

## THE ROLE OF LIFELONG LEARNING OVER SUSTAINABLE DEVELOPMENT

If you are planning for a year, sow a rice;  
if you are planning for a decade, plant trees;  
if you are planning for a lifetime, educate people.  
(Chinese proverb, 645 B.C. Guanzi).

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### 1. Introduction

The only thing that does not change is the change itself in the 21st century. Fast change in technological and economic structures, existence of too much outdated information, increased expectations about career and life and search for social integration cause continuous adaptation and updating. Therefore, individuals should apply lifelong learning processes into their lives by the support of state, private sector, non-governmental organizations (NGOs) and international actors. Lifelong learning is a process that has several social, environmental, economic and positive externalities to the society besides its personal benefits to the individuals. Lifelong learning requires active participation of all actors.

Global environmental and developmental problems also cause reconfiguration of education and training programmes according to sustainable development. Lifelong learning also has the characteristics of being an individual, institutional and societal investment. It is possible to intervene into social and economic life, preservation and management of natural resources and formation of actors' roles that will participate in the sustainable development or to the implementation of tools for this purpose.

Moreover, active intervention is possible through lifelong learning into the key fields of sustainable development such as social equality, economic productivity and environmental responsibility by using pre-defined plans. Demands of this generation can be met without risking the demands of next generation by taking the right steps in the areas of living standards, equal opportunity, economic growth, productivity, competitiveness, employment, consumption of resources, waste management ...etc. To this end, best way to reach this target is to open up ways for continuous lifelong learning and continuous sustainable development processes.

### 2. Lifelong Learning

The term 'lifelong' refers to the period between birth and death of an individual. Lifelong learning is used to express the learning process during the period between birth and death of an individual. This period of learning is also stressed as "process of learning from cradle to the grave" (Laal, 2011: 472; Witzman, 2010: 1). This process expands education and training

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activities through lifetime and does not limit it to a certain period of time. It provides recreation of existing skills or helps gain new skills and therefore serves as a second or third chance in the lives of individuals.

Nonetheless, today's age of information society and never ending technological progress requires reevaluation of personal skills and their continuous development. Knowledge, skill and competency acquisition should be relentlessly updated and obtained knowledge and skills should be improved extensively. This is a precondition for all individual development and societal participation in all areas. Lifelong learning is a response to all these requirements at this point (Borkowsky and Zuchuat, 2006: 7).

Improvements about lifelong learning started with the commencement of "International Education Year" in 1970\* by the United Nations, Educational, Scientific and Cultural Organization (UNESCO). The discussions about the subject reached its peak in 1996 when the year was declared as "The Year of Lifelong Learning in Europe". Both of mentioned years witnessed significant expressions about the discussion of lifelong learning in the international fronts. Also very important documents were published for education policy. Therefore 1970 and 1996 were the milestones for the discussion of education policies and lifelong learning (Kraus, 2001: 19, 57). New education programmes on lifelong learning were started on January 2007 in European level (Gatzke, 2007: 1). Moreover, "lifelong learning" seems to be a keyword that has entered into all political fields today.

Education stated in the concept of lifelong learning refers to a multidimensional process in which individuals continuously add new skills to their existing skills. Motivated individuals realize that their future success depends to their education efforts to an extent and those who give importance to education become qualified and those who do not give importance to education become unqualified employees (Demir, Üzümcü and Duran, 2006: 28-29). This process assists children and the youth gain necessary knowledge, skills and understanding to have their places in the society. Moreover, it helps them develop their personalities in the school or outside the school directly or indirectly. Education can be defined as organizing the activities, providing tools, and guiding that will ease learning by helping individuals obtain necessary knowledge, skill or attitudes that are necessary for a certain profession or job.

Lifelong learning can be classified in general as given below (Gatzke, 2007: 3);

- Formal: Learning that takes place in an educational institution and that leads to obtained qualifications and/or competencies.
- Informal: Learning outside registered schooling institutions.
- Non-Formal: Learning in the daily life. This kind of learning does not necessarily bears a purpose and therefore it is learning without consciousness.

