Policy of Education for the 21 st Century in Developed and Developing Countries: Focus on Japan and Persian Gulf Region

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Introduction

Increasing globalization, information technology, based on a knowledge economy, and socio-economic changes are rapidly changing the goals, policies, curricula, contents and methods of education. The need to differentiate and re-thinking education and learning, both within and outside the school system, is gaining increased attention among education researchers, policy-makers, and practitioners.

This paper tries to present a careful analysis of current trends and challenges in education and focuses on the policies of education for the 21st century in both developed and developing countries. Emphasis is placed here on the educational reform plan for the 21st century in Japan and the educational policies of Persian Gulf Countries. [1] The objective is to examine what "we" can learn from Japanese approach and experience in promotion of the educational reform plan for the 21st century named *"Rainbow Plan"* the seven priority strategies. In section I, the major trends that the world faces in the twenty-first century are concerned. In section II, the economic and social situation of the Persian Gulf Region will be examined. Section III deals with major challenges the educational systems are facing both in the world and the Persian Gulf Region. In the following section IV, I will analyze the Japan's educational goals in the 21st century. In section V, the Japanese educational reform plan for the 21st century named *"Rainbow Plan"* the seven priority strategies is discussed. In the last section VI, I would like to deal with a number of lessons which the Persian Gulf countries can learn from Japanese approach in

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promoting their educational reform plans.

I. Global Trends and Their Implications

There are various challenges confronting us today to society and education. Trends that will force changes of a sort not experienced during the twentieth century are now sweeping across every corner of the global. As UNESCO recognized in a resent research project and a multimedia teacher education program (*UNESCO, 2002a*), when we think about the pace of change over the last ten to twenty years, we know that the 21st century will be very different from the past. Yet, surprisingly, the future is often a neglected concern in education. No one can predict the future with any high degree of accuracy (*Morin, 2001*). Indeed, only the thing we know about future is the life in future will be very different from today's life (*Beare & Slaughter, 1993; Hicks & Slaughter, 1998*). Many social scientists agree that several key trends will shape human society over the next decade (*Bertrand, 1998; Hughes, 1998; Papadopoulos, 1998; Hammond, 1999; Hallak & Poisson, 2000*). Eight of these trends include:

1) Increasing cultural differences; ethnic, cultural and historical differences amongst peoples will increasingly influence national and global affairs in the future.

2) Globalization; transnational corporations now span the globe and are integrating all countries into a global system of economic interdependence and cultural uniformity.

3) Increasing gender equity; women are increasingly taking command of their own lives, both at work and at home. As gender relations become more equal, social priorities will change, and this will have a significant impact on the way in which society is organized and run.

4) Advances in biotechnology; the new scientific frontier of genetic engineering is about to transform our lives whether we like it or not. This includes both the creation of new plant and animal breeds as well as the alteration of human genes.

5) Religious revival; there are now clear signs of a worldwide religious and

spiritual revival, ranging from the growth of fundamentalist and evangelical groups to the spread of New Age beliefs and a renaissance of more ancient traditions.

6) Rising environmental concern; due to issues such as global warming and ozone depletion there is now an upsurge of popular interest in environmental issues. Increasingly, people are aware of the need to preserve and nurture the planet itself.

7) Increasing poverty; the nature of the world economic system is such that the gap between the countries of the rich North and the poor South will continue to increase. This growing division will continue to create serious problems in the future.

8) Technology; the increasing spread of computers in offices, factories, shops, schools and the home is changing the way people live, work and play (*UNESCO, 2002a*).

Therefore, on the beginning of the 21st century, developed and developing countries are facing daunting challenges such as: 1) a globalize economy that is high-speed, competitive and knowledge driven, and that requires a high-quality workforce that is agile, flexible and capable of adjusting to new knowledge and skill demands; 2) drastic innovations in technology, telecommunications and informatics that are transforming the production and delivery processes; 3) exponential growth in knowledge generation with significant implications for school curricula in terms of elasticity, structure, organizing elements, economies, etc.; 4) a more and more sophisticated society that necessitates higher levels of scientific and technological understanding for everyday living; 5) environmental degradation that calls for knowledge and skills to help individual and group reverse their behaviors and activity engage in the implementation of regulations that enhance sound environmental protection (*Knowledge Enterprise Inc., 2000; International Commission on Education for the Twenty-first Century, 1998; Soubbotina with Sheram, 2000*).

Meeting these trends and challenges quickly points to the crucial need to enhance new perspective on policy of education, to change educational goals, curricula, contents and methods; to creative new approach for educational

reform in the 21st century and educational delivery system; and to promote effective teaching and learning strategies from a focus on education and teaching, to a focus on learning; from students as passive recipients of information and services , to students as critical thinkers and life-long learners (*Torres, 2001; Shaeffer, Dykstra, Irvine, Pigozzi, & Torres, 2000; Cogan & Derricott, 2000*). Peters and Humes (2003) have indicated, national policies for encouraging knowledge generation, knowledge acquisition, knowledge diffusion, and the exploitation of knowledge have become the most pressing priorities in the science, research and education policy regimes. The emphasis, accordingly, has focused upon the twin strategies of developing the appropriate knowledge infrastructures, including the reform of knowledge institutions, together with a strong focus on so-called "human resources" or "human capital"; that is, people who know how to learn and who continue learning by upgrading existing skills and acquiring new skills (*Peters and Humes, 2003, p.2*).

Education and learning in the 21st century appear as the unfinished business of 20th century, as the revival of some basic premises and aspirations that have accompanied education theories, research, and reform plans for many years. Self-esteem and self-confidence, critical thinking and understanding, solid expression and communication skills, both orally and through reading and writing, continue to be essential foundations for lifelong learning and for citizenship building among children and youth (*Torres, 2001, pp.56-57*). For choosing the right objectives of education for the 21st century, Maitreya Balsara in recent publication proposes the following criteria:

1) the educational objective must be conceived in terms of the demands of the social circumstances (for example the conditions prevalent in a society where science and technology have the highest position, or a society faced with the challenge of globalization process, etc.);

2) education should lead toward the fulfillment of basic needs (such as access to a job, acquisition of communication skill, etc.);

3) be consistent with democratic ideals (such as producing responsible citizenship);

4) be capable of reduction to behavioristic terms (for example what critical

thinking means in terms of behavior at different levels of study), (*Balsara, 1999; Rassekh, 2001, pp.20-21*).

