Globalization of Education – A Comparative Study between the Romanian Educational System and the Japanese Educational System

Gabriela DIRLOMAN
„Nicolae Kretzulescu” Commercial High School
Bucharest, Romania
gabriela.dirloman@gmail.com

Sorina PIRVU
„Ion Mares” Secondary School
Vulcana, Romania
sosoliciul@yahoo.com

Manuela GHEORGHE
Vulcana School, Romania
manu28g@yahoo.com

Abstract: The paper tries to underline the evolution of the Romanian and Japanese educational systems which, irrespective time and space, have to evolve so that the new generations may adapt to the global changes. Education can be a driving force for human innovation and social transformation because it develops the capacity of human beings who are the central actors, in the end, to solve the problems surrounding Sustainable Development. Education itself must become global and has to emphasize the respect for environment, to promote mutual understanding between people, values and traditions based on truth.

Introduction

In a century of technology and information, all the societies of the world face rapid changes which make them become more conscious of their future. To adapt to such complex changes, human beings realize that they have to be prepared and well informed.

The key to this evolution is education, which has to change itself the scale of viewing, from local to global scale. Nowadays, Education for Sustainable Development seems to be the right answer to create a global community.

What becomes clearly in many countries, irrespective their social-economical development is that it is necessary to change something in the educational systems, and to act more responsible in reducing the problems humankind faces, such as: environmental degradation, urbanization or discrimination among gender and nations.

At global level, different countries cooperate in the field of education, developing and disseminating formal and non-formal education, which nurture the development of youths in the fields of international exchange and mutual understanding, environmental preservation with a special emphasis on cultural properties.

That is why the present study “Globalization of Education – A Comparative Study between the Romanian Educational System and the Japanese Educational System” tries to underline the main aims of two educational systems which seem to be totally different, but which in fact promote similar values and morals.

The answer to differences and similarities of Japanese education and the Romanian education, shows that each system is unique, and both countries are looking for the best alternatives to face the tendencies of the present times.

The objective of education should be “learning how to think” and “learning the process of understanding the changes and constantly building the solutions to the new and several problems that it outlines the society”. For that reason, people must be more capable to confront a changing world and to look for new solutions for their problems instead of making it thinking of the solutions of the past.
Concepts and Principles of the Romanian Educational System and of the Japanese Educational System

After the fall of the totalitarian regime in Romania, reform of education began and aimed initially at eliminating courses that had become obsolete in view of the new option and during a second more extensive phase, building a coherent legal frame that could ensure a more effective higher education.

The Constitution of Romania, adopted in 1991 is the foundation of the entire legislation in the field. It is currently under debate by Parliament in order to make it better adapted to the new evolutions at national, European and world level.

The Romanian education aims to develop human personality through: assimilation of scientific knowledge and of national and world culture; training of intellectual skills, of the emotional availabilities and practical abilities by assimilation of human, scientific and esthetical knowledge; assimilation of techniques for intellectual work which are necessary for self-training during all life; education in the spirit of respecting human rights, tolerance and dignity; development of sensitivity for human problems, for moral and civic values and for respecting nature and environment; harmonious development of individuals by sports and by health education; training the new generation to act properly in society.

According to the Constitution of Romania, all the citizens of Romania have equal rights to attend school at all levels irrespective social and material state, irrespective sex, race, nationality, political or religious beliefs.

The concepts and principles of education in Japan are formulated in the Fundamental Law of Education enacted in 1947. In the preamble of this Law, the desire of the Japanese people is expressed as follows: having established the constitution of Japan, we have shown our resolution to contribute to the peace of the world and welfare of humanity by building a democratic and cultural state. The realization of this ideal shall depend fundamentally on the power of education: we shall esteem individual dignity and endeavour to bring up the people to love truth and peace, while education which aims at the creation of culture rich in the individuality shall be spread far and wide.