Therefore education cannot be constrained to mainstream schooling; on the contrary it takes for a life time. Lifelong learning combines a wide range of education that consists of preschool, primary, secondary and higher education with the formal, informal and non-formal education in order to help individuals acquire maximum improvement in their private, family, social and occupational life (DPT, 2001: 9). Learning for all life, serves for developing knowledge, qualification and skills for everyone and developing the perspective of

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\* It was first introduced as a key word in educational structuring in a paper, "Introduction to Lifelong Learning", by Paul Lengrand in a conference organized by UNESCO in 1970. Please see (Polat ve Odabaş, 2008: 597-598).

relationship based on personal, societal, social and work life. The extensive scope of learning reflects its diversity by embracing all types of learning as formal, informal and non-formal (Europäische Kommission, 2011: 9).

General thought about lifelong learning assumes that it consists of three stages; school, work and retirement. However, today it is thought that even the education given to a baby in his mother's body would have effects over their future development. Particularly, use of foreign language, listening to classical music and partners' avoidance of discussing family matters can be given as examples to this situation. Moreover, economic difficulties faced by individuals often stop them leaving work life. For instance, for some retirement income is not enough in Turkey and therefore they feel obliged to return back to labor market. Besides the attitude of work, (after 20-30 years of work experience) also leads individuals remain in or return to the labor market since individuals feel themselves unimportant and unnecessary if they stopped working. People are social creatures and therefore it is not possible to restrict lifelong learning to school and work. Therefore, lifelong learning is implemented in all parts of life from pre-school to post school, from work life (required by the work) to outside work life, from change of a job or during retirement period. Therefore it is not possible to restrict lifelong learning to certain period, education or to particular characteristics of the individuals such as age, social status and economic circumstances.

Lifelong learning refers to a type of learning process that would be provided almost anywhere. It is not constrained to schools; it can be conducted outside the schools, at homes or in the communities. This increases the success of lifelong learning and its significance. Therefore, use of lifelong learning as a planned activity in today's world is an unavoidable consequence. Particularly, never ending technological improvements of information and technology age, change of occupational choices during the lifetime process and disappearance of many professions due to technological change are effective factors. Moreover, appearance of new professions, uncertainty brought by rapid socio-economic change, mobility of work and workforce globally also add significance to lifelong learning policies (MEGEP, 2007: 5-6)

Lifelong learning in other words adapting to changing and developing standards of life also refers to effective use of human capital in stepping into the globalizing economic world and spillover of information and communication technologies to vast spaces. It is an approach towards bringing up individuals in response to the need of qualified workforce that can be used in industry and services sectors. In this approach, change is accepted as an element of daily life. While creating a labor market that would adapt to the changes, lifelong learning also aims to creating a human resources environment that has future investments to respond to the future needs of labor market with possible new jobs and skill demands (DPT, 2001: 12-13).

Continuity of education and necessity of lifelong learning should be discussed all stakeholders of the society. Because improvement of education using lifelong learning is not just the key for innovation and competitiveness ability of the economy but also it is a precondition for the individual success of constant changes in business life. Education as an investment provides valuable individual, societal and entrepreneurial benefits. Development of skills and competencies provide gains in work life. Moreover it is central to evaluation of labor market and personal relations at the workplace (Brandherm, 2010: 3). However, by constraining the concept of lifelong learning to labor market goals would be unfair to content and meaning of the concept. Lifelong learning targets facilitating the adaptation of individuals

to knowledge based society, controlling their lives according to their will and assisting individuals enter into all parts of socio-economic and cultural life actively. In order to realize this target, it encompasses all stages of learning from schooling to vocational training, in-service training and other kinds of learning activities that aid in gaining knowledge, understanding and skills (MEGEP, 2007: 5)

Lifelong learning also should not be considered from the perspective of economic issues and adult education only. Lifelong learning encompasses a diverse education period from pre-school education to older ages as well as formal, informal and non-formal education. Moreover, the purpose of learning stresses the importance of active and democratic rights, personal satisfaction, social coordination and promotion. Apart from these, implementation of lifelong learning requires specific rules such as equal opportunity, quality and importance of learning possibilities (Europäische Kommission, 3-4).