Today's global trends and challenges demand that young people be engaged learners and critical thinkers. This requires a profound transformation of education models. As Rosa-Maria Torres argues, "in the face of rapid changes, young people need to learn skills related to flexibility, teamwork, entrepreneurship, autonomy, creativity, and problem solving. Critical and autonomous thinking are more vital than ever for personal and social development. Access to information and modern technologies is not enough. Learning to identify, discriminate, and critically analyze information has become a key basic learning need in itself. Social and economic realities are deteriorating for the majority of the population, and environmental degradation has become a serious threat to the future of mankind. Under these circumstances, active and responsible citizenship implies not only "adapting" to change, but also anticipating change, participating, controlling, and re-directing it through transformative social action"(*Torres, 2001, p.34*).

II. Persian Gulf Countries

The economies of Persian Gulf countries are heavily depend on the exportation of crude oil. A considerable portion of Gross National Product (GNP) or national income of all the countries of the Persian Gulf comes from the oil. The respective governments are well conscious of the necessity of diversifying their economy and that of the creation of new sources of income in both secondary and tertiary sectors. The access to the most advanced scientific and technological knowledge is emphasized in all these countries in addition to creating stronger links between education and labour market. The awareness of the necessity of educating and developing human resources in order to diversify their economy is shared in all these countries. At the same time all the Persian Gulf countries are still fighting for providing literacy and basic education for their people, particularly for women (*Rassekh, 2001*), (see figure 1).

Since the majority of people in the region are Muslim (see figure 2),

governments of the region are quite conscious of their religious identity and cultural heritage. The Islamic context of schooling in Persian Gulf countries suggests that schools as government institutions support the Islamic national religion (*Wiseman & Alromi, 2003*). In addition, Islamic studies have a particular place in school's curriculum. They pay also a particular attention to strengthening relations with other Persian Gulf Region, Arab and Islamic countries, and this makes an integrative part of their education policy. For example, we read in the national report of United Arab Emirates (UAE) on the development of education (1996) that among the objectives of the educational system are: 1) inculcating faith in God, his prophets, moral and human values; and 2) inculcating pride in Arab nationalism, the nation itself and the homeland. Qatar in its national report of education (2001) puts the two following principles among the main principles of education: 1) inculcating belief in Allah, His Prophets and religious convictions and values; and 2) strengthening respect for Arab Nationalism, for Qatar and for one's cultural identity. Also in Iran's national report of education (1999) we read the following principles among principles and objectives of education: 1) explain Islamic principles and culture on the basis of the Holy Koran, the Prophet's tradition and the actions of his family members; 2) unify all Islamic nations, to exert a continuous effort to obtain political, economic and cultural unity among Muslims. [2]

Human Development Report (2002) gives the following figures of Human Development Indicators (HDI) rank, life expectancy at birth, adult literacy rate, combined primary, secondary and tertiary gross enrolment ratio, Gross Domestic Product (GDP) per capita, life expectancy index, education index, GDP index, human development index value, and GDP per capita (Purchasing Power Parity US $) rank minus HDI rank in the Persian Gulf Region (see figure 2).

Figure 1-Human Development Position in the Persian Gulf Region, 2002

Country	HDI rank	Life expectancy at birth (years) 2000	Adult literacy rate(% age 15 and above) 2000	Combined primary, secondary and tertiary gross enrolment ratio (%) 1999	GDP per capita (PPP US$) 2000	Life expectancy index	Education index	GDP index	Human development index (HDI) value 2000	GDP per capita (PPP US$) rank minus HDI rank
Bahrain	39	73.3	87.6	80	15,084	0.81	0.85	0.84	0.831	- 2
Kuwait	45	76.2	82.0	59	15,799	0.85	0.74	0.84	0.813	- 10
Iran	98	68.9	76.3	73	5,884	0.73	0.75	0.68	0.721	- 22
Iraq *	126	63.8	53.7	50	3,197	0.65	0.52	0.58	0.583	- 22
Oman	78	71.0	71.7	58	13,356	0.77	0.67	0.82	0.751	- 38
Qatar	51	69.6	81.2	75	18,789	0.74	0.79	0.87	0.803	- 25
Saudi Arabia	71	71.6	76.3	61	11,367	0.78	0.71	0.79	0.759	- 26
UAE	46	75.0	76.3	68	17,935	0.83	0.74	0.87	0.812	- 19

Source: Human Development Report 2002.   *Source: Human Development Report 2000.

Figure 2-The Persian Gulf Region Populations, Population Growth Rate, Age Structure and Religious, 2000

Country	Total population	Population growth rate	Age structure: (0 - 14,	15 - 64,	65 years) & over	Religions: Muslim	(Sunni,	Shi'a),	other
Bahrain	634,137	1.78%	30%	67%	3%	100%	(25%	75%)	-
Kuwait	1,973,572	3.44%	29.36%	68.32%	2.32%	85%	(45%	40%) .	15%
Iran	65,619,636	0.83%	34%	61%	5%	99%	(10%	89%)	1%
Iraq	22,675,617	2.86%	42%	55%	3%	97%	(37%	60%)	3%
Oman	2,533,389	3.46%	41%	57%	2%	75%	(-	-)	25%
Qatar	744,483	3.35%	26%	71%	3%	95%	(-	-)	5%
Saudi Arabia	22,023,506	3.28%	43%	55%	2%	100%	(-	-)	-
UAE	2,369,153	1.61%	30%	68%	2%	96%	(80%	16%)	4%

Source: Central Intelligence Agency, Washington D.C., 2000; IBE, World Data on Education, 2001.

