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ABSTRACT

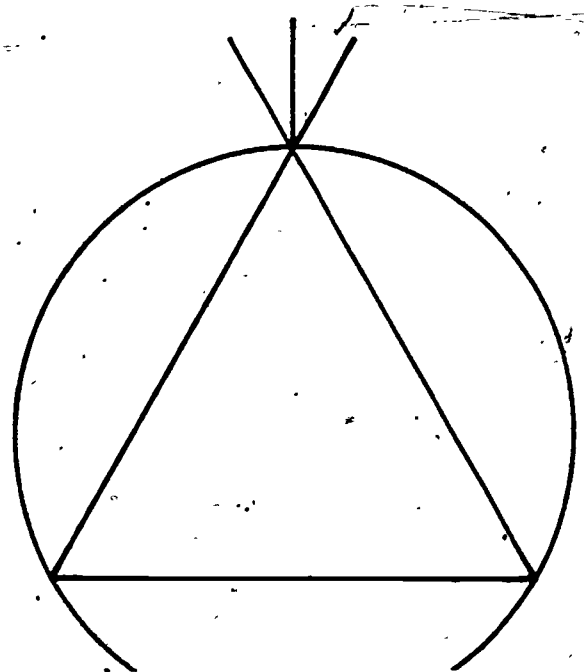
Presenting six position papers, this publication is the second in a series of five volumes on American Indian education. Papers are titled as follows: (1) "The Theory of Indian Controlled Schools" (Indian control of education is perceived as the basis for a cultural renewal process in which the problems of contemporary identity and purpose are resolved); (2) "A Theory of Vocational-Technical Career Education" (vocational training models are considered in terms of the ongoing developments in non-Indian America and the progressive developments in Indian communities); (3) "Testing, Evaluation, and the Indian Education Act of 1972" (testing criteria, particularly the criterion-referenced test, are proposed for use in Indian education); (4) "Early Childhood Education Program Models" (drawing upon a longitudinal study of the "Follow Through" program, numerous models of early childhood education are considered); (5) "A New Curriculum Design for Native American Schools" (consideration is given to a curriculum designed to emphasize tribal history, culture, traditions, and the immediate community environment); (6) "Perspective on Manpower Planning" (consideration is given to a philosophy of educational manpower planning that emphasizes innovative programs designed by Indian communities to promote both interculturalism and pride in heritage). (JC)

Indian Education Confronts The Seventies

Five Volumes

Volume II

Theoretical Considerations in Indian Education



Navajo Community College
Tsaile, Arizona

American Indian Resource Associates
Oglala, South Dakota

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This five volume series of Position Papers on Indian Education has been printed by the American Indian Resource Associates in conjunction with the Navajo Community College of Tsaile, Arizona. The papers were prepared under a contract between the Office of Education and the Navajo Community College, OE- 0-73-7094, which was in turn subcontracted by the Navajo Community College to the American Indian Resource Associates, Oglala, South Dakota, Mr. Gerald One Feather, President.

The respective papers have been edited for publication by Vine Deloria, Jr, Golden, Colorado who supervised the preparation of the papers and the format of the five volumes. Copies of the longer and unedited original papers are available through the Indian Education Office of the Department of Health, Education and Welfare. The opinions expressed herein do not necessarily reflect the position or policy of the Office of Education, the Navajo Community College, or the American Indian Resource Associates and no official endorsement by any of the parties should be inferred. The papers are presented in an effort to open discussions of the future of Indian education by presenting some fundamental and provocative papers on selected topics of importance in the field of Indian education.

We would like to express our appreciation to Mr. John Tippeconic of the Navajo Community College and Mr. Larry LaMoore of the Office of Education for their assistance in developing these volumes.

Vine Deloria, Jr.
Golden, Colorado

Indian Education Confronts The Seventies

Volume II

Theoretical Considerations in Indian Education.

Edited by Vine Deloria, Jr.

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INTRODUCTION

by

Vine Deloria, Jr.

One of the many problems in the field of Indian education has been the inability of people working in the field to separate and analyze some of the theoretical issues. The confusion that inevitably occurs when topics of political importance are seen in an academic light is surpassed only by the controversy that arises when primarily academic topics appear in a political context. In this volume we have tried to present essays that will serve to clarify rather than confuse the interworkings of the academic and political forces that are present in Indian education.

The task of distinguishing social theories or even educational theories from the task of getting those theories translated into program proposals and legislative drafts is immense. Even more difficult is the task of maintaining some form of logical consistency in program proposals which is not destroyed by the tremendous political considerations that must be made when legislation is

being discussed. While we have had a number of pieces of legislation concerning Indian education in recent years there is still a desperate need for more legislation to cover areas that cannot be easily described in one statute or program.

