# Chapter 2 Stages of Development in Primary Education: Japanese Experiences

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#### Summary

Japan's experiences with the development of primary education are generalized and described as a "developmental task model". The universalization processes are divided into four stages, and tasks to be performed by the government corresponding to each stage are pointed out. In the "initial expansion" stage, school systems should be established and schools constructed; in the "autonomous demand expansion" stage, school supply expansions, improvement of quantity allocations are needed; in the "shift towards universalization orientation" stage, enrollment of the entire school-aged population, alleviation of the advancement criteria and systematization of the enrolment reminders should be pursued; and in the "achievement of universalization" stage improvement of educational conditions, contents and quality, prolongation of the obligatory educational terms should be implemented.

The development task model schematically expresses the internal contextual structures of the development of primary education in a development stage framework, focusing upon the role of the government. This stage framework approach differs from the context-ignoring approach of the EFA movement.

#### Key wards

stages of development, primary education, Japanese experience

[Yonemura, Akio ed. Universalization of Primary Education in the Historical and Developmental perspective, Research Report (Chousakenkyu-Houkokusho), Institute of Development Economies, 2007]

The focus of educational development aims at a complete diffusion of basic education as represented by the movement of the EFA (Education for All) since the Jomtien conference (Yonemura, 2001). It is easy to see without discussion that diffusion can be an important developmental goal from the viewpoint of individuals' rights and from the viewpoint of healthy social or economic development. Still, this question remains: What kind of concrete processes must the universalization of primary education generally undergo to be realized? Descriptions are only sporadically seen concerning historical analyses of advanced countries on the one hand and individual cases of developing countries on the other. But there is no framework for macroanalyses. In this paper, education as a whole in the process of Japanese modernization and the dynamism of the diffusion of primary education are organized by dividing them into several stages (the first section), and their formulas are created as developmental stage models of general primary education policy tasks (the second section). In this way the problems of the present EFA's framework are explained and analytical tasks are examined as they relate to the universalization of primary education in developing countries (the third section).

#### 1. The universalization of primary education in the modernization of Japan

When the relationship between education and its development is considered, the important point is that both aspects are changing dynamically as they influence each other. In the process, the tasks facing both largely change. I would like to organize the elements influencing these changes, using examples in Japan that trace back more than a century. Japan's economic development and education

Japan has been working to achieve modernization and expand education for about 130 years, since not long after the Meiji Restoration began in 1868. The student enrollment rates during this period have been recorded chronologically as they apply to primary schools, secondary schools (until WW II, this category included students who attended general secondary and quasi secondary educational organizations), prewar higher secondary schools (including the old system's secondary schools and girls' schools, as well as postwar high schools in the new system), and high schools (Graph 1). Moreover, regarding the completion rates of the primary education of male students, the estimated values from a survey on young adults were added. Copious notes concerning these enrollment rates are necessary because systemic changes during those times were extensive; even so, it is possible to see the long-term changes in an overview. Following

are divisions of the long-term developmental stages of Japanese education based on Graph 1.

Stage I covers about 40 years, ranging from the beginnings of the Meiji Restoration until approximately World War I. In this stage, primary education spread rapidly, and school enrollment rates reached nearly 95%, a level that achieved the nearly completed "universalization" the government was seeking. On the other hand, the completion rates of secondary schools and high schools remained low at limited levels. Secondary education, however, began to increase toward the end of this stage. From the viewpoint of economic development, this stage is when Japan was still forming the basis of the development and when the per capita GDP increase was limited. In this sense, it can be said that the stage was economically the "accumulation stage." In other words, primary education was promoted without the support of personal income increases as a result of economic development. However, this accumulation stage is viewed as largely contributing to the country's subsequent economic development. So to understand Japan's developmental structure, it is quite important that the universalization of primary education was almost completed during this stage.

Stage II comprises about 40 years, starting during World War I and continuing until sometime in the 1950s. During this time, secondary education expanded largely, and lower secondary education realized universality. Higher secondary education also expanded, and by the 1950s its enrollment rates had reached about 70% of eligible young people throughout Japan. In the meantime, higher education was expanding smoothly, though the absolute level of completion rates was low. This stage corresponds to Japan's economic growth after World War I. Economic expansion constantly pushed up per capita income levels, which led to demands for the advancements of secondary education, then to higher education. Moreover, the demands for human resources accompanying the burgeoning economy also increased demands for secondary and higher education.



Graph 1: The developmental stages of the Japanese education system: 1873 to 1960

Sources: The estimated values of the completion rates of primary education (male students) are taken from Amano, 1997. Others are taken from the Ministry of Education, 1972.