The ideal toward which education in Japan strives is to mould a person who aspires to truth and peace. This has been created from the experience of the Japanese people in World War II. The significance of the phrase “No more Hiroshima!” is deeply rooted in the hearts and minds of the people. In present - day Japan, 50 years after the end of World War II, the outer conditions of life have greatly changed as a result of the rapid progress of industrialization, whereas the inner spirit of the people has hardly changed.

In order to achieve the above educational aim, the Fundamental Law of Education provides for equality of opportunity of education, free compulsory education, coeducation etc. Every Japanese is equally entitled to receive education in accordance with his ability whatever his race, creed, sex, social status, economic standing or family origin. For those who have ability but find difficulty in continuing education for financial reasons, the state and local public corporations are obliged to find a method to allow them to continuing schooling. Compulsory education is for 9 years according to the Constitution and is offered free of charge at schools run by the state and local public entities. Coeducation is one of the principles that have been observed almost completely in postwar Japanese education. Some people are still opposed to the coeducational system, but a majority of people are convinced of its benefits. Among other principles, secularism in education should also be mentioned.

School System

During the 24-th year reign of Nicolae Ceausescu, Romania’s educational system remained under strict state control. Curricula strongly emphasized Marxist-Leninist ideology, and universities, in particular, came under the direct influence of Ceausescu and his wife, Elena. As a result of the government’s isolationist policies, higher education was virtually cut off from the rest of the world.

Since the overthrow of the Ceausescu regime in 1989 and the country’s transition to a market-based economy, many educational reforms have been implemented. Under communist rule, all Romanians were required to attend primary school. But starting 1989, mandatory primary school was abolished, and as a result, illiteracy has increased throughout the country, especially in rural areas. The country’s successive post-communist governments have attempted to reverse this trend by offering educational programs to young people who abandoned compulsory schooling. These programs have been targeted especially towards children living in rural areas, urban slums and geographically remote communities in addition to ethnic minorities. So far, progress has been slow.

In 2000, the educational system underwent additional changes and got an open character.
According to the Law 151/1999, compulsory education lasts 9 years instead of 8; the first generation concluding 9 years began lower secondary education (the 5-th grade) in 1998/1999. The leaving examination of lower secondary education, for this generation was held in the summer of 2004.

The Romanian school system (Table 1) is similar to the Japanese one (Table 2), except the duration for each level of education.

The statistical values of the year 2003 show that the number of kindergartens and schools achieved 23,519, while in 2005 was of 21,419.

Comparing to the previous years – at national level in 2005, there may be noticed a decrease of number of kindergartens (Table 3).

<table>
<thead>
<tr>
<th>AGE</th>
<th>SCHOOL</th>
<th>EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-5</td>
<td>Kindergarten</td>
<td>-</td>
</tr>
<tr>
<td>6-11</td>
<td>Elementary school</td>
<td>Elementary education</td>
</tr>
<tr>
<td>12-14</td>
<td>Middle school</td>
<td>Secondary education</td>
</tr>
<tr>
<td>15-17</td>
<td>High school</td>
<td>Secondary education</td>
</tr>
<tr>
<td>17-19</td>
<td>High school</td>
<td>Secondary high education</td>
</tr>
<tr>
<td>18-20</td>
<td>Junior college</td>
<td>Higher education</td>
</tr>
<tr>
<td>18-21</td>
<td>University</td>
<td>Higher education</td>
</tr>
<tr>
<td>23-24 or 23-28</td>
<td>Graduation school</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 1: The School System in Romania

<table>
<thead>
<tr>
<th>AGE</th>
<th>SCHOOL</th>
<th>EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>23-24 or 23-28</td>
<td>Graduation school</td>
<td>-</td>
</tr>
<tr>
<td>18-22</td>
<td>University</td>
<td>Higher education</td>
</tr>
<tr>
<td>18-20</td>
<td>Junior college</td>
<td>Higher education</td>
</tr>
<tr>
<td>12-14</td>
<td>Special school</td>
<td>Secondary education</td>
</tr>
<tr>
<td>15-17</td>
<td>High school</td>
<td>Secondary education</td>
</tr>
<tr>
<td>12-14</td>
<td>Middle school</td>
<td>Elementary education</td>
</tr>
<tr>
<td>6-11</td>
<td>Elementary school</td>
<td>Elementary education</td>
</tr>
<tr>
<td>3-5</td>
<td>Kindergarten</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 2: The School System in Japan

The reduction of kindergartens is caused by the administrative fusion and by the attachment of kindergartens to schools – the most affected being the kindergartens in rural area, where the decrease was with 375
In 2003, a compensation to this situation was given by opening new 32 kindergartens. The geographical distribution of kindergartens is favourable to rural areas, where there are 6,734 independent kindergartens comparing to 2,813 kindergartens in urban areas.

