

AIRGRAM

DEPARTMENT OF STATE

PN-AAM-785/62
ISN-28182

24-4

O/EDU
CD
FO
C & R

UNCLASSIFIED
CLASSIFICATION

For each address check one ACTION

TO- AID/Washington	TOAID A- <u>90</u>	X
USAID/Bangkok	USAID A- <u>2</u>	X
USAID/Jakarta	USAID A- <u>2</u>	X

INFO	DATE REC'D
X	
X	JUN 11 PM 2 43

DISTRIBUTION ACTION

ASIA
INFO
4-8-2
8 ASIA
PPC
ED

DATE SENT
June 14, 1979

FROM - MANILA
E.O. 11652:N/A
SUBJECT - Project IMPACT/PAMONG: Southeast Asia Ministers of Education Organization (SEAMEO) Center for Educational Innovation and Technology (INNOTECH).
REFERENCE -

The SEAMEO/INNOTECH Project IMPACT/PAMONG has been recognized internationally as a very significant research project, attracting the attention of educators around the world as a result of its success in reducing the per pupil cost of primary education with no loss in quality of learning. The research and development work in this five-year experiment ends in June 1979.

AID policy in the education sector during the 1970's has consistently stressed the need to develop new, alternative approaches to achieving educational objectives and providing learning opportunities. It, therefore, may be useful to circularize a brief description of Project IMPACT, the results of the experiment, and the potential utility of the IMPACT experience and products. Although the principal donor for the project has been IDRC/Canada, AID has given major support to IMPACT's parent institution, INNOTECH, and AID has been a major supplier of consultants for the project itself. AID has had access to project progress reports throughout its five-year life, and INNOTECH and SEAMEO perceive AID as one of the partners in the experiment.

The catch-word of development education in the 70's was innovation. This seemed to emerge from recognition by development strategists that needs and demands for education could no longer be met by linear expansion of the existing formal school system as the massive resources required were not available. It was concluded that new

PAGE	PAGES
1	OF 6

DRAFTED BY: C/EDU: JATurman/ bls	OFFICE O/EDU	PHONE NO 2480	DATE 06/08/79	APPROVED BY: CD:DPBarrett
--	-----------------	------------------	------------------	------------------------------

AID AND OTHER CLEARANCES
1. PC:DLLeaty
2. INNOTECH (in draft)

UNCLASSIFIED
CLASSIFICATION

approaches must be discovered or identified; that alternative systems must be developed.

On the international scene, there were few actions which equalled the direct and determined approach to this challenge taken by the Southeast Asian Ministers of Education Organization (SEAMEO). In its planning for the 70's, this organization assigned to its principal research organ, the Center for Educational Innovation and Technology (INNOTECH), the pioneering task of developing alternative systems for delivery of mass primary education. The designing and implementation of Project IMPACT/PAMONG became the principal thrust of INNOTECH's efforts to carry out the SEAMEO mandate. Subsequently, INNOTECH has initiated other projects under this mandate which include Project RIT (Reduction in Instructional Time) and ISOSA (In-School Off-School Approach).

IMPACT is an acronym for Instructional Management by Parents, Community and Teachers. PAMONG is the acronym for the Indonesian words which most nearly translate into the English project title. The project has been aimed generally toward developing a learning system which utilizes learning resources within the community and makes minimal demands upon the formal school system. Components of IMPACT include:

- the curriculum follows national standards but is integrated so that learning is not separated into subjects to enable learning in one area to support and reinforce that in others, however, it is separated into a "core" and an "advanced" learning sequence;
- the core curriculum is to be followed^d by all learners, since it focuses on providing the basic skills, knowledge and attitudes required in becoming responsible members of a community; the advanced curriculum is made up of those parts covering requirements to enter secondary school and advanced "modules" may be undertaken at any time that prerequisite achievements have been accomplished;
- all learning is modular, a module being a learning segment directed toward a specific educational objective which typically requires 3-5 hours to complete;
- learning is individual/self and small-group paced and progress is measured by achievement rather than by year/time in school;

