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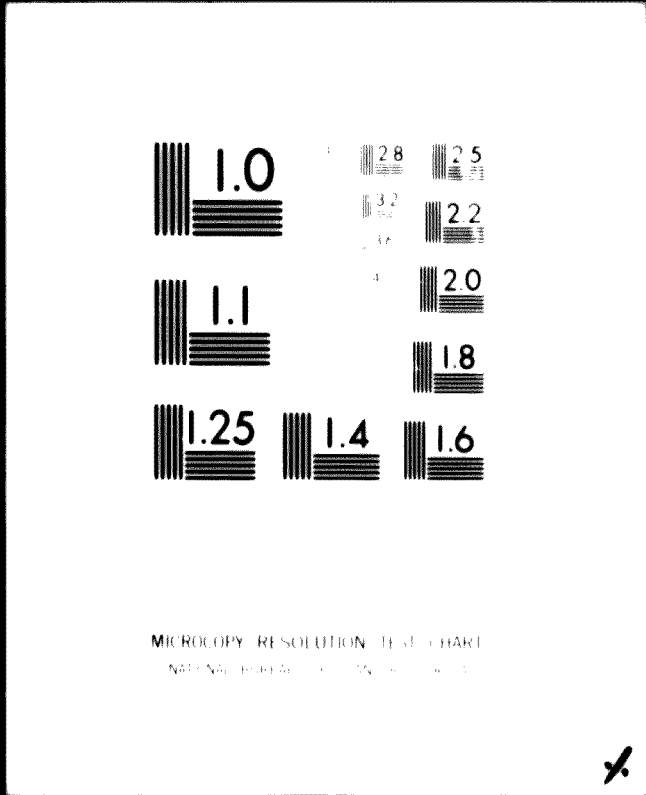
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PROPOSAL TO DESIGN AND IMPLEMENT  
A PROGRAMME FOR EDUCATION IN  
ENTREPRENEURIAL ACHIEVEMENT.



*presented to*  
UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

*presented by*  
BEHAVIORAL SCIENCE CENTER,  
Sterling Institute

October, 1969

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## CONTENTS

	<u>Page</u>
INTRODUCTION	1
OBJECTIVES AND PHASING	8
ILLUSTRATIVE PROJECTS	18
STATEMENT OF CORPORATE CAPABILITY AND RELATED EXPERIENCE	29

## INTRODUCTION

The Behavioral Science Center of Sterling Institute is pleased to present this proposal to design and implement a Programme for Education in Entrepreneurial Achievement (PEEA). The Programme outlined has been developed in response to the demand for new methods which could aid the developing world in its search for more effective means of stimulating its people to contribute to the development process. A critical assumption behind this proposal is that the mass infusions of capital and technical assistance into the developing world which have taken place since the Second World War cannot alone create economic development. Indeed, at least one author has defined development as a "country's ability to mobilize its own resources."<sup>1</sup> Means must therefore be developed to assist persons from developing countries in their endeavors to use their own resources and the reserves of others to systematically attack problems of development.

In the past, the choice facing technical assistance experts concerned with human resource development has usually been one of long-term benefits accrued through increased educational facilities and increased school enrollment.<sup>2</sup> These efforts, necessary as they are for economic and social development, require such a long time period for any demonstrable

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<sup>1</sup> Kenneth L. Neff, Education and the Development of Human Technology (Washington, D.C.: U. S. Government Printing Office, 1962)

<sup>2</sup> For a further discussion of the problems and strategies of human resource development see Frederick Harbison and Charles A. Myers, Education, Manpower and Economic Growth: Strategies of human resource development. (New York: McGraw-Hill, 1964).

pay-off that the developing countries and many technical assistance agencies are becoming frustrated with what appears to be a losing battle.<sup>3</sup>

One answer to this dilemma appears to lie in programmes of adult education.<sup>4</sup> Recent research conducted by Dr. David C. McClelland and his associates at Harvard University has demonstrated that motivational patterns may be changed in many persons from both the developed and developing world to generate activity highly associated with entrepreneurial achievement and economic development.<sup>5</sup>

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<sup>3</sup>In a report to be released in January by UNESCO, evidence has been gathered revealing that "high birth rates have caused an increase of almost 60 million illiterates during the last decade outstripping educational programs in underdeveloped countries." New York Times, October 19, 1969, p. 8

<sup>4</sup>For a discussion of the potential benefits of extended adult education, consult Arthur Mosher, Varieties of Extension Education and Community Development, Comparative Extension Publication No. 2, Ithaca: New York State College of Agriculture, Cornell University, 1958.

<sup>5</sup>David C. McClelland, "Achievement Motivation Can Be Developed," Harvard Business Review

These motivational characteristics, known collectively as the "achievement motive"<sup>6</sup> have been highly correlated in a series of studies in various countries of the world with periods of intensive economic development and rapid social change. Pilot studies reveal that when persons are trained in achievement or entrepreneurial methods of planning and thinking, there are concrete and measurable economic results.<sup>7</sup> It is in this discovery that new hope for the short-term development of human resources for economic expansion may lie.

At present, the basic research about achievement motivation and entrepreneurial development has been completed. Pilot studies in India, Mexico, Tunisia and other projects under way in Uganda and underdeveloped portions of the United States have demonstrated that:

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<sup>6</sup>The achievement motive or n-Ach, as it is referred to in technical discussions, is a measurable factor in groups and individuals. Briefly, it is measured by coding an individual's spontaneous thoughts, as in the imaginative stories he tells, for the frequency with which he thinks about competing with a standard of excellence, or doing something better than before. On a broader scale, the popular literature of a country can be used to ascertain the achievement motivation levels of the people among whom the literature is popular. As used here, therefore, the achievement motive is a precise term, much as "relativity" is in physics or "regressions" in medicine or mathematics.

<sup>7</sup>For a complete discussion of the results accrued from such training see, David C. McClelland, Motivating Economic Achievement, New York; Free Press, 1969.

- . achievement motivation can be developed through training;
- . this training can stimulate considerable economic development activity; and
- . the impact of this training can continue at least five years without significant diminution.

The following summary from Dr. McClelland's recent book, Motivating Economic Achievement, which contains a comprehensive history of the India Programme for Entrepreneurial Achievement, describes specific results of such training efforts:

Analysis of several measures of individual behavior and economic effects demonstrated that participants in achievement motivation courses showed significant improvement in many aspects of entrepreneurial performance, both as compared with themselves before the course and as compared with . . . controls. Course participants show more active business behavior. Specifically, they work longer hours . . . make more definite attempts to start new business ventures . . . they actually start more such ventures. They make more specific investments in new, fixed, productive capital. They employ more workers. Finally, they tend to have relatively larger percentage increases in the gross incomes of their firms. Thus by all measures they have become improved entrepreneurs. The aggregate effects of the course (e.g., the activity of the trained subjects minus the activity of the controls) include, to date, the mobilization of approximately Rs. 376,000 of specific new capital investments and about 135 new jobs. Measured by these figures the courses certainly seem to have had an economic effect."



It was particularly striking that the ratio of private to public investment (the cost of the training) stimulated by the training was 20:1, much higher than was reported for other investments made by the government of India to stimulate economic growth.

