

Summary of Evaluation Results

I. Outline of the Project		
Country: Mongolia		Project Title: Teaching Methods Improvement Project towards Children's Development in Mongolia
Issue/Sector: Education (Teaching Methods Improvement)		Cooperation Scheme: Technical cooperation
Division in Charge: Basic Education Division I, Basic Education Group, Human Development Department, JICA		Total cost: about 290,000,000(YEN)
Period of Cooperation	April 2006 – July 2009 (3 years 4 months)	Partner Country's Implementing Organization: Ministry of Education, Culture and Science (MECS), Elementary Education Improvement Center, Mathematics Education Improvement Center, IT Education Improvement Center, and Science Education Improvement Center (the four Teaching Methods Improvement Centers), and Institute of Education
1. Background of the Project The Government of Mongolia has introduced the new education standards in September 2005 within the framework of education sector reform. The new education standards focused on shifting from a 10-year basic education system to a 12-year education system, lowering the school entry age from eight to six, and introducing new subjects such as integrated learning, natural science (integrated science), and others. In accordance with the new education standards, the teaching methods have been also expected to change from conventional teacher-centered to student-centered ones. However, at the school level, it has been hard to implement the new education standards because their contents are too academic for teachers to put them into practice in the classroom. To address these challenges, the Government of Mongolia requested the Government of Japan for a technical assistance project to improve teaching methods. 2. Project Overview The Project has been implemented by MECS in cooperation with the Institute of Education, the four Teaching Methods Improvement Centers, the Department of Education Culture (DEC) of Ulaanbaatar (UB) City, Selenge Aimag and Dornod Aimag and nine model schools to shift from conventional rote learning methods to the new teaching methods that allow children to construct knowledge by themselves. More specifically, the Project has developed the teacher's guidebooks in eight subjects, namely elementary science, general science, chemistry, physics, arithmetic, mathematics, IT education, and integrated learning every year for the three-year project period. The first-year draft teacher's guidebooks were employed and examined in trial lessons in three model schools of UB City. The second- and the third-year draft teacher's guidebooks were employed and revised through trial lessons and lessons analyses in all nine model schools in UB City, Selenge Aimag and Dornod Aimag. The expected outcomes of the Project are shown below.		

(1) Super Goal: Teaching methods which support children's development "the Teaching Methods" are disseminated in the country.

(2)Overall Goal: Teaching methods which support children's development ("the Teaching Methods") are disseminated in model Aimags and City.

(3)Project Purpose: The Teaching Methods are developed in accordance with the new educational standards introduced in primary and lower secondary education.

(4) Outputs

Output 1: The Teaching Methods are studied and developed in Mongolian context.

Output 2: Developed Teaching Methods are examined by Aimag/City supervisors and teachers, so that the teaching methods are applicable in local school conditions.

Output 3: The examined Teaching Methods are improved through trial lessons in model schools, so that the teaching methods are more applicable in local school conditions.

Output 4: Monitoring model is developed and practiced to see introduction and continuous practice of the teaching methods.

(5) Inputs

Japanese Side:

Expert: 12 people in the following six professional fields: 1) Project Manager/Education Planning; 2) Science Education; 3) Arithmetic/Mathematics; 4) Integrated Learning; 5) IT Education; and 6) Project Management and Monitoring.

Equipment: 5.46 million yen for such items as digital cameras, digital video cameras, and computers

Operational Cost: 7.54 million yen for training in Mongolia **Number of Trainees Received:** 18

Mongolian Side:

Main Counterparts: 19 people **Members of Working Groups:** 57 people

Operational Cost: 11.63 million yen, i.e., 176 million Tg, was allocated for the budget for developing and printing the Teacher's Guidebooks, and operational costs for working groups. Due to the lack of the relevant information and data, it was not confirmed how much of the operational costs that the Mongolian side actually bore.

Land and Facilities: Office space provided

II. Evaluation Team			
Members of Evaluation Team	Mr. Atsushi MATACHI	Team Leader	Senior Advisor (Education) JICA
	Ms. Sumiko ASANO	Cooperation Planning 1	Basic Education Division I, Basic Education Group, Human Development Department, JICA
	Mr. Kiyotaka MIYAZAKI	Cooperation Planning 2	Assistant Resident Representative, JICA Mongolia Office
	Ms. Purevsuren ENKHZAYA	Cooperation Planning 3	Program Officer of Education, JICA Mongolia Office
	Ms. Toshiko SHIMADA	Evaluation Analysis	Consultant, IC Net Limited

