilization (2070 BC-1600 BC), Ancient Peru Civilization (1200BC), Ancient Mesoamerica Civilization (1200 BC). However, it is also known that not all of the civilizations of that period in these shadows have been able to be carried over to today's time with some reasons.

The construction of cities has always been considered a primary requirement for a culture to be regarded as a civilization.

Some scientists/thinkers considered that the history of civilization began with the rise of agriculture and settled communities, leading to the development of complex societies in river valleys like Mesopotamia, Egypt, the Indus Valley, and China.

Here what some of these scientists/thinkers do is to combine every subject under the concept/term/word of "civilization" in one point of view.

According to these points of view, these early civilizations shared common features such as cities, writing, social structures, and central governments, and contributed advancements like the wheel, writing, and monumental architecture. Here, the correct thing is, over time, civilizations expanded and evolved, with different

paths emerging in places like ancient Greece and Rome, and later with transformative periods such as the Renaissance, Scientific Revolution and Industrial Revolution.

The good and/or correct term/word is defined by the author as result of the R-Synthesis to express these founding, establishments, improvements, developments, changes, variations, and other cases, by considering all disciplines/branches including new perspective for philosophy, so that one common language in philosophy and science could be developed that is use and understandable same in all branches of science, and of philosophy.

Author considered the word/term “progression” and defined “philosophy of progression” as result of the R-Synthesis to cover all subjects/disciplines regarding the starting and development that human, group, community/society has involved/interested/faced. Here progression is defined by the author as multi-perspective, that is, hybrid progression, which is considered complementary to continuable/sustainable development in all disciplines. With this respect, author defined 39 subjects of services (Ramiz, 2010; 2015; others) where each world country should consider for the progression, where one can name it as modern civilization due to old point of view of some experts.

Author considered philosophy of progression, where progression in 39 subjects of services is taken as progress in hybrid structures, in one point of view. Also, author defined philosophy of progression as 8D Hybrid Philosophy of eight basic philosophies including philosophy of information as well. Here, eight basic philosophies (Ramiz, 2016d) are considered at the same time for the goods and benefits of the humans, groups, community, society, country, and for the world simultaneously. In this context, education, philosophy of education, and history of education are one of the important concepts.

Author evaluated some literature sources about the history of education and related contents, interaction, progression and effects of education to people, communities, cultures, and countries in the world. With this respect, *Britannica*’s assessment outline is “meaningful” outline that covers the following subjects, where it summarizes these influences/interactions in general manner: (a) Education in Old Egypt, Mesopotamia, and North China, (b) Education in Maya, Aztecs, and Incas, (c) Education in Ancient India, (d) Education in Ancient China, (e) Education in Ancient Hebrews, (f) Education in Ancient Greeks, (g) Education in Ancient Romans, (h) Education in Persian, Byzantine (East Rome), early Russian, and Islamic civilizations, (i) Education in Europe in the Middle Ages, (j) Education in Asian civilizations: 700 AD to the eve of Western influence, (k) Education during European Renaissance and Reformation, (l) European education in the 17th and 18th centuries, (m) European offshoots in the New World, (n) Western education in the 19th century, (o) The spread of Western educational practices to Asian countries, (p) Education in the 20th century, (q) Revolutionary patterns of education, (r) Patterns of education in non-Western or developing countries, (s) General influences and policies of the colonial powers on education, (t) Global trends in education—the development and growth of national education systems, (u) Global commitments to education and equality of opportunity; access to education, implications for socioeconomic status, social consequences of education in developing countries, the role of the state, social and family interaction, alternative forms of education.

Author expressed shortly the education perspectives in the old/past Egypt, Mesopotamia, and North China below, to give an idea about its historical situation:

Egyptian culture and education were preserved and controlled chiefly by the priests, a powerful intellectual elite in the Egyptian theocracy who also served as the political bulwarks by preventing cultural diversity. The humanities as well as such practical subjects as science, medicine, mathematics and geometry were in the hands

of the priests, who taught in formal schools. Vocational skills relating to such fields as architecture, engineering and sculpture were generally transmitted outside the context of formal schooling.

As a civilization contemporary with Egyptian civilization, it is expressed that Mesopotamia developed education quite similar to that of its counterpart with respect to its purpose and training. Formal education was practical and aimed to train scribes and priests. It extended from basic reading, writing, and religion to higher learning in law, medicine, and astrology. The center of intellectual activity and training was the library, which was usually housed in a temple under the supervision of influential priests.

In North China, the civilization of which began with the emergence of the Shang era according to some authors, complex educational practices were in effect at a very early date. Chinese ancient formal education was distinguished by its markedly secular and moral character. Its paramount purpose was to develop a sense of moral sensitivity and duty toward people and the state. Even in the early civilizational stage, harmonious human relations, rituals, and music formed the curriculum according to some authors.

Today, some people, experts, scientists, philosophers are interested in with the development of education in all 243 countries/states/territories in the world.

Today, in 2025s, one can talk about the top countries in terms of quality and performance of education which are listed as follows: Singapore, UK, USA, Australia, Finland, Canada, Denmark, Germany, and others.

However, things that need to be evaluated are developed countries, happy societies, countries with good income levels, countries that are effective according to their leading sectors, and other concepts/subjects that can be considered related to the purpose of education.

A meaningful answer to this assessment is that education will be of high quality and high performance in places (in classroom, school and/or in country) where the “educational components” are good and/or correct. In this way, successful students and graduates will have the possibility to work in many countries, companies, associations and institutions around the world.

In one point of view, author proposed new perspective for philosophy of education in this work to provide good and/or correct values for educational components, and to improve/develop some/most/all educational components, and other related disciplines/systems depending on the interested subjects in human life.

Author defined “education” as part of the “information sciences”, which is one of the academic disciplines (Ramiz, 2016e; 2025c), and information sciences are defined as one of the basic sciences and also as one of the important concepts of philosophy of information.

Here, author considered philosophy of education related to philosophy of progression (1st degree) generally, and specifically related with philosophy of information, philosophy of science, philosophy of social sciences (2nd degree), also related with philosophy of language, philosophy of teaching, philosophy of library science, philosophy of writing, (3rd degree), and so on. Besides this, philosophy of information is defined as complementary with other seven basic philosophies (Ramiz, 2016d; 2025c).

In this work, author considered the definitions, meanings, theories, and historical developments of the disciplines and concepts which are related with education. With this respect, history of education is considered “related/interacted” with: history of writing, history of language, history of teaching, history of libraries, history of agriculture, history of cultures, history of traditions, history of sciences, history of medicine, history of chemistry, history of alchemy, history of metallurgy, history of family, history of wooden art, history of commerce, history of trade, history of money, history of publishing, history of sports, history of engineering,

history of religions, history of law, and with history of military. Here, starting and variations related with all these concepts/disciplines of history are considered to be effective both in education life of humans and progression process of human, together and/or separately.

These are so called interactive disciplines related to the history of education that include, carry, and apply the concept of education within its scope and functioning process.

To express these historical effects/interactions in general manner, author briefly mentioned about some of these historical concepts below. Be note that, all of the above historical concepts are important where these branches of history contain, transmit, and/or process information and education in their clouds of ideas as well.

History of writing. It traces the development of writing systems and how their use transformed and was transformed by different societies. The history of writing began around the late 4th millennium BC (3400-3200 BC), with the earliest systems developing around the same time in Mesopotamia and Egypt according to some authors. The use of writing—as well as the resulting phenomena of literacy and literary culture in some historical instances—has had myriad social and psychological consequences. Each historical invention of writing emerged from systems of proto-writing that used ideographic and mnemonic symbols but were not capable of fully recording spoken language. True writing, where the content of linguistic utterances can be accurately reconstructed by later readers, is a later development. As proto-writing is not capable of fully reflecting the grammar and lexicon used in languages, it is often only capable of encoding broad or imprecise information. Early uses of writing included documenting agricultural transactions and contracts, but it was soon used in the areas of finance, religion, government, and law. Writing allowed the spread of these social modalities and their associated knowledge, and ultimately the further centralization of political power.

History of language. It includes the evolution, divergence, and development of languages throughout time, as reconstructed based on glottochronology (the use of statistical data to date the divergence of languages from their common sources), comparative linguistics, written records, and other historical linguistics techniques. The origin of language is a hotly contested topic, with some languages tentatively traced back to the Paleolithic (3.3 million BC-10000 BC). However, archaeological and written records only extend the history of language into ancient times and the Neolithic (around 10000 BC).

History of libraries. It is considered to be started with the first efforts to organize collections of documents. Topics of interest include accessibility of the collection, acquisition of materials, arrangement and finding tools, the book trade, the influence of the physical properties of the different writing materials, language distribution, role in education, rates of literacy, budgets, staffing, libraries for targeted audiences, architectural merit, patterns of usage, and the role of libraries in a nation's cultural heritage, and the role of government, church or private sponsorship. Computerization and digitization arose from the 1960s, and changed many aspects of libraries. The first libraries consisted of archives of the earliest form of writing—the clay tablets in cuneiform script discovered in Ebla in present-day Syria; and in temple rooms in Sumer, present-day Iraq. In the Ancient Near East, clay tablets were used as a writing medium, especially for writing in cuneiform, throughout the Bronze Age and well into the Iron Age. The history of libraries considered to begin with the earliest records of organized document collections, dating back to around 2600 BC in ancient Mesopotamia with the Sumerian civilization.

History of agriculture. It is stated that agriculture began independently in different parts of the world, and included a diverse range of taxa. At least 11 separate regions of the old and new world were involved as independent centers of origin. The development of agriculture about 12,000 years ago, around 10000 BC,

changed the way humans lived. They switched from nomadic hunter-gatherer lifestyles to permanent settlements and farming.

History of science. According to some authors, it covers the development of science from ancient times to the present. It encompasses all three major branches of science so called natural sciences*, social sciences*, and formal sciences*. Protoscience, early sciences, and natural philosophies such as alchemy and astrology that existed during the Bronze Age, Iron Age, classical antiquity and the Middle Ages, are considered to be declined during the early modern period after the establishment of formal disciplines of science in the Age of Enlightenment.

History of engineering. The concept of engineering has existed since ancient times as humans devised fundamental inventions such as the pulley, lever, and wheel. Each of these inventions is consistent with the modern definition of engineering, exploiting basic mechanical principles to develop useful tools and objects. The ziggurats of Mesopotamia, the persepolic in Iran, the pyramids and Pharos of Alexandria in ancient Egypt, cities of the Indus Valley civilization, the Acropolis and Panthenon in ancient Greece, the aqueducts, Via Appia and Colosseum in the Roman Empire, Teotihuacán, the cities and pyramids of the Mayan, Inca and Aztec Empires, and the Great Wall of China, among many others, stand as a testament to the ingenuity and skill of the ancient civil and military engineers.

History of law. It is defined as the study of how law has evolved and why it has changed. History of law, so called Legal history, is closely connected to the development of civilizations and operates in the wider context of social history. Certain jurists and historians of legal process have seen legal history as the recording of the evolution of laws and the technical explanation of how these laws have evolved with the view of better understanding the origins of various legal concepts; some consider legal history a branch of intellectual history.

History of medicine. This discipline tracks the evolution of human societies' approach to health, illness, and injury ranging from prehistory to the modern day, the events that shape these approaches, and their impact on populations. Prehistoric medicine is defined as a field of study focused on understanding the use of medicinal plants, healing practices, illnesses, and wellness of humans before written records existed. Although styled prehistoric "medicine", prehistoric healthcare practices were vastly different from what we understand medicine to be in the present era and more accurately refers to studies and exploration of early healing practices.

History of chemistry. It represents a time span from ancient history to the present. By 1000 BC, civilizations used technologies that would eventually form the basis of the various branches of chemistry. Examples include the discovery of fire, extracting metals from ores, making pottery and glazes, fermenting beer and wine, extracting chemicals from plants for medicine and perfume, rendering fat into soap, making glass, and making alloys like bronze.

History of metallurgy. It began around 6000 BC with the discovery of native metals like gold and copper in regions like southeastern Turkey (Türkiye). The earliest metal employed by humans appears to be gold, which can be found "native". Small amounts of natural gold, dating to the late Paleolithic period, 40,000 BC, have been found in Spanish caves. Silver, copper, tin, and meteoric iron can also be found in native form, allowing a limited amount of metalworking in early cultures. Early cold metallurgy, using native copper not melted from mineral has been documented at sites in Anatolia and at the site of Tell Maghzaliyah in Iraq, dating from the 6000-5000 BC.

Even though the starting dates of studies related to some of these above history disciplines are different, and different processes are going through simultaneously for some disciplines, it can be said that there were

simultaneous and hybrid designs, productions and trainings in these disciplines in certain periods and in certain places.

There are various ways, or methods of evaluating the subjects and interactions regarding the disciplines and branches, however author considered and applied new synthesis for his works.

Author considered R-Synthesis (Ramiz, 2010; 2016d) as a method for the evaluation of the philosophy, of all related branches of philosophy, of science, of all related branches of science, of engineering and for all other disciplines defined in the past. This synthesis is different from the one which is defined in the past literature.

R-Synthesis includes general/specific perspective with eight categories, 21-dimensions, 12 general subjects (with related scope and contents), and theoretical and experienced information for the past 12,000 years (Bucaille, 1973; Gültay, 2005; Yücel, 1985; others).

Author explained this study by taking into account his own theoretical information and practical experiences about education and all other disciplines, and with the analysis and synthesis he made.

Here, in this work “R-abcede... xyz” are used to express that they are considered by the author and they are new defined and/or re-constructed from the past/present one, or modified, or used with the same name and arranged due to all 21 dimensions of the R-Synthesis (Ramiz, 2016d), and by applying 27 (+) definitive/certain result cases of the synthesis to science, philosophy, education, engineering disciplines in general manner. Author used (*) signs together with some words to denote that these words, disciplines, “sciences”, “philosophies”, “branches of philosophy”, “branches of sciences” are defined in the “past” and due to past philosophical/scientific/religious perspectives.

There are “®©” symbols/signs which denote that it is re-constructed by the author, and there are “®®” symbols/signs which denote that it is new defined by the author.

Education

Education is defined in some languages with the following terms: eğitim-in Turkish, istruzione-in Italian, éducation-in French, educación-in Spanish, educatione-in Latin, ausbildung-in German, 教育 (Kyōiku)-in Japanese/Chinese, образование (obrazovaniye)-in Russian, הֶאָשְׁלָה (ha'skhala)-in Hebrew, koulutus-in Finnish, undervisning-in Danish, oktatás-in Hungarian, εκπαίδευση (ekpaídefsi)-in Greek, शिक्षा (shiksha)-in Hindi, 교육 (gyoyug)-in Korean, utbildning-in Swedish, utdannelse-in Norwegian, educație-in Romanian, edukasyon-in Filipino, pendidikan-in Indonesian/Malay, تعلیم-in Urdu, so on.

According to a widely quoted figure from Ethnologue reference database, the number of languages in the world is approximately 7,159.

Some authors state that education should be done in national/native language, some consider that English language, Latin Language, etc., are more effective because the most written old sources are in these language based educations.

Language is important for the disciplines defined in the literature, and it influences the educational system proposed to educate people through language.

There are various definitions about the meaning of education.

According to *Britannica*, education is defined as a discipline that is concerned with methods of teaching and learning in schools or school-like environments as opposed to various nonformal and informal means of

socialization (for example, rural development projects and education through parent-child relationships).

Education also can be thought of as the transmission of the values and accumulated knowledge of a society. In this sense, it is equivalent to what social scientists term socialization or enculturation generally. In one sense, this act of education is named as civilization, socialization, or enculturation. However, it is specifically the transition from being uneducated human level to an educated person level (Ramiz, 2010; 2021) in some manner.

Education is also defined as the transmission of knowledge and skills and the development of character traits too. Education is a way of life for some people as well.

In one point of view, education is the equipping of knowledge, skills, values, beliefs, habits, and attitudes with learning experiences.

Education is also defined with more specific manner as follows: (i) the act or process of imparting or acquiring general knowledge, developing the powers of reasoning and judgment, and generally of preparing oneself or others intellectually for mature life, (ii) the act or process of imparting or acquiring particular knowledge or skills, as for a profession, (iii) a degree, level, or kind of schooling, (iv) the result produced by instruction, training, or study, (v) the science or art of teaching; pedagogics, (vi) the development of the abilities of the mind (learning to know), (vii) an experience that teaches you something, (viii) the criterion of being a quality person, (ix) the criterion and level of being cultured and intellectual.