With preliminary research and pilot projects completed, there is now a need to extrapolate the results of such activities to prototype projects in different cultures and a variety of functional areas which may serve as the final test of the method before large scale reproduction. For example, the projects thus far completed demonstrate the relevance of education in entrepreneurial achievement to India, Uganda, Mexico and the United States. We propose within the context of the prototype programme, however, to systematically initiate additional programmes in four geographical regions of the world as recognized by the United Nations. The tentative distribution of projects is as follows:

<u>REGION</u>	<u>NO. OF PROJECTS</u>	<u>CANDIDATE COUNTRIES</u>
Africa	3	Congo (K), Ethiopia, Ghana, Ivory Coast, Morocco, Nigeria, Tanzania, Tunisia, Uganda, United Arab Republic
The Americas	2	Brazil, Colombia, Peru, Nicaragua, Trinidad, Tobago
Asia and the Far East	3	India, Indonesia, Iran, South Korea, Malaysia, Pakistan
Middle East and Europe	2	Lebanon, Romania, Syria, Turkey, Yugoslavia

From a functional viewpoint, the programs thus far conducted have been primarily for small businessmen who were concerned with increasing their economic output and expanding their business enterprises. The area of greatest promise for education in entrepreneurial achievement, however, lies in its testing in other functional areas of social and economic development. Areas which are under consideration as typical are:

- . consultant and manager education;
- . investment promotion and mobilization of capital;
- . industrial advisory services;
- . financial intermediaries
- . development of regions within a country;
- . preparation and evaluation of individual studies;
- . planning and programming for industrial development; and
- . national administrative services

During recent discussions, a willingness has been expressed by members of the following organizations to participate in expanding the applications of entrepreneurial education:

- . The United Nations Industrial Development Organization (UNIDO)
- . The International Labor Organization (ILO)
- . The International Bank for Reconstruction and Development (IBRD)
- . The United National Development Programme (UNDP)
- . The Ford Foundation
- . The U.S. Agency for International Development (USAID)

The interest of such a number of agencies and organizations involved in international technical assistance is in itself

testimony to the potential power of such an experiment. If a small portion of the resources of each of these institutions could be contributed to the development and further testing of entrepreneurial achievement programmes in selected countries throughout the world, a variety of short-term models to develop motivated human resources directed toward economic development could result. The following steps are proposed to initiate such action.

#### OBJECTIVES AND PHASING

The Programme of Education in Entrepreneurial Achievement is designed with a number of specific objectives in mind.

Short-term goals of the educational programme are to:

- . increase entrepreneurial spirit and improve leadership competence among selected persons in a variety of positions in the developing world by emphasizing motivation, planning and cooperative efforts rather than specific technical skills; and
- . help these persons initiate and control change in their own lives by setting reasonable goals for change in themselves, their organizations and their communities which will lead to more rapid economic growth for each individual and his community.

Intermediate-range objectives of the proposed educational programme and related activities are to:

- . design and implement an observational and follow-up programme which will enable the international agencies and local educational institutions concerned with the various projects to evaluate their effectiveness and determine the extent to which further training efforts should be expanded; and
- . develop a cadre of trainers from selected countries in the developing world who are qualified to conduct programmes in entrepreneurial achievement training in their own countries as a new form of continuing adult education.

Long-range objectives of the proposed programme and related follow-up activities are to:

- . increase business behavior resulting in:
  - .. the increased mobilization of capital investments;
  - .. the creation of new jobs; and
  - .. the more effective utilization of development resources now available to the underdeveloped world;
- . stimulate a greater interest and responsibility in community leadership and activities; and

. contribute to the economic and social development of selected underdeveloped countries at the grass roots level.

The Behavioral Science Center of Sterling Institute plans to accomplish the objectives of this proposal in three phases over a 62 month period. The first phase of the plan will take two months and will include the identification of four countries and projects appropriate to the goals and methods of the proposed educational programme. Included during this phase will be discussions and negotiations with the sponsoring organizations to establish common priorities, objectives and sources of funding.

The second phase will last three years and will entail the implementation of four prototype projects selected in the first phase, testing and evaluation of results, and the selection, negotiation and programme tailoring of six further projects for phase three.

Phase III will begin after the second year of Phase II and will run for three years. It will entail the implementation of the six projects selected in Phase II; further testing and evaluation of results from both the second and third phase, and recommendations regarding the geographical and functional areas in which the sponsoring agencies should make further

investments for continued entrepreneurial development.

The Behavioral Science Center of Sterling Institute plans to accomplish the various phases of the project outlined above in a series of specific tasks discussed below.

### Phase I

1. Select in collaboration with UNIDO officials five to seven on-going projects in four different regions of the world and across diverse functional specialization to be included in a feasibility study for Phase II;
2. Visit the selected projects to talk with project managers, U.N. Resident Representatives and other persons concerned with the relevance of entrepreneurial education to on-going projects;  
Select a local institution which is appropriate and willing to be the executor for training programs under the project.
3. Discuss results of these investigations with representatives of all potential sponsoring agencies to determine their interest and willingness to support future projects;
4. Diagnose the merits and disadvantages of each project and select four projects to be targets of Phase II training activities;

5. Prepare a final study on the feasibility of accomplishing the objectives set for Phase II of the program within the context of the projects selected.

The Behavioral Science Center is prepared to carry out the above tasks within a two month period during November-December of 1969. Depending upon the results of this effort, Phase II could begin any time after January 1, 1970, and continue through December 31, 1972. Phase III, overlapping Phase II by one year, would begin on January 1, 1972, and continue through December 31, 1974. Decision-points would occur on December 31, 1969, and December 31, 1971, at which time the sponsoring organizations could determine whether they wished to proceed to the next phase. The Behavioral Science Center, in conjunction with research departments of the sponsoring agencies, would submit periodic reports on its activities which would serve as the basis for evaluation and discussion.

## Phase II

### Sub-Phase A

1. Design with representatives of the four selected projects a preliminary training programme for use in each country, tailoring existing materials to specific needs of each project and each culture.



2. Survey the various target populations and determine the best procedure for marketing the educational programmes in each country.
3. Conduct first training unit for approximately fifteen to twenty persons, including potential trainers and interested officials.
4. Evaluate and revise the program to better meet the specific needs of each project and each culture.
5. Conduct Instructor Training Course for trainer candidates. All candidates must have completed an Entrepreneurial Achievement Programme.
6. Prepare First Public Programme with newly trained instructors enabling them to review their training, strengthen skills on units needing improvement, and familiarize themselves with incoming persons to be trained. Final revisions of course materials will be completed during this period.

Sub-Phase B

7. Conduct First and Second Public Programmes with BSC representatives acting as lead trainers and instructor candidates assisting and observing.
8. Conduct Third and Fourth Public Programmes with instructor candidates serving as lead trainers and BSC trainers assisting and evaluating.

9. Test and Certify Instructor Candidates who have been recommended by BSC representatives as being qualified to serve as lead trainers in the Entrepreneurial Achievement Programme.

Sub-Phase C

10. Research, Evaluation and Follow-up will be conducted by the Behavioral Science Center in cooperation with the local sponsoring agency and sponsoring international technical assistance agencies. This research will consist of four in-depth interviews, conducted at six month intervals after persons have completed the program. Such research will be adapted from the general design used by McClelland and Winter and described in their book, Motivating Economic Achievement. This research and observation will consider factors which will help advance understanding and knowledge of the effects of such training on economic development in each country.
11. Prepare preliminary report on research and observation conducted by the end of 1971 to be used as a criteria for the initiation of Phase III.
12. Prepare final report on Phase II to complete research and observation necessary to determine long-term effects of training on economic development in each country.