<table>
<thead>
<tr>
<th>EDUCATIONAL INSTITUTIONS 2003</th>
<th>EDUCATIONAL INSTITUTIONS 2005</th>
<th>STUDENTS 2003</th>
<th>STUDENTS 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergartens</td>
<td>9,547</td>
<td>14,396</td>
<td>629,703</td>
</tr>
<tr>
<td>Primary School</td>
<td>12,456</td>
<td>7,023</td>
<td>2,171,147</td>
</tr>
<tr>
<td>Secondary Low School</td>
<td>1,388</td>
<td>1413</td>
<td>740,404</td>
</tr>
<tr>
<td>Secondary High School</td>
<td>207</td>
<td>6370</td>
<td>41,313</td>
</tr>
<tr>
<td>Vocational Colleges</td>
<td>89</td>
<td>77</td>
<td>61,855</td>
</tr>
<tr>
<td>Universities</td>
<td>133</td>
<td>136</td>
<td>600,122</td>
</tr>
</tbody>
</table>

**Table 3:** Educational institutions in Romania  
(Source: Ministry of Education and Innovation, Bucharest, 2008)

The same phenomena can be noticed at the level of schools in 2003. One explanation may be the decrease of birth rate all over Romania (10.5 births/1000 population starting 2003) - the same phenomena can be noticed in Japan too (Table 4). In Romania, the highest number of elementary and secondary schools are national, same as in Japan where the highest number is hold by public and then private schools. In 2003, the number of private schools in Romania has increased to 20.

The same phenomena can be noticed at the level of schools in 2003. One explanation may be the decrease of birth rate all over Romania (10.5 births/1000 population starting 2003) - the same phenomena can be noticed in Japan too (Table 4). In Romania, the highest number of elementary and secondary schools are national, same as in Japan where the highest number is hold by public and then private schools. In 2003, the number of private schools in Romania has increased to 20.

In Romania, the highest number of elementary and secondary schools are national, same as in Japan where the highest number is hold by public and then private schools. In 2003, the number of private schools in Romania has increased to 20.

In the case of high schools, there were 1,388,000 independent high schools. The distribution of high schools is asymmetrical, the highest number being registered in urban areas, 85% of the total number. Similar to elementary and secondary schools, the highest number of high schools are national, the rest being private.

The number of students enrolled at high schools was of 41,313 in 2003, while in 2005 became 35,510. The distribution of students in high schools is high in urban areas – 93.4%. Even if the number of high school students has increased, there can be noticed that 48.6% enrolled in theoretical high schools, 44.7% enrolled in technological high schools and only 7.3% enrolled in vocational high schools. Thus, the orientation to a career is in balance with the theoretical one.

Taking into account the form of education, 89% students have attended day-courses, while 7.5% students attended evening-courses and 3.5% students attended part-time courses.

In Romania, higher education includes university colleges (for 3 years) and universities (which can last from 3 years – the case of Socio-Humanistic, Economic, Artistic and Sportive Universities till 6 years – the case of University of Medicine and Architecture).

Recent changes that have occurred in the Romanian and European higher education system is grounded on the options of continental countries, expressed in the Bologna Declaration, to achieve a unique space in this field by the year 2010. The creation of a pro-Bologna attitude at the level of education institutions, through debates, workshops, the inclusion of universities is an experimental network, that began with the MATRA Programme, financed by the Dutch Government.