It is meaningful to note that education can be supplied in the following forms in general manner: audioal education, verbal education, visual education, education with sign language, physical training, hybrid education.

Besides this, education can be classified/categorised due to different subjects. One classification depends on the types of institutional framework, distinguishing between (a) formal education, (b) non-formal education, (c) informal education.

Formal education occurs within a structured institutional framework, such as public schools, following a curriculum (education program). Non-formal education follows a structured approach but occurs outside the formal schooling system (organized, goal-oriented learning outside of a traditional school setting like tutoring), while informal education involves unstructured learning through daily experiences (unstructured learning through daily life and experiences). Formal and non-formal education are categorized into levels, including early childhood education, primary education, secondary education, and tertiary education.

Other classifications focus on education/teaching methods, such as teacher-centered and student-centered, and others, and on subjects, such as science education, language education, and physical education.

Additionally, the term “education” is used to denote the mental states and qualities of educated individuals and the academic field/discipline studying educational phenomena. Author defined philosophy of mind (Ramiz, 2025c) and expressed all interactions/relationships between mind and other parts/factors of person’s nature, where it guides people to have systematic and effective education accordingly.

There are various factors that can effect humans for getting education. Author defined Person’s Nature in other work that is related with philosophy of information (Ramiz, 2025c) and with continuable political administration (Ramiz, 2016a), where it includes all factors effective in human life. This also highlights the policies, strategies, ideologies, sciences, and philosophies that other relevant individuals, institutions, and organizations may put forward.

Some experts/people consider “literacy” as a degree of education as well.

There is a general search by United Nations Educational, Scientific and Cultural Organisation (UNESCO) about the literacy rate in world countries too. UNESCO experts considered the following categories due to age

ranges: (a) youth (people aged 15 to 24 years who can both read and write, with understanding, a short simple statement on their everyday life), (b) adult (people aged 25 years and over who can both read and write, with understanding, a short simple statement on his/her everyday life), (c) elderly (people aged 65 years and over who can both read and write, with understanding, a short simple statement on their everyday life). Author noticed that literacy rates are very old in the literature for some world countries and need to collect data and update up to 2025s.

Author proposed that primary school education (1st degree), secondary school education (2nd degree), lycee education (3rd degree) should be compulsory in all world countries/territories, and it is important to have sustainable education in each country and in the world. Related authorities should fund these public/private formal/non-formal educations in the related countries as possible as.

The education system is also one of the important effects on human/person's education and on the quality of education. In one point of view, the education system is defined as an ecosystem of professionals in educational institutions, such as government ministries, unions, statutory boards, agencies, and schools. The education system consists of political heads, principals, teaching staff, non-teaching staff, administrative personnel and other educational professionals working together to enrich and enhance.

At all levels of the educational ecosystem, "education management" is required; management generally involves with the planning, organising, implementation, review, evaluation, and integration of an institution. Research in educational management should explore the dynamic interplay among educational leaders, their followers, and the broader community to enhance the quality of teaching and learning outcomes. This concept and other effective parameters about education are evaluated in this work through the new perspectives of author.

Early Childhood Development and Education System

In the history, where there were no so called civilization, there were families which consist from father and mother, and are/were responsible from the education of the family and all other family members about different subjects such as food growing, cleaning, washing, talking, fishing, hunting, etc. Today, family is one of the most important parts of the education of the family members too.

However, some families deliver their children's education to other teachers, child-keepers starting from very early childhood. Author considered that it is important for families to watch/observe, inspect, support, protect their children's education period until 18 years old-the university starting age.

Early childhood development stages are defined generally as: (i) 0 to 12 months (infancy), (ii) 1 to 3 years (toddlerhood), (iii) 3 to 5 years (preschool), (iv) 5 to 12 years (school age), (v) 12 to 18 years (adolsence).

On the other hand, education systems (formal, nonformal) can be different in each world countries regarding the age and period of education.

The author attended kindergarten between his ages of 5 and 6, primary school between the ages of 6 and 12, secondary school between the ages of 12 and 15, and high school between the ages of 15 and 18. At the age of 18, he passed the general OYS-Turkey exam for university education and went to Istanbul, Türkiye.

Early childhood development is a broad field that encompasses the full range of a child's growth (physical, cognitive, social, emotional), while the education system is the formal, structured institution that provides learning, which includes early childhood education as its foundational stage.

Author considered that every human is unique and starting from early childhood his/her nature is shaped

according to different environmental effects (see Person's Nature; Ramiz, 2025c). Person's Nature is related with his/her philosophy of mind, where philosophy of mind is sub-branch of philosophy of information and is connected/related with philosophy of education and with other seven basic philosophies.

In this context, philosophy of mind, philosophy of education, philosophy of information, education systems, and other concepts and disciplines related to them must each be good or correct for the individual, group, society and country in order to receive good or correct education starting from early childhood.

Education Evolution Phases

There are evolution phases in the history of education that are effected from different subjects, concepts, and other environmental factors. Author generally/specially expressed these evolution phases below.

Education 1.0. This is defined as the first phase of education. During this period, teaching took place mainly at home and followed traditional methodologies. Teachers visited students' homes to impart the knowledge available at the time. This model was also applied in parochial schools, but with more restricted access, generally limited to the homes of noble families, philosophers, and intellectuals.

Education 2.0. It emerged in parallel with the progress of industrial processes. The focus of this phase was on memorization, repetition, reading, individualized learning, and the prevention of errors associated with industrial work. This era was characterized by the use of electric machines and internal combustion engines to prepare professionals for manual and repetitive work.

Education 3.0. It is an umbrella term used by educational theorists to describe a variety of ways to integrate technology into learning. According to Jeff Borden, Education 3.0 entails a confluence of neuroscience, cognitive psychology, and education technology, using web-based digital and mobile technology, including apps, hardware and software, and "anything else with an "e" in front of it. Instead of viewing digital technology as a competitor to current teaching models, Education 3.0 means actively embracing new technologies to see how they can help students learn efficiently. With Education 3.0, classes move away from traditional lectures and instead focus on interactive learning, with questions and answer sessions, reviews and quizzes, discussions, labs, and other project-based learning. It usually involves customization and personalization, such that educational content is tailored to meet the needs of specific students. It can mean reversing the traditional classroom learning, in which lectures happen in class and homework is done out of class, into flipped classroom, such that new content is delivered online while students work on assignments together in class.

In some manner, Education 3.0—which focuses on the individual learner, makes learning available at all times, and uses technology as a key driver and enabler—is built upon four pillars: (a) Curriculum, Pedagogy, and Assessment, (b) Infrastructure and Technology, (c) Policies, Procedures, and Management, (d) Leadership, People, and Culture.

Education 4.0. It has combined educational technology with personalized and flexible learning to transform schools and put students at the center of the learning process. The focus has shifted to developing technical, cognitive, digital, and socio-emotional skills.

It is also stated that Education 4.0 is the period in which higher education institutions apply new learning methods, innovative didactic and management tools, and smart and sustainable infrastructure mainly complemented by new and emerging Information and Communication Technology (ICT)'s to improve knowledge generation and information transfer processes. Combining these resources during teaching-learning

processes will support the training and development of desirable critical competencies in today's students.

There are four components that are expressed for Education 4.0 as: (1) Competencies: Training and development of desirable critical competencies in today's students, (2) Learning methods: Incorporation of new learning methods, (3) Information and communication technologies: Implementation of current and emerging ICTs, (4) Infrastructure: Use of innovative infrastructure to improve learning processes.

Education 5.0. Education 5.0 phase began with the arrival of the COVID-19 pandemic. Distance learning has become part of society's reality, and educational institutions have had to adapt to the digital environment.

According to some experts, this new phase covers all levels of education, from early childhood education to universities. The focus is on integrating technology into the learning process with the aim of developing more creative, collaborative, and socially aware individuals who are prepared to adopt creative and effective approaches to solving real-world problems.

Some of the approaches also include the use of knowledge tools in education, such as artificial intelligence (AI), critical thinking and teamwork. The aim is to encourage the application of advanced technologies and concepts that value autonomy and youth leadership in the face of 21st century challenges. But the question "what exactly is the new phase of education, and how does it differ from previous ones?" is under discussion.

Author expressed his new perspective about this education evolution phase 5.0 in the following sections, generally/specifically, by considering the educational components he defined.

Philosophy of Education* (General Approaches)

The philosophy of education is defined as the branch of applied philosophy* that investigates the nature of education as well as its aims and problems. It also examines the concepts and presuppositions of education theories. It is considered as an interdisciplinary field that draws inspiration from various disciplines both within and outside philosophy, like ethics, political philosophy, psychology, and sociology. Many of its theories focus specifically on education in schools but it also encompasses other forms of education. Its theories are often divided into descriptive theories, which provide a value-neutral description of what education is, and normative theories, which investigate how education should be practiced.

According to *Stanford Encyclopedia of Philosophy*, philosophy of education was a prominent aspect of the philosophy of human affairs that emerged in fourth century BC Athens, and it has remained an integral aspect of philosophy through much of its subsequent history. It established itself as a distinct subfield of philosophy in the 1960s, and its growth since the 1980s has been dramatic.

According to *Stanford Philosophy of Archive*, philosophy of education is defined as the branch of applied or practical philosophy concerned with the nature and aims of education and the philosophical problems arising from educational theory and practice. Because that practice is ubiquitous in and across human societies, its social and individual manifestations so varied, and its influence so profound, the subject is wide-ranging, involving issues in ethics and social/political philosophy, epistemology, metaphysics, philosophy of mind and language, and other areas of philosophy. Because it looks both inward to the parent discipline and outward to educational practice and the social, legal, and institutional contexts in which it takes place, philosophy of education concerns itself with both sides of the traditional theory/practice divide. Its subject matter includes both basic philosophical issues (for example, the nature of the knowledge worth teaching, the character of educational equality and justice, etc.) and problems concerning specific educational policies and practices (for example, the desirability of

standardized curricula and testing, the social, economic, legal and moral dimensions of specific funding arrangements, the justification of curriculum decisions, etc.). In all this, the philosopher of education prizes conceptual clarity, argumentative rigor, the fair-minded consideration of the interests of all involved in or affected by educational efforts and arrangements, and informed and well-reasoned valuation of educational aims and interventions.

Philosophy of education, on the other hand, is defined by *Britannica* as philosophical reflection on the nature, aims, and problems of education. The philosophy of education is defined also as janus-faced, which means looking both inward to the parent discipline of philosophy and outward to educational practice. (In this respect it is like other areas of “applied” philosophy, such as the philosophy of law, the philosophy of science, and the philosophy of medicine, including bioethics.) This dual focus requires it to work on both sides of the traditional divide between theory and practice, taking as its subject matter both basic philosophical issues (for example, the nature of knowledge) and more specific issues arising from educational practice (for example, the desirability of standardized testing). These practical issues in turn have implications for a variety of long-standing philosophical problems in epistemology, metaphysics, ethics, and political philosophy. In addressing these many issues and problems, the philosopher of education strives for conceptual clarity, argumentative rigour, and informed valuation.

Theories of education regarding the philosophy of education are considered as frameworks that explain how people learn. Major teaching/learning theories are defined as follows: (1) Behaviorism (learning through rewards and consequences), (2) Cognitivism (1950s-1960s; focusing on mental processes), (3) Constructivism (1910s; learners actively building knowledge; Jean Piaget, Lev Vygotsky, others), (4) Humanism (1300s-1400s; emphasizing personal growth), (5) Connectivism (2000s; learning via networks, developed by George Siemens, Stephen Downes), (6) Social Learning Theory (1977; developed by Albert Bandura, it suggests that learning can occur through observing and imitating others), (7) Experiential Learning Theory (1984; developed by David Kolb, theory that posits learning is a cycle that involves doing, reflecting, conceptualizing, and experimenting), (8) Multiple Intelligence Theory (1983; proposes that intelligence is not a single entity but a set of different abilities, as identified by Howard Gardner), (9) Information Processing Theory (1950s; developed by George Miller), (10) Adult Learning Theory (1973; developed by Malcolm Knowles), (11) Self Determination Theory (2000; developed by Richard Ryan and Edward Deci).

Author evaluated these theories regarding the philosophy of education generally. As result of the R-Synthesis, author defined eight basic philosophies including philosophy of information, where he included philosophy of education as sub-branch of it and considered connected/related/interacted with many other philosophy branches including philosophy of social science.

Author considered new era philosophy, hybrid philosophies as basics for new perspective for the philosophy of education and expressed his new perspective with the related concepts in the following sections.

Philosophers of Education and Their Interests

There are 63 American philosophers of education, where Benjamin Franklin (1706-1790), and Hilary Whitehall Putnam (1926-2016) are some of the highly noticed philosophers.

There are 22 British philosophers of education, where Thomas Hobbes (1588-1679), Karl Raimund Popper (1902-1994) are some of the highly noticed philosophers.

There are 27 French philosophers of education, where Auguste Comte (1798-1857), René Descartes (1596-1650), Michel de Montaigne (1533-1592), François-Marie Arouet (1694-1778) are some of the highly noticed

philosophers who are interested with more than one branches.

There are 37 German philosophers of education, where Johann Wolfgang von Goethe (1749-1832), Immanuel Kant (1724-1804) are some of the highly noticed philosophers who are interested with more than one branches.

There are also 67 philosophers/thinkers of education from Australia, Austria, Belgium, Canada, China, Czech Republic (President Václav Havel), Hungary, India, Iraq, Ireland, Israel, Italy, New Zealand, Poland, Russia, Slovenia, Spain, Sweden, others (in alphabetic order).

Author evaluated all of these philosophers'/thinkers' biography generally, and some of the philosophers of education who have interests to more than one philosophy and sciences are given in (Table 1) specifically.

As result of the evaluation, author determined that some of the philosophers of education being effective because of they were interested in with multi-disciplines at the same time, and interested in more than one branch of philosophy, or sciences as shown in (Table 1) below.

Table 1

Some of the Philosophers of Education and Their Philosophical Interests (Due to Date of Birth)

Philosophical interests of philosophers							
Pioneer/founder people	Philosophy of Mind*	Philosophy of Politics*	Philosophy of Religion*	Philosophy of Science*	Philosophy of Education*	Others	Life period
Confucius		X	X		X	Et., D	551-479BC
Socrates					X	Et., E, T, D	470-399BC
Plato		X	X	X	X	Et., E, D	428-348BC
Aristotle	X	X	X	X	X	PoL, M, L, D, Et.	384-322BC
Al Kindi					X	M, L, Et. D	801-873
Michel d.Montaigne				X	X	Et., PH, D	1533-1592
Thomas Hobbes		X			X	Et., PoL,	1588-1679
René Descartes	X			X	X	E, M, D	1596-1650
Baruch (de) Spinoza	X				X	E, M, D, Et.	1632-1677
John Locke	X	X			X	E, M, D	1632-1704
François-M. Arouet		X			X	PoH, D	1694-1778
Francis Hutcheson					X	M, L, E, A, Et.	1694-1746
Benjamin Franklin		X			X	D	1706-1790
Immanuel Kant		X	X		X	Et., E, M, PoL, D	1724-1804
Johann W.V Goethe					X	A, D	1749-1832
Auguste Comte				X	X	D	1798-1857
Karl R. Popper	X	X		X	X	E, M, D	1902-1994
Hilary W. Putnam	X			X	X	E, D	1926-2016

Notes. (*) denotes that these branches are defined due to past philosophical branch perspectives; here A*: Aesthetics, E*: Epistemology, L*: Logic, M*: Metaphysics, PoL*: Philosophy of Law, T: Teleology, Et.: Ethics, PH: Political History, PoH: Philosophy of History, D: denotes some other sciences.

New Perspective of the Philosophy

Author evaluated all related subjects and made a new R-Synthesis (Ramiz, 2016d). Author defined new perspective of the philosophy (R-Philosophy) which includes all the new and/or re-constructed branches of philosophy due to that perspective, as result of the new synthesis. Also, R-Science, R-Education, R-Information,

R-System disciplines are defined here as result of this new synthesis. Aim/purpose of R-Philosophy is defined in general/specific manner in the previous works (Ramiz, 2016d; 2016e; 2020; 2025a), where some general information is given here as guide. In this context, these new disciplines can be expressed as follows:

- R-Philosophy: New Perspective of Philosophy, New Era Philosophy, Basic Philosophies, Hybrid Philosophies, Branches of Philosophy, Ideal Philosophical System, History of Philosophy.
- R-Science: New Perspective for Philosophy of Science®©, Ideal Scientific System, Basic Sciences, Hybrid Sciences, Multidisciplinary Sciences, Interdisciplinary Sciences, History of Science.
- R-Information: New Perspective for Philosophy of Information®©, Information, Information Sciences, Theories of Information, History of Information, Information Technology, Information Engineering, Information Security.
- R-Education: New Perspective for Philosophy of Education®©, Education, Ideal Education Construction, Education System Administration, Theories of Education, History of Education.
- R-System: New Perspective for Philosophy of System®©, Hybrid Systems, Theories of System, History of System, Basic Sciences Systems.