Stage III covers 50 years from when the economic growth was started in a new form after postwar reforms following World War II until almost the end of the 20th century. In this stage, lower secondary education was stipulated as obligatory and thus became thoroughly universalized, and higher secondary education rapidly enlarged its enrollment rate. In particular, the completion rates of higher education rapidly expanded in the 1960s, and by the end of the 1900s, higher secondary education rates were at about 95%. The completion rates of higher education, in a broad sense including universities, junior colleges, and special schools, had by that time reached almost 70%. This stage of

so-called accelerated economic growth was connected with the expansion of these high enrollment rates.

The policy tasks of the developmental stages and primary education

From the position of comparing educational expansion with economic development, at the first stage the universalization of primary education was apparently nearly complete. However, from the position of the developmental tasks of primary education, even in stage I they were changing, and some were carried over to Stage II. Regarding the development of Japanese primary education in this stage, there is a detailed research carried out by Dr. Ikuo Amano (1997, especially section I). With Amano's work used as a reference, this stage can be divided into three stages, P1, P2, and P3, and organized as follows as far as the discussion needs.

That is, stage <P1> marks the introduction of the modern school education system. As Dore (1976) pointed out, fundamental basic education was spread considerably in the Edo era, especially in city areas, but for many people modern education was a completely new concept. On the one hand it forced families to make large sacrifices, and on the other it was unclear what tangible benefits it would provide. Therefore the demands for advancement to primary education were not necessarily high, though the educational system was formed institutionally by "Gakusei" (the Education Ordinance) in the 5th year of the Meiji Era(1872) and by "Kyoiku Rei" (the Education Order) in the 12th year of Meiji (1879), and though the system of "Shingaku Tokusoku" (clarification of criteria for attendance enforcement regulations) was created. Thus by 1890 only half of all eligible children had been enrolled in the new primary education system.

During stage <P2>, which ranged from 1890 to 1910, a policy for the expansion of enrollment rates in terms of educational policy was firmly established with specific goals. Since 1890, the enrollment rate had begun to rapidly increase. In particular, it is considered that the revision of "Shogakko Rei" (the Elementary School Order)" in the 33rd year of the Meiji Era (1900) had quite an important effect on the popularity of enrollment (Amano, op cit, p. 57). Consequently, enrollment increased from a level of about 50% to more than 90% during the approximately 20 years from 1890 to 1910. Here the enrollment rates roughly correspond to the gross enrollment rates. The estimated value of the completion rates also reached nearly 90% (actually 88.5%), regarding children who reached school age in 1910. This stage can basically be positioned as the time when the meaning of school education was largely spread among the public and when, having this as background, the demand for educational advancement grew rapidly.

But it was not only demand that caused the educational advancement rates to rise.

The demands for educational advancement meant a greater need for more classrooms and for more teachers to accommodate the needs of the great increase in students, and it was important that the schools supplied them. Moreover, the construction of elementary schools continued during this stage, and schools were created in remote areas. This played an important role in promoting the enrollment of children, especially in the lower grades. Moreover, it was stipulated that children from poor families would be partly or totally exempt from tuitions in 1990.

Furthermore, the supply side's orientation was changed largely by the revision of the Elementary School Order in 1900. That is, the primary education term that had changed or had shown some disparities until this stage was clearly stipulated to be four years of ordinary elementary schools. Also, the collection of tuition in ordinary elementary schools was completely abolished. Moreover, an examination had been required at the end of primary education until then, but it was declared that "it would be decided, without using another examination, by considering children's usual academic results". In short, the requirements for graduation became mainly the usual academic results. It can be said that changes of this kind show that the requirement of all children to complete primary education had become a concrete policy goal.

The subsequent <P3> stage, ranging approximately from 1910 to 1930, is the time of the complete universalization of primary education in Japan and also the time of its quality improvement. As described above, by 1910 the enrollment rate exceeded 95% if the enrollment is defined as the admission of students who enrolled at least once in an elementary school, but the number of children who dropped out subsequently reached a sizable level. Even when only male students were considered, only in 1920 did their rate of completing the four-year elementary education surpass 95%. If female students were included, it was only about 1930 when the completion rate was nearly 10% and when complete universalization was achieved. Furthermore, the expansion of secondary education finally also became an important policy issue.