The major topic of concern at the present time seems to be the control of educational programs and facilities by Indians, whether reservation residents or urban residents. Gerald Clifford points out that Indian control is more than a political process. It is in fact a more prolonged movement of cultural revitalization in which certain models of psychological breakdown and reconstruction can occur. From this premise we can derive a number of important conclusions in our effort to separate problems into their constituent parts.

We must first recognize that cultural growth, while it may manifest itself in political confrontations, is primarily a process of evaluation in the practical world in which we are involved. Programs must be constructed so that cultural values which seem to float through our lives seeking attachment to structural realities can come to grips with both the content and method of community life. Education in the community context is even more than Indian political control of the institutions. It is a radical change that occurs, perhaps, in non-radical occurrences. It may be exceedingly difficult to point to the exact situation in which cultural change is happening but no matter how we view the operations of programs that change is occurring. Thus programs that do not seem to be affecting any profound changes may actually be creating conditions under which more fundamental and futuristic changes will occur.

We must not, therefore, judge Indian control in terms of measurable products.

The second point is perhaps just as important. The ultimate nature of the relationship between American Indian communities and the rest of American society, particularly the Federal government, is primarily political and not cultural. Yet so many times in the past cultural attitudes have been cloaked in political terms. The history of Indian life has many incidents that clearly indicate the catastrophe that occurs when fundamentally social or cultural ideas masquerade as political realities. The General Allotment Act of 1887, for example, was primarily a cultural and philosophical theory that became law because people did not make a distinction between theory and legal reality. While today Indian control must express itself in school boards and coalitions funded and supported by the Federal government distinguishing between cultural attitudes and rules and regulations must be a priority item in the educational agenda. Programs designed to invoke cultural change must be redesigned to take the structure that allows maximum sufficient flexibility to channel changes that are already occurring.

Within this context of irreversible and perhaps not clearly identifiable changing of cultural patterns and values the other essays of this volume begin to make sense and take on an added significance. Whether it is testing programs, early childhood programs, vocational training, curriculum design or manpower needs the present state of Indian education points toward Indian control as that force which can and must induce both changes and the development of interreltaionships between subject fields. We cannot,

for example, follow the patterns of Chicano and Black early childhood educational models on the assumption that "all children are alike" or even that "all people learn using the same processes." The very presence of the extended community of the American Indian forces us to consider how the expression of that community influences learning and other educational processes.

In the final sense, therefore, further development of the theories of Indian control must be supplemented by development on the intellectual and community level of what it means to have Indian control of education. Is there a specific "Indian" content to education that distinguishes it from education received or experienced by other groups? Don Sharpes relates the experiences of Indians with some of the pressing issues of contemporary life to find a way to consolidate the historical experiences of both Indians and non-Indians in a modern curriculum. With variations according to tribal backgrounds, Sharpes' model should be considered as a venture into new ways of structuring content of education so as to allow Indians to view alternatives not in terms of control but more in terms of cultural expression which solidifies and gives meaning to political and fiscal control of institutions.

As we consider the essays in this volume, therefore, it becomes incumbent upon us to recognize that one priority in Indian education is to find relationships between previously unrelated fields of knowledge and interest. We must also find the relationships that do exist between the technical and mechanical aspects of education and the various fields of content. We must further define the process by which ideas are translated from one field to

another and the changes in our understandings of these fields that occur in the translation. Clarification of the nature of Indian educational problems should come from the interworking of these processes as well as new viewpoints on the determination of priorities in both content and procedures that we set in this field.

As we begin to leave the Dark Ages of Indian education and vocational training becomes more sophisticated than simply a job skill program and takes on the aspect of career and community-oriented career process, we shall find that the vital ingredient in refining and improving educational achievements and opportunities for American Indians really does reside in the understanding of education as a cultural process of solving questions of personal identity. To the degree that we fail to understand the mechanics and substance of that process, we will not have taken full advantage of the many human aspects of our existence and we will remain bogged down in the structural definitions of education which have plagued us thus far.

THE THEORY OF INDIAN CONTROLLED SCHOOLS

by

Gerald M. Clifford

Boulder, Colorado

Oglala Sioux

I. Introduction

The purpose of this paper is to suggest that the key to the total development of the Indian Community is through local control of schools for Indian children by Indian people. Of primary interest is the broader sociological implication of local control, its effect upon the development of Indian social institutions, and thus the development of the human and natural resources of Indians and Indian Tribes. In any discussion of Indian development there must be a discussion of Federal structures and their influence upon development. The most important concern of the Indian community should be the ongoing monitoring of Federal legislation which establishes programs as well as the administrative structures for their implementation. We should be concerned also with Agency development of rules, regulations, and guidelines which control program implementation. Only with the concerted effort of the whole

Indian community to influence the legislative process will programs that meet our developmental needs be forthcoming.