With this respect, the following general/specific subjects and concepts are considered as guide for this work.

Philosophy Due to Historical Period

Author divided the philosophy into the following “historical periods” as follows by considering the general perspectives considered for the New Synthesis given in the other work (Ramiz, 2016d): (1) ancient philosophy: Egypt and Babylon, Ancient Chinese, Ancient Greco-Roman, Ancient Indian, Ancient Persian, (2) 5th-16th centuries: Medieval Europe, Renaissance, East Asia, India, Middle East, Mesoamerica, Africa, (3) Early Modern and Modern (17th-18th centuries), 19th century, 20th century, (4) New Era Philosophy (future).

New Era Philosophy, Branches of Philosophy and Ideal Philosophical System

Author defined R-Philosophy discipline to express all subjects directly related with philosophy. With regarding this, there are following concepts: new perspective of the philosophy, New Era Philosophy, “xD” Hybrid Philosophies (x: 1 to 8), upper constructional philosophies, lower constructional philosophies, basic branches of philosophy (basic philosophies), branches of philosophies, sub-branches of philosophies, and Ideal Philosophical System.

Due to new perspective of philosophy (Ramiz, 2016d), New Era Philosophy is defined as 8D Hybrid Philosophy of eight basic philosophies, and as a major philosophy branch, for the design, definition, etc., of all the subjects and to express some subjects due to the known perspective in daily life.

Ideal Philosophical System and all possible “xD” Hybrid Philosophy Categories are given in previous work (Ramiz, 2016d).

Upper constructional philosophies and lower constructional philosophies are given in other work (Ramiz, 2016d; 2020) to express/explain the related subjects.

Basic philosophies, which are also defined by the author as new and/or re-constructed branches of philosophy, are as follows (Ramiz, 2016d) (in alphabetic order): (1) Philosophy of Administration®®, (2) Philosophy of Information®©, (3) Philosophy of Justice®®, (4) Philosophy of Politics®©, (5) Philosophy of Religion®©, (6) Philosophy of Science®©, (7) Philosophy of Social Science®©, (8) Philosophy of System®®.

Author defined new perspective for Philosophy of Science®© and its sub-branches in other work (Ramiz,

2016e), and also defined new perspective for Philosophy of Religion®© (Ramiz, 2020), new perspective for Philosophy of Justice®© (Ramiz, 2025b), new perspective for the Philosophy of Information®© and new perspective for the Philosophy of System®© in other work (Ramiz, 2025c)

Hybrid Philosophies®©

Hybrid Theories are considered under this philosophy. These theories are proposed basically to have information about: (a) existence of hybrid structure, (b) knowledge of hybrid structure, (c) nature of hybrid structure, (d) purpose of hybrid structure.

Since there are some technological, scientific founding/inventions which are/were effective and interacting with human life and also effecting the religion/science/politics/justice/administration/information and social science disciplines in some manner, author defined the hybrid branches of philosophy (hybrid philosophies) to express the interaction/relation between these founding and Ideal Philosophical System, and also to express the level of the hybrid philosophy perspectives behind these scientific founding.

New Perspective for the Philosophy of Education

Theories of education are considered under this philosophy of education. These theories are proposed basically to have information about: (a) existence of education, (b) knowledge of education, (c) nature of education, (d) purpose of education, (e) method of education, (f) administration of education, (g) inspection of education.

In general manner, education in community can be provided officially and/or non-officially: (1) by educating human beings, (2) by improvement/development in all education components, (3) by improving education systems, (4) by making the system educational.

Author defined “education” in systematic point of view as the transmission of data, information and/or accumulated knowledge about the related; Person (see Category-A), Institution (see Category-B), Disciplines (see Category-C), Values (see Category-D), Events (see Category-E), Objects (see Category-F), Devices (see Category-G), Places (see Category-H), and/or Units (see Category-I).

Here, Category-A: Person, Group, Community; Category-B: Institution, Association, Organization, Country, Category-C: Disciplines, Branches, Theories; Category-D: Values, Concepts, Thoughts, Senses, Ideas, Principles, Skills, Teachings, Beliefs; Category-E: Events, Arguments, Discussions, Panels, Meetings, Travelling, Visits; Category-F: Objects, Matters, Bodies; Category-G: Devices, Equipments, Tools, Vehicles; Category-H: Places, Buildings, Locations, Environment; Category-I: Units-Time, Mass, Velocity, Energy, Volume, Area, Illumination, Angle, so on.

Due to one perspective, humans can learn in one of the following general/specific ways: (a) by living the life with involving events, experiencing, and Other*, (b) by reading about subjects from books, articles, and from other physical/electronic sources, (c) by following guide person/people, (d) by going school, (e) by hybrid learning of the first four cases given here.

Existence of education is important for all human beings. However, there can be differences at the types of education such as education in urbans, education in sub-urbans, education in cities. For the content of the information supplied with regarding the education, there may be some subjects that are basic for all students, some subjects different for some students, and some subjects different for most students, etc. Methods that are used in the education can be human specific, purpose specific, for all students, etc. in general manner. Administration of education and inspection of education are a must to have good and/or correct results in one point of view.

In this new era, one can talk about education/training of humans, education/training of animals, and education/simulating/iteration/training of software/computer programs upon to the subject of disciplines interested.

Purpose of education can be categorised as follows: (a) purposes due to the targeted sides; personal purposes, group purposes, community purposes, country specific purposes, regional purposes, worldwide purposes, (b) purposes due to the association involved; company purposes, association purposes, society purposes, (c) purposes due to the types of sector; public sector purposes, private sector purposes, (d) purposes due to the disciplines/branches interested, (e) purposes due to subjects of services (see 39 subjects of services).

Specifically, one of the purpose of education is to educate good and/or correct person for the system of a world country, in more specific manner, to educate necessary and sufficient number of person for the 39 subjects of services that are mandatory for a world country, where it means a good and/or correct education planning should be organised, designed, defined. Here, education due to subjects of services is defined in the following sections.

It is important for every individual to have education on at least one subject, concept, branch, or discipline.

Disciplinary education, multidisciplinary education, interdisciplinary education, transdisciplinary education and hybrid education are important for the continuable/sustainable administration systems in a world country.

Education by qualification can be defined as: (a) Standard education (for general types of students/adults, from kindergarten to university), (b) Special education (for clever, intelligent, smart, hardworking, genius children/adults, and/or for specific disciplines/branches), (c) In-service training/education (for adults working in an association, institutes, others), (d) Certified training/education (for children/adults to have specific training/education about some disciplines; corporate/internal certification, product-specific certifications, profession-wide certification), (e) Private education (hybrid organized, formal/non formal/informal; following special education programs and schooling system that includes specific thoughts and senses, tasks, believes, disciplines; categorized into levels).

Education components, and their efficiency, effective use and their improvements/development are one of the important concepts and it is expressed in the next section, together with the other related subjects regarding the new perspective for the philosophy of education.

Efficiency, Effective Use and Improvement/Development of Education Components

Author defined that continuable/sustainable education can be achieved by taking into account the following educational components generally/specifically, and by organizing each of them appropriately to ensure efficiency, improvement, and development in the education systems:

(1) Student, (2) Teaching Staff (human, or computer/robot), (3) Language, (4) Education Program (discipline, branch, curriculum, course,), (5) Way of education/teaching (physical, virtual, online, hybrid), (6) School Education System (public, private, organizational; school, academy, university, institute), (7) Education Manager/Administrator, (8) Country Education (Administration) System, (9) Education/Teaching Tools (blackboard/whiteboard, board pen, paper, book; calculator, computer, mobile phone, tablet, TV, digital whiteboard, projector, smart screens; microphone, speaker, educational games, grading software, messaging apps, presentation software, online scheduling app, online platforms, quiz maker, spreadsheet program, test scanner, videoconferencing apps, video tutorials, virtual classroom; ICT tools), (10) Education/Teaching Methods, (11) Physical Infrastructure (chair, table, classroom, building, air conditioning), (12) Technological Infrastructure (lightening, electricity, battery, internet, Wi-Fi network, GSM Network, satellite network, fiber optic network, cable TV network, ADSL network), (13) Education System Administration, (14) Education Environment (place,

location, environment) (15) Accommodation and Food Facilities (house, dormitory, hotel; breakfast, lunch, dinner), (16) Transport (car, bus, train, tram, bicycle, motorcycle), (17) Safety and Security (for all related education components). Here, No. 14, No. 15, and No. 16 are not first-degree educational concepts but are issues that should be taken into consideration as complementary factors for continuable/sustainable education today.

Author considered Continuable/Sustainable Education Administration System (referred to as education system, or political/non-political educational administration system generally/specifically where necessary) for each country/territory in the world. With this respect, reconstruction, improvement, and development of the education components are important.

Education system administration (No. 13) is one of the important parts of the political/non-political education administration systems, and the education administrator(s) (No. 7) is one of the main subjects of the education system administration(s). It is also important how an education administrator (No. 7) is related with the education system administration too. In general manner, the “country education system” (No. 8), “education system administration” (No. 13), “education program” (No. 4), and “teaching staff” (No. 2) quaternary can be a solution to some/most education problems or cause problems in the political/non-political education administration systems, together and/or separately. With this respect, it is important to define the “priority” for the consideration of the characteristics of these effective parameters together. Here it is proposed that each of these effective parameters (education components) can have two possible characteristics/senses in simple manner: “good” or “bad”. Under these considerations, it is possible to define following priorities for continuable/sustainable education administration system in (Table 2) with the highest to lowest level importance.

Table 2

Priorities for Continuable/Sustainable Education Administration System (Due to Characteristics of the Student, Teaching Staff, Education Program, Education System, Education Tools, Education System Administration and Others Together)

Levels	Student (No. 1)	Teaching staff (No. 2)	Education Program (No. 4)	Education System (No. 8)	Education Tools (No. 9)	Education System Administration (No. 13)
(Highest)	Good	Good	Good	Good	Good	Good
A+n						
A	Good	Good	Bad	Good	Good	Good
A-n						
B	Good	Good	Good	Bad	Good	Good
B-n						
C	Good	Good	Bad	Bad	Good	Good
C-n						
D	Good	Good	Good	Good	Good	Bad
D-l						
D-n						
E	Good	Good	Bad	Good	Good	Bad
E-n						
F	Good	Good	Good	Bad	Good	Bad
F-n						
(Lowest)	Bad	Bad	Bad	Bad	Bad	Bad

Notes. Here: A, B, C, D, E, F denote the levels according to continuable education administration system priorities; and education components No. 3 = good, No. 5 = good, No. 6 = good, No. 7 = good, No. 10 = good, No. 11 = good, No. 12 = good, No. 14 = good, No. 15 = good, No. 16 = good, No. 17 = good are taken for A, B, C, D, E, F.

In Table 2, language = good (No. 3), way of education/teaching = good (No. 5), education school = good (No. 6), education manager/administrator = good (No. 7), education/teaching method = good (No. 10), physical infrastructure = good (No. 11), technological infrastructure = good (No. 12), education environment = good (No. 14), accommodation and food facilities = good (No. 15), transport = good (No. 16), and safety & security = good (No. 17) are considered as well.

Table 2 simply indicates the importance of “education system”, “education system administration”, “education program”, “teaching staff”, “student”, and “education tools” together and separately. Upon to some subjects of services, disciplines, and education programs, Levels B & C can interchange with Levels D & E. This is something related to priority theory.

There are some concepts in the education literature where some people defined them under specific frameworks/umbrellas by considering some of the education components together, or by defining special criterions for the related education components. These are: education performance, educational quality, quality education, lifelong education, quality profession, quality education services, quality of student, education economy, etc. Here, qualities of a good student, for example, include special criterion such as: strong work ethic, time management skills, active participation, effective study habits, self-motivation, responsibility and accountability, adaptability and flexibility, teamwork and collaboration.

Author defined continuable/sustainable education as a new and important concept as part of the continuable/sustainable administration system (Ramiz, 2015; 2016a; 2016b; 2016c), where one of the important principles for the continuity/sustainability in world country administration depends to continuity/sustainability in human education.

To have sustainable education, here the education components must be provided as “good” as possible.

It is good to have information about each of the education components, necessarily and sufficiently, to be able to do education in every condition and situation.

Some people can think that online education is more efficient way of education than others, but it is more correct to consider way of education (No. 5) and education methods (No. 10) effective for every type of student, such as less clever, mid clever, clever, super clever, smart, intelligent, genius, hardworking, very hardworking. It is also good and/or correct to consider suitable education methods due to disciplines/branches/courses/theories interested.

When considering subjects of services in a world country specifically, the meaning, importance, and priority of the basic senses for each of these subjects can vary. This also reveals the result of variations in the number of levels and priority in sustainable education administration in the concept of education.

Table 2 expresses the levels where the priority is “continuable/sustainable education system”, that is No. 13, No. 8, and No. 4 plays more important role as it is mentioned before. When the priority is “sustainable education programs”, the priority levels will be changed. Again, once the priority is “sustainable education administration”, the priority will be “education system administration”, and lately, if the priority is “sustainable teaching”, the teaching staff, education program, education tools, then education system and education administration can take place due to the education policy considered.

Once we considered two possible characteristics/senses (good, bad) for the evaluation of each of the education components in Table 2, there will be $2 \text{ over } 17 = 131,072$ levels considered.

If one considered four possible characteristics/senses (correct, good, incorrect, bad), or eight possible characteristics/senses (good and correct, correct, good, good and incorrect, bad and correct, incorrect, bad, bad

and incorrect) for the evaluation of each of the components, it is obvious that there will be much more levels to be considered. This case reflects the evaluation due to eight-basic senses (Ramiz, 2016a; 2025c) in general and specific manner.

These above approaches express more exact or analytic like solutions to the education problems, and can supply more effective results accordingly. However, these three evaluation perspectives (BS-2, BS-4, BS-8) are not easy to be performed exactly by standard teaching staff. Authors with high experiences and with good/correct philosophy of information, education, science and justice, and the ones who can use new technology solutions that use electronics, communication, computer, software and artificial intelligence engineering can be good and/or correct guide for evaluation of the performance of education components accordingly.

Alternatively, for example, the degree, class, or ranking of the effectiveness of each education component can be defined by using the “performance” concept, with values from P: 1 to 8. Here, standards related to education components can be a reference for better understanding the performance, and evaluations can be took into account minimum requirement criteria, optimum requirement criteria, and some other criteria.

General performance of the education components for a world country-X is given in Figure 1 below as an example.