III. The Challenges Ahead

All over the world educational systems are faced with a number of challenges which necessitate a revision of their school programs and structures. Some of these are: multiplication of sources of information and communication, which put an end to the school's monopoly in transmitting knowledge;

accelerated pace of scientific and technological progress, which requires a continuous adaptation of the science course content; transformation of the nature of work and the need for more flexibility and mobility which make the acquisition of some skills indispensable such as communication skills, the readiness for teamwork, the capacity of using some new technologies such as computers; process of globalization which bring about the need to adapt curricula to the conditions and needs of different social cultural groups in the multicultural societies of today and at the same time to maintain the national and social cohesion of the country (*Hallak & Poisson, 2000*); emergence of some new important problems such as environment pollution, drug addiction, aids, violence, etc. which require the introduction of new subject in the school's curriculum; growing importance of the civil society in the democratic world (*Cogan & Derricott, 2000*), which make necessary not only the decentralization and the development of participatory approaches in the education systems but also the mobilization of various partners such as parent associations, teacher's unions, representative of the private sector including the area of economy to participate in the design and implementation of the new subjects in the school's curriculum (*Rassekh, 2001*).

As Phillips Hughes affirms, the motivation for educational reform does not come from with in but from the impact of external circumstances. Almost every dimension of life has changed fundamentally in the past fifty years. Many of the changes that are underway make a particular impact on education and schooling: technology and communication; the world economy; ecology; peace and security; the nature of work; new knowledge on learning; basic education is an essential prerequisite for all people; an extended concept of "basic education"; life-long learning is a necessity; values as a central issues; and continuing development from evaluation (*Hughes, 2001, pp.53-54*).

Persian Gulf countries are confronted with some additional challenges such as the provision of "education for all". As I explained before, illiteracy rate is still high and many children are deprived of education. They are also faced with the challenge of how to reconcile tradition orientation with modernity. Some of the Persian Gulf countries (such as Kuwait, UAE and Iran) have

applied in the past a generous system of social welfare benefits (free of charge school, free of charge hospital) in order to provide education and health service for the poor family and rural people. They had to revise these schemes because of the fluctuations in the oil price and population rate. So, one of the main concerns of the governments in those countries is to find a way of reducing dependency on oil revenues, among other things through the development of brain resources.

According to the 1999 National Report of Education of Iran the main objectives of the education are: promote science and technology for the scientific and technical development of the country; and promote lifelong education (*World Data on Education, 1999*). Similar objective can be found in other National Report, Qatar put in its national report of 1996 the following objectives among the main objectives of education: providing students with an access to the advance knowledge and useful sciences; promoting the love and acquisition of knowledge, the attitudes and skills of self-learning; the constant search for knowledge and investing its resources to create an ever learning society (*Rassekh, 2001*).

Life-long education has been recommended by the international community during the last few decades (*OECD, 1996; Delors, 1996; Johnston, 2000; CEC, 2000; UNESCO, 2002b; Anonuevo, 2003*). The Persian Gulf countries do not seem to have done lot in that respect. It is not only the continuing evolution of science and technology and the changing requirements of the labour market which require such type of education but also the democratic exigency of equality of chances for all citizens (*Delors, 1996; Rassekh, 2001*).

In the Muscat seminar on the management of curriculum adaptation for curriculum specialists in the Persian Gulf region (IBE & the Oman National commission for UNESCO, Muscat, Oman, 17-21 February 2001), Shapour Rassekh summarized some specific challenges of the Persian Gulf countries in addition to global challenges, as follows:

1) the challenge of universal literacy; [3]

2) the challenge of a shortage of highly skilled human resources, including in the field of education;

3) the challenge of reconciling traditional orientation of education with the aspiration for modernity;

4) the challenge of privatization of schools in some countries;

5) the challenge of diversification of the economy to become less dependant on oil revenue and the consequent increase in the need for competence training and management development in other sectors of the economy;

6) the need to invest more in research in various priority areas, including education;

7) the need to derive optimal benefit from the complementary nature of the Persian Gulf region economies through enhanced cooperation (*Rassekh, 2001, p.9*).

Sharing experiences and expertise on current changes in curricula; examining common problems and discussing possible solutions relevant to the present situation in the Persian Gulf region; and strengthening cooperation between countries can bring alternative approach for adapt with these challenges. As participants in the Muscat seminar on the management of curriculum adaptation for curriculum specialists in the Persian Gulf region (2001) have indicated, in the region three aspects of school curriculum are more important and educational reformers should keep these in minds. These three aspects are as follows:

1) Emphasizing traditional values of education; devote Islamic education in weekly periods lessons of all of grade in school curriculum, goals of education and content of teaching and learning.[4] In case of Iran, in addition, students have to learn Arabic language for understanding Islamic culture and ideology.[5]

2) Promoting science evaluation; the access to the most advanced scientific and technological knowledge is emphasize in all Persian Gulf countries in addition to creating stronger links between education and the labour market.

3) Taking innovative measure; most of the region countries are committed to reform and improvement of educational process, teachers professional development and moving toward life-long learning, educational research and

more effective teaching and learning strategies. [6]

It seems that the education systems experience great difficulties in coping with these complex challenges. Even if reforms are planned, they are not always implemented or managed properly. And the reform in structures, curricula, programs, contents and methods, which are being executed, very often meet with a great deal of resistance from parents, teachers' unions and sometimes even from pupils or learners themselves (*Hughes, 2001; Rassekh, 2001; Sarkar Arani, 2003; Wiseman & Alromi, 2003*). So they would like to learn from other countries such as Japan to meet these challenges in a sustainable manner.

In the Persian Gulf countries, the process of Japanese modernization has attracted considerable attention for following reasons:

First, the Persian Gulf countries regard the Japanese model as of great value since the process of modernization was the first successful model in Asia and was different from the Western model.

Second, Japanese modernization was, as Numata reflected, a measure to enrich and strengthen the country, and their highest purpose was to increase productivity and promote industrial (*Numata, 2003*). This is very important for the Persian Gulf countries, since they are thinking that the Western value, such as individualism, humanism and democracy, which has been regarded as the essential and indispensable parts of modernization in Western world, can not apply directly to their own, Islamic society (*Wiseman & Alromi, 2002, 2003*). This is the most important reason that Japanese experiences are worth learning for the Persian Gulf countries. They are looking for the modernization model in the "East" not in the "West" for cultural reasons.