There is at this time widespread support for Indian control of the educational processes by the politically active Indian community. The Coalition of Indian Controlled School Boards, for example, has grown from four members at its inception in October of 1971 to over ninety-five members on October 31, 1973. As this movement for local control grows it appears that a major conflict between the Indian community and the policies of the Bureau of Indian Affairs is inevitable.[1]

It might be argued that if the politically active Indian groups do bring about a change in structure at the national level without having allowed for the time lag which separates the more progressive Indian communities from those less developed there may be an unexpected setback to the total movement for Indian development. Some leaders in the Indian communities have already complained that the only discipline which rules the activities of such groups as the Coalition of Indian Controlled School Boards is the discipline of "Indian control" without regard to the implications such control has for the exercise of Tribal sovereignty. If, for example, a local Indian community determined that control over their school was the ruling discipline, an occasion could arise wherein a Tribal government might oppose local educational control because it feared a conflict with the Tribal political or administrative structure. The community might then elect to establish relations with a state or local educational agency thereby weakening Tribal sovereignty.

It is crucial therefore for the Indian community to concern

itself with an ever increasing examination of the logical extension of the theories which direct and control political activity. There is an urgency for change nevertheless that is gripping the Indian community - an urgency which leaves behind the blessing or consensus of the Academic community and the considerations of tribal politicians. The value of this urgency will lie in its use as a incentive to refine the application of theories, it may suggest some areas for research by Indian research teams, and it may help the leaders of Indian communities appreciate the implications of their present political activities. An additional value of the urgency is to force state and Federal legislators and Government Agency policy makers to understand the substance of contemporary movements perhaps to react favorably to the suggestions and demands of Indian people.

The framework from which I begin is "subjective" in the sense that I have been actively involved in the development and application of the theory under discussion. Further, although given little importance by western Europeans, the Indian views man as having a capacity to know through "relational events"[2] with other beings. This way of knowing is more pronounced in American Indian societies[3] wherein the value of real relationship is paramount.

To treat abstract concepts of beings and relationships of beings as being exclusive truth is a habit of western man as well as the contemporary academic community. For such men, i.e., western scholars, insight into a particular relationship becomes blinding - such relationship becomes the basis for a system of thought or perhaps the basis for a sociological theory. The actual event or

experience from which the relationship is discussed seems to have no further value, yet it is this event that forms our primary data of the world.

Whether or not I am blinded by the relationship which I see between community control of Education and the total development of the Indian people remains to be seen. But surely no one could be blinder than those who have led us into the pit thus far.

I will rely primarily on the files of the Coalition of Indian Controlled School Boards and upon my own experience. Necessarily the discussion will contain generalizations which will not fit Individual Tribes, nevertheless the overall processes which I describe I believe are accurate.

II. The Theory Of Local Control Of Education

The following are quotations from various documents of the Coalition of Indian Controlled School Boards:

> "The possession and control of one's educational system is vital to the development and survival of a people . . .
>
> "If American Indians are to survive as a people, they must develop and control their own schools . . .
>
> "Acutely aware of the close inter-relationship between poor educational achievement and poor economic, social, and political achievement, Indians came to focus on the need for greater local control and self-determination as the most effective means of breaking the cruel cycle of poverty and discrimination which had distorted the lives of their peoples for generations . . .
>
> "One reason for this emphasis is that until Indian people control their own Educational institutions there is little hope for any type of real progress within the Indian communities . . .[4]
>
> "If the Coalition of Indian Controlled School Boards is anything, Sir it is simply this, Indian people demanding an account from Government for the mess that has come to be known as "Indian

Education." Accountability, Mr. Chairman, can only be attained, when the structures of Government, and the structures for the implementation of governmental programs, are designed with checks against Bureaucratic abuse . . . it is the duty of Congress to insure that the structures of implementation provide for accountability to Indian people."5

"We submit to you, Mr. Chairman, that the greatest obstacle to Indian Self-determination in Education is a Bureau of Indian Affairs committed to its own self-preservation and survival as opposed to the true concerns of the Indian community. Self-preservation is never so apparent and operational a motive in subverting and distorting policy decisions as at the Area Office and Agency Office levels . . . It is the Area and Agency personnel, presently running Bureau Schools who feel the greatest threat from Indian assumption of program control." 6

"The underlying concept is for us, self-evident, that is, that quality education is inherently connected with the degree to which the educational system is a part of the social system of the Indian communities . . . By "social system" we are describing those boundries within which the Indian participates fully. It is our contention that educational institutions must fall within that circle of participation or they will remain alien to the Indian student." 7

Documents, letters, testimony, and files of the Coalition are replete with statements such as those listed above. In its simplest form then the underlying causal theory is: Indian community control of Education leads to the development and survival of the total Indian community.

Conversely the same theory implies that Indian community control of Education influences negatively the Survival of the Bureau of Indian Affairs in its present capacity of Administering Schools.

