DOCUMENT RESUME

ED 142 566 TM 006 350

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TITLE Education and Modernization: A Method for Establishing The Relationship.
INSTITUTION American Institutes for Research, Washington, D.C.
NOTE 18p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Developing Nations; *Economic Development; Evaluation Methods; Participant Characteristics; Post Secondary Education; *Professional Continuing Education; Program Effectiveness; *Program Evaluation; Trainees; *Training
IDENTIFIERS *Agency for International Development; Brazil; Ghana; Korea; Philippines; Thailand

ABSTRACT

The Agency for International Development (AID) participant training program was examined to determine its impact on developing countries. One hundred and thirty-four senior officials in Ghana and Thailand provided 492 reports on: (1) indicators of participant achievements; (2) impact-producing characteristics; and (3) contributions attributed to participant training. An evaluation kit, or methodology, was field tested in Korea, the Philippines, and Brazil. Three hundred and sixty-four local officials reported 2,871 critical incidents. The data clearly showed that AID participants trained in the U.S. made significant contributions to the development of their countries, and that 58% of these contributions could be linked to some specifiable aspect of the participant training. The author predicted that participants would continue to make beneficial contributions in areas such as agriculture, economic planning, health, and public administration. Follow-up studies that would provide useful policy guidance were suggested. (Author/GDC)

EDUCATION AND MODERNIZATION:
A METHOD FOR ESTABLISHING THE RELATIONSHIP

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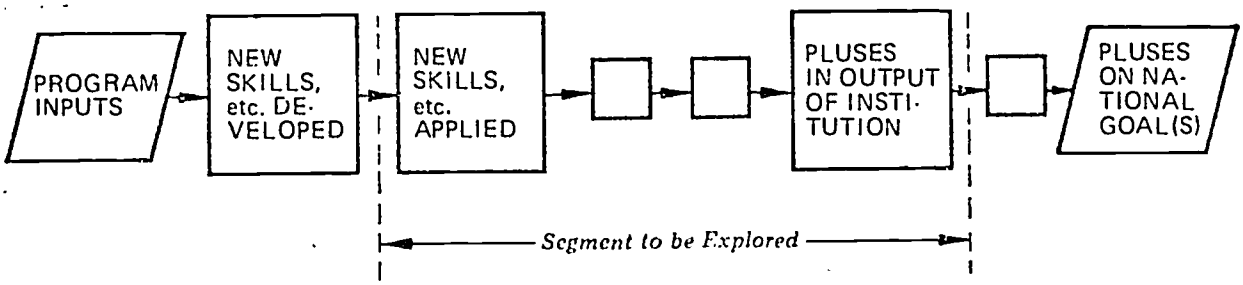
The AID participant training program has provided study grants to almost 200,000 professionals, administrators, and technical personnel from the developing countries. The vast majority of these grants has been for training experiences in the United States, ranging from relatively brief observation tours through focused work-study programs, to degree courses at the graduate and post-graduate levels. The fields in which training has been provided have spanned the full spectrum of economic and social development needs; the costs have exceeded 400 million dollars.

The overwhelming consensus, both here and abroad, is that no other form of technical assistance has been more productive than this training component. Yet, the lack of techniques for systematically measuring outcomes has hampered the program. Host country and USAID officials and participant nominees frequently espouse different views on the "right" training strategy to adopt in a given situation. The trade-offs between practical experience and paper credentials, between the customized programs that can be offered when participants are clustered at one training institution and the diversity of perspectives they will obtain if dispersed over many institutions are among the countless tactical issues that have long been debated but not yet resolved. A facility for comparing Approach X with Approach Y and reaching a rational conclusion remains a significant need. The participant training activity, like many result-oriented endeavors, must have a well-functioning feedback loop to be fully effective.

Earlier attempts to establish adequate feedback mechanisms applied criteria of program effectiveness that were intrinsically fragmentary and soft. Indices based on the participants' expressed satisfactions with the training they received fell short of the need. If the purpose of participant training is to accelerate development in the recipient countries, an index of tangible contributions to development would serve as an adequate measure of program success. The need was for feedback on training-linked development gains.