I also would like to emphasize that the Persian Gulf countries regard that it was the education that built Japan, one of the underdeveloped, backward counties, into the most developed country in Asia after World War II. Therefore, my major concern in this paper is to examine the Japanese idea and strategy of education both in post-world war II period and in present and try to find out what "we", as a member of the Persian Gulf countries, can learn from Japanese experience and how "we" can transfer the idea and strategies

into our society.

IV. Japan's Goals in the 21ˢᵗ Century

On January 18, 2000, the Prime Minister's Commission (PMC) on Japan's Goals in the 21ˢᵗ Century submitted its final report. The commission's aim was to elucidate Japan's challenges and policies as it moves into the 21ˢᵗ century. The commission has been encouraging Japanese to have a broader national debate on Japan's potential, place in the world, challenges, future, as well as how to enrich life and how to secure a safe society. In the overview of the report, the commission notes "we Japanese have not engaged in discussion and debate on national aspirations for long time. We hope to break down this inertia. In this report we will discuss Japan's aspirations, expressing our hopes for the nation and our determination to do what needs to be done. Addressing head-on the issue of Japan's goals in the 21ˢᵗ century, we will propose a number of principles and policies" (*PMC, 2000, p.1*).

According to the commission thought on Japan's goals in the 21ˢᵗ century, the Japanese remember the postwar period as a success story. The political, economic, and social systems built up then were also accepted as components of a successful model. Nevertheless, this successful postwar model has now leached Japan's vitality. Many of the vested interests and social conventions that grew up over the postwar period have made Japan's economy and society rigid and stale. This model was the "catch up and overtake" model, followed not only in the postwar period but ever since the Meiji era (1868-1912). Japan must now seek a better model. No model of immediate use to Japan exists. While studying cases from around the world, we must find solutions to such problems within Japan. In so doing, it is more important than ever to bring the latent mettle, talent, and potential within Japan into the open. Doing so is the key to Japan's future. In the world of 21ˢᵗ century individuals will possess incomparably more power than ever before. Varied networks are enhancing individual power and "empowerment" is spreading (*PMC, 2000*).

It seems that Japan's frontier now lies within Japan, and Japanese have to revitalize government and society through changes the methods and systems

whereby citizens interact with society. The traditional channels and organizations of one-way (top-down, or public-sector to private-sector) transmission of decisions and demonstration of power remained embedded through force of habit. These conventional social relations must be changed into a contractual and a more equal relationship between those "below" and those "above", or the private sector and the public sector. The other essential change is to redefine and rebuild the relationship between private and public space in civil society. Building a new system of governance, empowering the individual, and creating a new public space require the fostering of a spirit of self-reliance and a spirit of tolerance, neither of which has been allowed sufficient latitude for expression in Japanese society so far (*PMC, 2000*).

According to the commission report (2000), the major global trends, challenges and their implications for Japanese society in the 21ˢᵗ century are as follows:

1) Globalization; globalization has raised a variety of issues for Japan, such as the need to cope with the speed of developments, to participate in rule making and to empower individuals. Japan has relied on a time-consuming process of reaching consensus through the ringi system (under which a circular stating the proposed decision must be approved in turn by every affected department), rules have not been made explicit, and nonverbal communication has been prized; in this context the locus of responsibility has been blurred, and the ideas and creativity of individuals have not been fully utilized. Japan needs to base its systems and rules on standards that are explicit and internationally acceptable. It will also be necessary to delineate accountability, make the decision-making process transparent and speedier, place greater value on the wisdom and ideas of the individual, and clarify individual authority and responsibility.

2) Global literacy; global literacy means that people must can freely and immediately obtain information, understand it, and express their own ideas clearly. The basic components of this new literacy are the mastery of information technology tools, such as computers and the Internet, communication skills, participation and dialogues to express oneself in

two-way exchanges, and the mastery of English as the international lingua franca. Japanese are lacking in these basic skills. Their English-language abilities as measured by their TOEFL scores in 1998 were the lowest in Asia (*PMC, 2000*). In addition, the Japanese themselves are painfully aware of the inadequacy of their communication skills.

3) The information technology revolution; the revolution in information technology, is now exerting such a huge impact on people's lives, social institutions, and international relations that it has been dubbed the "third industrial revolution." The development of the Internet in particular has fundamentally transformed the flow of information, enhanced the convenience of life, and provided a revolutionary means for individuals and organizations to communicate simply, extensively, instantaneously, and cheaply.

   Japan is far behind the United States and other developed countries in this information technology revolution (*PMC, 2000*). There is an urgent need to establish the infrastructure that will allow every home, school, and institution to have computers hooked up to the Internet around the clock, providing low-cost, high-speed access to information. Another requirement is the development of new information technology, particularly software content and technology for practical use in society. In addition, Japan needs new rules to strike the proper balance between the protections of information on the one hand and disclosure and freedom of expression on the other.

4) Advances in science; in the 21st century, science and technology can be expected to advance even more rapidly, grow even more mammoth, and produce even greater possibilities for changes affecting the very core of human existence. At the same time, it is likely that even greater attention will be paid to the purposes of scientific and technological development, a question that can be expected to become a major political issue as well. The control and safety of mega technologies like nuclear energy will also pose a major challenge for civilized society.

   For Japan, which relies on unclear power for over 40 percent of its

energy consumption and which plans to increase this reliance to an even higher level, this is an issue of not just energy security but also of human security and of the security of civilization. Human existence and dignity will be tested to an even greater degree by science and technology. The science and technology of the 21st century must be used not to conquer nature but to support lives that are spiritually as well as materially affluent, accompanied by a sense that human being themselves are part of nature.

5) Falling birthrates and aging populations; the decline in the number of children being born and the rise in the proportion of elderly in the total population are issues common to many industrialized nations. This pair of demographic trends is progressing faster in Japan than anywhere else. It is calculated that by around 2015 one Japanese in four will be 65 or above, and by around the middle of the century the proportion will be one in three (*PMC, 2000, pp.3-6*).