- During the first 2½ years, students learn in Programmed Teaching groups of 6-10 youngsters; Programmed Teachers are older elementary students who are "programmed" to teach specific content in specific ways by following exact steps spelled out for each lesson in programmed teaching materials; after approximately 2½ years of learning under programmed teaching, learners move on to "transition modules";
- modules for transition learning are simply worded, but ability to read is required, and they introduce the learner to the self or small-group paced learning to follow after the transition modules (including the following module characteristics: (a) readiness assessment/preparation, (b) purpose and objective of what is to be learned, (c) short instructional sequences followed by self evaluation and feedback, and (d) review in preparation for post-tests); there are separate modules for applied skills;
- transition learning is in peer groups made up of children of heterogeneous ability, the more able can assist those having difficulty;
- both programmed teaching groups and peer groups meet in Community Learning Centers (formerly a school) often using small kiosks which are built by residents of the community out of local materials; instruction is also carried out in the community;
- in the last three years of the elementary curriculum, learning takes place primarily in peer groups with learners taking turns at being group leaders;
- three hours daily are spent in peer-group learning with one additional hour given over to individual pursuits so that the more able learners can study advanced modules while the less able study the core module of their group more thoroughly;
- students who must be absent can study modules on their own at home or elsewhere, coming to the learning center to take post tests, obtain help as needed, and exchange mastered modules for new ones; IMPACT has good flexibility tending to reduce drop out rates in rural areas;
- post tests are given individually to children following completion of each module to insure mastery and/or to indicate needed remediation; UNCLASSIFIED

- remediation is provided by tutors who are typically high school students assigned to the village, as part of a community service requirement in the high school curriculum;
- unpaid community members assist in learning by giving specialized skill instruction to groups of learners, usually in their shops, homes or farms;
- instructional aides assist in maintaining the complete collection of working modules, in keeping records, and in administering and scoring post tests;
- itinerant teachers spend one half day each week at a given learning center to instruct learners in scouting, hygiene, sports, music, and art;
- all instruction and learning is under the general management and supervision of an Instructional Supervisor (formerly teacher) who is responsible for the learning of 100 or more students;
- Instructional Supervisors work regularly with the learning groups and assist those in special need; they are responsible for management and guidance of all components of the learning system: programmed teachers, tutors, peer leaders, community learning resources, etc.; Instructional Supervisors do not teach (lecture); they are facilitators of learning;

The project has been carried on in two countries; one experiment site in Solo, Indonesia; and two in the Philippines. Results of all tests of pupil achievement have consistently shown that IMPACT/PAMONG learners equal or exceed achievement of learners in the traditional, formal school. Cost analyses show overall reduction of per pupil costs of approximately 50%. The great saving is in reduced requirements for professionally trained teachers (one Instructional Supervisor (IS) serves 100-150 learners). Evidence indicates that IMPACT has successfully achieved the objective of developing an instructional management system, for mass primary education, costing less than traditional schooling, and without loss of quality.

It cannot be expected that IMPACT as a system will be transferable intact to other learning situations. Actually, project models are in final stages of preparation for use by the SEAMEO member countries, but adaptation and modification will be required for dissemination beyond the project sites. However, it is clear that this experimental project has demonstrated conclusively that approaches other than the traditional, formal classroom mode

of instruction/learning are feasible and that alternative approaches are possible. Costs can be reduced at no loss in effectiveness of learning, thereby extending educational or learning opportunity without significant increases in educational budgets. It is this fact that marks IMPACT/PAMONG as a significant educational innovation.

A potentially useful body of experience has been accumulated during the course of this project which can provide time and cost saving reference material to educators around the world where solutions are sought to the kinds of problems addressed by IMPACT/PAMONG in SE Asia. Extensiveness of experimentation with the technologies of programmed teaching and programmed learning outside the US; the application of these technologies to the primary school level and to the levels of sophistication found in the developing country rural communities; translating the school curriculum into learning modules; mobilizing community resources, use of peer instruction/learning, training of learning facilitators, are but few of the components of the body of experience accumulated during the five-year course of this project.