Changes that have occurred globally in the educational system have been strongly influenced by the increasing number of public and private higher education institutions. In 2003, there were 133 civil universities and 8 military institutions in the higher education institutions network in Romania, compared to 30 higher institutions existing in 1989. Out of the 133 civil higher education institutions, 49 (not counting the military ones) belong to public higher education, while the other 84 are private.

As shown in Table 4, the basic pattern of the school system in Japan is that of a unitary system. This was established after 1947 by reforming the previous dual system. As an addition to the institutions of the unitary system, higher technical schools were created in 1962 with the aim of training middle - grade engineering specialists, but the number of schools of this type is still rather small. These technical schools specialize both in vocational and liberal
The educational system in Japan consists of 6 - years for elementary school, 3 years for junior high school, 3 years for high school and 4 or 6 years for universities.

<table>
<thead>
<tr>
<th></th>
<th>EDUCATIONAL INSTITUTIONS 2003</th>
<th>EDUCATIONAL INSTITUTIONS 2005</th>
<th>STUDENTS 2003</th>
<th>STUDENTS 2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergartens</td>
<td>14,174</td>
<td>13,949</td>
<td>1,760,494</td>
<td>1,738,766</td>
</tr>
<tr>
<td>Primary Schools</td>
<td>23,633</td>
<td>23,123</td>
<td>7,222,910</td>
<td>7,197,458</td>
</tr>
<tr>
<td>Secondary Schools</td>
<td>11,134</td>
<td>11,035</td>
<td>3,748,319</td>
<td>3,626,415</td>
</tr>
<tr>
<td>High Schools</td>
<td>5,450</td>
<td>5,418</td>
<td>3,809,827</td>
<td>3,605,242</td>
</tr>
<tr>
<td>Special Schools (For Pupils With Disabilities)</td>
<td>995</td>
<td>825</td>
<td>96,473</td>
<td>91,164</td>
</tr>
<tr>
<td>Vocational Colleges</td>
<td>63</td>
<td>63</td>
<td>57,875</td>
<td>59,160</td>
</tr>
<tr>
<td>Universities</td>
<td>702</td>
<td>726</td>
<td>2,803,980</td>
<td>2,865,051</td>
</tr>
</tbody>
</table>

Table 4: Educational institutions in Japan
(Source: MEXT, Tokyo, 2008)

Even if the kindergartens are fairly expensive, many children go to them for 1, 2 or sometimes 3 years before primary school.

All children start primary school at 6 years old and junior high school at the age of 12. Primary school lasts for 6 years and the junior high school for 3 years. Primary schools and junior high schools as well are compulsory and most of the students complete junior high schools.

More than 95% of junior high school students go on to senior high schools for 3 years at the age of 15, although senior high schools are not free.

The first 9 years of schooling are compulsory for children from age of 6 to 15. The 3 years of upper secondary education are non-compulsory.

In order to improve the education, 36.4% of students from 1-st grade to 9-th grade go to extra schools called Juku, while 59.5% of junior high school students from 7-th grade to 9-th grade go to Juku. In case of students who failed the entrance examination to universities, about 10% of university candidates spend 1 more year for preparation.

Junior colleges generally operate on the basis of 2-year courses. There are some junior colleges offering 3-year courses, but the number is small. One of the characteristics of junior colleges in Japan is that a large number of them are for women. In 2003, the number of female which attended these colleges was of 220,090 persons.

In case of universities (which last for 4 years) and technical schools, more than half of the senior high school graduates go to these, when they are 18 years old.

Comparing to 2003, at national level, in 2005, one may notice a decrease of number of kindergartens, elementary, secondary and high schools and of students as well (Table 4). One explanation may be the decrease of birth rate all over Japan (9.61 births/1000 population starting 2003).

Because of the rapid population growth after World War II, the number of students in a typical elementary or junior high school class once exceeded 50. But starting 1980’s and with fewer classes per grade and unfilled classrooms, the number of students decreased. For example, in some villages there are school classes with only 20 or 25 students.