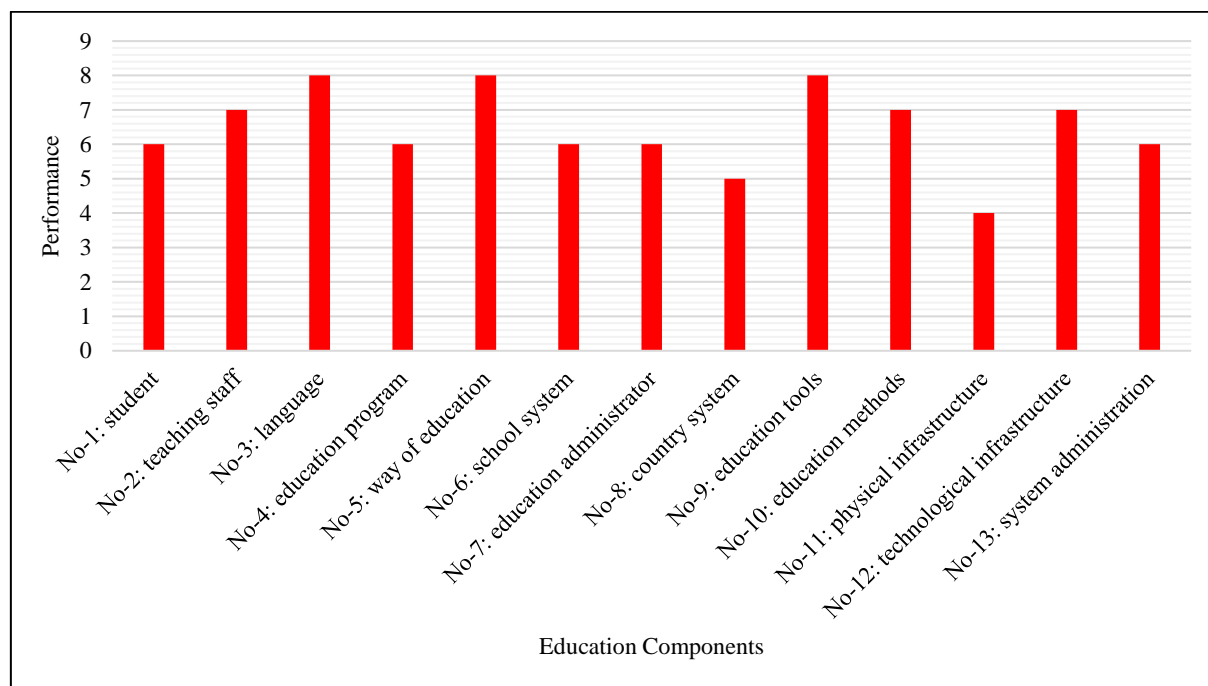


Figure 1. General performance of the education components for a world country-X (No. 1 to 13; P: 0 to 8 (max)).

This general performance evaluation method can be performed for a school, academy, or university in a world country specifically, by considering necessary numbers of education components. Also, one can study about the performance of each of the educational components separately due to the suitable criterions considered.

ResearchGate, PhilPapers, Google Scholar, IeeeXplorer, Scopus, Web of Science, and some other citation indexes are user friendly and good for reflecting the performance of the teaching staffs, education administrators, scientists, researches and information developed about the possible education methods, education tools, education programs, students behaviour, education language, and other education components in the education system.

However, here the purpose of education will play an important role for good and/or correct evaluation. It means that the number and/or size (magnitude) of educational variable may be less important than its effective use, or the effects of education variable created on the students, group, community, society, country, etc. can be more important. In this context, generally/specifically defined and expressed one education program, one article, one book, one discipline, one education method, or experienced one teaching staff, one education administrator, one minister, or good conditional one classroom, one school, or effective one education tool, one computer, one mobile phone, or suitable one language can change the student, group, community, school, whole country, or the world, in one point of view.

The important point is to have necessary and sufficient number of education components (teaching staff, school, education tools, education administrator, others) to have sustainable education, and to provide some purposes of education.

Good and/or correct teaching staff, good and/or correct education programs, good schools can be enough to have effective results in education/teaching as well.

Some effects of the education received on the student/person cannot be directly seen sometimes by the teaching staff who gives the education, but they emerge when the educated human/person actively works in the relevant disciplines and such a person can honor the source of success accordingly.

Author defined that making education effective, simplifying and facilitating education according to student type, and preparing and implementing educational programs by taking Person's Nature (Ramiz, 2025c) into account are important.

There can be similarities, differences in the education system of each school or world country. However, author defined general sustainable education administration system for each country, and also same education system administration for all the world countries in the following section.

It is possible to make the education system continuable/sustainable, and make it also permanent and deliver this education system from generation to next generation through a good and/or correct education, sense of justice and the validity parameters together. In this context, education construction, education system, education system administration and other education components should be arranged with judicious perspective in multi ways. Author defined these concepts in the following sections.

Purposes of education can generally be expressed as to have educated people for system, progressed community, science for community, science for science, science for world, and others as specified in the other parts of this article. In specific manner, purposes of education are corelated with purpose of information, purpose of science, and purposes of other disciplines. With this respect, evaluation of education due to all possible perspectives is important. These are generally/specifically explained in the following sections.

Education, Values and Basic Senses

Author defined R-Values in other work (Ramiz, 2020; 2025c), where personal values, community values, business values, economic values, political values, social values, cultural values and others can be given as some of them. The education that a student or a person receives/get can cause these personal values to change, develop, progress or remain the same. The nature of the person (Ramiz, 2015; 2025c) is a good and/or correct reference to determine the possible effects (values) that education can have on the student or the parties/sectors/disciplines that the student's education can affect. There can be three possible interactions: (a) transmission of values to environment, (b) receiving of values from environment, (c) mutual direction transmission-receiving of values.

In all cases, basic senses will be one of criterions for reading, understanding, evaluation, learning, and decision making about the related values.

Author defined the sense of justice that education and the eight basic senses create in a person and expressed it in Figure 2 below.

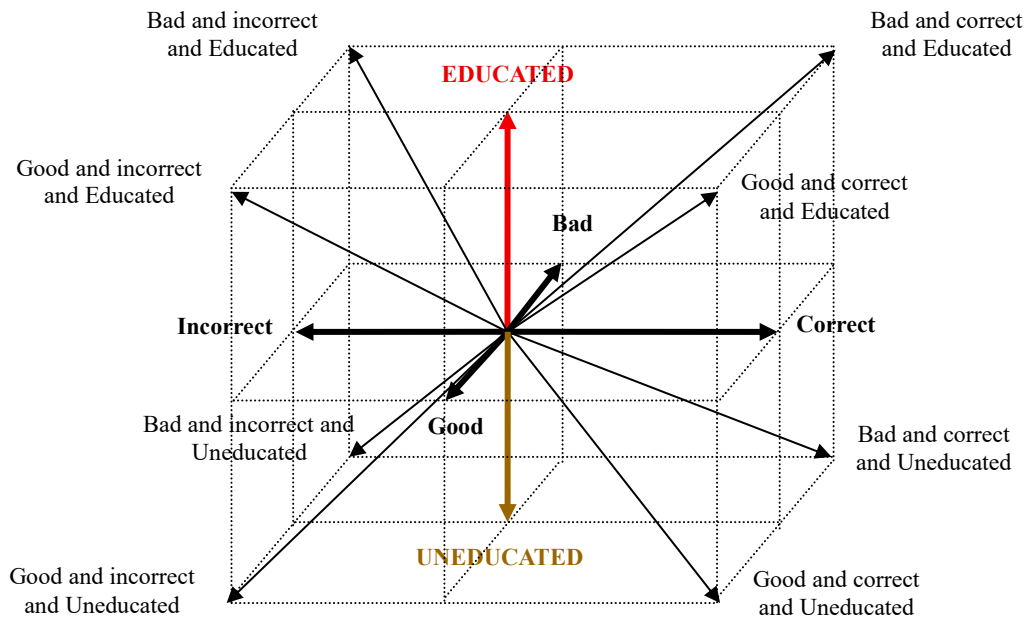


Figure 2. Education and sense of justice for a human being (in 3D) (Education and basic senses).

In one point of view, one of the purposes of education can be defined as:

(a) To increase the number of “good”, “correct”, “good and correct”, “good and incorrect”, “bad and correct” BUT/AND “educated” people in each world country.

(b) To decrease the number of “bad and incorrect”, “bad”, “incorrect” BUT/AND “educated” people in each world country.

(c) To decrease the number of “good”, “correct”, “good and correct”, “good and incorrect”, “bad and correct” BUT/AND “uneducated” people in each world country.

As it can be seen from Figure 2, it is not correct to consider that all uneducated or less educated people are incorrect or bad. However, in order to be a developed community and country, and to contribute to a sustainable administration system and to prevent problems from occurring, it is important, beneficial, and necessary to ensure that all people in urban, sub-urban, villages, cities, and people born in the future receive/get education.

Author gave the diagram in Figure 2 for three variables of “education/good/correct”. And it is important to consider and evaluate the diagrams for “education/good/working”, “education/good/culture”, “education/culture/happiness”, “education/information/earning”, “education/information/progression”, “education/information/crime”, and “education/information/performance”, “education/information/happiness”, “education/information/quality”, and for other personal/non-personal values.

Author defined, philosophy of information, philosophy of mind, philosophy of basic senses, philosophy of values, philosophy of progression, philosophy of social sciences, and some other hybrid philosophies that can be directly/indirectly related with education and philosophy of education.

Evaluation of the Education Due to Perspectives

In order to carry out “good and/or correct” education, administration, and studies within the scope of the continuable program, it is important to take into consideration the following 17 general perspectives and other relevant disciplines and systems in the most general sense, and to organize and carry out studies in this context by the relevant persons (in alphabetic order):

(1) academic perspective, (2) commercial perspective, (3) diplomatic perspective, (4) English/Turkish perspective, (5) expert perspective, (6) friendly perspective, (7) ideological perspective, (8) lawful perspective, (9) military perspective, (10) national perspective, (11) non-official perspective, (12) official perspective, (13) philosophical perspective, (14) political perspective, (15) religious perspective, (16) scientific perspective, (17) social perspective.

What is of primary importance here is to consider each perspective separately and/or together. There are also good and/or correct sub-perspectives that should be considered specifically.

Within the scope of scientific perspective, definitions made regarding science and branches of science, and possible perspectives taken into consideration behind these definitions are also expressed in other work (Ramiz; 2016b; 2016d; 2016e).

Here, in this work evaluation of education from new academic perspective and new philosophical perspective are expressed generally/specifically in the next sections. These perspectives provide kind information and guidance for re-organising the education programs, to define and use kind strategies/policies for education system administration and for improvement/development of some of the other educational components.

Evaluation of the Education From Philosophical Perspectives

It is important to examine educational issues from the perspectives of the following branches of philosophy (in alphabetic order):

(a) Philosophy of Administration®®:

Author defined this branch of philosophy in another work (Ramiz, 2010; 2015; 2016b; 2016d). Furthermore, it is important to evaluate the status of issues related to educational components in relation to school and country administration. This should be taken into consideration by philosophers, school administrators, country administrators, educational administrators, and teaching staff.

(b) Philosophy of Information®©:

Author defined this branch of philosophy in another work (Ramiz, 2016d; 2025c). Furthermore, it is important to evaluate the status of educational components related to the existence of information, principles related to information, the nature of information, management of information, control of information, the purpose of using information, and methods for presenting information. This should be taken into consideration by philosophers, school administrators, country administrators, educational administrators, and teaching staff.

There are 23 sub-branches defined under this philosophy, and each of them is important due to the age level of students and the school period involved.

Philosophy of education, philosophy of language, philosophy of teaching, philosophy of basic senses, philosophy of mind, philosophy of writing, and other sub-branches are important with this concept, and they are generally and specifically defined in the other works (Ramiz, 2016d; 2025c).

In the context of philosophy of language, author defined that there are 17 types of language that could be considered together and/or separately for upon the purpose of using language and for good and/or correct

education, administration and applications: academic language, commercial language, diplomatic language, English language, expert language, friendly language, ideological language, lawful language, military language, national language, nonofficial language, official language, philosophical language, political language, religious language, scientific language, social language. It is good to learn and use/apply these languages through the suitable education programs.

(c) Philosophy of Justice®©:

Author defined this branch of philosophy in other work with more details (Ramiz, 2016d; 2025b). Besides this, it is important to assess the law and justice status of issues related to educational components. This should be taken into consideration by philosophers, legal experts, educational administrators, and teaching staff.

(d) Philosophy of Politics®©:

Author defined new perspective for philosophy of politics in other work (Ramiz, 2010; 2015; 2016d). Besides this, it is important to assess the status of issues related to educational components in terms of politics and ideology. This should be taken into consideration by philosophers, politicians, political experts, educational administrators, and teaching staff.

(e) Philosophy of Religion®©:

Author defined new perspective for philosophy of religion in other work (Ramiz, 2016d; 2020), and considered new era theory, new era belief, progressive religions to express all possible believes, interactions and relations. Furthermore, it is important to consider the status of issues related to educational components from the perspective of religion and belief. This should be taken into consideration by philosophers, religious experts, country administrators, educational administrators, and teaching staff.

(f) Philosophy of Science®©:

Author defined new perspective for philosophy of science in other work (Ramiz, 2016d; 2016e). Furthermore, it is important to assess the status of educational components related to the existence of science, the knowledge of science, the nature of science, the method of science, and the purpose of science. This should be taken into consideration by philosophers, school administrators, country administrators, educational administrators, and teaching staff.

With this respect, general/specific basic components to be considered for each branch of science are specified (Ramiz, 2016e).

Definitions and categories of science and branches of science are defined specifically. New branches of science and related hierarchy of science due to scale of universe are defined by the author in Figure 3 below.

Here, basic science disciplines in Figure 3 are defined as follows (in alphabetic order):

R-Biology discipline is related with “science/law of living forms”;

R-Chemistry discipline is related with “science/law of plasma, condensate, solid, liquid, gas object”;

R-Electromagnetic discipline is related with “science/law of seen and/or unseen energy forms”;

R-Information discipline is related with “science/law of knowledge”;

R-Mathematics discipline is related with “science/law of numbers, size, shape, volume, distance/length, direction, etc.”;

R-Physics discipline is related with “science/law of motion and mass”;

R-Hybrid discipline is related with science/law of sub disciplines, as well as new proposed discipline.

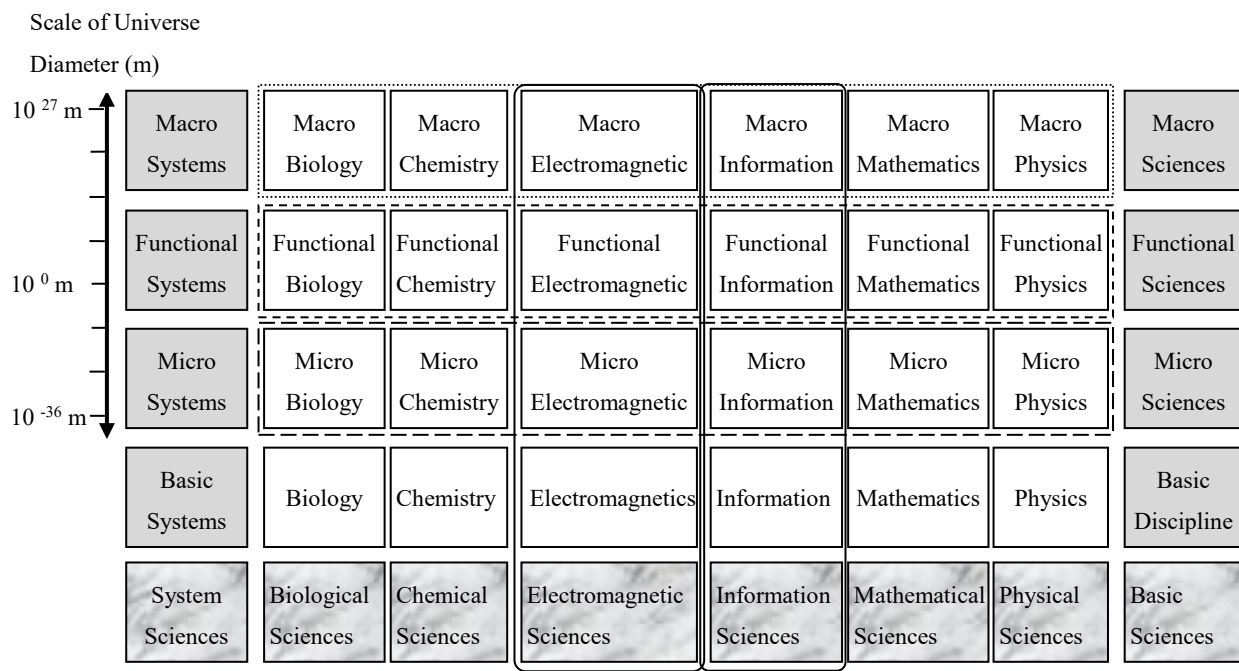


Figure. 3. New branches of science and related hierarchy of science due to scale of universe (in alphabetic order).

Branches of Science due to Methods and Size are given in other work (Ramiz, 2016e). In this context, one can categorize the educational studies as: (a) Theoretical education, (b) Experimental education, (c) Applied education, (d) Computational education, (e) Analytic education, (f) Comparative education.

Author also defined Ideal Scientific System, main categories of hybrid sciences (C-xD-yy) and related hierarchy of science (Ramiz, 2016e).

(g) Philosophy of Social Sciences®©:

Author defined this branch of philosophy in other work (Ramiz, 2016d; others). It is important to evaluate the status of educational components from social, cultural, psychological, and other social science perspectives. This should be taken into consideration by philosophers, sociologists, psychologists, social scientists, country administrators, educational administrators, and teaching staff.