It cannot necessarily be easily explained how the enrollment rates, especially the completion rates, increased so slowly. On the one hand, when viewed from the demand side, the reason for nonenrollment or dropouts in elementary schools in this stage was found in families' economic backgrounds. The reasons for nonenrollment or dropouts of children reaching school age in 1920 were that helping out with domestic chores accounted for 35%, working as an employee or apprentice for 33%, as a migrant worker or seaman, 7%, and the total of these reached about 80%. The tuitions had been largely

abolished, so the important factor was that children basically needed to earn incomes (Amano, op cit, p. 76). Since primary education was extended to six years in 1908, there were probably many cases where the number of children from poor families, a segment of the population that had increased in desolate villages and cities, had to stop studying in the upper grades of elementary schools. In this sense, when viewed from the demand side, it was shown that an expansion of the completion rates was difficult without economic and social changes.

On the other hand, steady changes in this stage were produced in terms of educational and financial policies. In short, "Shichoson Gimukyoikuhi Kokkofutan Ho" (the Law concerning the National Treasury's Share of Municipal Compulsory Education Expenses) was established in the 7th year of the Taisho Era (1918). This was an epoch-making law because a national subsidy system was established for the obligatory education, especially a financial basis was given to maintain the conditions of primary education in low-income regions. Moreover, the treatment of teachers was improved a revision of elementary school teachers salary scales in 1920 (Ministry of Education, 1972, p. 465). As a result of these policies, the number of regular staff teachers per class in elementary schools was increased from 0.603 in 1903 to 0.662 in 1910, and to 0.763 in 1920 (Amano, op cit, p. 69). By distributing "Oshitamawarikin (financial assistance from the Emperor)" to local regions, the school enrollment grant system was started in 1924 (13th year of Taisho), and 3.5% of school-age children received benefits from this system in 1925. Moreover, "Gakurei Jido Shugaku Shorei Kitei" (the Regulations to Encourage School Attendance by Children of School Age) was stipulated in 1928 (3rd year of Showa), the state subsidies began to be paid, and the receiving rate reached 10% in 1933. The number of hours of science, geography, and history was increased in 1919. To sum up the above, the quality improvement of education in elementary schools and increases especially in the low-income regions were intended and given financial support.

It is difficult to show empirically how policies aimed at improving the quality level on the supply side, those providing education, had the effect of directly bringing on an increase of the completion rates, though slowly. It is at least possible, however, to imagine that it was creating a condition where more sensitive care was given to children in elementary schools, and it is possible to think that the influence was great, considering that the enrollment itself was already not the problem in this stage and that the hurdle for the universalization of primary education was to let children graduate at the end of their primary education without seeing them turn into dropouts.

# 2. The developmental task model of the primary education

The above summarizes Japan's historical process. This was further generalized while the cases of today's developing countries are considered, and the development tasks were organized according to the developmental states of the primary education (Table 2).

	Objects of enrollment and completion rates	Constraint factors	Policy tasks
P1 Initial Expansion		Relative shortages of demands for educational advancement	Establishment of the school systems School constructions
P2a Autonomous demand expansion	More than 50% of the enrollment rate	Relative shortage of school accommodations Costs of attending schools because of school locations	Supply expansions Improvement of quantity allocations
P2b Shifts toward universalization orientation	More than 90% of the enrollment rate	Authoritative teaching methods, strict enrollment, grade advancement, and graduation criteria	Enrollment of all the population/alleviation of the advancement criteria Systematization of the advancement reminders
P3 Achievement of universalization	More than 90% of the completion rate	Dropouts of children of peripheral population Deterioration of school environments	The quality improvement of educational conditions and contents Prolongation of the obligatory educational terms

Table 2: The developmental task models of primary education

In this table, the process leading to the universalization of primary education is divided into four stages: P1, P2a, P2b, and P3. Each one's problems, policies toward them, and results are described below.

P1 – The initial expansion

To begin with, the first stage (P1) should be called the initial expansion stage. The relationship between factors appearing in this stage is illustrated briefly (Graph 3 [1]). Nevertheless, in this graph the fine arrows show plus effects on the increase of enrollment and the completion rates, the thick arrows show minus effects, and the gray arrows show minus factors.

First, when viewed from the supply side of educational opportunities, the governments introduce the modern school systems. According to this system, the central or local governments construct elementary schools, foster the educational curricula, and hire the teachers. In this way, the primary education opportunities are supplied. However, not only are the numbers limited, but so are the financial capacities. Thus students are required to shoulder costs directly in the form of tuitions. Moreover, in many colonies the educational systems or practices of the former suzerain countries tend to be directly introduced. Also, the modern school education systems are new systems for traditional societies, and teachers take authoritative attitudes. The schools and teachers, to establish the authorities, consider securing the educational conditions as the important task. Therefore the number of enrollees is limited, and strict criteria tend to be imposed at the time of educational advancement and graduation.