Sub-Phase D

13. Select in collaboration with representatives of interested international technical assistance agencies (UNIDO, ILO, UNDP, IBRD, USAID, and Ford) six on-going or new projects in four different regions of the world and across diverse functional specializations to be included in a feasibility study for Phase III.
14. Visit selected projects to talk with project managers, U.N. Resident Representatives and other persons concerned with the relevance of entrepreneurial education to these projects and the economic development of each country.  
Select a local institution which is appropriate and willing to be the executor for training programs under the project.
15. Discuss results of these investigations with representatives of potential sponsoring agencies to determine their willingness to support these projects.
16. Diagnose the merits and difficulties associated with each project and select six projects to be targets of Phase III training activities.

17. Prepare report on the feasibility of accomplishing the objectives set for Phase III of the program within the context of the projects selected.

In addition to executing the specific tasks noted above, Phase II would also serve as a model which could be revised or adapted in any way necessary for Phase III. It is possible that aspects of the phasing or sequencing could be changed or eliminated depending upon the results of the initial four programs.

### Phase III

#### Sub-Phase A

1. Design with representatives of the six selected projects a preliminary training programme for use in each country, tailoring existing materials to specific needs of each project and each culture.
2. Survey the various target populations and determine the best procedure for marketing the educational programmes in each country.
3. Conduct first training unit for approximately fifteen to twenty persons, including potential trainers and interested officials.
4. Evaluate and revise the program to better meet the specific needs of each project and each culture.

5. Conduct Instructor Training Course for trainer candidates. All candidates must have completed an Entrepreneurial Achievement Programme.
6. Prepare First Public Programme with newly-trained instructors enabling them to revise their training, strengthen skills on units needing improvement, and familiarize themselves with incoming persons to be trained. Final revision of course materials will be completed during this period.

Sub-Phase B

7. Conduct First and Second Public Programmes with BSC representatives acting as lead trainers and instructor candidates assisting and observing.
8. Conduct Third and Fourth Public Programmes with instructor candidates' serving as lead trainers and BSC trainers assisting and evaluating.
9. Test and Certify Instructor Candidates who have been recommended by BSC representatives as being qualified to serve as lead trainers in the Entrepreneurial Achievement Programme.

Sub-Phase C

10. Research, Evaluation and Follow-up will be conducted by the Behavioral Science Center in cooperation with

the local sponsoring agency and the sponsoring international technical assistance agencies. This research will consist of four in-depth interviews, conducted at six month intervals after persons have completed the program. Such research will be based upon results of research undertaken during Phase II and will continue with further adaptations of the design used by McClelland and Winter (see Phase II, Item 10).

11. Prepare final report on Phase III on the long-term effects of training on economic development in each country.
12. Prepare final report on the entire five year project with recommendations for future Entrepreneurial Achievement training activities.

#### ILLUSTRATIVE PROJECTS

One of the most critical aspects of the Programme for Education in Entrepreneurial Achievement is the nature of the projects selected for training components. International and bilateral organizations are sponsoring a multitude of projects in the developing countries to accelerate the rate of industrial growth. Many additional activities of this type are also fully operational under national administrators and do not require

the use of further technical assistance. Many of these projects are designed to improve the skills of businessmen or of those whose activities influence the growth environment and potential of private or public enterprises. The following descriptions of project categories provides an overview of the areas in which the proposed programme of entrepreneurial achievement could be relevant.

#### Consultant and Manager Education

Considerable experience has been gained in the design and operation of institutions to improve the technical skills of consultants to managers and of managers themselves. A typical institution in this group would have a staff of twelve, half that number of foreign consultants, and would be assisting a few hundred businessmen a year. Current activities of UNIDO and ILO, for example, include assistance for the staffing and operations of existing enterprises, in-plant training of executives, organization of management clinics, and the establishment of productivity centres for large, medium and small industry.

In all forms, a high level of entrepreneurial skill is required if the firm is to remain viable and expand. In small firms the owner/manager must also be the entrepreneur/manager. Considerable effort has been wasted in giving

management training to individuals who are unable to apply fully the additional knowledge because they lack entrepreneurial skills.

In such instances, educational programmes in entrepreneurial achievement could be built into the curricula of the institutions providing assistance to these managers. This training component could be coordinated with present training development activities for businessmen and could be conducted at a variety of corporate levels from the small businessman to executives of large companies. To a large extent, this would be a continuation of the training model which the Behavioral Science Center has used during the pilot entrepreneurial training programs in India and Uganda, and should therefore provide highly tested and valid assistance to these on-going projects.

#### Investment Promotion and Mobilization of Capital

In recent years a number of countries have requested UNIDO to assist them in the establishment of centre or institutes to initiate industrial studies prepared by or for national businessmen to bring national industries to the attention of international investors. This is essentially an entrepreneurial activity which should be designed as such. A programme in entrepreneurial achievement for those persons



responsible for preparing such reports would enable them to more fully understand entrepreneurial thinking and activity. Assistance could be given in the selection of Nationals who are high in entrepreneurial thinking and would therefore be more prepared to negotiate with foreign investors. Such an educational programme would therefore help the Nationals and the developing countries in the efforts to attract greater foreign capital for economic and social development in their countries.

Preparation and Evaluation of Industrial Studies:

A closely related activity in which UNIDO has engaged during recent years is in assisting centres and institutes designed to aid potential investors in the preparation and evaluation of studies within their own country. Many of the pre-feasibility or industry project studies are prepared at the request of public officials or private individuals who lack the entrepreneurial skill to implement the projects. Other studies may contribute little to economic growth because they were also prepared without sufficient attention to the role of the entrepreneur.

Educational programmes in entrepreneurial achievement could be conducted for persons given the responsibility for carrying out such feasibility studies in order to enable

them to more realistically assess the potential of resources around them. These programmes would concentrate upon the identification of potential entrepreneurs through imagery theory and the achievement motivation scoring system.

#### Industrial Advisory Services

A wide spectrum of technical services are now being made available to industrial enterprises which are unable to recruit or to afford the full time assistance of specialists in marketing, product, financial controls, etc. These services are generally of most value to medium and small enterprises.

A problem common to most institutions of this type is gaining acceptance by industrialists of the advice available. There is evidence that a manager with a high level of entrepreneurial skill is more likely to evaluate and to accept advice from outside sources. Thus the flow of advice could be accelerated by closer attention by advisory service officials to the role of entrepreneurship in the communication mechanism.

If entrepreneurial training programmes were offered to industrialists concerned with gaining additional services and advice from industrial advisory institutions, they could be encouraged during the training program to set goals which would more fully utilize the expertise of the officials of

the advisory service. In a number of countries the individuals giving advice to industrialists numbers in the hundreds (a few thousand in India for all institutions) who are in contact with thousands of industrialists each year. Programmes in entrepreneurial achievement for these officials as well as a number of selected industrialists could provide an excellent background against which to develop further services.

#### Financial Intermediaries

Development banks and similar institutions are being expanded rapidly in the developing countries. UNIDO has been assisting the promotion of such institutions in the Congo (Kinshasa), West Indies, and in a number of other countries. The World Bank Group (IBRD) plans to triple its lending to these institutions during the next few years.