In the case of universities, there is an opposite situation, in 2005 it may be noticed a slow increase of numbers (24) and of students (6171 more students than 2003) (Table 4). This could be explained as a more careful attention is paid to study sciences and technology, especially in national universities comparing to private universities which are concentrated on the teaching of humanities and social science.

The first 9 years of schooling are compulsory for children from age of 6 to 15. The 3 years of upper secondary education are non-compulsory.
The School Year

The duration of school year in Romania may differ from year to year, but usually it lasts for 36 weeks (178 school days). The school year is divided into semesters, the longest one being the first one.

For all elementary, secondary and high schools, school starts on September 15th and lasts till December, when there is the winter holiday for 2 weeks (when is celebrated Christmas). The second semester starts in January and lasts till June (with a spring holiday of 2 weeks when is celebrated Easter).

The school year can be modified for the schools which are affected by difficult weather conditions, especially in winter (heavy snow, strong wind etc.).

One of the main changes in the Japanese school year was the reduction of school days from 240 days to 200 days. This is the result of cutting with 30% of the educational contents in the national curriculum. The gradual transition from a 6-day school week to a 5-day school week was completed in 2002.

For most elementary, junior high and high schools, the school year in Japan begins on April 1st and is divided into 3 terms: April to July, September to December, and January to March. Some schools follow a two-term schedule. The Japanese elementary and secondary school year is reported as being 240 days long, including Saturdays. Monbusho requires a minimum of 210 days of instruction, including a half day on Saturday. No formal instruction is given on Saturday afternoon.

The School Time Table

The school time table in Romania is different from school to school according to the number of pupils and the space.

There are schools which work in 1 shift, but there are schools which work in 3 shifts, depending on the number of school classrooms.

Usually, school starts at 8 a.m. and 1 class lasts for 50 minutes, comparing to the Japanese system where a class lasts for 40 minutes. There is a longer break for pupils in order to have a sandwich, but comparing to Japan there are a few schools which have an eating hall (usually, just the private schools).

As it shown in Table 5, in Japan, school begins at 8.30 am and last till 3 p.m. for 1st graders, while 2nd graders go back home at 1 p.m or 2 p.m.

Educational Reform

In the context of global changes, educational reforms constitute a demand for mankind in order to live in harmony and develop solid societies based on moral principles and values. Training children to become part of their society is an integral part of the formation of society itself.

<table>
<thead>
<tr>
<th>TIME</th>
<th>MONDAY-FRIDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.25-8.35</td>
<td>Teacher’s morning assembly</td>
</tr>
<tr>
<td>8.35-8.45</td>
<td>Home room</td>
</tr>
<tr>
<td>8.45-9.35</td>
<td>The first period</td>
</tr>
<tr>
<td>9.45-10.35</td>
<td>The second period</td>
</tr>
<tr>
<td>10.45-11.35</td>
<td>The third period</td>
</tr>
<tr>
<td>11.45-12.35</td>
<td>The fourth period</td>
</tr>
<tr>
<td>12.35-13.20</td>
<td>Cleaning time</td>
</tr>
<tr>
<td>13.20-14.10</td>
<td>The fifth period</td>
</tr>
<tr>
<td>14.20-15.10</td>
<td>The sixth period</td>
</tr>
<tr>
<td>15.15-15.25</td>
<td>Cleaning time</td>
</tr>
<tr>
<td>15.30-15.40</td>
<td>Home room</td>
</tr>
<tr>
<td>15.40-17.00</td>
<td>Extracurricular activities</td>
</tr>
</tbody>
</table>

Table 5: School Time Table in Japan

The debate about education for peace, stability and democracy has increased tremendously since the collapse of the communism system in Romania. The world of two opposing sides was replaced by a world facing the problems of transition, a concept which encompasses an entire spectrum of social, economic, cultural and political
aspects. To establish priorities is in itself a great problem. But considering transition as a long-term change which deals fundamentally with people, education has to be a significant field of action for local, European and international factors.

The elements taken into account are the following: 1) the most complete term which can be used is “education for democratic citizenship”. It implies the learning of citizen rights and obligations, the respect for human rights, the fostering of a democratic culture; 2) it is a global approach and, therefore, has to be present in school curricula and in permanent education; 3) education for democratic citizenship; 4) civic education.