Meeting these challenges quickly points to the essential and various changes in Japanese society and education (*Abiko, 2002*). As the Prime Minister's commission already mentioned, it is essential first to change the methods and systems whereby citizens interact with society and second to redefine and rebuild the relationship between private and public space in civil society. The commission focuses on two central elements of reforms: 1) from governing to governance; this means establishing governance built up through joint endeavors, governance based on rules and the principle of responsibility and grounded in two-way consensus formation, rather than governance premised on one-way rule. The commission suggests calling the new governance *kyochi*, a Japanese word that emphasizes cooperation (*kyo*) rather than governing, rule, or control (*to in tochi*); and 2) empowerment of the individual and creation of a new public space; this means the Japanese empowering themselves as individuals, that they possess a robust individuality. The kind of individual needed is, above all, one who acts freely and with self-responsibility, self-reliantly supporting him or herself. In addition, Japanese have to rethink about the harmony and homogeneity which are the top priority of *ie* in Japanese and imposed by the authorities. The commission believes that interaction between

empowerment of the individual and creation of a new public space will generate a new form of governance (*kyochi*) that will elicit individuals' latent strength more fully and expand the frontier of self-realization (*PMC, 2000, pp.6-7*).

Based on the above challenges and two central elements of reforms, the commission concluded the following proposals for change Japanese society:

1) Promoting a pioneer spirit (transforming education, enhancing global literacy);

2) Making a strength of diversity (putting individuals in control of their lives, regional autonomy and self-reliance, energizing the nonprofit sector, establishing immigration policy);

3) Strengthening the underpinnings of good governance (diversity and transparency in policy choices, lowering the voting age to 18, strictly limiting the government's role, promoting rule-based governance);

4) In pursuit of enlightened national interest (global civilian power, a comprehensive and multilayered security framework, neighborly relations-rinko-) (*PMC, 2000*).

V. Educational Reform Plan: "Rainbow Plan"

The Prime Minister's Commission on Japan's Goals in the 21st Century mentioned "transforming education" as a very important proposal to elucidate Japan's challenges and policies as it moves into the 21st century. The commission clarified that "if we are to emphasize the kind of education that taps the latent strengths of individuals and society and that fosters and encourages excellence, we must break down the homogeneity and uniformity of present-day education. Present-day Japanese education has conflated the service of helping free individuals acquire the means for self-realization. To achieve this, it is essential to reexamine education in the broad sense, that is, the development of human resources" (*PMC, 2000, p.9*).

In addition, as Ministry of Education, Culture, Sports, Science and Technology's (*Monbukagakusho*) report recognized, people's trust in education appears to have been shaken enormously. At school, bulling, non-attendance, school violence and other types of problematic behavior by students have

become prevalent. So-called "class disruption" has turned into a major social issue. Outside school, there have been ever-increasing incidences of previously unimaginable vicious crimes committed by young people. Furthermore, at home, where education is supposed to begin, a variety of serious problems such as child abuse and a breakdown in communication between family members have emerged. At society, there is a spreading tendency among youth to neglect society (*Monbukagakusho, 2002a*). It seems to Monbukagakusho's mention that the standardization of education due to excessive egalitarianism and the cramming of too much knowledge into children have tended to push aside education geared more to fit the individuality or capabilities of children.

As Monbukagakusho's report concluded, it appears the present education system is not necessarily responding fully and adequately to social and economic changes as well as the changes that have been taking place in the environment surrounding children. In response to a variety of challenges and problems concerning Japanese education and society as a whole is being urged to consider the modality of the education and schools systems (*Monbukagakusho, 2002a*).

The National Commission on Educational Reform, which was established under the Prime Minister's Commission on Japan's Goals in the 21ˢᵗ Century for broad-based discussion on the modality of future education in Japan, had numerous sessions of its plenary meeting and three subgroups since the Commission's establishment in March 2000. These meetings led to the submission of the Report by the National Commission on Educational Reform proposals for changing education on 22 December 2000. The Commission laid out two basic principles that should be followed in considering reform proposals contained in its report; 1) standardization in education should be broken down, individual talents should be encouraged to grow and a back-to-basics approach should be adopted in examining school education and educational administration; and 2) specific movements should be created to achieve reform. The Commission then set forth its seventeen proposals, emphasizing the particular importance of three standpoints; 1) realizing education that fosters Japanese with rich humanity; 2) realizing an educational

system that lets individual abilities grow and fosters Japanese with rich creativity; and 3) building new schools befitting the new times and realizing a support system for that goal (*Monbukagakusho, 2002a, pp.10-11*).

The National Council on Educational Reform for the 21st Century especially focused on some of the basic line of thinking within all the proposals for changing education such as the principle of respect for individuality; shift to a lifelong learning system; responses to the changes including internationalization and information. As *Monbukagakusho's* report affirm, the educational reform Plan in the 21st century is also intended to promote "structural reform of education" to reform the whole educational system and make it more responsive to the expectations and requests to the people and keenly alert to social changes, through the "promotion of decentralization," "enhancement of information disclosure and accountability" and "promotion of appropriate evaluation" (*Monbukagakusho, 2002a, p.11*).

On the basis of the Recommendation Report by the National Commission on Education Reform, submitted in December 2000, the *Monbukagakusho* developed the Educational Reform Plan for the 21st Century in January 2001. The Plan presents the whole picture of the education reform agenda to be addressed going forward and also offers time schedules for specific major policies and measures to be addressed (see table 1), (*Monbukagakusho, 2002a, pp.13-14*).