It would be useful at this point to list some of the expressions which are given importance in the statements which we quoted.

1. possession and control of educational system
2. development and survival of people
3. develop and control own schools
4. aware of inter-relationship between poor Education Achievement and poor economic, social and political achievement
5. local control and self-determination
6. effective means of breaking cruel cycle of poverty and

discrimination

7. poverty and discrimination distorted the lives of peoples for generations
8. demanding an account of government
9. accountability to Indian people
10. bureaucratic abuse
11. obstacle, Bureau of Indian Affairs committed to its own self-preservation

An analysis of the above expressions indicates a clear reaction to conditions of poverty; low economic, social, and political institutional development, minimal educational achievement and finally a high level of personal disintegration. It also speaks to us of a people who do not control the Educational process; Indians do not own the means of Education, i.e., land, facilities, and money.

They are also indicative of an oppressive force, the Federal Government, which controls and possesses the means of Education through its Agency the Bureau of Indian Affairs. And the B.I.A.'s self-preservation depends upon retaining control over all institutions of local communities. But most important perhaps in terms of the dynamics, of change, they speak of a vocal minority at the local level calling for accountability to Indian people. This group contends that the final resolution of Indian problems means the possession and control of the means of Education by the local people.

This sounds amazingly close to a Marxiam discussion of the relationships of production. Parallel elements are evident. The two classes, Indians and Bureaucrats, wherein the Bureaucrats control the means of Education. The similarity becomes even more striking when we consider that for all practical purposes, the Industrial world has not arrived, Education is in fact one of the largest employers on reservations, yet only 2% of classroom teachers are Indian.[8] The similarity breaks down however when we consider that

the exploitation comes not from realizing profit at the expense of free-labor, but rather from civil service employees, for the most part non-Indian, drawing large salaries, while exhausting resources that could have been used to employ local people, and at the same time controlling the quality of Education, as well as the Educational facilities. As an indication of this kind of exploitation, data from a study dated May 1973, by the Bureau of Social Research, shows that on a per capita basis, education in the BIA system appears to cost about twice as much as it does in public schools.[9] Yet the 1970 census figures show that in states such as South Dakota wherein most reservation Indians attend BIA schools the rural drop out rate exceeds 77%.[10]

III. Historical Environmental Conditions

Lest we get overly enthusiastic about the Marxiam framework it would be appropriate at this point to pass from the face value of the theory to an in depth look at the underlying historical environmental conditions of its development. For this purpose I have constructed the causal graph in Figure 1 below. The graph is sufficiently clear and I believe essentially accurate.

The arrival in the west of the white man seeking his fortune through the possession of real and personal property brought about the eventual subjection of the Indian peoples. In some tribes intermarriage was not a factor. The military subjection in particular cases may or may not have been hastened by inter For our purposes it makes no difference since the vast numbers of white men, the superior technology, and the destruction of the food supply made

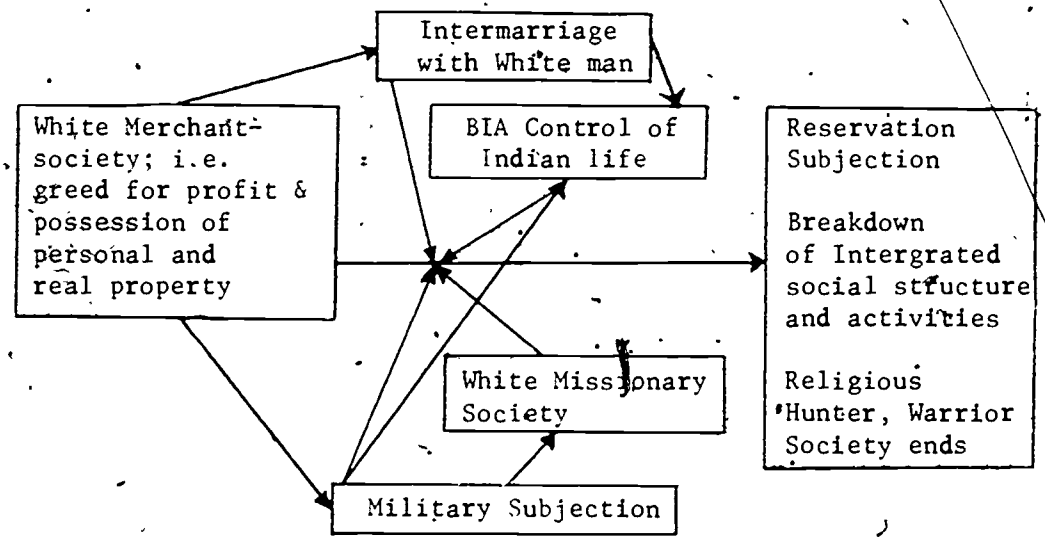

Figure 1.