Consultations with the staff of the SEAMEO/INNOTECH in Manila indicate a willingness to share this experience when requested. As budgetary and time resources present some constraint to this offer to share, modest charges will be made to cover costs of printing and mailing documents. Visitors are welcome at the sites where IMPACT is now operational as a total system. We understand that INNOTECH is attempting to obtain support for maintaining a small cadre of key professionals from project staffs to offer consulting services if requested. Within reasonable limits, USAID/Manila is willing to serve as a "broker" for USAID requests for specific information or for more general information, believing strongly that AID cannot afford to overlook the potential utility of the IMPACT experience.

Some components of the IMPACT learning system may be used in non-formal education approaches in the areas of health, agriculture, population/family planning, nutrition where there are requirements for acquisition of new knowledge, skills or changed behavior patterns. IMPACT experience with the use of community resources, the technologies of programmed teaching and programmed learning, peer group instruction/learning may also be applicable to sectors other than education and the IMPACT experience helpful in solving a diverse range of learning problems.

Present plans in the Philippines are for an expanded tryout of the IMPACT system in twenty (20) school divisions in thirteen regions of the MEC. In Indonesia the concepts of IMPACT were implemented two years ago during the third year of the project in some conventional schools in Bali. Almost simultaneously, the modules and the delivery system of PAMONG were utilized in Malang for out-of-school youth in a non-formal setting, with the objective of providing a second chance to obtain an elementary school diploma. The present plans call for the utilization of PAMONG system for small schools starting on a pilot basis in Kalimantan. The third five-year development plan of Indonesia which started in 1979 included provisions for the implementation of PAMONG concepts in the educational system.

Although Project IMPACT experimentation was concluded in June 1979 after five years of operation, follow-up activity is planned. The IDRC will support a two-year "Follow-Up Study of Graduates of the IMPACT Model in Three Sites". The sites are all in the Philippines. The objective will be to compare IMPACT graduates with comparable groups from the traditional system. Results of this study will prove useful in further assessing the utility of Project IMPACT.

AID/W is invited to circularize this airgram in order to call the attention of missions to the potential resource base described above.

MURPHY

AIRGRAM

DEPARTMENT OF STATE

24-4

O/EDU
CD
FO
C & R

UNCLASSIFIED
CLASSIFICATION

For each address check one ACTION

TO- AID/Washington
USAID/Bangkok
USAID/Jakarta

TOAID A- 90 X
USAID A- 2
USAID A- 2

INFO

DATE REC'D

X

X

1979 JUN 14 PM 2 43

DATE SENT

June 14, 1979

DISTRIBUTION
ACTION

ASIA
INFO
48-2
8 ASIA

PPC
ED

FROM - MANILA

E.O. 11652:N/A

SUBJECT - Project IMPACT/PAMONG: Southeast Asia Ministers of Education Organization (SEAMEO) Center for Educational Innovation and Technology (INNOTECH).

REFERENCE

The SEAMEO/INNOTECH Project IMPACT/PAMONG has been recognized internationally as a very significant research project, attracting the attention of educators around the world as a result of its success in reducing the per pupil cost of primary education with no loss in quality of learning. The research and development work in this five-year experiment ends in June 1979.

AID policy in the education sector during the 1970's has consistently stressed the need to develop new, alternative approaches to achieving educational objectives and providing learning opportunities. It, therefore, may be useful to circularize a brief description of Project IMPACT, the results of the experiment, and the potential utility of the IMPACT experience and products. Although the principal donor for the project has been IDRC/Canada, AID has given major support to IMPACT's parent institution, INNOTECH, and AID has been a major supplier of consultants for the project itself. AID has had access to project progress reports throughout its five-year life, and INNOTECH and SEAMEO perceive AID as one of the partners in the experiment.