As the financial intermediaries reach deeper into the economies of the developing countries to seek investment opportunities, greater care will have to be exercised in the selection of projects under the control of able entrepreneurs. Speculators who come forward are less likely to contribute an equal amount to the economy and methods must be developed to separate the sound investor from the individual interested in speculative venture.

Entrepreneurial achievement programmes for loan officers of these financial intermediaries could be an important initial

step in helping them identify those persons who would make the most sound entrepreneurs. Initial experiments in this area which have been conducted in India have proven highly successful<sup>8</sup>. Loan officers could in turn be trained to present entrepreneurial achievement programmes tailored to the locale and to potential borrowers. This arrangement would have benefits for both program participants and the sponsoring credit organizations, particularly if participation in the program was a prerequisite for obtaining credit. Potential borrowers - perhaps even those who would not normally be considered for loans - would have improved access to credit. Loan officers would have the opportunity to observe the program participants for the duration of the program and assist them in establishing their business goals and plans. They would, therefore, be in a unique position to judge the man and his plan and decide who should receive how much credit.

#### Development of Regions within a Country

As governments have come to recognize the growing disparities in economic growth rates between regions within their countries, increased attention has been given to the establishment of new growth centres. Such centres have,

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<sup>8</sup>See McClelland and Winter, op. cit., Chapters 6 and 8.

however, already lost many potential entrepreneurs through emigration to the capital city and abroad. The result is that these centres are not likely to grow as a result of an infusion of capital alone. Rather, it is necessary to either induce a number of entrepreneurs to return or to identify new potential entrepreneurs. The former is a difficult process, but the latter holds some promise.

Educational programmes in entrepreneurial achievement could be conducted for persons within the regional growth centres in efforts to identify new entrepreneurs and entrepreneurial skills. Once identified, these persons could be utilized more fully in the development process within their region. A number of governments are evolving policies and programmes for the development of regions including Brazil, India, Nigeria and Peru. These appear to be the countries toward which initial overtures should be directed.

#### Planning and Programming for Industrial Development

A number of countries encouraged by UNIDO and the World Bank group are establishing offices, in some cases in a staff relationship to the Minister of Industry, to plan and assist the implementation of programmes of industrial development. The officials in these offices need not have a high level of entrepreneurial skill. It is imperative, however, that they

understand the role of entrepreneurship in development, for such an understanding would facilitate the design of policy instruments which are supposed to encourage entrepreneurial activity.

Educational programmes in entrepreneurial achievement conducted for these officials would therefore be a considerable benefit in enabling them to more critically and validly judge the psychological as well as the economic dimensions of implementing programmes in industrial development. Within the context of their broad policy perspectives, new attention could be given to developing a social climate in which entrepreneurial activity could be stimulated to develop and allowed to thrive. A thorough understanding of entrepreneurial thinking and activity, as well as an understanding of the atmosphere under which entrepreneurs are most likely to become active (information which has been identified through research) would thus allow these officials to become more effective in their policy recommendations.

#### National Administrative Services

Many governments have staff colleges for the education of their senior civil servants. Many of these officials may hold responsible positions in agencies assisting industrial development or may manage public enterprises. The staff

college could improve both the selection of individuals for training and their placement through instituting a systematic method of testing entrepreneurial potential. In many cases, this would prevent the often-noted problem of an official with excellent entrepreneurial/managerial skills being assigned to an industrial research institute where he does not flourish or produce as expected.

Entrepreneurial achievement educational programmes could be woven into the curriculum of such national administrative training centres on all levels. Such training is appropriate not only for senior civil servants, but also for persons on lower administrative levels who are concerned directly with the sponsorship and development of industrial enterprises within developing countries.

It is hoped that over the course of the educational programme outlined in this proposal, at least one project could be considered dealing with each of the functional areas above. It is obvious that this will take both Phases II and III to complete, but in some cases there may be an opportunity to reach a cross-section of the target populations noted above in a single project. Projects with such multiple populations would therefore hold a great appeal for the programme proposed here.

The main objective of conducting entrepreneurial achievement programs across such a spectrum of target populations dealing with industrial development is to enable UNIDO and other sponsoring agencies to determine where such training is most effective and where the greatest amount of funds should be channeled in the future. This would allow a refinement of the current training methods and concepts to the point where programs could be tailored for many different target populations in various areas of the world. It is hoped that eventually an entrepreneurial training component would be available to all project managers associated in international technical assistance throughout the world.



## STATEMENT OF CORPORATE CAPABILITY AND RELATED EXPERIENCE

The Behavioral Science Center of Sterling Institute (BSC/SI) is a private organization devoted to the application of the results of behavioral science research to education and training. BSC specializes in educational programs that relate individual motivation, the value system of the organization, and administrative effectiveness to overall performance. The Center conducts research to identify specific organization development and training needs, along the dimensions of individual and group motivational patterns, and the ways in which these patterns relate to organizational and managerial effectiveness. The Center then designs and develops specialized training programs to assist participants in improving their personal performance and their organization's effectiveness.

Many BSC programs (to be described later in this section) are based on achievement motivation concepts developed through years of research conducted by Dr. David C. McClelland of Harvard University and his associates who include Dr. Paul R. Lawrence and Dr. George H. Litwin of the Harvard Business School. Dr. McClelland is Chairman and Drs. Lawrence and Litwin are members of the Policy Board of BSC.

Projects undertaken by the Center are performed under the direction of its Policy Board, which is composed of

faculty members from Harvard University and the Sloan School of Management, Massachusetts Institute of Technology. A member of the Policy Board typically acts as Project Director or Principal Adviser for each of the Center's projects. Members of the BSC Policy Board and their colleagues at other leading educational institutions also serve as Special Consultants to the Center, assuring that appropriate knowledge is applied to each project.

Members of the Policy Board, listed with their areas of special interest, are:

- . DR. DAVID C. McCLELLAND, Chairman, Professor of Psychology, Harvard University, Department of Social Relations. Human motivation and its relationship to business success and economic growth.
- . DR. DAVID E. BERLEW, BSC Managing Director. Human motivation, interpersonal dynamics, and organizational behavior.
- . DR. MASON HAIRE, Professor of Management and Organizational Psychology, Sloan School, MIT. Psychological problems in organization and management, and motivation in working.
- . DR. PAUL R. LAWRENCE, Professor of Organizational Behavior. Harvard University Graduate School of Business Administration. Development of organizational structures and managerial practices appropriate to varying environmental demands.
- . DR. GEORGE H. LITWIN, Assistant Professor of Organizational Behavior, Harvard University Graduate School of Business Administration. Motivation development through organizational climate studies and educational programs.

- . DR. J. STERLING LIVINGSTON, Professor of Business Administration, Harvard University Graduate School of Business Administration, and President of Sterling Institute.
- . DR. THOMAS F. PETTIGREW, Professor of Social Psychology, Harvard University. Personality and race as related to problems of education and community development.
- . DR. RENATO TAGIURI, Professor of Social Science in Business Administration, Harvard University Graduate School of Business Administration. Values and social behavior within the executive framework.

#### Related Experience

The Behavioral Science Center has considerable experience in areas directly related to the proposed Programme for Educational Achievement. In addition to the research by Dr. McClelland and his associates described earlier in this proposal, the following projects, some of which have been completed and some of which are still in process, are direct outgrowths of Dr. McClelland's research.