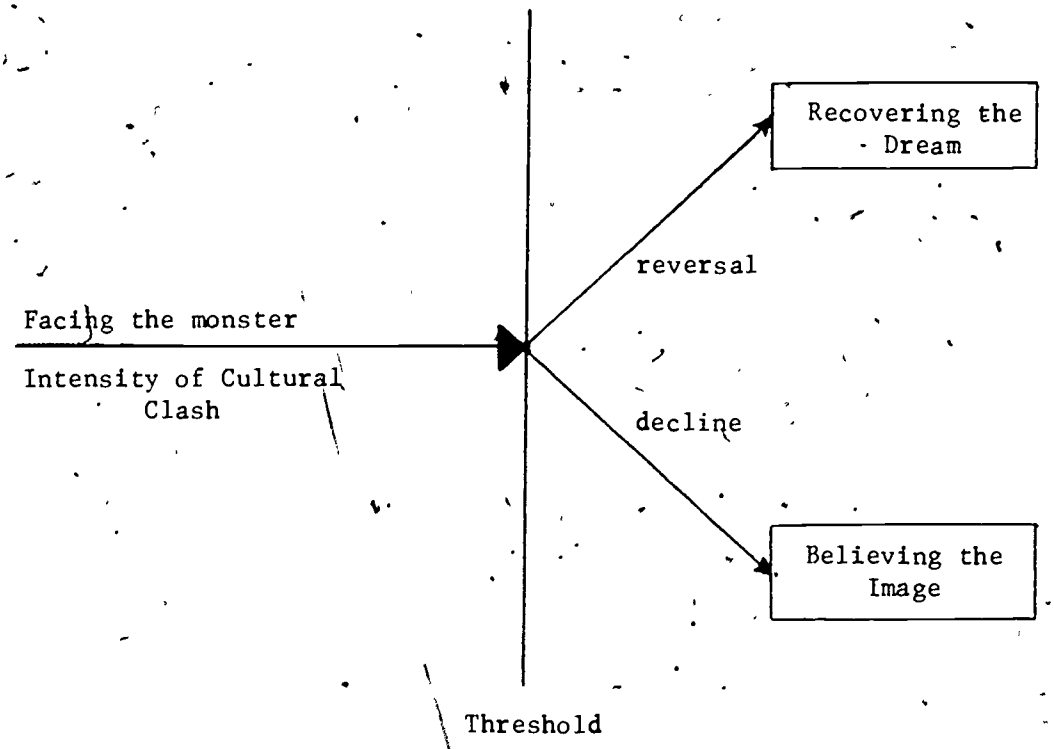

Figure 2.

subjection only a matter of time.

The combination then of all the forces listed and most directly the BIA Control of Indian life together with the coming of the missionaries combined to bring about a break-down in the Indian social structure. Following the creation of the reservations the factors and influences listed below combined to destroy the traditional tribal structures. The new reservation setting with the traditional position of the chief now filled by a government official responsible ultimately to the civil service produced startling adjustments in the modes of survival of the Indian people. The government Agent began to exercise the politics of division creating schisms in the people's concept of themselves and hastening the destruction of the traditional modes of tribal authority. The new rules of survival required submission to the Bureaucracy. Food came only by way of distribution from the Agency; food was the means of survival. The Traditional leaders who had attained formerly their leadership roles by self-discipline and demonstrations of special ability were replaced by those Indians who played the game of BIA manipulation for survival and personal gain. Not only did this process act to give power over the community to the BIA Agent and his functionaries, but it produced deep divisions in the tribes. The same processes are found in contemporary tribal governmental relations.

The presence of the BIA, the competition for commodities, the divisions in the community resulting from changing patterns of authority along with the rising incidence of alcohol consumption, resulted also in the breakdown of the traditional judicial systems. Re-

ligious and charismatic judges in the traditional society understood law as requiring reconciliation as well as retribution. The new reservation type of judge was neither religious nor charismatic, rather he was the type who could play the game of the politics of survival. Thus the new rules produced legal-rational judicial systems practicing the judgement of retribution to the state. Civil cases in this new form of Tribal Court were almost non-existent. Further these Indian Courts could only handle misdemeanors.

Probably one of the most important considerations for present day tribal governments is how to hold together tribal ownership of the little land that is left to them. The Allotment Act and its administration by the BIA, dealt as severe a blow to the breakdown of tribal structures as any one of the other causes. The Allotment Act provided for a division of the reservation land base and distribution to individual Indians. This division not only provided the mechanics for white individuals to acquire Indian land piecemeal but it also laid the seeds for economic divisions between Indians.

On the one hand Indians who managed to get into the cattle business had to lease land from other Indians who had neither the capital nor the business skills to become ranchers. On the other hand white-ranchers and farmers who had access to capital denied to Indian ranchers were able to advance money to land owners thus convincing them that it was better to lease from a whiteman than a fellow Indian. Individual ownership of property held in equal legal status with tribal ownership of property served to put individual landowners in opposition to the tribe when land policies were made. The concept of the tribe evolved from its original meaning of "all the

people" to mean only the formal governing body of the reservation. Thus the "Mechanical Solidarity" of the people was further disintegrated with nothing to replace it.

