

Summary

Evaluation conducted by: **SUEYOSHI Yukiko**

1. Outline of the Project	
Country : Egypt	Project Title: Project on Improvement of Science and Mathematics Education in Primary Schools
Issue/Sector : Primary Education	Cooperation Scheme : Technical Cooperation Project
Division in Charge : JICA Egypt Office	Total Cost : 350 million yen (Estimate at the Terminal Evaluation. No record available on the actual total cost at the end of the Project)
Period of Cooperation	1 st April 2003-31 st March 2006
	Partner Country's Implementing Organization : National Center for Educational Research and Development(NCERD) Supporting Organization in Japan : Hokkaido University of Education
Related Cooperation	(N/A)
<p>1-1. Background of the Project</p> <p>While access to primary education has been greatly improved, Egypt has been keenly aware that equal opportunities alone are not enough to achieve 'Education for Excellence and Excellence for all'. In 1997, upon request from Egypt, JICA started a mini-project focusing on the development of creative science and mathematics lessons in primary education, and developed guidebooks for training science and mathematics teachers. However, the training was intended for a limited number of people, and its use was merely initiated on a test basis. Moreover, it was assumed that some parts of the guidebooks needed to be revised, and the underlying concept of the guidebooks needed to be correctly understood by educators.</p> <p>To tackle such challenging issues, the Egyptian Government again requested advice and guidance from the Japanese Government to enable the new teaching methods using the guidebooks to take root and a to create a solid base for the further dissemination of information. The Project on Improvement of Science and Mathematics Education in Primary Schools (hereinafter 'the Project') was implemented from April 2003 and terminated in March 2006.</p>	
<p>1-2. Project Overview</p> <p>(1) Overall Goal</p> <p>The new teaching methods that use the guidebooks in science and mathematics education are used at the primary schools in Cairo governorates and PPMU's target governorates.</p> <p>(2) Project Purpose</p> <p>The new teaching method that use the guidebooks in science and mathematics education take root at the selected schools and form a solid base for further dissemination.</p> <p>(3) Outputs</p> <ol style="list-style-type: none"> 1. NCERD staff can give proper instruction to teachers on the new teaching methods, including lesson planning. 2. The teachers at the selected schools master the new teaching methods and practice them in class. 3. The new teaching methods are proved to be effective. 4. The guidebooks are revised. 5. The new teaching methods are introduced in existing teachers training courses. 6. The new teaching methods are recognized by the people in the education field. 	

<p>(4) Inputs (as of the final evaluation: no record is available on the inputs at the point at which the Project was terminated)</p> <p>Japanese side :</p> <table border="0"> <tr> <td>Long-term Experts</td> <td>9</td> <td>Equipment</td> <td>10 million yen</td> </tr> <tr> <td>Short-term Experts</td> <td>28</td> <td>Local costs</td> <td>-</td> </tr> <tr> <td>Trainees received</td> <td>9</td> <td>Others</td> <td>-</td> </tr> <tr> <td></td> <td></td> <td>Total</td> <td><u>350 million yen</u></td> </tr> </table> <p>Egyptian side :</p> <table border="0"> <tr> <td>Counterparts</td> <td>35</td> <td>Equipment</td> <td>-</td> </tr> <tr> <td>Land and Facilities</td> <td>Office space for Japanese Experts</td> <td>Local Costs</td> <td>Maintenance costs for facilities and equipment provided by Japanese side</td> </tr> </table> <p>Others</p>				Long-term Experts	9	Equipment	10 million yen	Short-term Experts	28	Local costs	-	Trainees received	9	Others	-			Total	<u>350 million yen</u>	Counterparts	35	Equipment	-	Land and Facilities	Office space for Japanese Experts	Local Costs	Maintenance costs for facilities and equipment provided by Japanese side
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2. Evaluation Team																											
Members of Evaluation Team	SUEYOSHI Yukiko, Junior Researcher, Global Link Management Inc.																										
Period of Evaluation	13/ January/ 2009 - 23/ January/ 2009 (Field research in Egypt)	Type of Evaluation : Ex-post																									
3.PROJECT PERFORMANCE																											
3-1. Performance of Project Purpose																											
<p>“The new teaching methods that use the guidebooks in science and mathematics education take root at the selected schools and form a solid base for further dissemination”</p> <p>Indicator: MOE Counselors, C/P teachers and people concerned make positive evaluation about the new teaching methods.</p> <p>It was concluded in the Final Evaluation that the Project Purpose had almost been achieved. However, the Ex-post Evaluation confirmed the achievement level was limited. During the focus group discussion with the model schoolteachers, the teachers outlined the difficulties of continuing to apply the new teaching methods due to the miss-match of concepts between the new methods and current curriculum. Furthermore, the Ministry of Education (hereinafter ‘MOE’) has no concrete plans for disseminating the teaching methods at this moment, even though they gave a positive response to the new teaching methods.</p>																											
3-2. Achievement Related to Overall Goal																											
<p>“The new teaching methods that use the guidebooks in science and mathematics education are used at the primary schools in Cairo governorates and PPMU’s target governorates”</p> <p>Indicator: all the teachers of 27 governorates introduce the new teaching methods, guidebooks are distributed to all the primary schools in Egypt</p> <p>Ex-post Evaluation concluded that the Overall Goal has not yet been achieved based on examinations of this indicator. Interviews with NCERD staff and MOE confirmed that the new teaching method and guidebook had not been introduced throughout the country. Very few activities for the dissemination of information have been done after the Project’s termination because of the absence of a follow-up mechanism among the relevant organizations.</p>																											