On the other hand, at this stage demands for the opportunities of primary education are limited. The high-income classes in city areas start sending their children to elementary schools. However, the peasants, accounting for the majority of the population, are at low-income levels and find it difficult not only to shoulder direct costs, such as children's classes, books, and stationery, but also to bear the sacrifices (opportunity costs) incurred by stopping children from doing agricultural or domestic work, thus allowing them to attend school, because the children are needed to shoulder such work. Moreover, in traditional societies economic and noneconomic benefits that would be created by receiving a primary education are unclear. Furthermore, the schools, having authoritative and selective orientations, do not necessarily offer the children comfortable environments.



#### Graph 3 (1) The factors regarding universalization – P1: The initial expansion period

Under the circumstances, the population enrolling the primary education itself is limited to children from considerably limited classes. As long as this is so, primary education tends to remain stagnant at the limited level of the enrollment rate itself. Let's call this the trap of the first stage.

To overcome the first trap, it is necessary to shift structural factors of the demand side as described above, but it is not necessarily possible to maneuver in terms of policies. The more realistic policy in this stage is to continuously construct schools by the hands of government. By doing so, the process where children who had wished for educational advancement but were unable to accomplish it is included in the schools and increases consciousness of the society at large regarding educational advancement.

P2a – The autonomous demand expansion

When the above process is passed, the second aspect starts (Graph 3 [2]). In regard to Japan, it seems that this happened when the enrollment rates exceeded 50%.

This aspect's characteristics are that the demands for educational advancement start increasing autonomously. That is because when the number of students increases, the

enrollment in schools starts to gradually become the social norm. In other words, lacking a primary education produces a social disadvantage. Or certain job opportunities in particular start demanding that applicants received at least a primary education. Especially in former colonial societies, the capacity to use a suzerain country language given in primary education may become a condition for entry into certain labor markets.



Graph 3 (2): The factors regarding universalization – P2a: The autonomous expansion of demands

However, on the other hand it is not always the case that the supply side of the educational opportunities can continue to expand the supply by responding to this. Constructing the school buildings according to primary education expansion and bearing the salaries of teaching staffs become enormous financial responsibilities. The government or local governments cannot readily respond to the expansion of financial costs. Under the circumstances, it is not surprising if the schools will be forced to move in the direction of limiting the number of students rather than actively increasing the number. Therefore the authoritative classes and strict grade advancements or gradual requirements are maintained. Moreover, if primary education has a value as a professional qualification,

this also probably promotes the tendency to retain the status quo.

Because of this situation, the expansion of the enrollment rate itself is limited by the factors of the supply side, and, simultaneously, the number of cases where children fail in the process of elementary education and drop out without graduating from elementary school is often produced. Under the circumstances, the enrollment rate of the primary education becomes stagnant at a certain level, and the completion rate does also. This can be called the second trap of the primary education expansion process. This tendency is seen in the large number of the contemporary African countries. Structural changes on the supply side are needed to remove the traps.

## P2b – The shifts toward universalization orientation

The process that achieves structural changes is the second stage of the second stage (Graph 3 [3]). Japan entered in the stage when the enrollment rate reached about 90%.

Because of the above-mentioned P2a mechanism, the enrollment rate itself reached a very high level. However, the dropouts are frequent and the completion rate leaves much to be improved. At this stage, a basic policy is needed to shift from the aim of diffusing the primary education to the aim of making primary education obligatory in the sense that all the people are required to complete it. The shift does not naturally occur. In regard to Japan, it can be said that the strong ideology in modernization supported it. In the present developing countries, international ideological changes starting from the EFA seem to be promoting it.

The basic turning point of the changes occurs on the supply side as a result of policy initiatives. That is, the system allowing all applicants to enroll in school is generalized, and a systemic enrollee management that embraces school–age children and allows them to enroll in school is carried out. Moreover, a systemic school enrollment reminder system is implemented. Furthermore, after enrollment the criteria for class advancement and graduation are relaxed, and efforts are made to avoid holdovers and dropouts. At the same time a policy expanding the enrollment opportunity itself becomes necessary. Furthermore, as a means of heightening the incentive for children to enroll in school, elementary schools are widespread in terms of geography, and the distance between school and home has been shortened considerably. Moreover, if the universalization becomes a clear task, the legally coercive measure for educational advancement is organized, and according to this, the tuitions will need to be abolished.

# Graph 3 (3) The factors regarding universalization –





When viewed from the demand side, the above changes in supplies increase the incentives to enroll in primary education and to simultaneously heighten the incentives that will lead to completion.