The religious structures of the traditional societies began to receive less importance in the community as religious communities set up schools and churches through out reservation lands. The influence of traditional religious authority in the person of holy-men and their capacity as mediators between the great spirit and man was replaced by the influence of the missionaries. This change had a further debilitating effect upon most tribes. The old religious systems required a submission to individual sacrifice and discipline for the good of the people as a whole. Not only was there community ceremony, there was individual committment and discipline. Traditional religion served both a community and personal social development function.

The missionaries failed to replace the Indian holy-men with men who could match their charisma and did not provide a structure for individual self-discipline which allowed for integral human development. Still less did they succeed in developing native clergy. The real impact of the missionaries was that of making the Indian people less religious ineffect undermining the potential of whatever institutions they might eventually have.

In an effort to "tame" the Indian, the United States Government invited missionary sects to set up schools and provided them with a percentage of government money to run the schools. Although many Indian students attended these schools until the last decade, those students who were able to survive in the church schools were Indians of mixed ancestry who didn't feel the full weight of the clash of

cultures as did the full-bloods.

Although the Missionaries came to the Indian country bearing the sign of Christ, their major message was the efficacy of the western European value system. Perhaps an accidental by-product of the missionary failure to produce assimilated Indians, was the degree to which they contributed to the survival of the traditional Indian who after dropping out of school in the first few grades faded into the outlying areas of the reservations and quitely practiced the traditional forms of worship.

Reservation existence soon featured poor food, poor shelter, high incidence of alcoholism, frequent exposure to cold, and lack of reasonable sanitation facilities. All of which combined to contribute to an excessively high incidence of tuberculosis. Tuberculosis, new diseases brought by the whites and other health problems contributed to the replacement of the traditional healer, the medicine man, by the white BIA doctor, and eventually the PHS doctor.

Missionary schools could not handle all the Indian students. Federal boarding schools were set up which moved Indian children from their homes to distant locations sometimes far across the nation. A number of government schools the Indian school in Rapid City, South Dakota, for example, were run by the military. Such schools were to some extent more successful than the church schools if we judge their success by the stability of the individuals who spent time there. The military schools extended the military system of authority to the students thus allowing them to exercise judgement and authority in their relationships with their fellow students.

11

On the other hand, the schools administered by the BIA and the Missionaries produced very few graduates, nor did they allow for any degree of self-discipline and growth through responsibility. The long periods of attendance acted to deprive the child of the atmosphere for personal growth and integration that traditional family and religious upbringing provided, nor did the boarding schools replace this process with a suitable substitute. Moreover students came away from such schools convinced that it was a shameful thing to speak their native language, convinced that Indians were inferior to white men, and that there was no future for anyone on the reservations. In spite of having accepted negative prejudices about themselves, the Indian students could not cease being Indians and thus the underlying cultural values still ruled social conduct.

The Indian was neither able to assimilate to the whiteman's ways, nor was he able to reconcile his predominately community orientation and his family oriented gut feelings with the ideologies taught to him in the Boarding and Mission schools. The result was and continues to be personal and community disintegration, a high degree of alcoholism, and finally the most recent phenomenon among young Indian people, a high incidence of suicide.

Although other factors or elements contribute to the breakdown, I feel that those listed above are of maximum importance. I have not mentioned the effort to move Indians off their reservations by the Federal Government during the 1950s and 1960s. The relocation program produced the Urban-Indian, his roots on the reservation, his body in an urban community, carrying with him all the problems

resulting from having been born on the reservation, being haunted by his memories of this existence, finding new problems as he experienced poverty in an urban setting. This policy has come back to haunt the BIA in the form of the American Indian Movement which had its origins in the urban areas but which has gravitated back to the reservations and is giving rise to a growing reservation-militancy.

IV. The Reversal: The Re-Generation of Internal Forces

There is no more powerful statement expressing the depth of shock and dismay of the people during the final moment of military subjection and reservation confinement than that of Black Elk, the Oglala Lakota, holy-man.

> ....there were many, many soldiers. They stood in two lines with their guns held in front of them as we went through to where we camped.
>
> And so it was all over.
>
> I did not know then how much was ended. When I look back now from this hill of my old age, I can still see the butchered women and children lying heaped and scattered all along the crooked gulch as plain as when I saw them with eyes still young. And I can see that something else died there in the bloody mud, and was buried in the blizzard. A people's dream died there. It was a beautiful dream.
>
> And I, to whom so great a vision was given in my youth, you see me now a pitiful old man who has done nothing, for the nation's hoop is broken and scattered. There is no center any longer, and the sacred tree is dead. 12

To say that the nation's hoop is broken and scattered, that there is no center any longer, and that the sacred tree is dead is to summarize in three short phrases every crucial element that served to create a mechanics of solidarity in Indian society. But Black Elk was not without hope. He prayed:

> It may be that some little root of the sacred tree still lives.