Eval. Period	March 2, 2009 – March 20, 2009	Type of Evaluation: Final Evaluation
III. Results of Evaluation 3-1 Confirmation of Results Overall, most of the four Outputs have been achieved or almost achieved, which will contribute to the attainment of the Project Purpose. The university teachers took the lead in developing the draft Teacher's Guidebooks for eight subjects (Output1). These draft Teacher's Guidebooks were revised by working groups, Model Aimag/City supervisors and model school teachers through various workshops and training (Output 2). In model schools, trial lessons were conducted and monitored (Outputs 3 and 4). After trial lessons, lesson analyses were undertaken in which project stakeholders discussed and analyzed the Teaching Methods and the draft Teacher's Guidebooks. The comments of the model schools were finally incorporated into the Guidebooks to be applicable in all schools. In this way, the achievement of the Outputs 1 to 4 has contributed to the achievement of the Project Purpose, i.e., the development of the Teacher's Guidebooks in accordance with the new education standards and the needs of teachers and schools. 3-2 Summary of Evaluation Results (1) Relevance: Very high The Project aims to break away from the conventional rote learning methods and develop the new teaching methods that allow children to construct knowledge by themselves. Thus it matches the needs and priorities of MECS in accordance with the new education standards of 2005. Since the Project is expected to contribute to enhancement of the quality of education through the development of the new teaching methods, it is also consistent with the 2006-2015 Master Plan to Develop Education of Mongolia that aims to improve the access to educational service and the quality of education. Furthermore, the Project has addressed the needs of teachers in model Aimags/City by developing the Teacher's Guidebooks that describe the details of the Teaching Methods to be employed in lessons. According to the Japanese Government's Country Assistance Program for Mongolia of 2004 and JICA's Plan for Country-specific Implementation Program of 2006, human resource development that matches the market-oriented economic reform is one of the four priority areas for assistance. The programs above highlight the necessity of assistance for basic education. The Project, therefore, is consistent with the Japanese aid policies. In its approaches, the Project put an emphasis on the process of development of the Teacher's Guidebooks in which three different actors, namely university teachers, Aimag/City supervisors, and model schools worked collaboratively. This approach seems appropriate since it helped them acquire practical skills and knowledge and develop the Teaching Methods that would meet the needs of schools. Since the nine model schools were selected from urban and rural areas in two Aimags and UB City, and also from well-equipped complex schools and non-well-equipped ones in urban areas to develop the Teaching Methods, the Teacher's Guidebooks are expected to be applicable to all schools in Mongolia. Thus the Project as a whole has a high degree of relevance for technical cooperation. (2) Effectiveness: High All the four Outputs have been almost achieved, which is expected to contribute to the attainment of the Project		

Purpose by the end of the Project period. The cooperation of the three actors who had learned from one another to pursue their common goals of the development of the Teacher's Guidebooks contributed to enhancing the effectiveness of the Project. Another contributing factor is that the Japanese experts with extensive experience in the field of education imparted the new skills and knowledge of the Teaching Methods to the counterparts. This has greatly raised the morale of the counterparts to be involved in the Project activities and make the maximum use of learning opportunities in the Project. Therefore, it is fair to say that the effectiveness of the Project is high.

(3) Efficiency: High

Although some of the inputs such as transportation costs to attend trial lessons were not provided by the Mongolian side as agreed, other inputs from both sides have been provided as planned. Thus the majority of activities has been carried out smoothly and has been all contributing to producing the Outputs. The training in Japan in particular, which is directly linked with the Project activities, contributed to smoothly producing the Output 1. This design enabled the participants to effectively and efficiently learn the practical skills and knowledge of the Teaching Methods employed in Japan from local schools, teachers and the Japanese experts. Thus the Project has a high degree of efficiency as a whole.

(4) Impact: Moderately high

The availability of the ADB loan from MECS allowed the Project to distribute one set of the Teacher's Guidebooks developed in the first and second years to all schools in the country, although this was not included in the original plan of the Project. The dissemination of the Teaching Methods to non-model schools has been gradually proceeding in three model Aimags/City through the existing in-service teacher training, open lessons, meetings, and other training. Among others, the following unexpected impacts have been observed: the dissemination of the Teaching Methods in pre-service teacher training courses in the teacher's colleges; the issue of several Orders of the Minister that are expected to provide teachers with incentives to improve their teaching skills and to more actively interact with children; and the active interaction between the children in model schools and their parents at home.