Still, it is necessary to note that the changes produce big problems when carried out rapidly without being accompanied by the final supports. That is, when the above-mentioned process is produced, the number of enrollees increases and the number of dropouts decreases; therefore the number of students greatly increases. If enough school buildings have not been not been constructed to respond, shortages of classrooms are produced, and shortages of the number of teachers, or at least shortages of those who received certain training, are also produced. Consequently, the number of students per class largely increases, and double and triple class sessions become necessary. As a result, the class hours are limited. Concurrently, each child's academic achievement level decreases. In this sense, universalization orientation could cause decreases in terms of the quality of primary education. Therefore the teachers' attention to each student is forced to

be limited, so constraints on the increase of completion rates are produced.

These phenomena are frequently seen in countries that shifted the policy rapidly to the universalization orientation in EFA since 1990. For example, in Uganda, as a result of the shift to the policy, the number of students per class reached 90 in the elementary schools.

### P3 – The achievement of universalization

The third factor is the process wherein the completion rate surpasses 90% and where primary education is universalized (Graph 3 [4]). It can be considered that this process is highly time-consuming and complex in reality because at this point constraint factors of the achievement of universalization are quite diverse and locally produced. Moreover, this process generally must be advanced in parallel with a prolongation of primary education or an establishment of obligatory secondary education.

First, when this situation is considered from the supply aspect, it is necessary to prevent the above-mentioned deterioration of educational conditions or to take policy measures to restore them if the deterioration has already occurred. That is basically difficult without increasing the financial costs. Concretely, the increasing construction of school buildings and the securing of qualified teachers become necessary. These points should be achieved in regions where the financial capacity is low.

The problem with the demand aspect is that a population having no conditions allowing children to enroll in elementary schools is produced locally. It is partly created because of individual factors, such as low-income families and children who are physically difficult to enroll in school. However, the important things are peripheral places and ethnic minorities or children of floating population in cities. Concerning the peripheral places or ethnic minorities, there is a possibility that the demands will increase according to the school locations. However, when the floating population in cities increases largely amid the process of economic development, the expansion of educational opportunities corresponding to it will become difficult for various reasons. Educational policies alone cannot sufficiently deal with the greater part of the problem in the demand aspect. It is expected that the social policy as a whole will become strong and even more that the increase of the general income level will become a condition.



# Graph 3 (4): The factors regarding universalization – P3: The achievement of universalization

As described above, in regard to educational finance it becomes necessary to ensure the financial sources of primary education at the central government level and, based on this, to provide financial support especially to low-income regions. Moreover, cost assistance and other measures become necessary, aiming at poor families. If these needs are to be fulfilled, it becomes necessary to have management mechanisms that cover the entire primary education system, including statistical information and others regarding the schools. Furthermore, systematizing the educational advancement reminder system also becomes necessary.

#### 3. EFA's scope

The policy task model of primary education as described above is a theoretical assumption, and no assertion is made that the processes described there should happen in all societies. However, at least the following can be stated.

First, the above-mentioned model shows that the process of establishing a firm universalization of primary education is not a simple process. It is a complex process including diverse aspects, and various proper hindrance factors occur at each aspect. If the responses to them are insufficient, the educational system will be caught in a trap, and the enrollment or completion rate of primary education will become stagnant at that stage. Moreover, the development at one stage produces proper problems, and overcoming them could become tasks in the next stage. In any event, it is very important to grasp the universalization of primary education as the dynamic process.

Second, when considered from these viewpoints, it is clear that great danger is hidden in the EFA system, including international organizations and governments, since the Jomtien conference. The universalization of basic education for humanitarian ideas or for economic development is a highly important task when viewed internationally. However, each actual developing country is located at an entirely different aspect in the process leading to the universalization of primary education, and the policy tasks required at each aspect are very different. Treating them all the same would be of little help; rather, it could probably generate even larger problems. For example, there are instances where some African countries, influenced by the Jomtien system, try to move from the above-mentioned aspect P2a to aspect P2b without enough financial support. However, that has produced the unexpected result of incurring extreme quality deterioration. It can be considered that over the long term, activities of this kind will become a minus factor regarding the universalization of primary education.

Third from the perspective of international cooperation, these viewpoints are quite important. Indeed, it goes without saying the universalization of primary education is desirable to be realized from a global perspective. However, the realization requires dynamically changing policy tasks that include interrelations among diverse factors. Foreign participation can only provide partial impact on the structures. On the other hand, it is true that the societies of developing countries include momentum for proper changes. It would be necessary to select objects of international cooperation from strategic viewpoints while sufficiently understanding the structures.

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