(h) Philosophy of System®©:

Author defined this branch of philosophy in another work (Ramiz, 2016d; 2025c). Furthermore, it is important to evaluate the status of issues related to educational components, including existence of the systems, knowledge of the systems, nature of the systems, purpose of the systems, model/management of the systems, and administration of the systems. This should be taken into consideration by philosophers, school administrators, country administrators, relevant system experts, educational administrators, and teaching staff.

(i) Hybrid Philosophies®®:

Author defined this branch of philosophy in other works with more details (Ramiz, 2016d; 2016e; 2025b). It is one of the important concepts/disciplines of the new era philosophy (Ramiz, 2016d), where new perspective of the philosophy is defined regarding the eight basic philosophies mentioned above. Hybrid philosophies provide philosophers, teaching staff, and administrators with hybrid examples/cases to evaluate and implement education components from multidisciplinary, and hybrid perspectives.

Philosophy of Artificial Intelligence, Philosophy of Engineering, Philosophy of Computer Science and others are important “xD” Hybrid Philosophies that need to be taken into consideration in order to understand and realize their impact on the philosophy of education. These hybrid philosophies are being effective not only for students and teachings staff but also for the service providers, scientists, and manufacturers who are in connect with education sectors.

(j) Ideal Philosophical System®®:

Author defined ideal philosophical system and branches of philosophy due to structural categories in other work (Ramiz, 2016d). There are Basic Philosophies (1D), Hybrid Philosophies (“xD” Categories: 2D Categories, 3D Categories, 4D Categories, 5D Categories, 6D Categories, 7D Categories, and 8D Categories), sub branches of “xD” hybrid philosophies, Lower Constructional Philosophies and other branches categorised in a single figure. All of the new and reconstructed branches of philosophies are put under one framework with this system. Here, all eight basic philosophies are defined complementary with each other as well.

Authors, teachers, lecturers, teaching staff, and others should have necessary and sufficient information about the related nine philosophy branches and ideal philosophical system regarding the education discipline(s) he/she is involved, interested. This is good and/or correct for the continuable/sustainable education administration system too.

On the other hand, it is important for education administrator(s) to have necessary and sufficient information about the above eight basic philosophy branches to have good and/or correct management/administration.

Author proposed that, philosophy of science and philosophy of information should be educated in all departments of university to gain good and/or correct university skills to university graduates where they can use it within their future business/non-business lives as well.

Author considered that three basic philosophies of philosophy of science, philosophy of information, philosophy of social science play important role until some education ages and level of students. Then at higher education level, 3+5 basic philosophy branches become important. These are also important due to education policies/strategies and for education programs, and education administrations, and others.

Evaluation of the Education From Academic Perspectives

Author defined major sciences and related basic principles due to the basic philosophies by considering R-Synthesis and new perspective for philosophy of science (Ramiz, 2016e). Here, each of the major sciences is reconstructed, strengthened, and lifted upper level in the hierarchy of branches of science in one point of view, and is defined below as general academic science disciplines.

It would be good and/or correct for educational scientists, researchers, teaching staffs (professors, associate professors, assistant professors, classroom teachers, special education teachers, lecturers, educators, instructors, tutors), and educational administrators to create/form educational programs, and make arrangement about other educational components by taking these academic science disciplines as reference.

(a) Science of Administration®® (Administration Science®®):

Basic principles of these sciences are defined by the author in other work (Ramiz, 2016e).

According to some people/institutions, administration science is generally considered to seek answers to the following two questions:

- (1) How do organizations work and how do people who come together in organizations behave?
- (2) How can organizations be run most effectively and efficiently?

Besides this, it is generally assumed by some people/institutions that administration science has two main dimensions as follows:

(1) It examines the general problems of management with a “universal” quality in the light of theoretical principles that do not discriminate between private and public and finds solutions.

(2) It deals with various segments of social life such as subjects of economy, education, defense, and science with an interdisciplinary approach that requires and mandatory the use of the core methods of these segments.

It is important to consider this science branch and teach the basics for all subjects or disciplines where management/administration is required and/or compulsory in one point of view.

Author defined new administration system for the world countries, where it considers 39 subjects of services (Ramiz, 2010; 2016c). This system also examines and explains the theories of administration philosophy and the fundamental principles of administration sciences for all disciplines within the administration system in a country and globally.

(b) Science of Information®© (Information Science®©):

Basic principles of these sciences are defined in other work (Ramiz, 2016e; 2025c). History of information, definition and meaning of information, and related branches are considered under this science generally.

Information science(s) are defined as: accounting, archaeology, archive science, banking, communication, criminology, data science, economics, “education”, ethics, finance/monetary values, history, library science, linguistics, “philosophy”, relations, statistics, Hybrid sciences (Data Engineering, Information Engineering, Information Technology, Information Management, Cognitive Science, Computer Science, Information Theory, Classification Science, Logic).

Education science is considered as one of the information sciences. Some experts name it education studies. It is basically defined as research on general knowledge, education, teaching and learning. Some authors consider that it seeks to describe, understand, and prescribe education including education policy.

Author defined new perspective for the philosophy of information, where it includes the meaning, importance of information sciences, branches of philosophy of information, and its interactions, relations with other disciplines, branches.

(c) Science of Justice®®:

Basic principles of this science are defined in other work (Ramiz, 2016e).

With this respect, there are following concepts/branches: forensic science, criminal justice, social justice, natural law, human rights, engineering and law, engineering and justice, law and justice.

Author defined new perspective for the philosophy of justice, where it includes the definition, meaning, importance of justice, branches of philosophy of justice, and its interactions, relations with other disciplines like engineering, and other branches.

(d) Science of Politics®® (Political Science®©):

Basic principles of these sciences are defined in other work (Ramiz, 2016e). In general manner, it is a scientific discipline concerning the theory and practice of politics.

History of political science, definition and meaning of politics, and related branches are considered under this science generally.

The main branches/concepts of political sciences are defined as: international relations, political ideologies, comparative politics, political philosophy, political theory, public administration, public policy, political

methodology, political economy, political theology, history of politics, political systems, political stability, political analysis, political parties, political organization, political elections, foreign policy, foreign affairs, legislatures, political crises, government, political identity, political services, political values, political power, geopolitics, political geography, American politics, public law, political language, gender and politics, political sociology, political spectrum, strategic studies.

Author specifically considered ideal political construction, political/non-political ideologies, political engineering, politics and religions, politics and justice as important hybrid branches under this political science umbrella.

(e) Science of Religion®®:

Basic principles of this science are defined in other work (Ramiz, 2016e).

General science of religion is defined as a multi-faceted discipline that includes religious studies, which uses historical and scientific methods to analyze religion. And there is “science and religion” discipline, which explores the relationship between scientific and theological concepts. It involves applying scientific tools and theories to religious phenomena, studying the historical interaction between science and religion, and analyzing the role of religion in society through social science disciplines like sociology and anthropology.

Author defined religions, under the framework of “community values” which includes religions, progressive religions, denominations, sects, beliefs, thoughts, traditions, cultural values, ethnics, historical values, and others (Ramiz, 2020). With this respect, basic principles of this new science branch are defined due to community values.

Author defined new perspective for the philosophy of religion (Ramiz, 2010; 2016d, 2020) where it includes the definition, meaning and importance of all past/present religions, history of mythologies and religions, and New Era Theory, Progressive Religions, Religion and Science, and its interactions, relations with other disciplines/branches.

(f) Basic Sciences®®:

Basic principles of these sciences are defined in other work (Ramiz, 2016e).

These sciences are defined as (in alphabetic order): Biological sciences, Chemical sciences, Electromagnetic sciences, Information sciences, Mathematical sciences, Physical sciences.

Author defined new perspective for the philosophy of science, where these basic sciences hierarchy and correlations are re-constructed under Ideal Scientific System (Ramiz, 2016e).

It is important to provide students with education in these basic sciences, starting from the appropriate age level and in line with their interests and/or abilities.

Science education is defined as the teaching and learning of science to school children, university students, or adults within the general public. This science branch includes work in science content, science process (the scientific method), social science, and teaching pedagogy generally.

(g) Social Sciences®®:

These sciences are defined as: anthropology, psychology, sociology, pedagogy, dance, film, music, theatre, sports, culture & art, beauty & art, love & relations, demography, geography (human), social works, gender & sexuality. All other old social science* branches are redefined/re-constructed under the information sciences, administration sciences, political sciences, hybrid sciences, and others (Ramiz, 2016d; 2016e; 2025c; others).

It is important to educate the students regarding these social sciences starting from the suitable age level and due to their interests, abilities, and talents accordingly.

(h) Science of Systems®® (Systems Science):

Basic principles of these sciences are defined in other work (Ramiz, 2016e).

In general, there are following concepts/branches expressed under the umbrella of systems science: systems theory, cybernetics, system biology, systems engineering, systems dynamics, systems ecology, operation research, system analysis.

Author defined new perspective for the philosophy of system (Ramiz, 2016d; 2025c) where it includes the definition, meaning and importance of systems, history of systems, and information systems, hybrid systems, and its interactions, relations with other disciplines/branches.

(i) Hybrid Sciences®®:

Basic principles of these sciences are defined in other work (Ramiz, 2016d; 2016e).

Hybrid sciences are defined to reconstruct and/or to redefine some multidisciplinary sciences, interdisciplinary sciences and transdisciplinary sciences due to the new perspective of philosophy of science. It is related with hybrid theory (Ramiz, 2016d). Hybrid sciences emerge as a branch in which the structural disciplinary sciences that constitute these sciences are brought together with appropriate perspectives, strengthened and carried to a higher dimension/plane/level.

Hybrid sciences can be considered through three categories as follows:

Category-A: Hybrid sciences due to basic sciences (2D-6D Categories of: biology, chemistry, electromagnetics, information, mathematics, and physical sciences), Hybrid Sub-branches.

Category-B: Hybrid sciences due to major sciences (2D-8D Categories of: administration, information, justice, politics, religion, science, social science, system), Hybrid Sub-branches.

Category-C: Hybrid sciences due to Category-A and Category-B together (2D-14D Categories).

Evaluation of the Education From Administration Perspective

In addition to evaluating the subject of education according to the 17 perspectives mentioned above, it is important to evaluate management concepts and perspectives in education for all these perspectives.

With this respect, one can consider the following six concepts: (a) education (management) system, (b) education system management, (c) education managers, (d) education (administration) system, (e) education system administration, (f) education administrators.

“Education managers (education administrators)” (No. 7) which is expressed in the previous sections generally, is one of the important components of the education.

Educational management refers to the administration of the education system in which a group combines human and material resources to supervise, plan, strategies, and implement structures to execute an education system.

Besides this, educational management is defined as one of a trilogy of overlapping concepts, along with educational administration and educational leadership. These three concepts are related but nonetheless possess definitional differences depending on where the terms are applied.

Education management is also expressed as a discipline that integrates the principles of management with the context of education. With this respect, basic concepts of education management include planning, organization, guidance, coordination, and control.

In the literature, “education management” expression used by some authors generally for referring management that will need at every level of education system.

However, the author considered the concept of “education administration” as a definition that represents the highest authority among all levels of educational management and expresses the perspective of the administrator and the values he/she can add to the system.

It is possible to mention about the following management units and responsibilities regarding the education management: (a) kindergarten education management, (b) primary school education management, (c) secondary school education management, (d) Lycee education management, (e) Department education management, (f) Faculty education management, (g) University education management, (h) National Education Directorate, (i) Country National Education Ministry, (j) Regional Union Education Administration, (k) World Wide Education Administration. These are management units in the general education systems.

However, in this work, author focused on the “education administration systems” and “education system administration” specifically and defined related new perspectives in the next sections.

Continuable/Sustainable Education Administration System for a World Country

One of the important components of the education is “education systems”. The continuity of the education system, how long it will be effective, and what kind of structure it should have are as important as its existence. Author defined two related education components in this context: school education system (No. 6), and country education system (No. 8).

Continuity/sustainability is important for education systems of the schools and/or of countries. It is necessary and important that R-Values (Ramiz, 2020; 2025c) are maintained and transferred, businesses and public/private sector organizations constantly provide human resources, and the system is managed good and/or correctly. To have good and/or correct basic senses, and philosophy of progression is important for continuity/sustainability too.

In this work, author focused on Country Education Administration System (No. 8) and specifically defined continuable/sustainable education administration system for a world country in Figure 4 and Figure 5 below with its bloc diagrams.

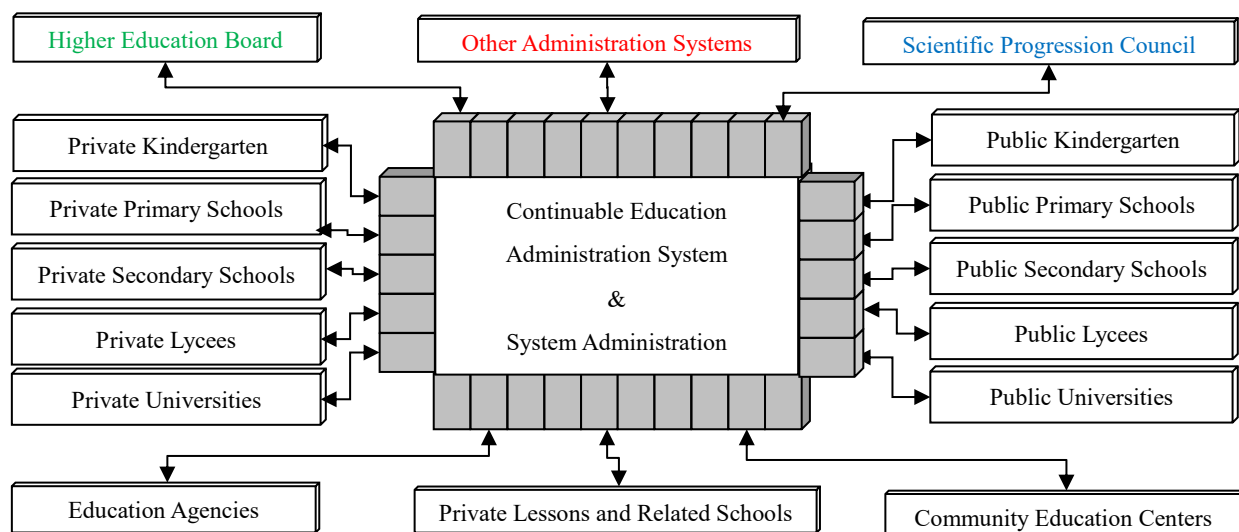


Figure 4. Continuable/sustainable education administration system for a world country (external structure).