> Nourish it then, that it may leaf and bloom and fill with singing birds. Hear me, not for myself, but for my people; I am old. Hear me that they may once more go back into the sacred hoop and find the good red road, the shielding tree! 13

I have quoted Black Elk at length for two reasons. First because I believe that these passages give an indication of the Lakota societies' prevading psychological mood at the time of subjection. (Other tribes shared similar experiences). Because this mood is prevading, extends through the whole society, and becomes sociologically relevant. It speaks of the integration of social behavior felt with varying intensity through the passage of time and by each new generation. The second reason is that it speaks of another principle which by each is relevant to education and that is a community's "dream." If a people's dream seemed to die with Black Elk's generation yet Black Elk hoped the dream would live in generations to come. Whatever can be said about the great "American Dream," which I might have titled the input of the causal graph in, figure 1, it did not become the dream of the Indian people. Though it contributed to the breakdown and decline of the old structures, it also set the stage for a dialectical reversal. A discussion of this reversal poses problems more complex than the discussion of decline. I hope nevertheless to touch upon developments which are most important to the regeneration of internal forces giving direction and meaning to Indian society.

As the laws of average would lead an attentive scholar to predict, a small percentage of Indians attended college, to a greater or lesser extent survived the attendent traumas, a graduated. The alternatives which they had to face as Indians were not at all clear. To the people of my generation who attended high school in

the early fifties and college in the late fifties, only one option was held out to us by the educators. We were told that there was nothing for us on the reservation. A college degree, and the possibility for a good job, any job, any where but on the reservation, was held out to us as the ultimate good. Among those who blindly accepted this option to pass into the world of the white man, there have been a significant number of drop outs. What was asked of us was to pass into the world of the white man, deny our underlying repulsion at the operative mechanics which rule his world, master the rules as he plays them and in spite of ourselves, subscribe to his standards, participate in his institutions, and in effect become a white man. Such a choice would insure that our children or our children's children would have totally assimilated.

We might define a threshold, a breaking point, beyond which the pressures of cultural clash upon the individual Indian force him to drop out. He then must become what his is, an Indian. It is at this point that self-image becomes an operative principle in determining social conduct. It is important to recognize that the subjects of the discussion are those Indians who are facing the monster (the dream of white America) head on. Whether they face this monster in the BIA, mission, or public school classrooms, the urban setting, or in higher educational institutions, eventually they have to face it. Some Indians are able to avoid this confrontation. They know very well who they are. They are Indian. They never have to ask themselves what it is to be an Indian, they simply are. Black Elk was such an Indian. The holy-men of today are such. The rest of us as we are pushed beyond the threshold, experience

either further decline, or radical reversal. (figure 2)

In the past those who were able to stay in the white man's society either had a higher threshold or else were in a profession or geographical location that rendered them neutral to this clash of cultures. The Indian dropouts, professional and non-professional, in this clash of values came to admit that they were, indeed, different than white men. They were forced to ask themselves why they were repulsed at the white man's ways even after learning the skills that enabled them to compete with him on a professional basis. The questions arose: "What does it mean to be an Indian?", "Who am I?", "Who are we?" Such questions are the beginning of the option for truly Indian survival, life without assimilation. From these questions emerged an ideology which passes beyond the narrow confines of the "American Dream" and recovers the possibility of an "Indian Dream."

While the Indian dropouts of the last two decades pondered the meaning of their existence, new developments were taking place which served to alter somewhat irreversibly the skills of the Indian communities to deal with the Federal Government. The establishment of the Office of Economic Opportunity by the Economic Opportunity Act of 1964 was a milestone for Indian people. O.E.O. in its short existence did more for the development of the Indian people than did the BIA in all its years of existence. The success of O.E.O. was an accidental result of government programs and not part of the Federal Government's Indian policy. O.E.O. really had nothing to do with Indians in the ideological sense. It was initially a tool of the Great Society to wage a war on poverty.

While the O.E.O. structure was being designed, the BIA fought jealously to obtain jurisdiction over the administration of any monies that might go to Indians from this agency. The BIA did not prevail and an Indian desk was established in the Washington O.E.O. Office to administer poverty programs specifically designed for Indian people. The results of the poverty programs on reservations were astounding, less because they were effective in themselves, but rather because of their institutional structure. For the first time tribal governments were able to hire their own people, design their own programs, administer their own programs and be held fiscally responsible for the expenditures of reasonably large amounts of money.