For concert education reform plan, on 26 November 2001, *Monbukagakusho* asked the Central Council for Education to consider the Formulation of the Basic Promotion Plan for Education and the Modality of a new Fundamental Law of Education befitting to the new time. In addition, after more than two year, in 15 May 2003, the Minister of Education, Culture, Sports, Science and Technology (Atsuko Toyama) asked the Central Council for Education to conduct a comprehensive review of the education system from kindergarten to high school. The Minister asked the council to consider following items:

1) Introducing flexibility to the timing of children entering elementary school by allowing admission one year earlier or later than the norm, depending on the level of development;

Table 1- Education Reform Plan for the 21ˢᵗ Century -Rainbow Plan-
The Seven Priority Strategies, 2001

1. Improve the students' basic scholastic proficiency "in easy -to-understand classes"
    * Implement a class size of 20 students for core subjects and a system for streaming students
    * Establish the education system to develop diverse individualities and competencies
    * Implement national academic achievement test
    * Improve classroom facilities through the use of IT classes and a class size of 20 students ("A Learning Environment for the New Generation")

2. Foster open and warm-hearted Japanese through participation in community service and various programs
    * Encourage participation in community service and various programs
    * Establish the "Children's Dream Fund"
    * Improve moral education (for example, development and distribution of the "Kokoro no Note"(notebook to be used by students in moral education))
    * Take action for the revitalization of education in the home and community

3. Improve the learning environment to one which is enjoyable and free of worries
    * Enrich cultural and sports activities (encourage school club activities)
    * Promote participation of working adults in school education (School Ikiiki Plan)
    * Take proper action concerning children who cause trouble at school (the suspension from school as strict discipline and measures to care for such children)
    * Protect children from harmful information, etc.

4. Promote the creation of schools trusted by parents and communities
    * Establish a school self-evaluation system, promote the creation of open schools, including the introduction of a 'school council' system
    * Revitalize boards of education through the participation of parents and the disclosure of information
    * Promote the establishment of new types of schools making the most of the individuality of each community
    * Improve the school counseling system with the increased number of school counselors allocated

5. Train teachers as "education professionals"
    * Introduce a commendation system and special increases in the salaries of excellent teachers
    * Take appropriate measures for teachers who lack teaching abilities
    * Improve the teacher qualification system, establish a new teacher training system, and increase the opportunities to undertake work experiences in the communities (i.e., work experience at companies)

6. Promote the establishment of universities of an international standard
    * Reinforce university education and research functions in order to create leaders of the next generation(improve the system for admitting 17-year-old students into universities, promote system for admitting students who have finished their third year into graduate school, and establish professional schools)
    * Establish a competitive environment in university education (grant national universities the status of independent administrative institutions, promote fixed-term employment so that university staff can transfer easily, increase competitive research grants)
    * Implement a strict grading system for university students and focus on the teaching abilities of academics

7. Establish a new educational vision for the new century and improve the foundation of education
    * Review the Fundamental Law of Education so that it is suitable for the new times
    * Provide the Basic Promotional Plan for Education

Source: Monbukagakusho, Educational Reform for the 21ˢᵗ Century, 2002a.

2) To weight weather coordination between kindergartens and elementary schools, as well as between elementary and junior high schools, needs to be bolstered to improve curriculum links;

3) Decentralization of education administration;

4) The role division between the central government and local authorities in terms of the state's contribution to compulsory education;

5) The growing use of the semester system at school runs by local governments. [7]

VI. Discussion and Conclusion

As the world enters the 21st century, it faces a set of major challenges. New understandings about the brain; about how people learn; about the potential of information and communication technologies; about radical changes in patterns of work as well as concerns about social divisions in society, necessitate a profound rethinking of the structures of education. Research and experience have consistently shown that the teaching of basic facts, laws and theories alone, no matter how successful, does not meet these demands in a sustainable manner, nor do classrooms structured around a behavioral learning theory in which teaching was telling and learning was memorizing. [8] Thus, educational reform is universal in both developed and developing countries. Every country is involved, sometimes with similar aims, sometimes with different aims.

For instance, in China, the extension of compulsory education from seven to nine years provides the basis for curriculum reform and is now accompanied by a Joint Innovation Program with UNESCO to improve the quality of public examinations (*Hughes, 2001*). In the United Kingdom, twelve years after the introduction of the National Curriculum, a substantial effort is being made to increase the capacity of schools to evaluate their program and to establish procedures to help those that do not perform well (*Hughes, 2001*). In Oman, there is a need for the education system to produce more knowledgeable and skilled indigenous employees (*Hughes, 2001*). In the United States of America, the new president announced an increased emphasis on evaluation and testing as a way to improve student achievement (*Hughes, 2001*). In Japan, the

education reform plan is intended to foster Japanese people with a rich sense of humanity, develops the talent of individuals and fosters creative individuals and emphasis on moral education (*Monbukagakusho, 2002a*). In Iran, there is a need for the education system to produce more citizenship education, to create democratic environment in school and to building a democratic society (*Sarkar Arani, 2003*).

The patterns may differ from place to place but the involvement with reform is universal (*Hughes, 2001*). In Japanese case, they need to place greater value on the wisdom and ideas of the individual, and clarify individual authority and responsibility (*Monbukagakusho, 2002a*). In Persian Gulf region where Islam is a dominant religion, people are living through an era of profound social transformation. People are involved in current discourse and debate on Islam on a mass scale. The result is a collapse of earlier, hierarchical notions of religious authority based on claims to the mastery of fixed bodies of religious text (*Eickelman, 1999*).

What is happening in practice? That is the major thing that we like to learn from Japan. First of all, Japanese experience of education reform shows us that it is easy to say we are looking for higher standards, or more individuality and humanity. But what is higher standards means? What kind of individuality should be pursued? What kind of society are they anticipating, or do they desire? How are standards and individuality to be achieved? There is paradox here because for most people education seems a strangely boring topic. This is strange for there is more material now about the nature of human learning and its importance to individuals, to society at large and to the economy than at any pervious time. It is learning which will drive our future economies, and determine what kind of people we become (*Knowledge Enterprise Inc., 2000*).

First Lesson: views of the past mission

In Japan, the objective of educational development has been considered to modernize Japanese society and increase economic growth for a long time. Even today, economic factories often determine the educational needs in Japan.