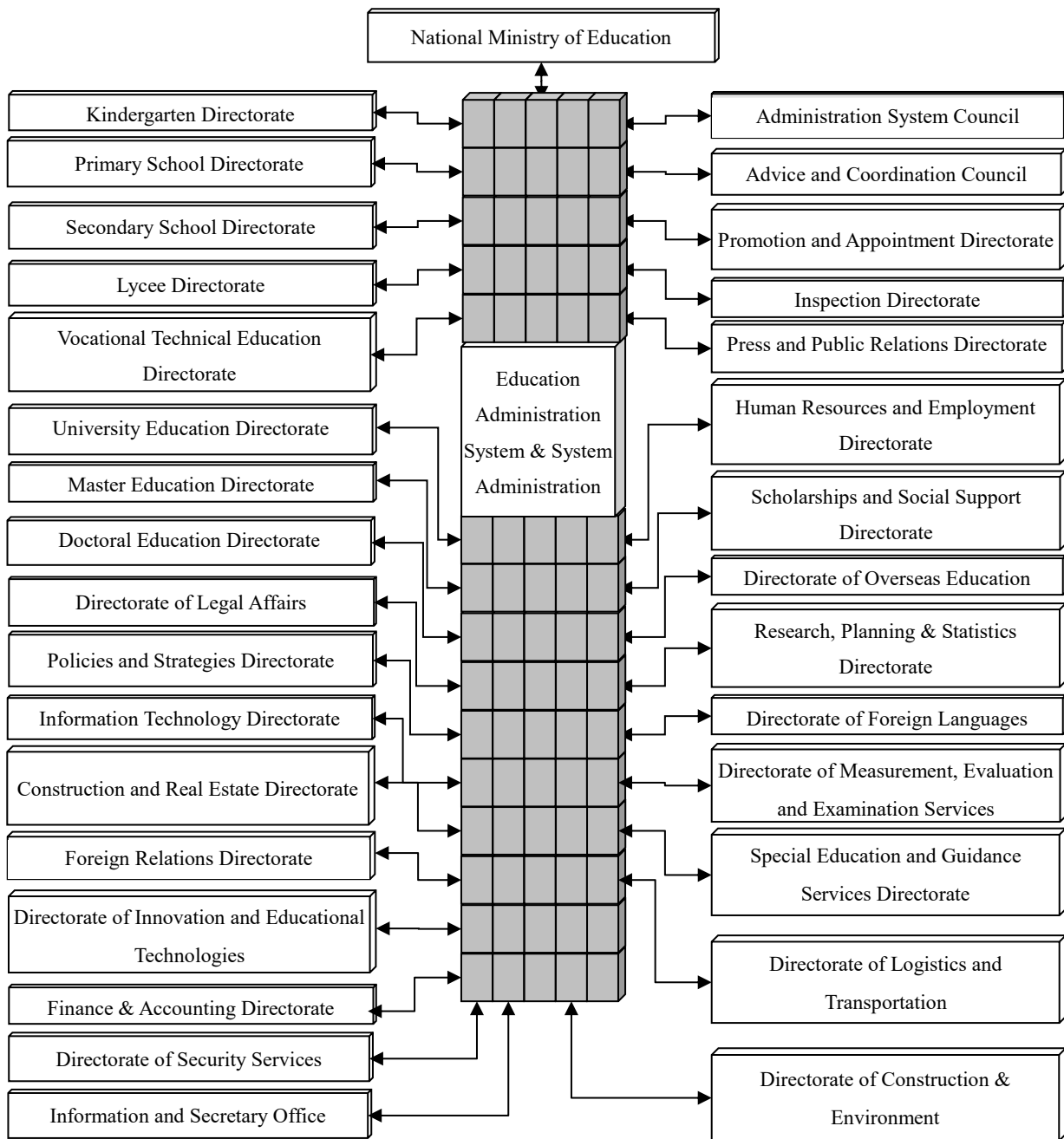


Figure 5. Continuable/sustainable education administration system for a world country (internal structure with 32 units).

The contents of some of the blocs related with Figure 4 and Figure 5 are expressed in other work.

However, author defined education system administration, ideal education construction, and other improved education components related with the education administration system in the following sections, and considered to supply/provide good and/or correct continuable/sustainable education in each world country accordingly. In this context, even if a person makes a mistake, the system can continue to function or be operated as good or correctly as possible.

Education System Administration

From a professional perspective, the following points should be taken into consideration for highest level education system administration (No. 13) in a world country:

(a) Determination of the existence and/or effective use of “subjects of services” that are mandatory and necessary for a world country.

(b) Determination of the existence of the necessary “State/Autonomous/Semi-Autonomous/Mixed/Private” institutions related to these “subjects of services” and/or whether these institutions have effective education and management.

(c) Be knowledgeable about the establishment and/or reconstructing of education/training and management systems related to these “subjects of services”.

(d) Be knowledgeable about the existence and/or effective use of “system administration” blocks for each of the institutions/systems related to these “subjects of services”, and/or identify, organize, and reconstruct any other deficiencies in their functioning.

(e) Determination of the review, organization, structuring, and other aspects of the Ideal Political Construction required for a world country.

Author made a synthesis based on his theoretical information, knowledge and practical experiences on these issues and points, and defined education system administration as shown in Figure 6 below.

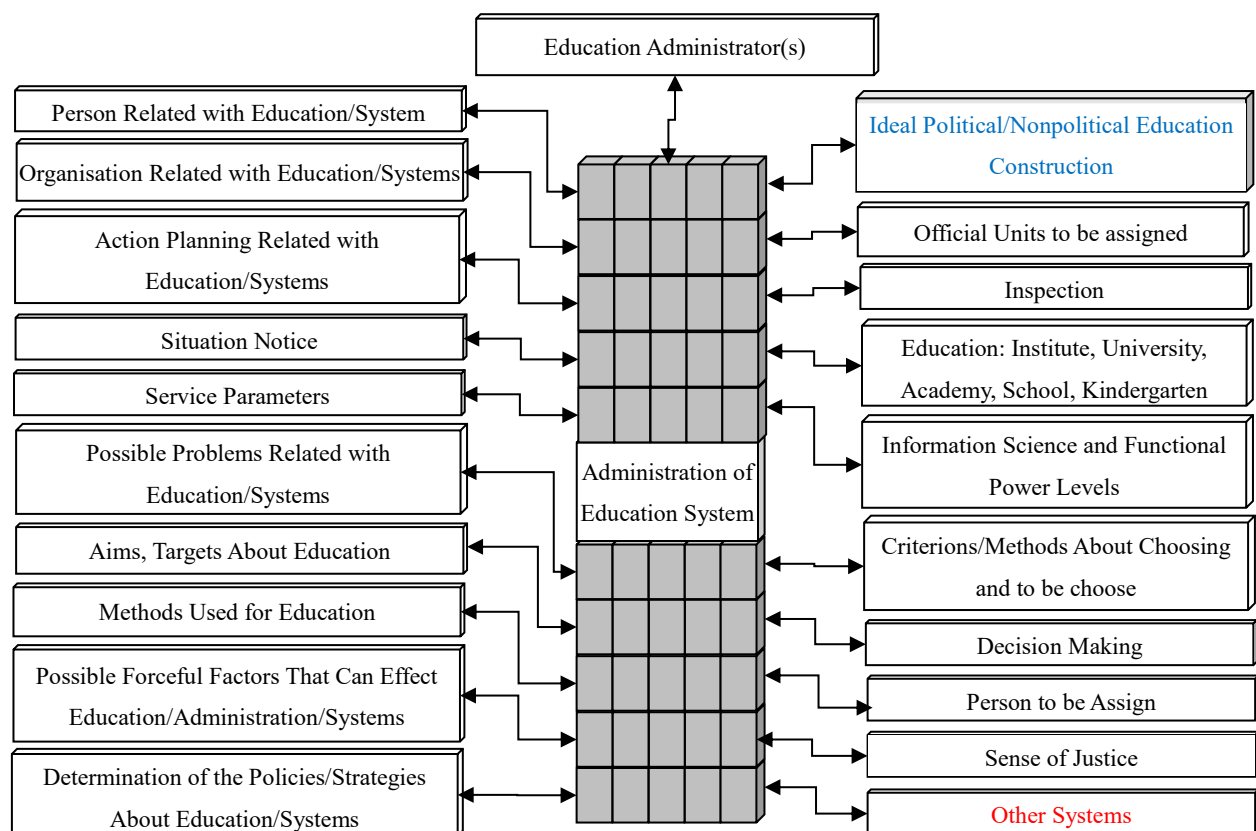


Figure 6. The general education system administration structure to be considered for education systems in a country/association/institution/school.

Here, sense of justice, decision making, service parameters, information science, and some other blocs in (Figure 6) are defined generally/specifically in other works (Ramiz, 2010; 2015; 2016a), where some others are expressed in the next section.

Each bloc is important to have good and/or correct system administration for the education system in the world country.

It is good and/or correct that the person who will administrate the education system (education administrator) must have knowledge of the philosophy of science, philosophy of information, and philosophy of social sciences.

Depending on the disciplines that Education System Administration will cover, it is necessary to look at the subject at different hybrid philosophical levels of basic philosophies (1D, 2D, 3D, 4D, 5D, 6D, 7D, 8D), where all possible category levels can be evaluated through the ideal philosophical system.

Ideal Political/Nonpolitical Education Construction for a Progressive World Country

Author noticed that following factors can affect the outcomes of educational systems: (a) ideology of students, (b) ideology of teaching staff, (c) ideology considered within educational programs, (d) ideology used in educational methods, (e) ideologies/philosophies of the education administrator(s), (f) ideology considered as policy/strategy in the education system, (g) others.

One can suggest to consider and/or follow the old known socialist ideology education (integrated to Gr.5.5), one other radical religious ideology education (integrated to Gr.4.4), another one far nationalist ideology education (integrated to Gr.3.3), other one far monetarists ideology education (integrated to Gr.2.2), and so on. Author evaluated all these old/past/present ideologies and their effects to national education systems of the world countries, and so the educated peoples and political/non-political sectors they are involved through R-Synthesis he made. As result of the new synthesis, author defined ideal political construction for each world country to solve the problems created by ideological/non-ideological discussions in one point of view (Ramiz, 2010; 2015; 2016c).

With this respect, all possible parameters related to ideology are reviewed and the Ideal Political Construction and Sub-ideologies are defined (Ramiz, 2010; 2015; 2016c). There are many methods defined to describe this Construction, one of which is specifically stated in the formula below:

$$\text{R-Ideology} = I \{W; \text{NoE}; i; j; \text{KoS}; \text{SoS}; \text{WoS}; \text{ST}; P; r; t; \text{other}\}.$$

Here: W: World Country; NoE: Ethnic origin of administrator or group; i: Group number (1 to 5); j: Sub group number (1 to 5); KoS: Kind of Services; SoS: Subjects of Services; WoS: Way of Services; ST: Service Types; P: Person; r: location; t: time; others. These components are defined specifically in other work (Ramiz, 2010; 2015).

The author determined through his various experiences, both theoretically and practically, that some/most of the problems originate or continue to arise: (i) from the nature of people (Ramiz, 2016a; 2025c) who involved in the subject matter, (ii) past/present ideologies of the teaching staffs and/or family members, (iii) education programs of the schools/academies/universities, (iv) education programs of the related politics, ministry of education, and/or governments, (v) education programs of the related scientists, philosophers, (vi) and of others.

Author defined Ideal Education Construction in Table 3 below by considering the ideal political construction (Ramiz, 2010; 2015; 2016c) to solve all these problems systematically in short/mid/long period, and through sense of justice he adopted.

Table 3

Ideal Political/Nonpolitical Education Construction for a Progressive World Country

1. New Era Education Group	2. Progression of the Country Education Group	3. Unity of the Country Education Group	4. Values of the Country Education Group	5. Social Progression Education Group
Gr(1, 1); I(1, 1); new	Gr(2, 1); I(2, 1); new	Gr(3, 1); I(3, 1); new	Gr(4, 1); I(4, 1); new	Gr(5, 1); I(5, 1); new
Gr(1, 2); I(1, 2); new	Gr(2, 2); I(2, 2); modified	Gr(3, 2); I(3, 2); modified	Gr(4, 2); I(4, 2); modified	Gr(5, 2); I(5, 2); modified
Gr(1, 3); I(1, 3); new	Gr(2, 3); I(2, 3); modified	Gr(3, 3); I(3, 3); modified	Gr(4, 3); I(4, 3); modified	Gr(5, 3); I(5, 3); modified
Gr(1, 4); I(1, 4); new	Gr(2, 4); I(2, 4); modified	Gr(3, 4); I(3, 4); modified	Gr(4, 4); I(4, 4); modified	Gr(5, 4); I(5, 4); modified
Gr(1, 5); I(1, 5); new	Gr(2, 5); I(2, 5); modified	Gr(3, 5); I(3, 5); modified	Gr(4, 5); I(4, 5); modified	Gr(5, 5); I(5, 5); modified

Notes. Here, Gr(i, j) denotes numbers of the sub groups, and I(i, j) denotes good/correct ideologies, philosophies that should be for the related sub-groups of the country.

Here, the good and/or correct ideologies, philosophies for each of the sub-group in Table 3 are defined below as result of the synthesis: I(1, 1): R-Centrism (New Era), I(1, 2): New Era and Progression of the Country, I(1, 3): New Era and Unity of the Country, I(1, 4): New Era and Values of the Country, I(1, 5): New Era and Social Progression, I(2, 1): Constructional Centrism-2 (Progression of the Country and New Era), I(2, 2): Progression of the Country, I(2, 3): Progression of the Country and Unity of the Country, I(2, 4): Progression of the Country and Values of the Country, I(2, 5): Progression of the Country and Social Progression, I(3,1): Constructional Centrism-3 (Unity of the country and New Era), I(3, 2): Unity of the Country and Progression of the Country, I(3, 3): Unity of the Country, I(3, 4): Unity of the Country and Values of the Country, I(3, 5): Unity of the Country and Social Progression, I(4, 1): Constructional Centrism-4 (Values of the Country and New Era), I(4, 2): Values of the Country and Progression of the Country, I(4, 3): Values of the Country and Unity of Country, I(4, 4): Values of the Country, I(4, 5): Values of the Country and Social Progression, I(5, 1): Constructional Centrism-5 (Social Progression and New Era), I(5, 2): Social Progression and Progression of the Country, I(5, 3): Social Progression and Unity of Country, I(5, 4): Social Progression and Values of the Country, I(5, 5): Social Progression.

The “new” defined five education groups given in the first row and the ones in the first column in Table 3 refer the convergence points of 5 x 5 (= 25) sub education groups in one perspective. To explain this, there are different ways of synthesis that can be considered by person. Two ways of synthesis are given other work (Ramiz, 2010; 2015).

With this new ideal education construction, all good and/or correct R-Values are preserved (being protected), some other values are advanced/progressed, and some old/past ideologies that are not suitable for this new era are removed or changed, re-constructed, and/or redefined according to a new perspective.

In this context, five education groups, with 5 x 5 education sub groups are necessary and sufficient for a world country/territory/community to have “good and/or correct” educated students/adults, to have sustainable education administration and to be progressive world country in short, mid, and long period accordingly.

This ideal educational construction provides the following opportunities and capabilities to the education and administration system for every political/non-political individual, group and society involved: (a) Justice in Education, (b) Objectivity in Education, (c) Future Vision in Education, (d) Cooperation in Education, (e) Solidarity/Support in Education, (f) Representation in Education, (g) Continuable/Sustainable Education, (h) Hybrid Education, and its importance and use.

Author considered this ideal education construction as an education program as well to have sustainable education, sustainable community too. In this context, new perspective for philosophy of science, philosophy of politics, philosophy of religion, philosophy of information, philosophy of justice, philosophy of system, philosophy of administration and philosophy of social science can be considered as reference.

With this respect, there can be necessary and sufficient to open five schools, or 25 schools in a country for progressive educational needs of a country/territory.

Education process of students/humans can be variable, different, similar due to their ages, ethnic origins, ideologies, beliefs, groups, community and regarding their information level, abilities, skills. However, author proposed gathering and educating clever, smart, intelligent, genius, and/or hardworking children, students, humans in Gr.1X, Gr.2.1, Gr.3.1, Gr.4.1, and/or in Gr.5.1 due to their interests and their progression processes/phases, by the guidance of suitable group teaching staff.

Author proposed that, as of 15/18 years of age, it is good and/or correct to consider education/teaching to students about political, religious, scientific, judicial, and other ideologies related with these 5 x 5 constructions. Besides this, until 15 years of age, some other good values regarding the ideal education construction are considered to be thought.

In this case, people can take a look at to the ideal political construction and old/past ideologies for the suitable integration to the groups for the future (Ramiz, 2010; 2015; 2016c).

A simple form of the ideal political construction is given below in Table 4 only for one/two specific sub-ideology integration for each 5 x 5 group. In facts, it includes integration of all scientific, religious, political, commercial, philosophical, military, ethnic, etc. all politic/non-politic groups' thoughts and senses where author evaluated it generally/specifically for all world countries before.

Table 4

Integration of the Old Political Ideologies Into Ideal Political Construction for a Progressive World Country (An Example for a World Country and for one Ethnic Origin)

1. New Era Politic Group	2. Progression of the Country Politic Group	3. Unity of the Country Politic Group	4. Values of the Country Politic Group	5. Social Progression Politic Group
Gr(1, 1); new	Gr(2, 1); new	Gr(3, 1); new	Gr(4, 1); new	Gr(5, 1); new
Gr(1, 2); new	Liberal* Monetarist-2 others	National liberal* Monetarist-3 others	Conservative liberal* Monetarist-4 others	Communist, Monetarist-5 others
Gr(1, 3); new	Liberal nationalist* others	Nationalist* others	Religious nationalist* others	Nationalist socialist* others
Gr(1, 4); new	Religious democrat* others	Nationalist conservatist* others	Conservatist, radicalists* others	Religious socialist* others
Gr(1, 5); new	Social democrat* Democrat environmentalist Singer, artists-2 others	Social nationalist* National environmentalist Singer, artist-3 others	Social conservatist* Religious environmentalist Singers, artists-4 others	Socialist* Social environmentalist Singers, artists-5 others

Notes. Here, Gr(i, j) denotes numbers of the sub groups; * denotes some old/past ideologies integrated.