DECs are expected to play a key role in disseminating the Teaching Methods. As the Teaching Methods differ from conventional ones, the existing in-service training alone seems insufficient for further dissemination of the Teaching Methods to non-model schools. Moreover, if the budget for DECs is greatly reduced due to the financial crisis, it will be difficult for DECs to launch new programs related to the dissemination of the Teaching Methods. At the final evaluation, it is too early to say that the Overall Goal and the Super Goal will be achieved, though some positive impacts have been confirmed. Therefore, the degree of the impact of the Project is assessed as moderately high.

(5) Sustainability: Moderately high

No major changes are expected in the direction of the new education standards, but they were being evaluated and revised by MECS at the time of the final evaluation. During the Project period, the following Orders of the Minister that are expected to sustain the effects of the Project were issued by MECS: 1) a new system for performance evaluation of teachers in accordance with the new education standards; 2) a new framework for

in-service training of teachers; and 3) a new system for obtaining professional qualifications of teachers. Thus, the sustainability in the policy aspect is likely to be high. In the technical aspect, most of the Project stakeholders have acquired the skills and knowledge of the Teaching Methods and are likely to apply them at work. The Manual on Teacher's Guidebook Development to be developed and published by the end of the Project will help sustain the know-how for developing Teacher's Guidebooks. Therefore, the knowledge and skills transferred by the Project are highly likely to be sustained after the completion of the Project. Under the Project, the working groups have played an important role in developing the Teacher's Guidebooks. The Project stakeholders so far have been highly motivated to sustain the effects of the Project. Thus it is possible that the Project stakeholders will be involved in the development, dissemination and practice of the Teaching Methods in their own organizations. Accordingly, the sustainability in the organizational aspect is relatively high.

For further dissemination of the Teaching Methods developed by the Project, individual efforts of a few motivated pilot teachers and Aimag/City supervisors alone are not enough. An effective mechanism should be developed and strengthened to enable top officials of DEC's, Aimag/City supervisors who were not involved in the Project, and principals and vice principals of non-model schools to understand the importance and necessity of the Teaching Methods and assist teachers in employing these methods in lessons. Since such a mechanism has yet to be established at the time of the final evaluation, the sustainability in the institutional aspect is moderately low. As the budgets of the Four Centers, the DEC's, and the model schools are not secured, these actors are unlikely to accelerate the dissemination of the effects of the Project without any external assistance. In addition, if the financial crisis adversely affects MECS, it may be difficult to allocate an additional budget for promotion of the Teaching Methods. More internal efforts and closer cooperation with development partners are necessary to sustain and extend the effects and impacts of the Project. Thus, at the time of the final evaluation, the sustainability in the financial aspect is medium. Given the assessments above, it is fair to say that the sustainability of the Project is moderately high.

In addition, after this final evaluation period, JICA has decided to conduct the social sector support program in collaboration with ADB in May 2009. The objective of the Program is to protect the poor during the financial crisis and to improve the targeting of social assistance and living conditions of the poor by ensuring and strengthening basic social services and protecting essential social sector expenditures, thereby contributing to improvement of public expenditure management, and enhancement of social development in Mongolia.

3-3 Factors promoting sustainability and impact

(1) Factors concerning planning

The institutional arrangement of the Project was well designed as university teachers, model Aimag/City supervisors, and model schools had been directly involved in developing the Teacher's Guidebooks and the new Teaching Methods through a variety of training, trial lessons, monitoring of trial lessons, and lesson analyses. This approach made it possible to develop the Teacher's Guidebooks that differ from the conventional and academic ones developed by university teachers alone, but are expected to be more applicable to schools and teachers. The approach is also the most positive contributing factor that facilitated the achievement of the Outputs and the Project Purpose and enhanced the effectiveness of the Project.

The training in Japan also helped the counterparts acquire the practical expertise on the Teaching Methods

employed in the classroom by teachers in Japan. The practical knowledge and skills that Mongolian counterparts have learned in Japan were also shared with other counterparts who did not participate in this training, which also deepened the former group's understanding of the Teaching Methods. Thus the training in Japan was very effective in enabling counterparts to develop the Teaching Methods that suit the actual conditions of Mongolia and in creating a ripple effect such as introducing the new Teaching Methods in the pre-service teacher training courses of the teachers colleges.

The development cycle of the Teaching methods in the Project including trial lessons, monitoring of trial lessons, and lesson analyses was undertaken for three years in UB City and for two years in Selenge Aimag and Dornod Aimag. This allowed most of the counterparts to acquire the practical knowledge and skills step by step, which can contribute to the attainment of Outputs, several positive impacts, and the sustainability of the Project in the technical aspect.