From a broad perspective lifelong learning can be put forward as follows (Deutscher Bundestag, 2004: 20-22):

- Lifelong learning consists of formal, informal and nonformal education through lifecycle of an individual.
- Lifelong learning is a transparent education and at the same time above other ways of education.
- Besides individual responsibility in learning, lifelong learning also requires responsible behavior during the education process.
- Lifelong learning is a process in a various and flexible ways of education.
- Lifelong learning refers to learning at the time of obtaining sufficient skill acquisition.
- Lifelong learning is an individual, institutional and societal investment.
- Lifelong learning refers to an education process under transparency, consultancy and quality assurance.

Lifelong learning is therefore very important and some of the reasons that make this subject attractive can be given as follows (Kistler, 2010: 5; Kraus, 2001: 68);

- Rapid change in technological and economic structure requires adaptation of abilities and skills of individuals.
- Lifelong learning is required with respect to the lifecycle of “knowledge” which ends fast.
- Adaptation to never ending career and life goals demand an adaptation capacity for individuals
- Lifelong learning has the function of adaptation in the work life.
- Positive effect of education and increased necessity of education strengthens demographic change.
- Education is a citizenship right of individuals.
- Lifelong learning promotes acquisition of new skills
- Lifelong learning converges education and entrepreneurial activities
- Lifelong learning assists in challenging social exclusion.

### **3. Sustainable Development**

Lexical meaning of the term ‘sustainable’ refers to the “the ability to be continuous”. Also

this concept is expressed as “something with long term effects”. While the state of continuity stresses the possibility to happen by itself, sustainability includes a will power of choice even if all the conditions are appropriate for continuity (Akgül, 2010: 134).

The concept of development is defined in various ways with economic, social and human aspects. Economic development is about creating an advanced economic system to meet never ending needs of mankind and increase their happiness and satisfaction with respect to goods and services production. Social development is obtaining leverage in education, health, culture, urbanization, infrastructure issues of social life. Human development refers to the increase and use of the potential that every individual has for the positive development of societies and the countries (Tolunay and Akyol, 2006: 119).

The concept of growth is often used for the concept of development in the literature. Economic growth is also key to struggling for advancement, growth, increased prosperity and poverty reduction. Beneath the concept of economic growth the real annual increase or decrease of ratio in the gross domestic product (GDP) without net of inflation is mentioned. This is the definition of monetary value of all goods and services in the market. In this case, there is economically more or less money instead of better or worse. Better quality in goods and services only mean increased price or decreased price for their calculation in economic growth. However, immaterial growth, happiness, the quality of life is not immeasurable with GDP rates like the quality of a product or a service (BUND, 2011: 6-7).

Economic development points out production of goods and services by establishing an advanced economic system to increase happiness and welfare of societies in which individuals with never ending needs live (Tolunay and Akyol, 119). Sustainable development promotes welfare gradually. From this point, it can be said that sustainable development is about increasing consumption. The time dimension of economic development is a significant dynamic concept in sustainable development. This way of development sometimes becomes unsustainable in time. Also it is hard to define sustainability as any point in the process. The reason lies beneath the fact that countless alternative development ways exist and some of them are sustainable and some are not. The characteristic of sustainability itself does not make it desirable for a development way. It should be desired by the society and should provide welfare for its members in this regard (United Nations, 2008: 20). Nonetheless, there is no agreed definition of sustainable development in economic, political and societal fronts.

Sustainable development was first mentioned in a report “Limits to Growth” published by Club of Rome in 1972 and in the same year a second step for this concept was taken by United Nations in a conference in Stockholm. Then it was first put into a conceptual framework in a report “Our Common Future” prepared by Brundtland Commission in 1987 (Akgül, 2010: 136). Sustainable development became focal point of national and international political agenda in the conference of environment and development organized in Rio de Janeiro in 1992 (Otto, 2007: 14). Representatives of 179 countries participated in the conference and conducted what was popularly known as Rio World Summit. One of the significant conventions signed in this conference was Agenda 21. This 900 pages document was an action plan to start sustainable development efforts at local, national and international levels in the 21st century. The parties to this convention undertook action in four areas (Stance und Bayley, 2008: 28):

- Social and economic dimension: struggling poverty and promotion of sustainable urban development.

- Preservation and management of resources such as the oceans and fighting against illegal fishery and deforestation activities
- Strengthening the roles of major groups such as women, local governments and NGOs
- Means of implementation that includes, international institutions, science, technology, transfer, education.