3-3. Follow-up of the Recommendations by Terminal Evaluation Study

Recommendation	Follow-up Situation
1. Authorization and consent of the guidebook from the MOE	Although the guidebook was submitted to the MOE, it was not authorized for the official use.
2. Clarification of the implementation system for conducting teacher training and distribution of the guidebooks.	It was not made clear how and who would implement teacher training to distribute the new teaching methods during and after the Project implementation.
3. Translation of the guidebooks into Arabic	The complete version of the guidebook was translated into Arabic by a translation company, but failed to meet the quality control standards of NCERD.
4. Capacity improvement of the pilot school counterpart teachers, including school-based training unit	According to the Cairo Governorate, the SBTU is not functioning well. Training to improve the capacity of SBTU is being performed by Cairo Governorate.
5. Dissemination and utilization of the teaching methods by Cairo Governorate.	Cairo Governorate has been conducting teacher training to disseminate the new teaching methods introduced by the Project.
6. Conducting in-service teachers training in all Governorates	The teacher training required to apply the new teaching methods has not been conducted on a nationwide scale because the implementation system has not been clarified between the relevant organizations after the Project termination.
7. Contribution from NCERD counterparts as teacher instructors	NCERD staff members are occasionally invited as trainers to the teacher training sessions conducted by the Cairo Governorate.

4. Results of Evaluation**4-1. Summary of Evaluation Results****(1) Relevance**

The Project was in line with MOE policy and contributed to the promotion of ‘student-centered teaching’, which was part of the ministry’s educational reforms. As an implementation agency, NCERD was judged as appropriate as a counterpart in terms of research and development of the teaching method. However, to ensure the further dissemination and utilization of the guidebook, MOE’s commitment to the implementation of the Project should have been confirmed. Furthermore, relevance was found to be high as the Project Purpose was in line with one of the priority areas of the Japanese assistance policy in Egypt.

(2) Effectiveness

The achievement level of the Project Purpose was limited because no collaboration system between NCERD and MOE existed to disseminate the new teaching method and guidebooks during and after Project implementation. Furthermore, the teachers at model schools stated that the current curriculum and examination system should have been revised to allow continued application of the new teaching method in their daily class-activities. To enhance the effectiveness of the Project, it was important that a formal agreement be concluded to clarify the roles and responsibilities of each organization involved in achieving the Project Purpose.

(3) Efficiency

Regarding Japanese input, it was reported that experts were not dispatched for a long enough period to provide adequate guidance on the new teaching methods. Egyptian counterparts pointed out that

they did not have enough time to engage the project activities because of their heavy workload. It was reported that the high transfer rate of in-service teachers who received technical guidance from the Japanese Experts might hinder the dissemination of the new teaching methods.

(4) Impact

Some of the inhibiting factors which may have undermined the achievement levels of the overall goal were; i) absence of a follow-up mechanism among educational organizations, ii) examinations that depend on memorization, and iii) no assessment studies regarding student-centered teaching. The Ex-Post Evaluation concluded that positive impacts from the Project implementation included students becoming actively involved in classes, and participated actively in learning and thinking activities.

(5) Sustainability

The Ex-post evaluation confirmed that the sustainability of the Project is relatively low in terms of the implementation system for continued dissemination of the new teaching methods. During the focus group discussions with beneficiaries, the teachers at model schools requested follow-up support from MOE to respond to teachers' technical questions, and to resolve the challenges faced when applying the new teaching methods at school.

4-2. Factors project

(1) Impact

Teacher training conducted by PPMU utilized the method guidebook as teaching material, thus promoting dissemination of the new teaching method.

4-3. Factors that have inhibited project

(1) Impact

The Project was commenced and implemented by mainly NCERD, which was one of the educational research institutions in Egypt. Therefore, the Project faced the challenge of obtaining the ministry's commitment to the Project implementation, especially with regards to the dissemination of the teaching method and guidebooks.

(2) Sustainability

One of the inhibiting factors that may have undermined the achievement of the Project sustainability was an absence of a feedback mechanism between NCERD and in-service teachers, which would be essential for assessing the applicability and providing revisions based on teacher needs.

4-4. Conclusions

The Ex-post Evaluation team observed that the Project had made positive impacts on the model schoolteachers and students. As for the sustainability of the Project, MOE and NCERD have no concrete plans to disseminate the new teaching methods and guidebooks, and teachers at model schools reported the revision of the guidebook and current curriculum are necessary. In order to promote the project outcomes, a clear role sharing and linkage among relevant organizations, such as MOE, NCERD and the Governorate, should have been confirmed during the Project implementation.

4-5. Recommendations

- 1) **Impact assessment of the new methods:** For further dissemination and utilization, it is recommended that NCERD utilize the results of the impact assessment on the new teaching methods which the Cairo governorate has undertaken.
- 2) **To utilize the teaching methods in education reform:** It is recommended that NCERD give positive consideration to utilizing the new teaching methods in education reforms promoted by the MOE.

4-6. Lessons Learned

- 1) **Cooperation involving concerned authorities:** To ensure the Project's sustainability, it is necessary to obtain commitment from the ministries concerned.
- 2) **To ensure the follow-up mechanism to sustain project outcomes:** To ensure Project sustainability, a follow-up mechanism should have been established during the project period involving bodies such as the local administration and MOE who have a great deal of influence over in-service teachers.