The catch-word of development education in the 70's was innovation. This seemed to emerge from recognition by development strategists that needs and demands for education could no longer be met by linear expansion of the existing formal school system as the massive resources required were not available. It was concluded that new

PAGE 1 OF 6

DRAFTED BY: C/EDU: JATurman/ bls	OFFICE O/EDU	PHONE NO. 2480	DATE 06/08/79	APPROVED BY: CD:DPBarrett
--	-----------------	-------------------	------------------	------------------------------

AID AND OTHER CLEARANCES
1. PC:DLLeaty

2. INNOTECH (in draft)

UNCLASSIFIED
CLASSIFICATION

7

approaches must be discovered or identified; that alternative systems must be developed.

On the international scene, there were few actions which equalled the direct and determined approach to this challenge taken by the Southeast Asian Ministers of Education Organization (SEAMEO). In its planning for the 70's, this organization assigned to its principal research organ, the Center for Educational Innovation and Technology (INNOTECH), the pioneering task of developing alternative systems for delivery of mass primary education. The designing and implementation of Project IMPACT/PAMONG became the principal thrust of INNOTECH's efforts to carry out the SEAMEO mandate. Subsequently, INNOTECH has initiated other projects under this mandate which include Project RIT (Reduction in Instructional Time) and ISOSA (In-School Off-School Approach).

IMPACT is an acronym for Instructional Management by Parents, Community and Teachers. PAMONG is the acronym for the Indonesian words which most nearly translate into the English project title. The project has been aimed generally toward developing a learning system which utilizes learning resources within the community and makes minimal demands upon the formal school system. Components of IMPACT include:

- the curriculum follows national standards but is integrated so that learning is not separated into subjects to enable learning in one area to support and reinforce that in others, however, it is separated into a "core" and an "advanced" learning sequence;
- the core curriculum is to be followed^d by all learners, since it focuses on providing the basic skills, knowledge and attitudes required in becoming responsible members of a community; the advanced curriculum is made up of those parts covering requirements to enter secondary school and advanced "modules" may be undertaken at any time that prerequisite achievements have been accomplished;
- all learning is modular, a module being a learning segment directed toward a specific educational objective which typically requires 3-5 hours to complete;
- learning is individual/self and small-group paced and progress is measured by achievement rather than by year/time in school;

- During the first 2½ years, students learn in Programmed Teaching groups of 6-10 youngsters; Programmed Teachers are older elementary students who are "programmed" to teach specific content in specific ways by following exact steps spelled out for each lesson in programmed teaching materials; after approximately 2½ years of learning under programmed teaching, learners move on to "transition modules";
- modules for transition learning are simply worded, but ability to read is required, and they introduce the learner to the self or small-group paced learning to follow after the transition modules (including the following module characteristics: (a) readiness assessment/preparation, (b) purpose and objective of what is to be learned, (c) short instructional sequences followed by self evaluation and feedback, and (d) review in preparation for post-tests); there are separate modules for applied skills;
- transition learning is in peer groups made up of children of heterogeneous ability, the more able can assist those having difficulty;
- both programmed teaching groups and peer groups meet in Community Learning Centers (formerly a school) often using small kiosks which are built by residents of the community out of local materials; instruction is also carried out in the community;
- in the last three years of the elementary curriculum, learning takes place primarily in peer groups with learners taking turns at being group leaders;
- three hours daily are spent in peer-group learning with one additional hour given over to individual pursuits so that the more able learners can study advanced modules while the less able study the core module of their group more thoroughly;
- students who must be absent can study modules on their own at home or elsewhere, coming to the learning center to take post tests, obtain help as needed, and exchange mastered modules for new ones; IMPACT has good flexibility tending to reduce drop out rates in rural areas;
- post tests are given individually to children following completion of each module to insure mastery and/or to indicate needed remediation; UNCLASSIFIED

- remediation is provided by tutors who are typically high school students assigned to the village, as part of a community service requirement in the high school curriculum;
- unpaid community members assist in learning by giving specialized skill instruction to groups of learners, usually in their shops, homes or farms;
- instructional aides assist in maintaining the complete collection of working modules, in keeping records, and in administering and scoring post tests;
- itinerant teachers spend one half day each week at a given learning center to instruct learners in scouting, hygiene, sports, music, and art;
- all instruction and learning is under the general management and supervision of an Instructional Supervisor (formerly teacher) who is responsible for the learning of 100 or more students;
- Instructional Supervisors work regularly with the learning groups and assist those in special need; they are responsible for management and guidance of all components of the learning system: programmed teachers, tutors, peer leaders, community learning resources, etc.; Instructional Supervisors do not teach (lecture); they are facilitators of learning;