Agenda 21 expresses an action plan to live well today and in the future for mankind. Agenda is a Latin word and it means “what to do”. The purpose of Agenda 21 action plan is safe use of natural sources to reach an improved stage of recovery against global ecological, economical and social deterioration. The idea of sustainability is used to signify a red line during the Agenda 21. Although the concept was restricted in the beginning today it is used in connection with almost every subject. The concept was used to define a form of forestry that provides continuous income (Bayerisches Landesamt für Umwelt, 2004: 1-2). The concept became a significant issue in the international politics worldwide following the 1992 Summit of United Nations in Rio de Janeiro with the slogan “sustainable development” (Kreller, 2000: 12). Moreover, 1996 Habitat II Summit, 1997 Rio +5 Summit and 2002 Johannesburg Summit were important steps taken on this subject (Özmehmet, 2012: 5).

Sustainable development is a form of development that meets the needs of today’s generations without risking the ability of future generations to meet their own needs (Strange and Bayley, 2008: 24). By this concept a response to the question how the needs of today’s generations can be satisfied without compromising the chances of future generations (Kreller, 15). As it was expressed in the Brundtland Report sustainable development is not suitable to a stable situation but it is a process of change (Strange and Bayley, 30).

Reference point of discussions arises from the fact that a possible catastrophic global natural disaster would eliminate natural ecological resources. This implies that resources are not vast and they have limits and they have to be assessed properly. In that point it would be impossible to reverse the deterioration of the environment. Several key words are used to stress excess use of resources and environmental deterioration such as; extinction of species, decrease of land productivity, desertation, climate change, increased sea water levels, ozone depletion, deforestation in the jungles, water pollution and etc. (Kreller, 15-16).

#### **4. Lifelong Learning and Sustainable Development**

Lifelong learning and sustainable development concepts gained their popularity after 1990s and both of them convey similar features that complement each other. Lifelong learning refers to the things that individuals can accomplish during their lives while sustainable development refers to things that continue during the lives of individuals in the same manner. Lifelong learning implies education and training activities while sustainable development implies the concepts of growth and development. Both of them have social, environmental and economic effects.

Therefore both of the concepts have common points and in the form of complementary and supportive to each other. Education is accepted as an important and extensive means of supporting economic growth (Bloom, Cannig and Chan, 2006: 1). A vast literature exists on this subject. However, changing role of education during the ages should be considered at this point. Aristotle stressed the importance of education in his saying “education is the best provision for the old age”. United Nations General Secretary Kofi Annan defines education as transformation of limitless power and a human right as well as milestones in freedom,

democracy and sustainable human development (Eginli, 2010: 1-3). Therefore lifelong learning concept refers to formation of new structural principles by the society after learning process in an attempt to respond problems in an organized way. (Faulstich, 2008: 34). Rapid change in the world due to technological advancement and globalization and decrease of use of information time cause increased importance of lifelong learning. A good start to work life requires a sound education and the knowledge gained in the beginning become insufficient during the retirement years (Gatzke,1). However, life does not end with the beginning of retirement. Although work life seems to be ending, it both continues for some and positive externalities continue to increase with the retirement.

Becker (1964; 1993), Mincer (1958; 1974) and Schulz points out to the productivity and income rise with the education. The authors stress that time and money spent on education activities make an individual more productive and based on this assumption; productive individual earns higher income. This opinion also accepts education as an investment to human capital (Blanden, et al., 2010: 5).

Global environmental and development issues are common in this century. Therefore formation of timely education policies by the decision makers are required in order to challenge difficulties of globalization. Youth should be prepared to the living style of global society through education presentations during schooling period. In this regard, implemented rules, education curricula and course structures should be more guiding for the lives of students with respect to societal life. This requires an interdisciplinary approach besides existing formations. In order to form the necessary skills –to struggle using social and emotional skills- pre-school preparation can be the first step. Within the positive personality development view, education becomes a focal point for the sustainable development in addition to this period. Approaches implemented in lifelong learning such as the innovative side of education, methods and content encompass professional areas for sustainable development (DNR, 2002: 2-3). Apart from these, flexibility in long school breaks and steps taken during short regular learning periods during life cycle are shared and active transition between work and education should be provided. In fact, various transitions of action forms are realized in time in between the following actions of individuals (Faulstich, 33-34):

- Full time and part time work,
- Dependent work and self-employed work,
- Unemployment and employment,
- Education and employment,
- Wage fork and unpaid work,
- Work with pay, personal or communal actions.