This project was divided into two phases. Phase I focused on the development of suitable impact assessment procedures; Phase II emphasized testing the methodology in three independent field assessments, then incorporating the revised procedures.

Two basic requirements must be met in an impact assessment. The contributions that have been made to national goals must be identified; in addition, these contributions must be attributed to a special input, such as participant training. The AIR approach was based on two strategic decisions. The first was to concentrate the search for suitable indicators within a fixed segment of the long chain of events that links the training inputs to the ultimate goal of national development gains. The following schematic highlights the segment on which the search was focused.



The second decision was to look for indicators in this segment with a search process precisely opposite to that used in earlier participant follow-up studies. Rather than beginning with the outcomes of the training program and looking for their effects in or on the institution, we began with the identification of visible improvements or achievements, and then traced these "backward" to their antecedents. The initial step was to identify events that might prove serviceable as indicators for assessment. A three-step process was used to develop the required indicators. The first step was to obtain from a sample of former participants and their supervisors reports (critical incidents) of specific improvements that have occurred in the output of the institution or in its operations since the participant's return. The second step was to seek from the same respondents such evidence as they may be

able to cite concerning the relationships, if any, of these achievements to experiences during participant training. The final step was to deduce from these data the types of achievements that most effectively straddle the contribution-attribution dilemma, and to fashion these into prototype indicators for impact assessment. The product was a master list of indicators classified three ways: (1) indicators of participant achievements; (2) impact-producing characteristics; (3) attributions to participant training.

The feasibility study was conducted in Ghana and Thailand. Senior officials were interviewed in fields such as agriculture, health, revenue, and transportation. One hundred thirty-four (134) people were interviewed; 492 reports were collected. The reports were sorted into the three categories mentioned above; the sorting resulted in 20 separate groupings of participant achievements, 14 impact-producing characteristics and 5 groups of attribution information representing decreasing attributability to participant training. Phase II was a test of the methodology in three developing countries and the preparation of an "evaluation kit" that eventually could be used in local operational assessments.

The three field assessments were conducted in Korea, the Philippines, and Brazil. With each successive study, additional responsibility for the data collection was given to local personnel. Officials were interviewed in the agricultural and the economic planning/public administration sectors. Three hundred sixty-four (364) officials were interviewed; 2,871 incidents were collected.

The data clearly show that USAID participants have made and are making significant contributions to the development of their countries. There is clear evidence that a substantial portion of these contributions (58%) can be linked to some specifiable aspect of the participant experience. And the

benefits will continue to accrue. The individual participants will make new contributions, and, in addition, they serve as multipliers of institutional capability. The people chosen to represent their country in the participant training program were identified as the most promising candidates; there was nothing random about their selection. Our data provide no estimate at all of the contributions which would have been expected in the absence of the participant program, but common sense tells us that some would have occurred.

In Phase I a small number of impact-enabler combinations accounted for most of the reported events. This characteristic has great practical utility; one can design efficient procedures by focusing on specific combinations of high potency. The comparability of the two sectors provided some interesting results. Economic planning and agriculture are distinct and reasonably well-defined fields, but appear on the surface to differ considerably. There is little reason to expect similarities in the nature of impact, in the enabler-impact combination, or in the pattern of attribution. Some similarity was found. The correlation between the number of reports in each of the twenty impact categories for the two sectors is .64 (41% of the variance in the nature of impact is common to the two); the correlation was .74 for the enabling characteristics (55% of the variance is common), and a correlation of .57 in the frequency of attribution (32% of the variance is common). The commonality of the two sectors is considerable, approximating 50% of the variance.

There are three major types of follow-up studies that can supply useful policy guidance. Type I would be open-ended, diagnostic assessments that would be carried out periodically for specified training activities. Each study would focus on a single type of training activity and establish the nature of impacts that graduates of this program typically are (or are not) achieving. Type II studies would be comparative evaluations of alternative patterns of implementation that have been tried at

varying times, by separate training centers. They would be designed to test specific hypotheses about specified program characteristics. Type III studies would aim for policy guidance on basic programming characteristics that affect most or all of the separate training activities that comprise the program. It is anticipated that Type III studies would not be based on new data collection, but rather conducted by appropriate analyses of the aggregate data base that has been provided by the more narrowly focused assessments already completed.