#### Achievement Motivation Training Projects

##### Uganda Achievement Motivation Training Program

Staff of the Behavioral Science Center are currently working with personnel of the Management Advisory Training Centre (MATC) of Kampala, Uganda - an organization supported by the International Labor Organization - and several medium sized businesses in Uganda to adapt BSC achievement motivation and leadership training programs to the special needs,

problems and opportunities of the African nation. BSC is also preparing MATC staff and company personnel to present the training.

Ultimately, the program will be offered regularly by MATC and the companies who will provide the training to their own managers and to the managers of firms on which they depend for their raw materials, services, etc. Because of the number and variety of people who are being trained, this program promises to have a significant development impact in Uganda.

Prince Edward Island NewStart, Inc., Prince Edward Island, Canada

The Behavioral Science Center, in cooperation with Prince Edward Island NewStart, Inc., a Government-funded training/research organization concerned with manpower development, prepared and presented a motivational program for young unemployed and underemployed males from rural Kings County, P.E.I. The program was designed to increase motivation for seeking training, counseling and jobs among a population characterized as "unmotivated" and lacking the desire for achievement. Because such training could lead to an increase in the rate of outmigration of young men from the area, which already was high, BSC developed a special high-intensity workshop for members of the community--the influential poor

and nonpoor--whose purpose was to stimulate significant expansion in the available number of career opportunities in the area.

BSC is currently conducting research on the effectiveness of the training and will shortly prepare a report documenting the findings. Early results, however, are encouraging and plans are being made to implement the training on a broader scale in other rural parts of Canada and the United States as well as in the developing world.

Program to Facilitate Social and Economic Development  
in Curacao

BSC has recently begun work on a program in Curacao, Netherlands Antilles, to develop the human resources on the island and remove obstacles to economic self-sufficiency.

The program will run until June 1970 and will:

- . introduce motivation (achievement and efficacy) training and train local residents to utilize this educational technology;
- . collect information on factors which impede the development on Curacao of a harmonious and economically self-sufficient community; and
- . work intensively with a group of island leaders to identify and agree on obstacles to Curacao's development, and to set goals, formulate plans,

and implement actions designed to remove these obstacles.

The program is divided into two phases. Phase one will provide achievement motivation training for Antilleans. Phase two will include the design and implementation of an "Outlet Program" to channel and accelerate new motivations toward the most economically productive outlets.

Concentrated Employment Program, Eagle Pass, Texas

Under a contract with the Concentrated Employment Program (CEP) at Eagle Pass, Texas, the Behavioral Science Center trained Mexican-American skill trainers and remedial education teachers to teach a BSC-CEP program developed to increase aspirations for achievement and accomplishment among Mexican-American farm workers. BSC also prepared and presented an intensive training program to the CEP senior staff to improve communications and planning in the organization.

Development of Achievement Trainers for San Mateo County PACE Program

The Behavioral Science Center trained teachers from the San Mateo County School System in California to present achievement motivation development courses to racially mixed groups of underachieving high school students. To insure the effectiveness of the program, prospective instructors received intensive exposure to the achievement training

course, to assist them to understand the methodology and pedagogic aspects of the training and develop the skills necessary to present the course. BSC also presented a demonstration course to teachers, administrators, parents, and interested community representatives, to create a supportive climate for the students' newly acquired achievement motivation.

Achievement/Leadership Training for the American Baptist Home Mission Societies

BSC has conducted several seminars for the American Baptist Home Mission Societies concerned with the development of achievement and leadership skills. Moreover, BSC has conducted an organizational study of the Home Mission Study and is currently working with an internal Organization Design Team to help them solve some of the problems identified by that study.

Research in Achievement Motivation in Culturally Disadvantaged Elementary School Children for the Institute of Education, Washington University, St. Louis (Carnegie Corporation Grant)

The Behavioral Science Center presented achievement training to 16 teachers working in St. Louis elementary schools, as part of a three-year project to assess achievement motivation, the "origin-pawn variable," and academic achievement among a group of low income Negro children.

BSC-trained teachers are currently using achievement motivation-related strategies as pedagogic techniques in experimental classrooms to measure the impact of these strategies. A control group is being presented identical subject matter through traditional teaching methods. Early findings are impressive (the project is now in its second year), indicating the validity of the hypothesis that an achievement strategy, used pedagogically, leads to greater academic achievement.

#### Bundy Corporation

Designed to create a more entrepreneurial corporate climate, a program conducted by the Behavioral Science Center included achievement motivation training for the top management group of Bundy Corporation. Achievement and managing motivation training as well as team building was also carried out with senior and middle management.

#### Systems Design, Implementation and Administration

BSC/SI has gained experience in the design and administration of complex research, evaluation and training projects, coordinating the efforts of recognized experts in diverse fields, both from within and outside of the Institute.



Planning Process and Supportive Training System for  
Region II, Office of Economic Opportunity

The objective of this extensive effort was to assist Community Action Agencies on the Delmarva Peninsula to improve their effectiveness in meeting the needs of the poor, both through increased organizational effectiveness, and through increased capability to work with community leaders in forming and carrying out community economic development plans.

In a joint effort, a Sterling Institute team drawn from the Behavioral Science Center and the Management Science Center collaborated with members of OEO staff and staff members of six Community Action Agencies to implement a new planning system.

Members of the project team established residence on the Delmarva Peninsula for several months. They conducted extensive research, both through personal interview and association with members of all social and economic groups and through gathering of socioeconomic data. The project team successfully employed training (focusing on self-discovery, goal setting, and analysis of the environment) as a research instrument. Participants in this training ranged from members of CAA staff (including staff members drawn from the poor) to representatives of the poor.

The project team then designed and developed special educational programs which reflected results of their socio-economic research. These programs focused on planning and organizing for economic development.

Participants in the special educational programs included CAA staff, representatives from the public and private sector on the Peninsula, and members of OEO Region II's program planning staff. OEO has asked the Behavioral Science Center to assist them in developing an evaluation system to measure the impact of this training.

Technical Assistance in Planning and Evaluation to Selected Model Cities, for the Department of Housing and Urban Development

An additional example of Sterling Institute's system administration capability is represented by a proposal recently submitted to the Department of Housing and Urban Development, to provide on-site and indirect technical assistance in planning and evaluation to 150 selected model cities. Implementation of this project will require integrating the efforts of professionals from the Management Science Center and Behavioral Science Center of the Institute, HUD Supervisors of Direct Technical Assistance and Indirect Technical Assistance, regional consultants to HUD, and a project advisory board of specialists in planning, urban analysis and

data processing, management and behavioral consulting, and attitude surveying.

A comprehensive system of training, including core city cross-cultural training, will be implemented during the project to insure the success of early implementation stages of the model cities program.

Management Personnel Assessment and Selection, and Career Planning and Development

American Telephone and Telegraph Company Management Progress Study

Dr. David E. Berlew, Director of the Behavioral Science Center, served as a consultant to AT&T's Management Progress Study. The study was conducted by the Bell System to develop methods for the early identification of executive and management talent, and utilized the talent search approach to assessment and selection.

During the five years in which Dr. Berlew consulted to the AT&T Personnel Research Section on this study, he served as a center staff member on 15 assessment sessions conducted for middle and top level management of the Bell System. In 1964, he designed the assessment center program currently being used for selection of Communications Consultants within the Bell System.