During the communism regime, formal education had, apart from the ideological framework of all subjects, at least three clear-cut instances of ideological education: the subject matters called “Constitution” (7-th grade) and “Social-political Education” (10-th grade) and the classes for “political education”) one hour fortnightly, lectures and debates over articles in party publications, grades 5-th to 12-th.

It is important to focus on another aspect. During the communist regime, voluntary work was seen as a paramount feature. It showed not only the solidarity of the society as a whole, but also the approval of the party’s politics. As far as the civil society is concerned, it was practically non-existent. The lack of straightforward and open communication between individuals and groups, was almost total.

In 1997, a comprehensive reform was drawn up and called for the following: modify teaching methodology; academic programs and textbooks; make the national curriculum more compatible with the rest of Europe; shift from rote learning to “problem solving”; establish links between secondary and postsecondary schools and their economic, administrative and cultural environment; undertake infrastructural improvements, particularly with regard to the World Wide Web and other forms of electronic communication within the classroom; decentralize secondary and postsecondary schools and grant autonomy to various institutions of higher education; enhance cooperation at the international level.

In Agenda 2000, elaborated by European Union and based on the analysis of years 1996 and 1997, it was stipulated: “The big difficulty in the way to reform is the low level of funds allocated by Romanian Govern in order to maintain and improve the educational infrastructure, to buy new equipments and pay in an attractive way the teachers. Other major risks which may affect the success of reform are the low capacity of Ministry of Education and Innovation to implement reforms and the resistance to change which has been noticed at national and local level”.

In 2000, it could be noticed that strong efforts to end the transition reform in the Romanian educational system were made. It became a necessity to change mentality - from that organized on passive waiting, generated by state to the mentality which encourages initiative, elaboration of projects and competition on the qualification market and on that of technical and scientific innovations. Thus, the situation of schools, high schools and universities is very diverse and depends more on school management. There are also schools or high schools which still depend on the “state mentalities” and with no programs and interest in innovation. It has also been underlined that the agents of educational reform are the teachers, the students, the specialists in the administrative sector, the researchers – in fact everybody involved in the educational process.

Following the end of World War II, education in Japan realized the concept of equal opportunity and elevated national educational standards to become the driving force for the development of economic society. However, turning toward the current state of education in Japan reveals various problems significantly unbalancing the confidence of the public and society in education.

Firstly, against the backdrop of the advance in declining birthrates and urbanization, and the notable fall in educational functions in the home and society, Japan faces serious education issues, including bullying, non-attendance at school or violence in school.

Secondly, through the standardization of education resulting from excessive equality to the cramming of immoderate levels of knowledge, education oriented toward the individuality and competence of the children has been given to neglect.

Thirdly, traditional educational systems are being marginalized by the progress of the era and society amid society’s transformation on a grand scale, evidenced by the rapid progress of science and technology, socio-economic globalization and computerization.

The main aims of the Japanese educational reform are: to implement a class system based on 20 pupils/class in order to improve the efficiency of education; to encourage the youth to become open minded and generous by taking part to different services and activities of the community; to improve the environment for learning, an environment with no worries and fearless; to build reliable schools for parents and local community; to establish a new educational psychology adapted to the new century.

Globalization of Education
A closer international relationship existing nowadays among nations has been a main debate at the United Nations Conference on Environment and Development held at Rio de Janeiro in 1992. At this conference, Sustainable Development was recognized as a common goal for humanity. Thus, the period 2009-2014 has been declared “The United Nations Decade of Education for Sustainable Development”.

None of the issues over Sustainable Development can be solved separately and it requires an interdisciplinary and integrated approach. In this sense, education can function as a catalyst to unite the various components which constitute Sustainable Development. Education can be a driving force for human innovation and social transformation because it develops the capacity of human beings who are the central actors in the end to solve the problems surrounding Sustainable Development. Therefore, Education for Sustainable Development should include not only the teaching of a notion and a concrete image of what Sustainable Development is, but also the provision of norms of behaviour in favour of Sustainable Development. Education for Sustainable Development urges people to transform their minds in terms of their knowledge, skills, values, behaviour and life styles in compliance with Sustainable Development. The role of teachers at all stages of education, based on this new idea, becomes critical as well.