Japanese are very much concern about the academic standards of schools and students achievement. Especially, they are evaluating Japanese mathematics and sciences achievement through last four decade as common sense in Japan. They think that there is no need for reforming their educational system and making it more flexible. They think raising student academic achievement to recover its high level of education is more important. So they are not so much agree with the education reform plan and the new courses of study including integrated study time. Some educational researchers noted that it is extremely doubtful that the goals of education reform plan and the new courses of study can be realized (*Fujita, 2000a, 2000b; Kariya, 2000a, 2000b*). For example a Professor of the University of Tokyo mentioned, "to me it seems that inevitably the lowering of educational standards and disruption of rhythms of learning will be exacerbated and children will be more spoiled" (*Fujita, 2000b*).

They sometimes call *Yutori Kyoiku* "education with flexibility" as *Yuttari Kyouiku* "education with gradually" and don't agree with reduce the mathematics and sciences teaching hours in school and giving children more flexibility. Professor Takashina argues, "it is pointed out that the implementation of "education with *Yutori* or flexibility" may have been a mistake, which is thought is the cause for decline in academic ability" (*Takashina, 2001*). Also, Professor Kariya stated, "it is difficult to oppose viewpoints that everybody supports. The media, too, reiterate what the educational reports say" (*Kariya, 2000a*).

What we can learn from these harmful side effects, as Kariya mentioned, "in so far as we must live in the nation-state, it is now the responsibility of the Japanese people to deepen understanding of the harmful side effects suffered by a country late to modernize, to put this understanding definitively into words, and share it across our borders. For this purpose, knowledge of the natural sciences, social sciences, and humanities must be utilized, and as much as possible "intellectual reflection" must occur" (*Kariya, 2000b*).

In Japan, policies to improve educational system in the name of "modernization of education" were closely related to economic and industrial recovery both during the *Meiji* Restoration and after World War Ⅱ. Political

and industrial logic determined the world of children and educational contents, first under the slogan of modernization of the country and then under the pretext of economic and industrial recovery from the ruins of the War (*Numata, 2003*). Thus, as Numata (2003) concluded, "the problem of school was not by accident that bulling, violence and refusal to attend school emerged in the post-war period. These were signs of revolt from children who had been neglected for over a century" (*Numata, 2003, p.257*).

Japanese modernization has succeeded. School education has contributed much to that, but at the sacrifice of the child's world. It seems that the leaders of the modernization process should not have denied all the cultural elements pertaining to childhood. Rather, they should have activated them in the new context of modern democratic civilization, even though it would not have been easy at that historical moment to do so. It is the obligation of the Japanese of today to try it again (*Numata, 2003, p.260*). This is an effective lesson from Japanese experience for us as developing countries and region which give the impression of being for modernization.

Second Lesson: views of the future vision

The second lesson that we can learn from Japan is how Japanese tries to resolve their problems and the paradox. Policies of education for the 21ˢᵗ century in Japan look a way to do the above obligations. Based on the Educational Reform Plan for the 21ˢᵗ Century, which maps out specific measures and issues of educational reforms, the *Monbukagakusho* is taking new approach to these policies and issues on curriculum reform for individualized education and changes in the Course of Study (*Gakushushido-yoryo*) from April 2002. The approach is focused on the New Courses of Study, the Comprehensive Five-day School Week System, and Integrated Curriculum. This innovative curriculum approach tries to consider children's development in two very important aspects; "academic skill" which encourages the proper growth of their learning ability and "zest for living" which promote acquisition of various behavioral skills, enhancement of self-evaluation and self-esteem (*Monbukagakusho, 2003*).

As *Monbukagakusho* noted, the aims at letting the children spend more time free from pressure at home and in the communities and engage in social contribution activities and nature-oriented experiences to nurture "*Ikiru Chikara*" (the zest for living) in their daily lives including the abilities to learn and think by themselves, rich humanity, and healthy development and physical strength to lead vigorous lives. Also, under the new courses of study, schools are developing detailed and thoughtful instruction suitable for each child; aiming at helping them securely acquire basics and based on it, fostering "*Ikiru Chikara*" (*Monbukagakusho, 2002b, p.8*). In addition, school strives to securely improve the "*Gakuryoku Chikara*" (academic ability) through Frontier Program for Improving Academic Ability to promote advancement-oriented instruction, to equip children with the basic knowledge and the ability to learn and think independently, to form a habit of learning by enriching the opportunities for learning, and to promote the redefinition as a distinctive school for the purpose of leveling up the steady scholarly attainments (*Monbukagakusho, 2002b, pp.15-16*).

There are three educational elements in school education prior to the new courses of study and integrated study as new approach of Japanese school education: 1) academic skills, 2) moral education, and 3) special activities. As Takashina stated, integrated study was introduced as a turning point of Japanese educational system, which does not limit its scope to these elements, but encourages studies in a broader sense such as global understanding and environmental issues. It is regrettable that current school education has prevented children from getting in touch with society that is necessary for children. Integrated study aims to overcome this issue (*Takashina, 2001*).

The Curriculum Council of *Monbukagakusho* has announced an evaluation standard for integrated study times. The evaluation standards clarify what integrated study is expected to result. There are five aspects in the evaluation standards: 1) ability for problem identification, 2) problem-solving capability, 3) learning and thinking skills, 4) active and creative study attitude, and 5) consideration toward one's way of life (Takashina, 2001). It seems to me and other researchers that the most of the evaluation aspects of integrated study

can be converted into the academic skills which are acquired while achieving global understanding and information society. [9]

As Takashina evaluated, since the new courses of study and integrated study approach encourages students to make their own decision, it will nurture the ability of self-determination and identification of problems. It will also nurture a challenging spirit toward what children want to pursue. Children will be able to acquire sociability and social behaviors through various encounters with adults in the community (*Takashina, 2001*). Also, children are highly satisfied with integrated study. They like selecting topics according to their interest and deepening their ideas or thoughts. [10] For instance, the touching program in various schools means that the children have contact with the elder, the city people, and foreigners. The children have curiosity and interest in people who are different and unfamiliar. The difference inspires the creative motivation. The discrepancy between the day-to-day life and the ideal produces the inspiration for the future. Deviation from the taken-for-granted world provides the opportunity to question and wonder at the world. Children are encouraged to experiment with the real world (*Asanuma, 2003, p.441*).