Attachments

The attachments included in the following pages illustrate some of the major features described in the presentation.

1. Participant achievements. These represent the nature of the impact that was the participant's end product or action.

2. Impact-producing characteristics. These represent the various paths the participants took to bring about the 20 achievements; the reports are reexamined from this point of view. These characteristics are defined as the specific skill, attitude or other resource that the participant brought to the situation to effect the impact reported.

3. Attributions to training. These represent decreasing attributability to participant training; they permit decisions on which of the sequences are initiated by an experience provided by participant training.

4. Illustrative critical incidents. These eight reports demonstrate the classification procedure used for the more than 3,300 incidents collected during Phase I and Phase II.

5. Table I. Percentage of Reports Attributed to Participant Training: High Frequency Combinations in Agriculture.

6. Table II. Percentage of Reports Attributed to Participant Training: High Frequency Combinations in Economic Planning/Public Administration.

Catalog of Types of Participant Achievements

IMPACT ON DEVELOPMENT TARGETS

1. Influenced development strategies or emphases, or a specific investment decision.
2. Introduced a new agricultural, industrial, or commercial enterprise in the country.
3. Developed a local capability for an activity formerly dependent on external resources.
4. Discovered a solution or a more promising approach to a significant development problem.
5. Stimulated the more widespread adoption of a preferred practice or other, desired public response.

IMPACT ON INSTITUTIONAL OUTPUTS

6. Initiated a new service or program.
7. Raised standards of products or services provided.
8. Changed rules or procedures to be more responsive to needs of clients.
9. Avoided disruption of service by timely action, despite difficulties or risk.
10. Performed task that required special effort or skill.
11. Improved or expanded dissemination programs, techniques.

IMPACT ON OUTSIDE SUPPORTS

12. Expanded institution's authority, status, or charter.
13. Developed more effective working relationships with local agencies or sources of external aid.

IMPACT ON INTERNAL OPERATIONS

14. Introduced or expanded the use of analytic, data-based management aids.
15. Introduced cost- or time-saving measures, ideas.
16. Imposed tighter structure or controls on staff or vendor performance.
17. Improved the allocation or organization of responsibilities and functions.
18. Upgraded the caliber, capabilities, or morale of the staff.
19. Upgraded physical facilities or equipment.
20. Improved record-keeping or information retrieval systems.

Impact-Producing Characteristics

PROGRAM

A. Technical capabilities, sophistication.

B. Awareness of other possibilities, approaches.

C. Appreciation of nature and magnitude of inputs required.

DOCTRINE

D. Acceptance of new or expanded objectives.

E. Commitment to principles, convictions.

LEADERSHIP

F. Willingness to take responsibility, act.

G. Data orientation

H. Goal orientation

RESOURCE MANAGEMENT

I. Efficiency orientation.

J. Skill in human relations

K. Familiarity with equipment.

L. Familiarity with workable operating routines.

LINKAGES

M. Access to external sources of information or help.

N. Credibility and credentials.

Attributions to Training

I. Reasonably clear-cut links to training

   a. Specific technique or theory applied
   b. Specific practice or model adopted
   c. U.S. source or product applied
   d. Practical job experience cited
   e. Incidental skill learned
   f. Credentials applied
   g. Before-after changes observed

II. Probable links to training

   a. Technical background cited
   b. U.S. work style cited
   c. Timing of the event
   d. Requirement for technical knowledge
   e. Conformity of approach to U.S. standard

III. Possible links to training

   a. Claim of increased self-assurance
   b. Claim of attitude change

IV. Doubtful links to training

   a. Personal characteristics
   b. Clever ideas

V. No links to training

ILLUSTRATIVE CRITICAL INCIDENTS

The following illustrative reports were collected by local interview
gathered critical incidents for an impact assessment of participant

Illustration #1

Report

Recommended and drafted the new barangay zone system for the
which reduced the zone area to a maximum of 50 families. This ma
easier for the barangay to meet a quorum. The old system was by
of over 200 families which was found to be ineffective.