It is important to teach students the “past-present-future” trinity well. In this context, integrating past/present ideologies into the relevant ideal political construction can be considered as the beginning of the development process in education. However, it would be good and/or correct for administrators and educators to take as reference the new 5 x 5 ideal education construction according to the new era perspective, rather than continuing the old ideologies as they are. Here, Gr.(1,X) values and Gr.(Y,1) values are specially expressed in other works

(Ramiz, September 2015; June 2016a; March 2016b; April 2016c; June 2016d; 2016e; 2020; 2025a; 2025b; 2025c) where it provides/guides readers to explore all of the related subjects regarding the New Era. Here, also some of the old/past ideologies given in Table 4 are expressed in other works (Ramiz, 2010; 2015; 2016a; 2016c). There is more than one method to explain these old/past ideologies and how to integrate them to this structure. To give an idea, monetarists can be considered person whose monetary values interest is minimum 60%, comparing with his/her social/cultural/community values interest of 40 %, for example. Definition and good and/or correct integration of old/past ideologies to ideal political construction requires specific professionalism/experience/expertise where it is advised to be done by good qualified persons. Author expressed some of his good and/or correct integrations to ideal political construction in other works (Ramiz, 2010; 2015; 2016c).

In this context, it is important to have good and/or correct Education Programs, Teaching Staffs, Education Administrator(s) for having good and/or correct political/non-political education construction in a world country. Also, related education programs of each of the sub-groups in Table 3 should be considered as result of the synthesis. It is good and/or correct to have education administrators from the Gr.1X, or Gr.2.1, Gr.3.1, Gr.4.1 and/or from Gr.5.1 where these group people are proposed to be more judicious, objective, educated, and have good skills, abilities, values to supply continuity/sustainability in the education system.

Education administrator(s), teaching staffs should consider the general perspective they must have for continuable/sustainable education administration in the county, or in any other types of union, or in any commercial/non-commercial associations.

Education Due to Subjects of Services

Author defined 39 subjects of services (Ramiz, 2010; 2015; others) that are mandatory to have/achieve sustainable political/non-political administration system in each world country and in the world. With this respect, it is important to have education about each of these 39 subjects of services. Educations due to subjects of services mandatory for a progressive world country are defined in Table 5 below.

Table 5

Educations Due to Subjects of Services Mandatory for a Progressive World Country (In Alphabetic Order)

Subject of education	Subject of education	Subject of education
1. Accreditation, Standardization Education	14. Environment Education	27. Political Works Education
2. Administration Education	15. Finance and Monetary Values Education	28. Press and Publication Education
3. Agriculture Education	16. Health Education	29. Public/Private Inhabiting Education
4. Civilian Community Education	17. Industry Education	30. Research and Planning Education
5. Combat with Organized Crimes Education	18. Information and Service Education (internet, e-government, library, other)	31. Science Education
6. Commerce Education	19. Inspection Education	32. Security Education
7. Community Values Education	20. Integration Education	33. Social Support, Aid Education
8. Consultancy Education	21. Intelligence Education	34. Sports Education
9. Culture and Art Education	22. Judgment Education	35. Stockbreeding/animally Education
10. Economy Education	23. Law Education	36. Tourism & Hospitality Education
11. Education Systems	24. Logistics Education	37. Transport Education
12. Electricity Education	25. Military Education (land, air, naval)	38. Infrastructure Production & Maintenance Education
13. Electronic and Communication Education	26. Natural Sources and Energy Education	39. Other Educations

Author proposed to re-construct educational programs by taking these subjects of services into account, to reconstruct the education system according to the needs of the country, to ensure that students are educated by providing guidance according to these needs, and to develop educational policies and strategies that take these issues into account.

Education Programs

Education programs are one of the important components of education as mentioned in the previous sections. They should be designed, prepared, re-organised, reconstructed due to the new era perspectives and by considering the all subjects/concepts mentioned above.

With this respect, author categorized the education programs as follows.

(a) Education programs due to age levels categories (standard/traditional education): Early childhood education program, primary school education program, secondary school education program, lycee education program, university education program, master education program, doctoral education program;

(b) Education programs due to education tools;

(c) Education programs due to subjects of disciplines;

(d) Education programs according to their nature/publicity: Standard/traditional education programs (due to public education system), private education programs (education programs created by private companies, institutions, and other organizations in the short, medium, or long term according to specific goals, missions, visions, and programs);

(e) Education programs due to characteristics methods: Theoretical, experimental, applied, computational, analytical, comparative;

(f) Education programs due to special educations;

(g) Education programs due to disciplinary types: Disciplinary, multidisciplinary, interdisciplinary, transdisciplinary, hybrid;

(h) Education programs due to formality: Formal, non-formal, informal education programs;

(i) Education programs due to subjects of services: Due to 39 subjects of services.

Author considered that it is good and/or correct to educate/teach philosophy of science, philosophy of information and philosophy of engineering to all students at their possible early young ages. Engineering branches and engineering software experts are necessary for the progression of the all world countries.

Computer using, should be in education programs for the students at their 6/12/15 years of ages due to their abilities.

Mobile phone using, should be in education programs for students at their 15 years of age (at starting to lycee education). This is proposed by the author because of the electromagnetic effects of mobile phones on human health and regarding its social sciences effect in student life. Also, student should be allowed to use social media at their 15 years of age.

As a specific education tool in Case (b), digital tools are chosen by the author. This is named as Digital Education in the literature and generally/specifically explained below to give idea about it.

As a specific discipline in Case (c), Engineering Education is chosen by the author and specifically explained below to accompany to the educational evolution 5.0 mentioned above.

Digital Education and Digital Tools

Digital education refers to the use of digital tools, technologies and content to support teaching, learning and assessment. It includes everything from online courses and interactive learning platforms to virtual classrooms and educational apps.

The COVID-19 pandemic has necessitated digital agility.

Digital education is defined as a student-centered approach to learning that facilitates anytime and anywhere access to educational resources, allowing learners to choose their courses, modes of learning, and schedules. It utilizes technology to overcome barriers such as strict timetables and physical presence, thereby broadening participation and enabling personalized learning experiences.

Digital education includes digital learning, education technology, online education, virtual learning, eLearning, and blended learning (Hamlyn, 2025). There are many technologies such as Internet of Things (IoT), blockchain, artificial intelligence (AI), big data, learning analytics, gamification, Virtual Reality (VR), and Augmented Reality (AR) that are the backbone of digital education. Of all these technologies, AI plays an important role in digital education by automating all the basic activities such as virtual tutors and smart evaluation.

Digital learning, combining technology with education to create high-quality teaching and learning practice, results in better outcomes.

Digital learning can be defined as a process of learning that is mediated, or supported, by digital technologies. These have different forms, including online learning, mobile learning, blended learning, and any educational software and available resources used in teaching and learning. The main aim of digital learning is to utilize technology to enhance accessibility, flexibility, and individualization of learning.

Digital learning, often synonymous with e-learning, is any type of learning or education that is supported or facilitated by the use of electronic devices and technology.

In contrast, eLearning has been known to deliver training in a structured format through online platforms or a Learning Management System (LMS).

There are: (a) EU Digital Education Program, (b) OECD Digital Education Program, (c) Digital Education Council: A global community of practice for education innovation, (d) World Bank Group-Digital Education for Latin America and Caribbean, (e) UNICEF Digital Education Strategy 2025-2030, related with the digital educations.

Engineering Education and Industry Evolution Phases

Engineering education is defined as the activity of teaching knowledge and principles to the professional practice of engineering. It includes an initial education (Diploma of Engineering-Dip.Eng.) and Bachelor of Engineering-B.Eng., Master of Engineering-M.Eng., or Bachelor of Science-B.Sc., Master of Science-M.Sc., and any advanced education and specializations that follow. The length of education, and training to qualify as a basic professional engineer, is generally four years in some countries and typically five years in others.

Science, technology, engineering, and mathematics education in primary, secondary, and lycee schools often serves as the foundation for engineering education at the university level. In the United States of America, engineering education is a part of this quaternary initiative in public schools.

Definitions of engineering and its branches are expressed in other work (Ramiz, 2025a). Be note that, theoretical and applied education in engineering increases the skills of engineers.

According to some authors, service-learning in engineering education is gaining popularity within the variety of disciplinary focuses within engineering education including architectural engineering, chemical engineering, civil engineering, computer engineering, electrical engineering, electronic and communication engineering, industrial engineering, mechanical engineering, robotic engineering, and other engineering educations (in alphabetic order).

In the literature, versions of engineering education that interact with industry evolution phases are expressed as follows generally: (a) Engineering Education 1.0 \approx Industry 1.0, (b) Engineering Education 2.0 \approx Industry 2.0, (c) Engineering Education 3.0 \approx Industry 3.0, (d) Engineering Education 4.0 \approx Industry 4.0, (e) Engineering Education 5.0 \approx Industry 5.0.

These interactions put into use generally because of the engineering education components, where some versions are not being enough for the theory and application of industrial evolutions. In other words, new industrial founding caused new engineering education programs.

Engineering education versions and its interactions with industrial revolutions are generally expressed as follows:

Engineering Education 1.0. The technological advances of the first industrial revolution (Industry 1.0) made a fundamental impact on production, transport and infrastructures, hence completely changing societies. These revolutions importantly impacted military technology as well. Modern engineering education was established as a consequence of the first industrial revolution and in connection with the growing demand of engineers, both as civil servants for designing and developing infrastructures, as mentors of mechanization and production and as technicians for innovating and applying military technology.

Engineering Education 2.0. The second modern engineering education evolution lasted approximately from 1880 to 1940 and progressed in accordance with the pace established by the second industrial revolution (Industry 2.0). It was connected to a continuous search for a balance between theoretical and practical aspects of engineering; to a view of technology, arts and crafts as a global unity; to the establishment of chemical and electrical engineering, as independent disciplines; and to the incorporation of the new concepts to engineering education, inspired from the heyday of European physics.

Engineering Education 3.0. Between the 1950s and 1980s, following the digital revolution, the first programmes in some contemporary engineering disciplines started to appear, including: biomedical engineering, electronics engineering, computer engineering, robotics and mechatronics, to mention some examples of disciplines from engineering, which are now fundamental. This emergence of new topics and programmes reshaped importantly the landscape of engineering and, in turn, motivated the rise of international accreditation agencies, as a way of bringing order to the vast number of programmes arising those decades. In terms of internationalization, the foundation of the Erasmus programme in 1987 was a result of this period of changes and contributed to the transition towards more modern student-centred paradigms.

Engineering Education 4.0. The turn of the 21st century brought a relevant change of focus to higher education in general and to engineering education in particular. The Bologna Declaration (1999) and the consequent process, aimed at the implementation of the European Area of Higher Education, contributed to a change of focus from a traditional teacher-centered scheme to a learner-centered approach. Classical master lessons started to be complemented and replaced by more active methodologies.

Engineering Education 5.0. There are various thoughts and approaches about Engineering Education 5.0. Some of them are expressed below.

In one point of view, Engineering Education 5.0 should combine the benefits of well-established and validated engineering education models, taking inspiration from the past for constructing the future, while incorporating radically innovative aspects and relying on advanced technologies, as a necessary complement for more effectively and efficiently transform engineering, in order to successfully face global societal and environmental challenges. Inspiring criteria and proposals from well-established accreditation agencies, from recent worldwide initiatives focused on educational innovation.

Another discussion is put forwarded by the questioning “Engineering education: Does Industry 5.0 need Education 5.0?” Industry 5.0 is transforming the engineering profession and creating a need for new skills and knowledge. Here are some key areas where engineering education can be adapted to prepare students for Industry 5.0 era: interdisciplinary skills, digital skills, design thinking, entrepreneurship, and sustainability. By adapting engineering education to meet the needs of the Industry 5.0 era, educators can prepare students for careers that leverage the latest technologies and enable them to make a positive impact on society. Additionally, industry-academic partnerships can help bridge the gap between academia and the workforce by providing students with real-world experiences and opportunities to work on cutting-edge projects.

There are also some discussions about if it is appropriate that graduates who will work in a society dominated by Industry 4.0 should be educated in Education 1.0.

Another research by Marcelo Cardoso and Rafael Matone Chanin stated the history of engineering education for learning from the past to design the future.

Arfan Ghani (2022) expressed his thoughts about engineering education and Industry 5.0 with his study the “Engineering Education at the Age of Industry 5.0—Higher Education at the Crossroads”. He noticed that the nature of work is rapidly evolving, mainly driven by digital technologies, underpinned by Industry 5.0. It is more important than ever that engineering education, in particular, disciplines such as computer science and engineering must adapt to these changes. As witnessed by the changes over the past decade, enormous technological advancements have taken place in both hardware and software domains. Some of the outstanding industrial advancements in disruptive technologies include the Internet of Things (IoT), intelligent systems and artificial intelligence (AI)-enabled paradigms. The difference is shrinking, and it is becoming harder to draw a fine line between various engineering disciplines.

These interactions between engineering education and industry X put into use generally because of the engineering education components where some versions of components are not being enough for the understanding and teaching of the theory and application of the related industrial evolutions.

New Proposal for Education 5.0 and Engineering Education 5.0

As it can be noticed from the previous sections, author evaluated the subject of education and all disciplines including branches of sciences and branches of philosophies generally/specifically through this article and his other works by considering R-Synthesis (Ramiz, 2010; 2015; 2016d; 2016e; 2020; 2021; 2025a).

Here, author made a general proposal for Education 5.0 and Engineering Education 5.0, which takes into account all 17 education components and includes their related regulations and practices. New proposed Education 5.0 is a kind of hybrid structure of Education 1.0, 2.0, 3.0, and 4.0 in one point of view. However, there are new proposals regarding all of the education components, and also new engineering and technology products are being included in some manner.

Newly proposed Education 5.0 is considering education for all sides: students, teaching staff, education administrator(s) in general. Specifically, New Engineering Education 5.0 is proposing to consider Education 5.0 but also increase the importance and effects of Engineering Disciplines, Engineering and Technology Tools use for education. This provides cooperation between the related philosophers, scientists, teaching staff, and educational industry manufacturer companies.

In general, one can notice many of the concepts and components of new Education 5.0 within the all sections of this article. However, author simplified some topics below shortly to remind the general perspectives. Numbers of Education Components, and Related Proposals/Conditions/Requirements/Outcomes are as follows:

No. 1: Student; 1st degree-national, 2nd degree-national and international, 3rd degree-international, categories of student should be encouraged.

No. 2: Teaching Staff; should be educated, 1st degree-philosophy of science, philosophy of information, 2nd degree-philosophy of social science, 3rd degree-all basic philosophies

No. 3: Language; 1st degree-national language; 2nd degree-English language, should be encouraged, 3rd language can be optional. However, Italian, French, Latin, Spanish, Turkish, German, Chinese, Japanese, Russian, etc. languages can be 2nd degree option for English origin countries and for others.