### Career Development Program

In collaboration with the Executive Development Center of Sterling Institute, the Behavioral Science Center offers a program specially designed to assist young managers in organizations in their career development. The first phase of the program is a Career Development Laboratory which emphasizes participant self-assessment in areas related to goals, motivation, and values, as well as to skills, and includes identification of training needs in the formulation of career plans.

An overall objective of the Career Development Program is to support an organization's management development efforts by providing a pool of motivated, well trained managers which will meet projected, long range staffing needs. Sterling Institute has introduced the Career Development Program through Training Directors' Weekends conducted for representatives of such organizations as Celanese Corporation, G.M. Overseas Operations, Lever Brothers, and Xerox.

### Chi Psi Educational Trust Program for Self Development

BSC designed and developed this program to assist undergraduate members of the Chi Psi fraternity in developing career plans, and in establishing educational, personal development, and recreational goals compatible with those plans. The program opens with examination and discussion

of cases revealing varying life styles in contemporary America. Psychological tests are administered, interpreted, and results fed back to participants, to enable them to better understand their own life styles. Self-discovery exercises are also used, in combination with intensive group discussions, leading to specific goal-setting and commitment to goals by course participants.

Staff of the Educational Trust have been trained through BSC's instructor training program to present the Self-Development Program on campuses throughout the country. Initial presentations have proven the program to be effective in aiding undergraduates in adjusting to the collegiate environment, and relating that experience and their newly gained self-knowledge to their future plans.

BSC Managing Motivation for Performance Improvement Seminar Series

Seminars in this BSC series include "Achievement Thinking for Managerial Effectiveness," which focuses on the planning, managerial responsibility, and the motivational aspects of management; "Effective Development of Subordinates," which is designed to increase the effectiveness of managers in performing the critical task of developing subordinates, including team building and integrating personal goals with the goals of the organization; and "Assessing and Improving

Organizational Climate," a seminar to assist managers in identifying, defining and solving problems of organization and structure.

Sales Management Development Program for Metropolitan Life Insurance Company

The Executive Development Center of Sterling Institute (EDC/SI) in cooperation with BSC is currently engaged in a major effort to assist the Metropolitan Life Insurance Company in increasing the effectiveness of its sales force and sales managers. This effort includes:

- . original field research to identify needs for education to improve performance;
- . design, development and presentation of special programs of management education for sales managers; and
- . training to equip Metropolitan management development personnel to present the special program.

Managerial Development for U.S. Navy Chaplain Corps

BSC is currently engaged in extensive work to assist the U.S. Navy Chaplain Corps through educational programs designed to meet identified training needs. The primary goal of the effort is to assist senior chaplains to make the transition from their major role as pastors and staff officers

to their expanded role and function as supervisors. This highly successful effort has been conducted in five primary areas:

- . design, development, and presentation of a four-week Pilot Course for Captains;
- . design, development, and presentation of portions of a 22-week Career Course for Commanders;
- . instructor training for Chaplain School staff;
- . research on the characteristics of the most effective supervisory chaplains; and
- . evaluation of impact of courses on participants.

Design and Presentation of Leadership Training Programs

The Behavioral Science Center has experience in the design, materials development, and presentation of seminars for leaders in private and public organizations, including those engaged in community development efforts.

Seminar "Strategies for Effective Leadership and Influence," in BSC's Managing Motivation for Performance Improvement Series

This seminar is designed to provide participants with knowledge of their own strategies, and understanding of the techniques of others, for gaining influence and becoming effective leaders. Seminar objectives are to assist each

participant to identify (a) bases of status (power), and (b) bases of solidarity (affiliation), in interpersonal situations, and to combine a knowledge of his own needs with sensitivity to the needs of others along these leadership dimensions. Issues dealt with in this context include efficacy, trust, reciprocity, competition and collaboration.

Comprehensive Training Program for Raleigh County  
Community Action Association, Region II, Office of  
Economic Opportunity

BSC is currently conducting a comprehensive training program for the Raleigh County Community Action Association in West Virginia. The training population includes the Board of Directors, key CAA staff, middle level supervisors, neighborhood workers, and community leaders from both the poor and non-poor elements in the county. Objectives of the training include development of new skills in planning and decision-making, goal-setting, and mobilizing local resources. New materials are being designed to assure the relevancy of training to these community leaders.

Challenge and Response - A System for Developing  
Outstanding Performance

Another Institute-produced film is "Challenge and Response," a feature film with Jim Ryun's coach Bob Timmons. This film explores concepts and practices for effective coaching, and team and individual goal-setting.



### Design and Presentation of Trainer Training Programs

BSC has extensive experience in the field of trainer training. Research into learning theory which has been conducted by BSC Policy Board members, combined with practical experience found among BSC's senior staff, represent a unique competence in the trainer training field.

Dr. David C. McClelland and his associates within BSC and at Harvard, while testing their theories on human motivation, developed a model for training which has been proven highly effective. As the professional staff of BSC grew, new training methods were introduced, including sensitivity methods. New staff, familiar with training with Blake's Grid system, the Kepner-Tregoe Decision System, and a number of less widely known training approaches, helped modify the training model.

BSC instructor training combines a broad, concept-based approach with a specific set of behavioral objectives which have been tailored for trainers in joint sessions between BSC and the client. Instructor training programs include extensive practice teaching, using videotape monitors for feedback and critique. During training, instructor-trainees develop and test with the group learning exercises, games, simulations, and role plays. Instructor training includes

intensive in-class training, and closely supervised field training with senior BSC trainers.

Primary objectives of the BSC instructor training programs are to assist participants to develop interpersonal and teaching skills, along with a conceptual understanding of training materials and units, which will permit trainees to construct training designs against which program effectiveness can later be measured. For example, following presentation of the special educational programs developed for the Office of Economic Opportunity, whose participants included members of the Region II program planning staff, OEO has asked the Behavioral Science Center to assist them in developing an evaluation system to measure the impact of this training.

Most trainers who have been trained by BSC have had no previous teaching preparation, or experience. Many have come from backgrounds wholly unrelated to training, such as life insurance salesmen, retail store managers, high school dropouts and college students. However, with the variety of approaches combined with extensive field work during which experienced trainers co-train with new trainers, the methods used have been proven demonstrably effective.

Instructor Training Program for Peace Corps Volunteers,  
with the Experiment in International Living

Peace Corps Volunteers, most of whom have little or no formal teaching experience, are receiving the first sequence of BSC instructor training, prior to assuming overseas assignments. The program is designed to increase the ability and confidence of Peace Corps teachers in what is, for most of them, an introduction to a new culture and a new role. Particular attention is being given to developing and implementing creative and effective educational approaches within the traditional educational framework of host countries.

Instructor Training Program for the Chi Psi  
Educational Trust

BSC trained staff of the Chi Psi Educational Trust to present a broad self-development program, designed and developed by BSC, to undergraduate members of its fraternity network. Instructors were prepared to perform effectively in each of the major areas of the program, which includes: feeding back to program participants the results of psychological testing, leading them through increasingly deeper rounds of self-study and introspection, conducting group discussions of games and exercises, helping participants establish meaningful goals, and obtaining commitment to the attainment of these goals.