Knowledge and acquisition of knowledge within the scope of lifelong learning play a more important role for developing countries than obtaining raw material. Besides developing countries this issue has increased its significant for developed countries day by day too. For instance, lifelong learning is seen as a protective factor against the causes of demographic development and expected transition in the age structure –especially for employees- a potential for economic development and a fundamental part of protecting economic system in global competition (Gatzke, 1). Therefore, education for sustainable development was agreed on 22 years ago as a significant strategy (Gräsel, usw, 2012: 7).

Lifelong learning plays a key role for all individuals of all ages with respect to personal and social gains. Mascle (2007) stresses five benefits of lifelong learning (Laal, 2012: 4270):

- Lifelong learning leads higher pays for employees,
- Lifelong learning increases self-confidence of employees,
- Lifelong learning brings freedom to adults,
- A transition from class based education to distant and internet based 7/24 education model is possible,
- It turns education into a habit.

Lifelong learning is also expressed as a second chance of updating basic skills. Moreover, it provides advanced development of mentioned skills to higher levels. Nordstrom points out ten benefits of lifelong learning (Laal, 2012: 4270-4271):

- Providing a better life for individual self-fulfillment,
- Assisting in new friendships and valuable relations,
- Integrating individuals to society as active participants,
- Assisting individuals to find the meaning of their lives,
- Assisting in adaptation to change,
- Making world a better place to live,
- Increasing the wisdom of individuals,
- Creating a curious hungry mind,
- Opening minds,
- Developing natural talents of individuals to the full extent.

Mentioned benefits of lifelong learning points out several implications for sustainable development as trying new things, discovering new ways and strengthening vision, imagination and creativity that will shape the future (Bundesministerium für Bildung und Forschung, 2012: 5). The literature frequently discusses three concepts in sustainable development “sustainable growth”, “ecological modernization” and “structural greening”. There is not a solid boundary among these issues that would make differentiation of actors difficult (Kreller, 26-28).

These three concepts that are used to define sustainable development have multi-dimensional relationship with the lifelong learning separately. For instance, to obtain sustainable growth various variables are needed such as qualified workforce, generation of information based on the demand by speed and modernity of global age, use of modern production techniques, innovation, entrepreneurship, creating conditions for competitiveness. Lifelong learning has the capacity to meet all these requirements at different levels to provide change and development.

Ecological modernization is another concept that is used to define sustainable development. Probably, widely interpretation of sustainable development is its ecological side. Contrary to economic growth, ecological modernization takes the basic idea of sustainable development and implements it. Franz Nuscheler points out central problem of ecological modernization and searches for an answer to following question; “What has to be done or can be done technically and politically in order to sustain current living standards?” Behind responding to global environmental problem lies decrease of continuous resource consumption by ecological modernization of economic growth (Kreller, 26-28). Therefore, individuals’ acquisition of knowledge during their life, lifelong learning activities take the responsibility of creating new ways of economic modernization that would give no or



minimum harm to environment. This requires an effort that will spread to life span of an individual. To raise this awareness several issues such as environmental and social responsibility and the feeling of living together should be taught through lifelong learning activities. Indeed, lifelong learning will not only cause creation of environment friendly consumers and producers but also help environment friendly politicians come to duty. In this way it will create basic ground to minimize environment and consumption of natural resources to provide ecological modernization. For instance, a less energy consuming refrigerator or washing machine with A+++ levels, or a hybrid automobile with less carbondioxide emission and less energy consumption.

Another concept used in the definition of sustainable development is structural greening. This concept separates from the ideology of growth from a certain point. Also for sustainable development, growth has of quality. Structural greening refers to environment friendly development and in this way reaching to an acceptable relationship between nature and mankind (Kreller, 26-28). This requires development of a course of conduct that will be implemented in all areas of life as in the case of sustainable growth and ecological modernization. Lifelong learning has a process that would respond fully to this issue as well. Because environment friendly attitude as an individual, environment friendly production as a producer, environment friendly consumption as responsible consumer and environment friendly policy decisions as authorities and politicians will all help for a better world.