The project has been carried on in two countries; one experiment site in Solo, Indonesia; and two in the Philippines. Results of all tests of pupil achievement have consistently shown that IMPACT/PAMONG learners equal or exceed achievement of learners in the traditional, formal school. Cost analyses show overall reduction of per pupil costs of approximately 50%. The great saving is in reduced requirements for professionally trained teachers (one Instructional Supervisor (IS) serves 100-150 learners). Evidence indicates that IMPACT has successfully achieved the objective of developing an instructional management system, for mass primary education, costing less than traditional schooling, and without loss of quality.

It cannot be expected that IMPACT as a system will be transferable intact to other learning situations. Actually, project models are in final stages of preparation for use by the SEAMEO member countries, but adaptation and modification will be required for dissemination beyond the project sites. However, it is clear that this experimental project has demonstrated conclusively that approaches other than the traditional, formal classroom mode

of instruction/learning are feasible and that alternative approaches are possible. Costs can be reduced at no loss in effectiveness of learning, thereby extending educational or learning opportunity without significant increases in educational budgets. It is this fact that marks IMPACT/PAMONG as a significant educational innovation.

A potentially useful body of experience has been accumulated during the course of this project which can provide time and cost saving reference material to educators around the world where solutions are sought to the kinds of problems addressed by IMPACT/PAMONG in SE Asia. Extensiveness of experimentation with the technologies of programmed teaching and programmed learning outside the US; the application of these technologies to the primary school level and to the levels of sophistication found in the developing country rural communities; translating the school curriculum into learning modules; mobilizing community resources, use of peer instruction/learning, training of learning facilitators, are but few of the components of the body of experience accumulated during the five-year course of this project.

Consultations with the staff of the SEAMEO/INNOTECH in Manila indicate a willingness to share this experience when requested. As budgetary and time resources present some constraint to this offer to share, modest charges will be made to cover costs of printing and mailing documents. Visitors are welcome at the sites where IMPACT is now operational as a total system. We understand that INNOTECH is attempting to obtain support for maintaining a small cadre of key professionals from project staffs to offer consulting services if requested. Within reasonable limits, USAID/Manila is willing to serve as a "broker" for USAID requests for specific information or for more general information, believing strongly that AID cannot afford to overlook the potential utility of the IMPACT experience.

Some components of the IMPACT learning system may be used in non-formal education approaches in the areas of health, agriculture, population/family planning, nutrition where there are requirements for acquisition of new knowledge, skills or changed behavior patterns. IMPACT experience with the use of community resources, the technologies of programmed teaching and programmed learning, peer group instruction/learning may also be applicable to sectors other than education and the IMPACT experience helpful in solving a diverse range of learning problems.

Present plans in the Philippines are for an expanded tryout of the IMPACT system in twenty (20) school divisions in thirteen regions of the MEC. In Indonesia the concepts of IMPACT were implemented two years ago during the third year of the project in some conventional schools in Bali. Almost simultaneously, the modules and the delivery system of PAMONG were utilized in Malang for out-of-school youth in a non-formal setting, with the objective of providing a second chance to obtain an elementary school diploma. The present plans call for the utilization of PAMONG system for small schools starting on a pilot basis in Kalimantan. The third five-year development plan of Indonesia which started in 1979 included provisions for the implementation of PAMONG concepts in the educational system.

Although Project IMPACT experimentation was concluded in June 1979 after five years of operation, follow-up activity is planned. The IDRC will support a two-year "Follow-Up Study of Graduates of the IMPACT Model in Three Sites". The sites are all in the Philippines. The objective will be to compare IMPACT graduates with comparable groups from the traditional system. Results of this study will prove useful in further assessing the utility of Project IMPACT.

AID/W is invited to circularize this airgram in order to call the attention of missions to the potential resource base described above.

MURPHY