Instructor Training for the Metropolitan Life  
Insurance Company

BSC worked with personnel from the Metropolitan Life Insurance Company with no prior teaching experience to develop their capability to assist in the instruction of a program developed by EDC to improve the managerial effectiveness of district managers. The instructional approach utilized in this instance prepared the instructor trainees to work effectively with particularly large groups in presenting the program, and to use various methodologies (case studies, role plays, and audiovisual support) in attaining educational objectives.

Orientation/Training Program Design and Presentation

The Behavioral Science Center has broad experience in identifying the knowledge, skills, and attitudes necessary for effective personal performance in a wide variety of social and occupational environments. More specifically, BSC has designed and presented programs to assist change agents to work effectively, and orientation programs for groups engaged in community development efforts.

Seminar for Change with the New England Center for  
Continuing Education

This seminar in community economic development was designed by BSC to enable county extension agents and others

in the community to acquire and practice the interpersonal skills required for working effectively with individuals-- including those in community organizations, special interest organizations, Federal, state, and local governments, and government agencies. Through the use of role plays, case studies, and other exercises designed to improve group operating effectiveness, the seminar emphasized the integrative skills and attitudes necessary for effective group planning and interaction. A special instructor training session was held for New England Center instructors, following the initial presentation, to enable the Center to present the seminar on a continuing basis.

Managing Motivation Course for Extension Marketing Specialists, U.S. Department of Agriculture, Federal Extension Service

BSC conducted research to determine training needs of extension marketing specialists in Maryland on the Delmarva Peninsula. Materials prepared for this course were designed to stimulate participants to take a more innovative, creative approach to their jobs; to increase their understanding of their own motivation and how it affects their performance; and to increase their ability to motivate farmers and small agribusinessmen in achieving maximum effectiveness and providing for personal growth and satisfaction.

## Organization Development Programs Including Research and Training

The Organization Development Group of the Behavioral Science Center is an experienced staff of OD researchers, consultants, and training specialists skilled at using research data within an organization as the basis for designing and implementing a total organization development program.

Using interview guides, questionnaires and other basic research tools, BSC can economically develop comprehensive research data along many critical interpersonal dimensions. Using computer technology to assist in analysis of this data, an agency or organization can be provided quickly and inexpensively with much of the critical data required to design and implement a continuing program of improvement.

### Organizational Inventory

One of the several services offered by BSC is its Organizational Inventory. The Inventory has been conducted to yield significant results in organizations ranging in type from a high-technology research and development firm to the national headquarters of a major U.S. religious denomination.

The Inventory has assisted the top management of such organizations to identify problems whose nature and scope had previously been unknown. For example, in one firm, top

management learned that poor communications and coordination between divisions constituted a major obstacle to improved performance. As a result, a major program to eliminate these problems has been initiated.

The Inventory has assisted the management of a large, highly diversified company to assess the relative strengths and weaknesses of its many divisions, and has assisted the management of a mature, established company to assess the impact of broad recent changes in policy and structure.

Seminar "Managing and Motivating," for Celanese Corporation

Sterling Institute (EDC and BSC) researched, designed, and developed a management seminar program for the Celanese Corporation. In order for Celanese to develop a strong capability for forming and implementing effective management development strategy, Sterling Institute identified their needs for general management education, and isolated those needs which were most critical to superior performance. In addition, Sterling Institute designed, developed, tested, and presented a high impact general management seminar, to improve managerial performance.

The objective of the Seminar was to increase the manager's understanding of his role and responsibilities, enhance the manager's capability to respond effectively to major problems

through increased skills in the management of people and operations, and aid the manager's understanding of intercompany relations.

Seminar "Diagnosing and Affecting Organizational Climate," in BSC's Managing Motivation for Performance Improvement Series

Participants in this seminar learn to identify and evaluate the impact of their total environment--or organizational climate--on a problem situation. The objective of the seminar is to assist participants in increasing their abilities to design programs for performance improvement, and includes developing competence in using instruments specifically designed to measure climate and provide data which can be used for the solution of organizational problems.

Candidate Personnel and Curricula Vitae

Key candidate personnel who would participate in the proposed project for all Phases include:

Dr. David C. McClelland, Project Director

Stephen H. Rhinesmith, Project Manager

Dr. David E. Berlew

Dr. Gary D. Bergthold

David H. Burnham

William E. McClere

Manohar S. Nadkarni



In addition to the core staff, personnel would be selected from the following list to participate in Phases Two and Three.

Lawrence J. Brailsford

Richard M. Hailer

Dr. David A. Kolb

Harry M. Lasker

Fredric A. Margolis

Irwin M. Rubin

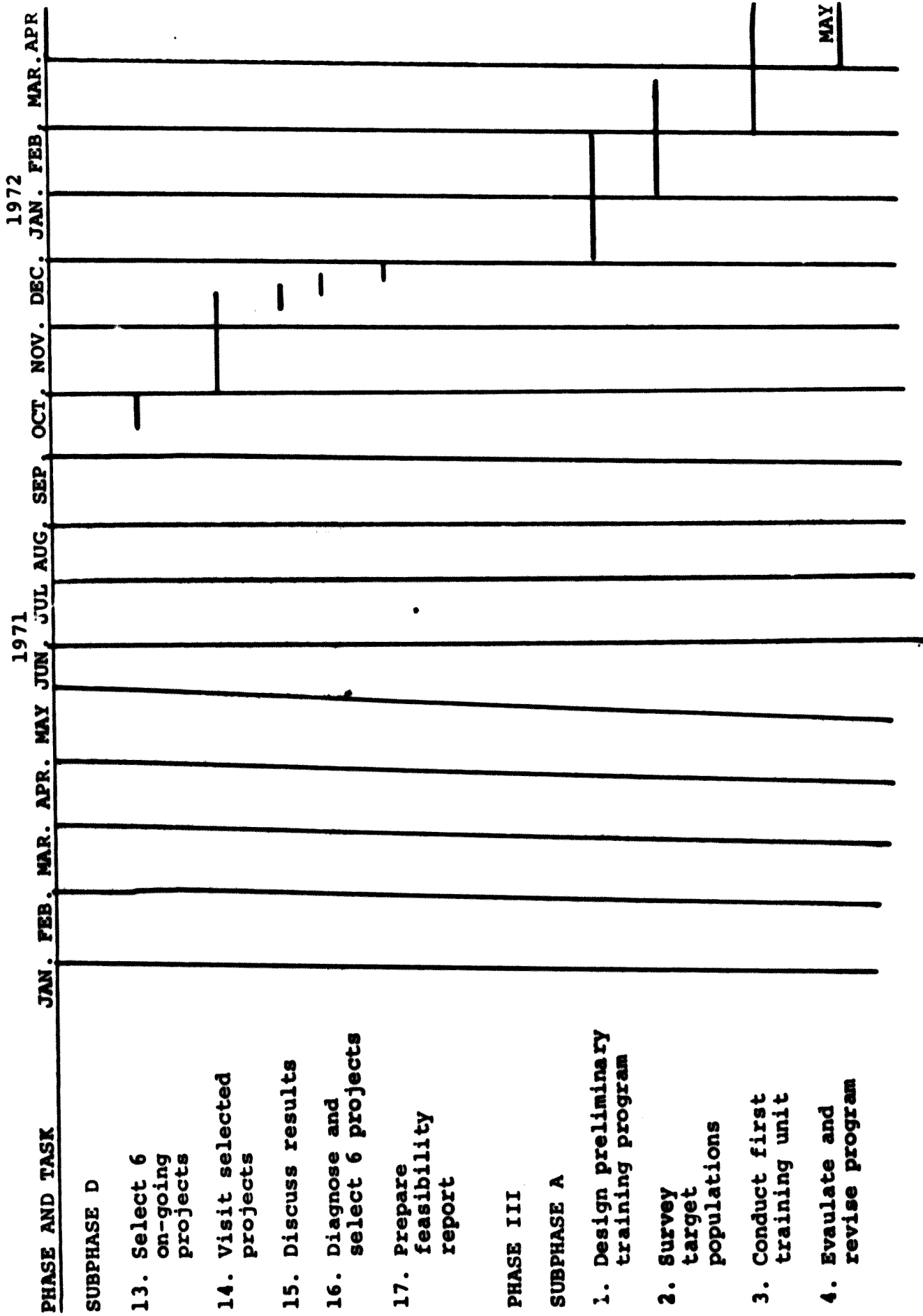
James R. Thompson

Gerald F. Walsh

Curricula Vitae for all proposed project staff members follow.