What was the outcome?

It is now easy for the barangay to meet to transact business. T
closer fellowship and the spirit of brotherhood was evident.

How was it achieved?

He was aware of additional and better ways of achieving his go

Attribution evidence?

AID trainee: 1970 in Taiwan: "Planning and Management of Rur
Development."

Classification: Impact Category 1 Characteristic H Attribution IId

Illustration #2

Report

Introduced concept of the amnesty in 1974; no suits brought aga
guilty tax evaders prior to this time. It was necessary because of
amount of unreported income and the government needed revenue.
now file all assets and liabilities; this creates an open network for
ing true income. Of approximately 600,000 taxable incomes in thi
400,000 took advantage of amnesty rather than risk investigation in
records.

What was the outcome?

Those who took advantage of amnesty pay tax no higher than 20%.

How was it achieved?

As Commissioner, the participant directed development of this plan; it became a Presidential decree

Attribution evidence?

Experience; personal resourcefulness.

Impact
Classification: Category 1 Characteristic B Attribution V

Illustration #3

Report

Convinced town mayors of two provinces to set up livestock markets that have proper weighing scales, fences, facilities for storage, standard prices, etc. There were only six livestock markets in these two provinces. Because of this lack of livestock markets, there were no standard prices in buying and selling of livestock.

What was the outcome?

In a span of one year, seven additional livestock markets were set up in these two provinces. This resulted in fair trading (standard prices were set), and thus led to increased income for the town.

How was it achieved?

Contacted town mayors to directly convince them to set up these livestock markets. Persuaded people to help him in this job. Personal initiative and his awareness of his duties as chief of the marketing unit motivated him, too, to undertake this project.

Attribution evidence?

Observation of livestock markets in Texas, experiences in his job as chief of the marketing unit.

Impact
Classification: Category 2 Characteristic C Attribution Ib

Illustration #4

Report

Organized store cooperatives for farm supplies and household needs in the barrios. Cooperative stores in the towns most often did not have in their stocks what the farmers needed. The barrio cooperatives now sell what the farmers need on the farms.

What was the outcome?

It is now easier for the farmers to purchase their farm and household supplies right in their own places. They save a lot in terms of time and money.

How was it achieved?

Familiarity with the operating coops in Taiwan which he believed would work in own country.

Attribution evidence?

Observation and study tours on rural development as AID trainee in Taiwan, 1966.

Impact
Classification: Category 4 Characteristic M Attribution Ib

Illustration #5

Report

Introduced removal of registration plates of cars parked in no parking areas. In the past parked cars blocked two lanes causing traffic jams. This was necessary to ease traffic and to discourage parking at no parking areas.

What was the outcome?

Parked cars occupy only one lane; helped ease traffic a little.

How was it achieved?

Concern for efficiency.

Attribution evidence?

His training on revenue administration, U.S. 1959-60.

Impact
Classification: Category 5 Characteristic M Attribution Ib

Illustration #6

Report

Developed training courses on agricultural cooperatives for use in SE Asian countries. His agency is the innovator in the area of cooperatives and provides assistance in this area to other Asian countries.

What was the outcome?

The courses were accepted by the international cooperative organization and project has been submitted for funding.

How was it achieved?

Commitment to achieving agency goals for cooperatives.

Attribution evidence?

Observed needs on many trips to SE Asia on business.

Impact
Classification: Category 6 Characteristic H Attribution V

Illustration #7

Report

Introduced the use of actual designs for irrigation projects which cover computations and other work necessary to arrive at grades, sizes, and location of irrigation projects. This was necessary because all the details of the project could be viewed on the face of the papers.

What was the outcome?

Came out with the final map which contains the plans, profiles, and specifications which guided construction workers.