Therefore lifelong learning is a prerequisite for sustainable development. Table 1 represents sub-groups of sustainable growth as social equality, economic production and environmental problems. It is also reach sub-groups of them too.

**Table 1: Sustainable Development**

Social Equality	Economic Productivity	Environmental Responsibility
<ul style="list-style-type: none"> <li>• Life circumstances</li> <li>• Equal opportunities</li> <li>• Social harmony</li> <li>• International Collaboration</li> <li>• Preservation of human capital</li> </ul>	<ul style="list-style-type: none"> <li>• Economic Growth</li> <li>• Productivity and Competition</li> <li>• Flexibility and stability</li> <li>• Production/consumption</li> <li>• Employment</li> <li>• International Trade</li> </ul>	<ul style="list-style-type: none"> <li>• Consumption of Resources</li> <li>• Equipment and wastes</li> <li>• Risks</li> <li>• Change ratio</li> <li>• Natural and Cultural Outlook</li> </ul>

**Source:** (SFSO, 2002: 5)

Increasing life standards of individuals by improving their skills is possible through lifelong learning. This would give way to equal opportunities. Individuals who are socially excluded or individuals with low social skills can be integrated to society through education activities of lifelong learning process their self confidence can be increased and their social integration process can be realized. This social harmony will be possible not only for the regular individuals of the society but also for the immigrants. Individuals obtained educational attainment through lifelong learning. In this way universal values would be created and a way towards overcoming conflicts about global interests would be possible. Lifelong learning would contribute realization of sustainable development through social equality since obtained educational attainment will help development of human capital and also preservation of existing human capital.

Another branch of establishing sustainable development is to provide economic productivity. Economic productivity includes issues of economic growth, productivity and competition, flexibility and stability, production and consumption, employment and

international trade. Lifelong learning also related to almost all of them directly or indirectly. Because it is possible to intervene every part of economic productivity by lifelong learning. It is possible to express this multidimensionality as the formation of human capital, introduction of environment friendly technology, generation of knowledge, conscious producer and consumer behavior, domestic and foreign employment opportunities, development of international relations and developing trade to serve in the universal arena.

Another responsibility arena necessary to provide sustainable development is awareness of environment. Probably it is one of the most significant issues of 21st century. In the name of economic growth nature (living species and plants) is destroyed. Occurred damage until now or the damage to be given would be eliminated only by the efforts of mankind. Therefore, raising awareness through lifelong learning would lead to responsible behavior about environment issues such as consumption of resources, waste management, nature and cultural outlook. A sustainable development model that will give a chance to future generations will be obtained.

## **5. Conclusion**

Lifelong learning is considered to be a market motivated issue due to some of its targets of adapting to information society, innovativeness, competitiveness and increasing employment. However, lifelong learning has several positive externalities as self-fulfillment, better life, freedom, social harmony, environmental awareness and active participation to society. These positive externalities can only be gained and developed in the process of lifelong learning for certain age groups outside formal education. If lifelong learning processes are not implemented negative externalities would continue to remain in the society. To express clearly, disposal of a waste battery by a child with no environmental awareness and a greedy entrepreneur's attitude towards his employee and state for his own interest would harm nature to an extent with no recovery.

Mentioned considerations about externalities of lifelong learning suggests best use of this approach in formal, informal and nonformal education processes from the birth of an individual to death in the lifelong learning process. Members of society should serve the society they are born by the channel of different organizations such as NGOs (national-international), state institutions, private sector institutions, responsible and systematic introduction of regulations by international agencies. Lifelong learning has the advantage of being location free education which can be given almost anywhere.

Implementation of lifelong learning processes and its consecutive results on the individual's knowledge, qualification and skill gains will ultimately serve sustainable development goals within the scope of societal and social responsibility. This will form nationally and internationally the basis for a better life in the world by contributing all the elements in social equality, economic productivity and environmental responsibility. As expressed in Brundtland Report without compromising the chances of future generations, meeting the needs of current generations can be achieved by sustainable development. Extinction of species, loss of land productivity, desertation, deforestation of rainforests, water pollution and many environmental issues are at their critical non-reversible stages. All these issues can be responded by increasing the wisdom of mankind by lifelong learning efforts and in this way creating a world with a habitable environment and keeping it for future generations.

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