(2) Factors concerning the implementation process

Prior to the Project, some of the core counterparts had, to some extent, acquired the knowledge about the teaching methods being employed in Japan through the technical transfer from one JICA expert who had been dispatched to MECS or from the other technical training in Japan conducted by the "Strengthening the Planning Capacity for In-Service Teacher Training Project." The assignment of these counterparts with a high sense of ownership and responsibility to the Project has led to smooth implementation of the Project. In addition, the transfer of knowledge and skills from the Japanese experts to the counterparts has been successfully undertaken. The Japanese experts provided their Mongolian counterparts with appropriate knowledge and skills every year, i.e., lesson study (*jugyou kenkyu*), analyses of teaching materials (*kyozai kenkyu*), and child development to stimulate the counterparts' motivation for learning.

3-4 Factors inhibiting sustainability and impact

(1) Factors concerning planning

The indicators were not well identified in the PDM to measure the degree of the achievement of the Project Purpose and the Output 1. Although the content of the Project Purpose and the Output 1 differed from each other, the same indicator was set to measure the degree of the achievement of these two items. Thus, the indicators need to be adjusted at the time of the final evaluation according to what has been really happening on site. Occasionally the logframe was not clearly formulated and well documented, although the PDM was revised by the Project based on the recommendations of the mid-term evaluation. It seems hard for even the project stakeholders to explain the difference between the summaries of the Project Purpose and the Outputs in the PDM. The PDM thus needs to be theoretically formulated, and well documented and shared among the Project stakeholders in the planning stage of the Project.

(2) Factors concerning the implementation process

Indicators in the PDM can be set clearly or changed based on results of baseline surveys or discussions of project stakeholders after the start of a project. In this Project, it was found at the time of the final evaluation that several indicators were not objectively measured and had no target values. Thus the final evaluation study team had to

adjust indicators and newly set the criteria of judgment according to what has been actually happening. Also, the alternative data and information such as the results of the Questionnaire Survey conducted by the local consultants of JICA prior to the final evaluation were used to measure the achievement of the Outputs and the Project Purpose since some of the indicators in the PDM were not available. In hindsight, the results of the baseline data should have been well utilized to set the objective and measurable indicators in the PDM.

3-5 Conclusion

Most project activities have been smoothly carried out through the good cooperation between the counterparts and the Japanese experts. The Project has properly addressed the priorities and needs of MECS, schools, and teachers. It is also consistent with the Mongolian education policies and the Japanese aid policies. Thus, the relevance of the Project is very high. Since most of the Outputs and the Project Purpose have been almost achieved, the Project as a whole has a high degree of effectiveness. The working groups for eight subjects have committed themselves to developing the new Teaching Methods and the Teacher's Guidebooks. The training in Japan was particularly effective in imparting practical knowledge and skills of the teaching methods to the counterparts, which has contributed to smooth implementation of the Project. As the relatively small size of project inputs have been producing effects as expected, it is fair to say that the efficiency of the Project is high. The ripple effects of the Project have been confirmed to some extent. Overall, the sustainability of the Project is moderately high at the time of the final evaluation. If the institutional and financial aspects are strengthened by establishing an effective mechanism and securing a sufficient budget for the dissemination of the new Teaching Methods, the prospects for sustainability will improve.

3-6 Recommendations

3-6-1 Collaboration of university teachers with classroom teachers

The approach adopted by the Project where university teachers and classroom teachers on the ground work together, seemed to be highly effective because the university teachers were able to understand the actual needs of classroom teachers and children on the ground. The knowledge they have acquired in the process has been improving the quality of pre-service in the universities.

In addition, as some of the university teachers are involved in the curriculum reform and textbook writing, the knowledge about the Teaching Methods that they have acquired through the project are also expected to be reflected in the curricula and textbooks in Mongolia in the long run.

3-6-2 Inter-linkage of the project activities in Mongolia and Japan

Since the training in Japan was planned and conducted by the Japanese experts who were involved in the Project activities in Mongolia, the training was well coordinated with the Project activities in Mongolia. This contributed to enhancing the effectiveness of the Project.

3-6-3 Necessity of making use of the Base-line and End-line surveys for project monitoring

- (1) The data collected for the Base-line survey and the End-line survey should have been better utilized to monitor the progress of the Project. Although the Project conducted a comprehensive Base-line survey in the three Aimags/City, it seems that those data were not well utilized to monitor the progress and to evaluate the effectiveness of the Project.

- (2) Indicators of the PDM should have target values. If the decision was made not to set the target values for the indicators, the decisions and reasons should have been recorded in the official documents such as JCC minutes.

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