How was it achieved?

After coming from Colorado on the inservice training with the U.S. Bureau of Reclamation, informed Division Chief of actual on-the-job training and on observations on ongoing projects in the U.S. Division Chief expected an output from knowledge obtained and assigned him the Agno River Project in 1960.

Attribution evidence?

Inservice training from Colorado, U.S. Bureau of Reclamation, and by the U.S. Reclamation manual.

Impact
Classification: Category 6 Characteristic M Attribution Ia

Illustration #8

Report

Introduced the improvised incubator for seed germination in the nursery. The old incubators used were single flat form. The improvised version is composed of several layers but provided with electric lights for each layer for faster germination or response of the seed. This was necessary to cope with the demands of the consumers.

What was the outcome?

An incubator with around 10-15 layers was being used to germinate seeds to be distributed for the green revolutional program and is still being used at the nursery.

How was it achieved?

With strong determination to be able to cope with the demands of consumers and having in mind the incubators used at Mississipi State University. Devised a way of copying the design because the machine is very expensive.

Attribution evidence?

Masters in B.S. Agriculture at the Mississippi State University.

Impact
Classification: Category 7 Characteristic M Attribution Ic

Table 1

Percentage of Reports Attributed to Participant Training:

High Frequency Combinations in Agriculture

	A. Tech. Soph.	B. Possibilities	C. Requirements	D. New Goals	E. Convictions	F. Take Resp.	G. Data Orient.	H. Goal Orient.	I. Efficiency	J. Human Relations	K. Equipment	L. Routines	M. Sources	N. Credentials	No. of Reports	% Attrib.
1. Development Decisions																
2. New Enterprises																
3. Local Capabilities																
4. Discoveries/Solutions	57	60													33	58
5. Public Adoption	100	100													18	100
6. New Programs	71	88										100			31	84
7. Higher Standards	88														16	88
8. Client Needs																
9. Timely Actions																
10. Demanding Tasks	59	80					70						76		103	68
11. More Dissemination	49	63	40	13									45	70	133	51
12. Institutional Charter																
13. Outside Relations	57									33			38		44	43
14. Data-Based Aids	55	50					52								53	53
15. Cost Savings									67						9	67
16. Tighter Controls																
17. Organiz. Structure																
18. Better Staff	64	38	50			75				22			67	38	113	48
19. Equipment			50								73				34	68
20. Record-Keeping									33				69		22	55
No. of Reports	231	80	32	8		12	46		18	36	26		84	36	609	
% Attrib.	60	68	47	13		75	61		50	25	73		63	58		59

Table 11

Percentage of Reports Attributed to Participant Training:

High Frequency Combinations in EP/PA

	A. Tech. Soph.	B. Possibilities	C. Requirements	D. New Goals	E. Convictions	F. Take Resp.	G. Data Orient.	H. Goal Orient.	I. Efficiency	J. Human Relations	K. Equipment	L. Routines	M. Sources	N. Credentials	No. of Reports	% Attrib.
1. Development Decisions	53						29								32	44
2. New Enterprises																
3. Local Capabilities																
4. Discoveries/Solutions																
5. Public Adoption	82													71	31	77
6. New Programs	80				83			90						79	86	83
7. Higher Standards	77								25				85	71	74	69
8. Client Needs	64	53													39	59
9. Timely Actions																
10. Demanding Tasks	76						64						59	69	188	72
11. More Dissemination	42													47	39	44
12. Institutional Charter	47														17	47
13. Outside Relations	22							25		31			31		59	27
14. Data-Based Aids	60						48						60		76	55
15. Cost Savings		56							61						49	59
16. Tighter Controls									33						12	33
17. Organiz. Structure	55								26					23	52	37
18. Better Staff	40	71	33			21		38	71	18			79	18	204	43
19. Equipment											83				12	83
20. Record-Keeping									58				85		25	72
No. of Reports	384	56	21		12	14	66	45	110	61	12		95	119	995	
% Attrib.	64	61	33		83	21	50	58	50	21	83		67	55		58