



<b>1. Project Data:</b>		<b>Date Posted :</b> 02/14/2003	
<b>PROJ ID:</b> P004793		<b>Appraisal</b>	<b>Actual</b>
<b>Project Name:</b> Th-technical Education	<b>Project Costs (US\$M)</b>	52.7	52.7
<b>Country:</b> Thailand	<b>Loan/Credit (US\$M)</b>	31.6	30.27
<b>Sector(s):</b> Board: ED - Vocational training (87%), Tertiary education (10%), Central government administration (3%)	<b>Cofinancing (US\$M)</b>		
<b>L/C Number:</b> L4053			
	<b>Board Approval (FY)</b>		96
<b>Partners involved :</b>	<b>Closing Date</b>	04/30/2002	04/30/2002
<b>Prepared by :</b>	<b>Reviewed by :</b>	<b>Group Manager :</b>	<b>Group:</b>
Khaniya, Tirth	Patrick G. Grasso	Alain A. Barbu	OEDST

**2. Project Objectives and Components**

**a. Objectives**

The objective of the project was to improve the quality of technical education program in Thailand . The specific objectives were:

(a) improve the management capacity within the Rajamangala Institute of Technology (RIT) campuses; (b) strengthen curricula and linkages with industry; (c) upgrade workshops and laboratories through the provision of up-to-date equipment and physical improvements to building; (d) expand the supply and upgrade the quality of instructional materials; and (e) strengthen the practical skills of key teaching staff in advanced technologies through overseas training.

**b. Components**

**1. Institutional Improvement** (US \$ 1.3 M) by (a) improving teaching skills of RIT's instructors through the provision of overseas training in specialized technologies and teaching techniques; (b) improving managerial capacity of the PIU and Project Institutions through the provision of overseas training in institutional systems and management practices; and (c) strengthening the PIU's procurement capacity through the provision of specialized advisory services and training of local staff in procurement procedures; **2. Equipment Upgrading** (US \$ 35.4 M) by (a) improving the quality of technical training in the Project Institutions through the upgrading of specialized equipment and computers; and (b) improving the equipment operations and maintenance systems in the Project Institutions through: i) the provision of materials; spare parts, supplies and services; ii ) the provision of training in operations and maintenance techniques for the staff of Project Institutions; and iii ) the development of instructional management policies and procedures; **3. Curriculum Development** (US \$ 0.1 M) by updating curricula of technical courses through the provision of local advisory services; **4. Instructional Materials** (US \$ 3.6 M) by upgrading instructional materials through: (a) the development and preparation of instructional materials such as audio -visual materials, video-tape instructional packages, and individualized competency -based materials, and (b) the provision of technical reference materials, textbooks, journals, and technical catalogues; **5. Upgrading Educational Facilities** (US \$ 9.4 M) by refurbishing physical facilities of the Project Institutions, including the construction of laboratories and workshops; and **6. Education Sector Strategy** by developing a strategy for the Borrower's education sector .

**c. Comments on Project Cost, Financing and Dates**

The project was completed within the expected time . Almost all funds (95.78%) made available from the Bank were exhausted.

**3. Achievement of Relevant Objectives:**

**Institutional improvement** was satisfactorily achieved by giving overseas training on 8 areas of the state-of-the-art technologies to selected 74 RIT instructors. Upon return, they trained additional 110 RIT instructors in the same technologies, training 181 teachers on equipment utilization, giving a 7 day overseas training to six administrators on project management, organizing a 15 day study visit to Scotland for a key administrator and an in -country management training for five administrators, organizing planning workshops for PIU staff involving 642 project and institution staff. In addition, 16 project monitoring and evaluation programs were also held in the participating

Institutions. The Bank provided ongoing procurement training and regular consultations to PIU staff throughout the project period making the project achieve 100% disbursement in procurement requirements.

-Equipment was upgraded by procuring and installing a package of 43 equipment items in 8 areas in the participating RIT institutions. The utilization rates of the equipment were high and teachers and students expressed their high satisfaction with functionality.

-Spare parts in all 8 areas were procured and stored for future use to support **Operations and Maintenance** of equipment. Existing operation and maintenance facilities were also upgraded to support the increased needs of the institutions.

-**Curriculum Development** was achieved by developing curriculum in all 8 areas following the RIT's policies and procedures. The competencies to be included in the curriculum were identified. They were evaluated by the employers. The curriculum for all instructional areas were evaluated by experts from industry sector and RIT in terms of efficiency, efficacy and acceptance. Course outlines for 141 subjects were implemented at the campuses which were later found highly satisfactory. The curriculum designs were approved by the RIT Council.

-An instructional materials development centre was established to support **Instructional Materials**. A Self-access Learning Centre and a closed-circuit TV room was established at each campus. Five groups of media developers were trained and committees were formed to purchase media and textbooks. A total of 8110 English textbooks, 14980 Thai Text books, 55 sets of reference books, and 110 titles of English journals were purchased.

-Workshops and laboratories in the project institutions were successfully refurbished to accommodate the new equipment before the end of the project.

-Education Sector Strategy was developed by completing a report titled "Thailand: Education, Achievement, Issues and Policies (1998)" in consultation with Ministry of Education and RIT.

#### 4. Significant Outcomes/Impacts:

The project has improved technical education in Thailand by modernizing it and establishing a collaboration between the suppliers (e.g. RIT campuses) and employers (Industries). Strengthening the RIT campuses to produce the technical human resource highly acceptable to the industries is likely to lead the country to achieve long waited export-oriented economy.

#### 5. Significant Shortcomings (including non-compliance with safeguard policies):

There was a change in the nature and duration of training for PIU staff due to the unanticipated financial crisis. Therefore, in-country training was given instead of overseas training and short-term instead of long-term training. Less well trained staff could have a detrimental effect on the performance of the project.

6. Ratings:	ICR	OED Review	Reason for Disagreement /Comments
<b>Outcome:</b>	Satisfactory	Satisfactory	
<b>Institutional Dev.:</b>	Substantial	Substantial	
<b>Sustainability:</b>	Highly Likely	Highly Likely	
<b>Bank Performance:</b>	Satisfactory	Satisfactory	
<b>Borrower Perf.:</b>	Satisfactory	Satisfactory	
<b>Quality of ICR:</b>		Satisfactory	

**NOTE:** ICR rating values flagged with '\*' don't comply with OP/BP 13.55, but are listed for completeness.

#### 7. Lessons of Broad Applicability:

-When the PIU cannot implement the project as scheduled, a strong and timely intervention on behalf of the Bank may direct government attention to problems and enable the PIU to obtain resources needed for successful implementation.

-A competent team with extensive design experience is capable of developing an accurate design of a project which can be implemented successfully even without recent experience in project implementation.

-A project that enjoys high government commitment and priority can achieve a high level of success despite budgetary difficulties and lack of recent experience in project implementation.

#### 8. Assessment Recommended? Yes No

**Why?** There has not been an audit of technical education in Thailand. It would be useful to find out how the institutions which received inputs from the project have been working after the project was over so that insights for the future design of projects could be gained.

#### 9. Comments on Quality of ICR:

On the whole, the ICR is of high quality. However, it has not looked sufficiently into the effect of the substitution of short-term for long-term training and in-country instead of overseas training for key PIU staff, as was proposed in the project, on the performance of the project. The ICR makes a reference to the establishment of an instructional materials development centre but gives no reference to any instructional materials produced by the center. Instead, several ready-made instructional materials were purchased to improve instruction. It was not quite clear whether the center would develop materials or depend on the market in the future.