1971  
 JAN. FEB. MAR. APR. MAY JUN. JUL AUG. SEP. OCT. NOV. DEC. 1972  
 JAN. FEB. MAR. APR.

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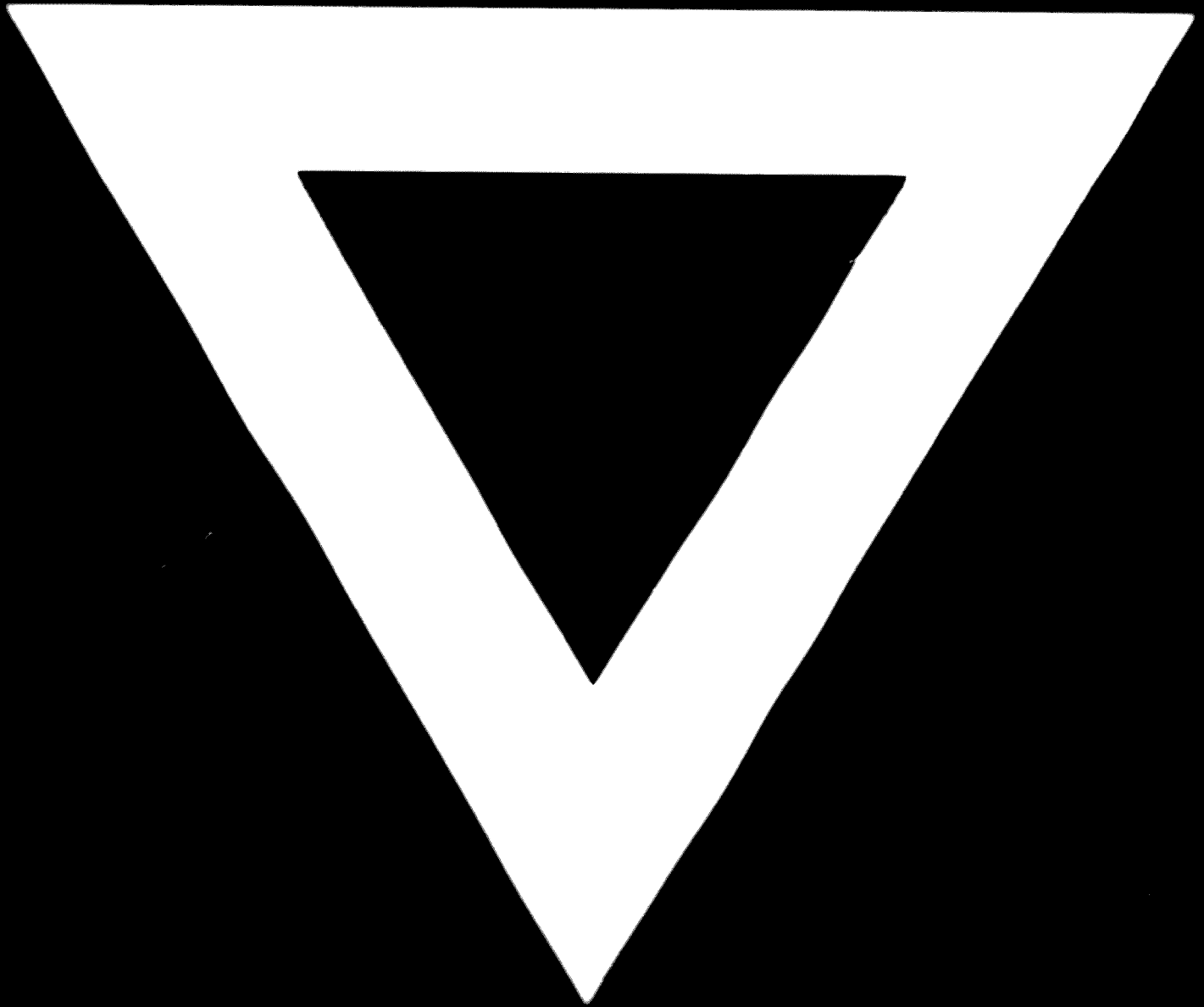
PHASE AND TASK	1972					1973							
	JAN. FEB.	MAR. APR.	MAY JUN.	JUL. AUG.	SEP. OCT.	NOV. DEC.	JAN. FEB.	JUL. AUG.					
5. Conduct Instructor training course													
6. Prepare first public programme													
SUBPHASE B													
7. Conduct first and second public programmes													
8. Conduct third and fourth public programmes													
9. Test and certify instructor candidates													
SUBPHASE C													
10. Research, Evaluation and follow-up													
11. Prepare final report of Phase III													
12. Prepare final report of entire five year project													

1974  
 NOV 1974  
 Dec 1974

## Bibliography

- Coleman, James S. (ed.) Education and Political Development. Princeton: Princeton University Press, 1965.
- Harbison, Frederick and Charles A. Myers. Education, Manpower and Economic Growth: Strategies of Human Resource Development. New York: McGraw-Hill, 1964.
- Lewis, Arthur W. "Priorities for Educational Expansion," in Policy Conference on Economic Growth and Investment in Education. Paris: OECD, 1961.
- McClelland, David C. The Achieving Society. New York: Van Nostrand and Co., 1961.
- McClelland, David C. "Business Drive and National Achievement," Harvard Business Review (July-August, 1962).
- McClelland, David C. "Achievement Motivation Can Be Developed," Harvard Business Review, (November-December, 1965).
- McClelland, David C. Motivating Economic Achievement. New York: Free Press, 1969.
- Moore, W.E. and Feldman, A.S. (e.s.) Labor Commitment and Social Change in Developing Areas. New York: Prentice Hall, 1960.
- Mosher, Arthur. Varieties of Extension Education and Community Development, Comparative Extension Publication No. 2. Ithaca: New York State College of Agriculture, Cornell University, 1958.
- Neff, Kenneth L. Education and the Development of Human Technology. Washington, D.C.: U.S. Government Printing Office, 1962.
- Parnes, Herbert S. Forecasting Educational Needs for Economic and Social Development. Paris: OECD, 1962.
- Parnes, Herbert S. (ed.) Planning Education for Economic and Social Development. Paris: OECD, 1963.
- UNESCO, Economic and Social Aspects of Educational Planning. Paris: UNESCO, 1964.

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