However, school educational coverage in Japan is decreasing and is not capable to solving all the problems alone. It is necessary that schools should organize an educational system so that they can work together with local communities and other educational institutions (*Takashina, 2001*). Consequently, the educational reform plan for the 21st century cannot be realized without cooperation among schools, families, and communities. In the course of implementing this educational reform plan, *Monbukagakusho* encourages schools, families, and communities to cooperate and to nurture children's "*Ikiru Chikara*" (*Monbukagakusho, 2003, 2002b*).

We have to learn that the educational reform plan for 21st century in Japan caused heat discussion among scholars and educational researchers. For example, two researchers group of curriculum studies in Japan strongly advocates an integrated curriculum and the new courses of study by working hand in hand with practitioners to spread integrated study to each school (*Abiko, 2003*). One of them places curiosity and interest of children at the

center, and another group emphasize on themes or topics such as environment and peace. Although this movement follows the examples of *theme learning* in America and *topic learning* in England, it also recommends various other endeavors be developed at each school level (*Abiko, 2003*).

In addition, as Professor Asanuma (2003) argues, it is conceivable that Japan's curriculum practices for integration are in the midst of the transition from modern curriculum to postmodern. There is no distinctive boundary in this transition. It is chaotic, but creative. He stated, "Japan's curriculum reform movement has a postmodernism value in its practice. The traits of the postmodernism are typically characterized by reciprocity, mutuality, dialogue, flexibility, situation dependency, virtual reality, style, marginality, chaos, and exchanging value orientation. Most curriculum reforms are defined in terms of these traits. Most practices include the reciprocal action in its teaching method and program" (*Asanuma, 2003, p.441*).

In the meantime, other researchers group of curriculum studies squarely oppose the educational reform implemented by the *Monbukagakusho,* and don't emphasize the virtue of integrated curriculum and the new courses of study. As Professor Abiko concluded, "their discussion is placed not so much on the curriculum, but on their belief that the educational administration makes light of the public ness that public education should inherently encompass because it asserts that the further expansion, via liberalization, of the discretion by parents and guardians in choosing a school would deprive children of the equal opportunities in education, and economic as well as class gaps between the rich and the poor would be further broadened" (*Abiko, 2003, p.430*).

However, it seems to me that based on the policies of education and the Rainbow Plan, the new approach of curriculum in Japan could offer various types of education to meet individual needs of children. I believe that the Persian Gulf countries would respond positively to this kind of approach for curriculum development view as well.

In the beginning of 21st century, we need a global perspective, multidimensional citizenship, new issues of mankind, innovative philosophy of individualistic, academic skills, zest for living, open school to society, teacher as

learner, as researcher and as curriculum developer, learner as critical thinker, manager as leadership, parent as participator, and policy-maker as practitioners. We have to develop an alternative vision to policy of education, curriculum development, school leadership, teaching and learning environment, teachers' quality and evaluating of children. For develop this kind of vision we need to learn from each other, exchange experiences and enhance collaborative research. I believe that the examination of Japanese case of Policy of Education and Educational Reform Plan for the 21st Century, especially the new courses of study including integrated curriculum, offers a real possibility for the decision-makers and policy-makers of the Persian Gulf countries to learn from their Japanese colleagues.

The author, as member of nation-states of Iran that is late in developing, and striving to become modern and democratize education, looking for learning from Japanese process of modernization, especially modernization of education. We have already started some of collaborative research project, seminar and workshop on Japanese modernization of education, policy of education, the new courses of study, integrated curriculum, and teachers' professional development with our Japanese colleagues. Who would like to participate and enhancing professional dialogue?

Acknowledgement

Notes:

1) The Persian Gulf Countries include Bahrain, Kuwait, Iran, Iraq, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE). This revival of sorts has even been documented in the *Comparative Education Review* through articles by Talbani (1996) and Mazawi (1999), and the *Compare* through article by Wiseman & Alromi (2003).

2) See UNESCO, IBE: World Data on Education, (the fourth edition, 2001), (the third edition,

1999), (the first edition, 1996), National Reports on the Development of Education, http://www.ibe.unesco.org

3) According to data of figure 1 the adult literacy rate (% age 15 and above), is as follows: Bahrain 87.6%; Kuwait 82%; Iran 76.3%; Iraq 53.7%; Oman 71.7%; Qatar 81.2%; Saudi Arabia 76.3%; and UAE 76.3%.

4) In Kuwait, Oman, Qatar, and Saudi Arabia students have about 3 to 9 weekly period lesson for grade 4 to 6 and 2 to 8 weekly period lesson for grade 7 & 8 about Islamic education in each year(IBE: Draft Educational Profiles, 2000). In Iran, students have 4 weekly period lesson for grade 3 to 5 (Elementary Education) about the Koran and Islamic culture and 6 to 8 weekly period lesson for grade 6 to 8 (Lower Secondary Education) about the Koran, Islamic culture and Arabic language in each year. Also, they have to continue learning Islamic culture, Arabic language and the Koran during grade 9 to 12 (Upper Secondary education), about 4 to 6 weekly period lesson in each year.

5) They also have weekly period lessons for grade 9 to 12 about Islamic culture, the Koran and Arabic language.

6) See Final Report of the Muscat Seminar on the Management of Curriculum Adaptation for Curriculum Specialists in the Persian Gulf Region (IBE & the Oman National Commission for UNESCO), Muscat, Oman, 17-21 February 2001, pp.97-100, Switzerland: Geneva, IBE.

7) Kyodo News, Education-System Review Sought, *The Japan Times, Daily Newspaper*, Tokyo, No.37392, Friday, May 16, 2003, p.2.

8) See Knowledge Enterprise, Inc. website at http://www.knowledgeenterprise.org

9) See papers on *Japanese Education Today* in http://www.childresearch.net

10) See Benesse Educational Research Center website at http://www.childresearch.net

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