No. 4: Education Programs; (a) considered for all related sides; students, teaching staff, education administrator(s). (b) "Past-present-future" concept based education programs. (c) Education programs should be related with (No. 8), so generally/specifically following education programs should be considered for a county:

*Education Program-1: Perspectives (see previous sections);

*Education Program-2: Philosophy, Branches of Philosophy, Hybrid Philosophies (see previous section);

*Education Program-3: Academic Disciplines, Branches of Sciences, Hybrid Sciences (see previous section);

*Education Program-4: Education Systems (see previous section);

*Education Program-5: Administration, Leadership, Administration Sciences and Systems;

*Education Program-6: Education Tools and Education Technologies;

*Education Program-7: Science Education;

*Education Program-8: Digital Education;

*Education Program-9: Ideal Education Construction (see previous section);

*Education Program-10: Subjects of Services and Education (see previous section);

*Education Program-11: Learning How to Use Computer, age 6/12/15/18;

*Education Program-12: Learning How to Use Mobile Phone, age 15;

*Education Program-13: Engineering Education;

*Education Program-14: Engineering and Multidisciplinary, Interdisciplinary, Hybrid Studies:

Engineering education in following dual concepts is important because for the benefits they provide to the students, teaching staff, education administrators, companies, associations, and to countries: engineering and standardization, engineering and administration, engineering and agriculture, engineering and commerce/business, engineering and consultancy, engineering and art, engineering and economics, engineering and electricity, engineering and electronics/communications, engineering and environment, engineering and finance, engineering and health, engineering and industry, engineering and inspection, engineering and intelligence, engineering and justice, engineering and law, engineering and logistics, engineering and military, engineering and natural sources, engineering and energy, engineering and political science, engineering and

publication, engineering and inhabiting, engineering and planning, engineering and science, engineering and security, engineering and sports, engineering and animality, engineering and transportation, engineering and infrastructure, engineering and philosophy, engineering and ethics, engineering and architecture, engineering and artificial intelligence, engineering and technology, engineering and biology/medicine, engineering and chemistry, engineering and marketing, engineering and software, engineering and design;

*Education Program-15: Engineering and Branches of Engineering:

Disciplinary studies in the following eight basic engineering branches are generally required: chemical engineering (including sub-disciplines), civil engineering (including sub-disciplines), electrical engineering (including sub-disciplines), materials engineering (including sub-disciplines), industrial/mechanical engineering (including sub-disciplines), aeronautical engineering, computer engineering and biomedical engineering (including sub-disciplines);

Specifically, AI Engineering, Biomedical Engineering, Computer Engineering, Electric & Electronic Engineering, Electronic & Communication Engineering, Robotics and Mechatronic Engineering, Software Engineering (in alphabetic order) are important for all engineering branches because of their programs, content, theories, methods, applications, etc. There are important interdisciplinary engineering branches as well;

*Education Program-16: Engineering Applications of 20th century and 21st century:

The following 20 engineering achievements that influenced the new era, in other words, changed human life in the 20th century, can be considered effective for 21st century: (1) Electrification, (2) Automobile, (3) Aircraft, (4) Water supply and distribution, (5) Electronics, (6) Radio and television, (7) Agricultural mechanisms, (8) Computers, (9) Telephone, (10) Ventilation and cooling, (11) Freeways, (12) Spacecraft, (13) Internet, (14) Imaging, (15) Household appliances, (16) Health technologies, (17) Petroleum and petrochemical technologies, (18) Laser and fiber optics, (19) Nuclear technologies, (20) High-performance materials. Author considered these engineering achievements will be effective in the 21st century too.

No. 5: Way of Education; hybrid-physical and online, should be considered.

No. 6: School Education System; should be reorganised for Schools, Academies, Universities, Institutes due to new era requirements, and by considering “past-present-future” hybrid perspectives:

For Universities; 1st degree-department, 2nd degree-faculty, 3rd degree-university are important. Also, 1st degree-teaching staff, 1st degree-education programs are important.

No. 7: Education Manager/Administrator; should have 1st degree-theoretical and practical experiences, 2nd degree-necessary information about all eight basic philosophies.

No. 8: Country Education (Administration) System; See-Continuable/Sustainable Education Administration System.

No. 9: Education Tools; hybrid use of the following education tools should be encouraged-whiteboard, book, pen/computer, mobile phone, tablet/ICT tools.

No. 10: Education Methods; hybrid method that considers the followings should be applicable—student centered, teacher centered, program centered.

Here, the arrangement should be done: (i) due to needs of students, (ii) due to needs of public/private sector, (iii) due to university/company cooperation, (iv) due to university/industry cooperation.

No. 11: Physical Infrastructure; good physical infrastructure should be provided, 1st degree-classroom, chair, table, 2nd degree-building facilities.

No. 12: Technological Infrastructure; good performance 1st degree-internet, 2nd degree-WiFi, 3rd degree-GSM Network, and others should be provided.

No. 13: Education System Administration; See-Education System Administration.

No. 14: Education Environment; 1st degree-place where you can reach any other offices, shops, etc., easily should be chosen, 2nd degree-upon to No. 1, city where you live, or other city in country, or other country should be preference/provided for education.

No. 15: Accommodation and Food Facilities:

For students; *school-home, dormitory should be encouraged, *university-house, dormitory should be encouraged.

For School/University; *arrange lodging for university staff, *arrange breakfast, lunch facilities for students and university staff

No. 16: Transport:

*For students-teach how to travel by walk, bicycle, bus, train, taxi; teach addresses, teach how to use maps;

*For school/university-arrange all possible transport ways for students and other teaching/administrative staff.

No. 17: Safety and Security:

*For student-teach safety and security to students;

*For school/university-arrange all necessary safety and security for school/university;

*For other education components.

Author proposed new Education 5.0 and expressed its necessity through the problems/subjects he noticed by his other works (Ramiz, 2010; 2015; 2016a-e; 2020; 2021; 2025a; 2025b). Here it is important to note that, hybrid sciences, hybrid philosophies, hybrid disciplines, hybrid theories, hybrid applications, hybrid technologies, and hybrid education will be good guide, reference together and separately for all related people in the 21st century to have continuable/sustainable administration and benefits.

Here, all above mentioned 17 education components are considered to be reconstructed, improved, progressed systematically, and hybridised.

Instead of providing a future for individuals who lose their values with technology, whose priorities change, or who are crushed under workload, or raising such a society, an Education 5.0 that will protect, develop, and move forward the individual, group, society, country, and R-Values is important. In the above sections, the structure, system, and administration that will provide this are defined not only for the engineering discipline but for all related disciplines.

It is important and necessary to talk about education in all disciplines separately.

In this study, while a general definition is made for all disciplines/branches, guideline information is presented specifically for the engineering education program as possible as.

Author defined new administration system for the world countries (Ramiz, 2010; 2016c), also engineering and artificial intelligence (AI) (Ramiz, 2025a), new perspective for philosophy of science (Ramiz, 2016e), new perspective for the philosophy of information (Ramiz, 2025c) specifically. So, in one perspective, the science branches that are required or to be required by the groups, communities, and countries are defined in generally/specifically.

Conclusion

In this work, history of education is expressed and evaluated generally/specifically by considering the related concepts. History of education is defined due to various approaches and perspectives. Specially, its

relation to history of civilization are expressed with more details. The concepts of civilization and progression are discussed generally/specifically. Philosophy of progression is specified with the purposes, nature, and vision. History of education outlined by Britannica is generally given. Author expressed shortly the education perspectives in the old/past Egypt, Mesopotamia, and North China due to related civilizations, to give an idea about its historical situation. It is stated that historical development of some of the disciplines is related to the history of education as well and each of them is specifically important.

Definition and meaning of education are expressed for various perspectives. Classification of education explained with specific approaches, and relation between literacy and education interpreted generally. Author advised to make primary, secondary, and lycee education as compulsory as possible for the all related world countries. Early childhood development briefly defined and the correlation with education systems outlined. The importance of one to one correlation between two concepts is briefly expressed by reminding the Person's Nature. There are five evolution phases in the history of education that are effected from different subjects, concepts, and others. Author generally/specially expressed these five evolution phases in this work.

The meaning and importance of philosophy of education are then defined according to the general approaches. Theories of education regarding the philosophy of education are considered as frameworks that explain how people learn, and 11 major teaching/learning theories are expressed generally. Some of the important philosophers of education and their philosophical/scientific interests are compared and expressed with a table.

New perspective of the philosophy generally defined by considering new era philosophy, eight basic philosophies, branches of philosophy, ideal philosophical system and hybrid philosophies. R-Philosophy, R-Science, R-Information, R-Education and R-System new disciplines are shortly expressed.

New perspective for the philosophy of education defined as sub-branch of philosophy of information. The related theories are proposed basically to have information about the existence, nature, purpose, method, administration, and inspections of education generally. Author defined education in systematic point of view as the transmission of data, information and/or accumulated knowledge about the related subjects/concepts. Education by qualification is defined generally.

17 education components are defined specifically for continuable/sustainable education, and efficiency, effective use and improvement/development of each of these education components expressed specifically. Priorities for continuable/sustainable education administration system are given with table due to characteristics of some education components. Some concepts in the education literature are given shortly. Importance of each education component for continuable/sustainable education administration system is expressed specifically.

Performance of the 13 education components for a country-X is given with a figure as an example. Importance of unit numbers about some of the education products, tools, methods, etc., is specifically mentioned.

Importance and relationship/interaction of education, values, and basic senses are explained with example figure. Purposes of education are expressed due to these basic senses. Author gave the diagram for three variables related with "educated/uneducated" people. The importance and relation of evaluation of variables "education and working", "education and culture", "education and happiness", "education and earning", "education and progression", "education and crime", and "education and performance", and "education and quality", are mentioned.

Evaluation of the education due to 17 specific perspectives is briefly expressed.

Then, evaluation of the education from philosophical perspective is specifically explained for philosophy of administration, philosophy of information, philosophy of justice, philosophy of politics, philosophy of religion,

philosophy of science, philosophy of social science, philosophy of system and for hybrid philosophies. The importance of ideal philosophical system is shortly explained.

Evaluation of the education from academic perspective is done by considering administration sciences, information sciences, science of justice, political science, science of religion, basic sciences, social sciences, systems sciences and hybrid sciences.

Then, evaluation of the education from administration perspectives is generally discussed by considering education management and education administration differences.

Continuable/sustainable education administration system for a world country is defined with bloc diagrams regarding internal structure and external structure.

Education System Administration is defined with bloc diagrams accordingly, and some of its blocs explained briefly.

Factors that can affect the outcomes of education systems are expressed. With this respect, ideal political/nonpolitical education construction for a progressive world country is outlined with 5 x 5 table, and related explanations. Definition, meaning, and importance of each of the sub education group Gr.X.Y. are expressed specifically to explain their effect to the education components and specially to students, teaching staff, education administrators. The opportunities, capabilities, and abilities that ideal education construction provide to the education and administration system for every political/non-political individual, group and community are explained briefly.

Then importance of education due to 39 subjects of services is expressed with a table. Author proposed to re-construct educational programs by taking these subjects of services into account, to reconstruct the education system according to the needs of the country, to ensure that students are educated by providing guidance according to these needs, and to develop educational policies and strategies that take these issues into account.

(a) Categories of education programs outlined. Priorities, importance, and possible application results of the education programs interpreted.

(b) Digital education and related digital tools are generally expressed; the benefits of using this education category are specifically mentioned.

Engineering education and related five industry evolution phases are defined as special education program. Some discussions regarding engineering education are given.

In the last section, new proposal for Education 5.0 and Engineering Education 5.0 are outlined generally/specifically. Concepts and components of new Education 5.0 specifically expressed due to 17 education components, and related proposals/conditions/requirements/outcomes. 16 specific education programs defined, and 41 dual concepts related to engineering and related disciplines are specifically expressed to convey the necessity of education in the field of engineering and the high expectations placed on engineers in these fields in every country of the world.

Education can be defined as a concept needed in every discipline, a concept that develops and shapes human development according to the field of interest taken into consideration.

Education, by creating a hybrid combination with engineering and technology, shapes human progression on the one hand, and on the other hand, it becomes necessary to ensure its good and/or correct use through information, administration, and justice philosophies to be taken into account generally/specifically.

The principles of education science guide the correct use of educational information, while philosophy of education guides the development and shaping of individuals, groups, societies, and countries.

Author expressed the following information in the other work (Ramiz, 2025c) to guide both students, teachings staffs, education administrators, and other related people to have information about engineering and technology tools: (1) Largest technology companies by revenue as of 2023 in the world, (2) Mobile phone manufacturers with the highest revenue in the world, (3) Computer manufacturers with the highest revenue in the world, (4) List of social platforms due to the highest active users, (5) List of the integrated services, (6) List of the search engine companies with the largest user.

The scientific and engineering/technological founding/inventions are effective and interacting with education life of humans, and also affecting information sciences and social sciences disciplines in general manner. Author defined basic philosophies and branches of philosophies, including philosophy of education which is sub branch of philosophy of information, to express the interaction/relation between these founding and other philosophies.

This study examines the meaning and significance of the disciplines of education, administration, information, mind, basic senses, languages, sciences, systems, hybrids, philosophies, and others, both individually and together. The general and specific philosophical/scientific approaches considered in the formation and application of these disciplines are defined generally. The indispensable relationship and interaction of these disciplines/concepts, which influence and transform human life and the face of the world, are revealed through a new philosophical perspective, using hybrid sciences, hybrid philosophies, and hybrid education.

Education used to be considered essential. Then, a good education became more meaningful. Later, education gained value in many areas. Education became a cultural element. Being educated became a privilege. Education became a factor of development. The education trade developed, the science of education developed, and education management gained importance. The education system, education schools, education technologies, the education industry, competition in education, and equal opportunity in education became topics that everyone concerned with.

Author defined new perspectives for philosophy of education, together with the new perspectives on philosophy of administration, information, justice, politics, religion, science, social sciences, system and hybrid philosophies which considered new ideal systems as well for the solutions of all related problems involved directly/indirectly (Ramiz, 2010; 2015; 2016a-e; 2020; 2021; 2025a-c).

Education/training should be done by people who have good and/or correct values, information, and knowledge.

People should be open to learning until certain ages such as 6, 12, 15, 18, 22, 24, 28, 35, 40, etc.

People should be able to simultaneously transition to practical life alongside/in parallel with continuous learning through processes such as “learning and applying” at a certain age, then “learning-applying-inventing”, “learning-applying-inventing-managing”.

An engineer must have practical knowledge as well as theoretical knowledge and must also improve himself in measurement and evaluation.

Students and individuals should aim to receive education in more than one discipline and branch.

They should develop studies on hybrid science, hybrid disciplines, hybrid production, and hybrid solutions by using the opportunities and abilities they have gained through education.

Teachers, education managers/administrators, and teaching staff should focus on hybrid education and to have the ability to teach in all situations, conditions, and times as possible as.

Teaching staff are the primary and valuable component of the education system. The educational programs, teaching methods are other important prior components, and educational tools must always be produced. Outdated educational tools should not be phased out just because newer ones are available.

The new era and new educational tools allow access to information in a shorter time, but the process of reading, evaluating, learning and applying will always require a certain amount of time for the student. This is also correct for the ability to absorb/adopt information or use it in the right place, at the right time, for the right purpose.

Within the scope of education, students, teaching staff, and education administrators must learn Person's Nature well. Author defined good and/or correct person nature in other work (Ramiz, 2025c).

Education and the information/knowledge gained should not be used for bad and/or incorrect purposes.

Just like on a five-person basketball team, each student must learn to score individually, and also learn to score by passing the ball with the entire team.

Education should be of a quality that will provide students with the opportunity and skills to live and work in a village, a city, across the country or around the world. And some students should educate themselves to have such skills, abilities, not for their benefits only but also to provide the requirements of the public/private associations, institutes, companies and country.

Teachings, principles, believes, and others are kind guides for all related people besides the books, articles they read. With this respect, author defined the following teaching which includes information for all related sides and disciplines:

Due to one perspective:

-Tough times creates strong men, -Strong men create easy times, -Easy times creates weak men, -Weak men create tough times,

Many people cannot understand this, but,

-You have to raise good and/or correct wise people, warriors, administrators, scientists, teachers, philosophers, businessmen, businesswomen, et al. who are knowledgeable of the "Past-Present-Future" perspectives/values in correct way for not to face same old problems. (Ramiz)

Due to one perspective, humans can learn in one of the following general/specific ways: (a) by living the life with involving events, experiencing, and Other*, (b) by reading about subjects from books, articles, and from other physical/electronic sources, (c) by following guide person/people, (d) by going school, (e) by hybrid learning of the first four cases given here. Author considered that all of them are important for students and other people.

There are 17 types of languages that could be considered, together and/or separately, due to the 17 perspectives defined in the previous sections, for good and/or correct education, organization, administration and for realization.

One can consider that it means: 17 types of competition, or 17 types of war, 17 types of foxiness, 17 types of cunning, 17 types of chatter, 17 types of wordiness, 17 types of arrogance, 17 kinds of lying, 17 kinds of anger, 17 kinds of greed, or 17 kinds of jealousy as some ignorant people did.

However, it means: 17 types of experience, and 17 types of relation, 17 types of wisdom, 17 types of law, 17 types of sense, 17 types of vision, 17 types of values, 17 types of justice, 17 types of thoughts, 17 kinds of culture, 17 kinds of education, 17 kinds of nobility, 17 kinds of trust, 17 kinds of guide, 17 kinds of system, 17 kinds of method, 17 kinds of faith, 17 kinds of doctrine, 17 types of security, 17 types of balance, 17 types of

centrism, and 17 kinds of teachings, for good and/or correct knowledgeable people, that could be consider together and/or separately when necessary.

This reflects some parts of philosophy of education, philosophy of language, philosophy of administration that should be considered by philosophers, scientists, teaching staff, education administrator(s), and other related people for good, continuable/sustainable life.

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