The content of Education for Sustainable Development differs between Japan - a developed country and Romania - a developing country. It is desirable for Romania to envision a sustainable future on its own and set a plan of action towards achieving the goal. As Education for Sustainable Development also aims to transform a social system, people in Romania need to take into account issues such as to build a local community, how to promote respect for traditional cultures and how to alleviate problems caused by population growth in addition to the activities of the Education for All. Therefore, it is necessary to be creative in developing curricula, contents of educational materials and methods of education.

Although the financial and human resources of developed countries - such as Japan – are crucial to developing various educational programmes and building educational infrastructure in developing countries such as Romania, the one way flow of knowledge, data and technology which is currently moving into developing countries has to be reconsidered.

To reduce the knowledge and information gap, it is also necessary to enhance the capacity of educators, researchers and related organizations in Romania as well as to promote cooperation with developed countries like Japan by building a network in order to cooperate, to create meaningful ideas and knowledge.

Education in Japan is an important agenda for Sustainable Development as well. As a developed country, Japan needs to reconsider its own patterns of production and consumption from the perspective of sustainability. Furthermore, Japan needs to raise awareness in the areas of creating new social norms, reducing and preventing environmental degradation. By promoting Education for Sustainable Development, it is needed to improve the situation of “poverty of the rich” found in the other developed countries as well, where bonds and solidarity are becoming scarce.

Environmental Education – A Goal of Education for Sustainable Development

Environmental Education in Romania, as a part of Education for Sustainable Development aims to understand the relation between humans and nature, to increase the consciousness for the environmental problems and to understand the personal values of the pupils by “discovering” their own attitude, helping them to evaluate and clarify their feelings for the environment they live in.

The Environmental Education can be found in the curricula of Geography, Biology, Physics, Chemistry and History. It can be taught using trans-disciplinarily, which means to find new methods of learning, centered on the problems of real life so that the pupils may become good citizens in the future. Furthermore, Environmental Education can be taught through extracurricular activities and by financial support offered by the local authorities, by parents or by European Programs: Comenius, Leonardo etc.) or by ONG-s.

The “Eco-schools” Programme, which is managed internationally by Foundation for Environmental Education (FEE) was initiated in 1994 by European Commission as a pilot-programme, and nowadays is being implemented in 24 European countries, counting 7000 schools and 2360 Eco-schools. In Romania, Eco – schools Programme is under the coordination of the Carpato-Danubian Center of Geo-ecology; it has started in 1999 with 5 pilot schools; around 600 school have carried out the project, 403 being active now and 57 schools have been awarded the Green Flag and the title of Eco - school.
The goals of Environmental Education in Romania are: to increase the level of conscience for environmental problems to the children; to develop a civic spirit and the capacity of taking decisions to the children; to create connections with schools in Romania and in the world; to recycle the wastes (Figure 1); to arrange the green space around the school.

![Figure 1: Collecting the plastics (Eco – school, Romania)](image)

Environmental Education can give the pupils the possibility to develop their thinking in a creative and critical way. A method which can be applied is that of partnership projects with schools from other spaces: towns, villages or other countries. An example of good practice is the project called “Bridges between town and village: Together, we are equal” made in partnership by the Commercial High School “Nicolae Kretzulescu” in Bucharest and Secondary School “Ion Mares” from Vulcana Bai, during the school year 2008 – 2009. The project’s goal was to increase Environmental Education to the children in rural areas by activities like: “Let’s plant a tree!” (Figure 2), “What we know about forests?” (identifying species of trees and plants) or contest among children from the two schools concerning Education for Natural Disasters Reduction.

Environmental Education can give the pupils the possibility to develop their thinking in a creative and critical way. A method which can be applied is that of partnership projects with schools from other spaces: towns, villages or other countries. An example of good practice is the project called “Bridges between town and village: Together, we are equal” made in partnership by the Commercial High School “Nicolae Kretzulescu” in Bucharest and Secondary School “Ion Mares” from Vulcana Bai, during the school year 2008 – 2009. The project’s goal was to increase Environmental Education to the children in rural areas by activities like: “Let’s plant a tree!” (Figure 2), “What we know about forests?” (identifying species of trees and plants) or contest among children from the two schools concerning Education for Natural Disasters Reduction.

Environmental Education in Japan is the 2nd subject taught in Japanese schools (after the culture and language subjects). It aims: to cultivate the conscience for environmental problems; to respect the environment; to train the capacity of solving the environmental problems; to take part of activities of environmental protection (1 day/week).

Basic Environmental Education is taught starting kindergartens, and then at schools during so called “comprehensive studies”. Environmental activities range from those integrated within the curriculum, to extra-curricular activities, such as clubs and associations. Activities are also initiated at the school level by local and national governments, by the private sector, and by NGOs.

There are three trends in teaching Environmental Education in Japan: increasing and unintended pollution of the environment from the high industrial growth periods of the 60’s and 70’s; urban lifestyles and resource consumption patterns that were essentially unsustainable and placed a heavy burden on the local environment – both in production and in disposal of wastes; awareness on global environmental trends as a result of United Nations and other international events and Japan’s own growing presence on the global arena.

Environmental Education, as part of Globalization of Education constitutes a strong goal for the Associated Exchange UNESCO Programme in Japan. This programme aims to build a new regional network of ASP schools in Asia-Pacific region for a Flagship Programme of the future. Associated Schools Project activities in Japan started at 4 lower secondary schools and 2 upper secondary schools in 1953. 30 schools joined into this project in 1975, but
now the number is only 20. The most famous Associated UNESCO Schools are Ikeda (Figure 3), Hagoromo and Kitazodo.

Figure 3: Japanese pupils collecting the plastics (Ikeda School, Osaka)

Environmental Education has to be learned by each pupil through their own experience, having a strong foundation in their families and being based on moral and values inherited from the past. Sharing the experience about their own values and traditions, about the way they understand and respect the environment with people all over the world can be a model to apply the principles of GLOBAL EDUCATION. Based on such principles, the Commercial High School “Nicolae Kretzulescu” has settled a partnership called “Sharing the Globe!” with the Bucharest Japanese Language School, developing different activities such as: “Knowing Japan”, “Origami”, “Small Japanese Gardens” (Figure 4) or “Wearing Yukata” (Figure 5).

Figure 4: Small Japanese Garden Project

Figure 5: Wearing Yukata by a pupil from the Commercial High School „Nicolae Kretzulescu”, Bucharest

Conclusions
As both Japan and Romania experience an era of rapid changes, “Globalization of Education” should emphasize the promotion of mutual understanding between peoples of nations through education. The importance of international understanding can be seen also by promoting non-formal education, as well by taking into account the importance of cooperation and the respective roles of schools, communities and families in education and in the creation of lifelong learning societies.

In order to cooperate more effectively and efficiently, Japan and Romania should conduct more programmes, domestically and internationally in order to exchange ideas such as: common values and cultural diversities, Ethics in Science and Technology, globalization and social transformation or establishment of knowledge societies.

In conclusion, both Japanese educational system and Romanian educational system have good and weak points, which make them be different not only from socio-economical point of view, but also from cultural and mental level.

Irrespective time and space, Japan and Romania have to improve education so that the new generations should adapt to the evolution of world, a world which becomes more global.

References


www.ceser.hyogo-u.ac.jp
www.cnr-unesco.ro
www.cnrop.isc.ro
www.eco-schools.org
www.edu.ro
www.isc-mc.co.jp/eco2e
www.isci.or.jp/books
www.web-ajan.org/factsheet/education
www.mext.go.jp
www.mext.go.jp/english/topics/unesco
www.mofa.go.jp
www.portal.unesco.org/education