The Indian desk of the O.E.O., with a small staff, was able to effect the development of tribal human resources in a more effective manner than the 16,000 bureaucrats of the BIA. For the first time since pre-reservation days a structure, the Community Action Program, was established within tribal governments which allowed for the development of professional skills by tribal members regardless of previous economic or educational backgrounds. At the same time this structure allowed Indian college graduates to return to their reservations in some meaningful role in the ongoing life of the community. Because of the nature of the Community Action programs Indian administrators had to learn the arts of grantsmanship and congressional and Agency lobbying. And although gains were realized in upgrading the administrative skills of Indian individuals, they were often lost in the new intensity which the O.E.O. programs brought to tribal politics.

The position of CAP director came to be more powerful in many cases than that of Tribal Chairman. Sometimes the CAP director replaced the tribal chairman as the most damned person on the reservations. No matter how successful the CAP director was in bringing monies to the reservation he could only relate to a small number of people.[14] For every person he was able to hire in a CAP program, he couldn't hire the sixty or seventy persons who had also applied for the job. It was inevitable that Tribal administrations, under the same pressure as other governmental entities to provide employment opportunities for their constituents, would begin to see the BIA with its massive funding and many jobs as an area to be exploited by Indians. As an indication of the extent of the prize we might consider the Navajo Area Office of the BIA which serves the Navajo Nation.

This Area Office has 4,821 BIA employees together with 472 part-time and temporary employees. There are 133,487 members of the Navajo Tribe.[15] It is only reasonable for a tribal government to want to control this office which is the largest single agency of employment on the reservation. The lesson learned from the O.E.O. experience, local control of institutions, provided a rationale for demanding and planning for eventual Indian control of all institutions relating to Indian communities. Inability to achieve immediate exercise of this control began to build uncontrollable frustrations everywhere.

No matter what perspective we use to consider the Indian community there will necessarily be Federal legislation as a relevant factor in determining the limits of the situation. The first major

piece of social legislation affecting Indian communities was the civilization fund created for the purpose of civilizing the Indians on the pre-Mississippi frontier. The second was the Snyder Act of 1921 which authorized program services to Indian people by the BIA and which remains the law authorizing financial support for the BIA school system. The third crucial law was the Johnson-O'Malley Act of 1934 which authorized the Secretary of the Interior to make contracts with any state and other non-profit agency for the education, medical attention, agricultural assistance and welfare of Indians.

The JOM Act became the Federal Government's mechanism to induce states to take an interest in educating Indians. This law soon made it attractive to state and local public school systems to have high Indian enrollment. They got paid to provide a seat in the classrooms for Indians. They gave nothing more. In the 1950s big money became available to states and local school systems through Public Laws 874 (Impact Aid to Federally-connected Children) and 815 (Public School Construction) which provided general operating resources to public school districts enrolling children whose parents either lived or worked on Federal property. By later amendment these two laws made eligible those districts that enrolled Indian children living on Federal reservations.

None of the above laws gave any hint that the Federal Government might consider Indian people capable of running their own schools. Again by accident and not because the Federal Government was trying to solve Indian Educational problems, two major pieces of general education legislation were passed which came to have a tremendous impact on the Indian community. These laws were the

Elementary and Secondary Education Act of 1965 (ESEA), particularly Titles I (Compensatory Education) and VII (Bilingual Education) and the Education Progressions Development Act which featured teacher training programs such as Teacher Corps.

Because programs funded under Titles I and VII of ESEA were used in many instances to bring Indian adults into the classroom to work with Indian children, Indian philosophy, values and eventually curriculum became a part of the educational experience. In addition, cultural and linguistic materials were legitimized in the school systems. This development proved to be an important turning point in the history of Indian education.

Previous educational programs of the Federal Government had been designed to snuff out Indian culture with the implementation of ESEA programs even the academic community had to acknowledge that cultural concepts and values were a crucial if not essential factor in the education of Indian children. Academic resistance began to stiffen and scholars began to view the goal of Education as one of transforming these concepts and values from one cultural system to another.[17]

The Teacher Corps Program was also an important development. It allowed for a practical examination of the education system by offering a mechanism for Indian dropouts to complete their undergraduate work as well as pursue graduate degrees while gaining valuable experience in the classroom. The educational system had to respond to both students and teachers undergoing a learning process.

In addition to these developments, higher education grants to

Indian students during the 1960s showed continuing increases and made it possible for large numbers of Indians to attend universities and colleges. A report by the BIA Indian Education Resources Center dated June 15, 1973 showed some 13,000 Indian students participating in the BIA grant program.[18] In varying degrees these students were facing cultural clashes and in many instances returning home with almost imperialistic designs on the educational institutions that existed at the local level.

Summary: Reversal

New ideologies were born by Indians rejecting the assimilation theory. The tribal governments, and most importantly the local communities, experienced some measure of self-determination and control through the Community Action programs from O.E.O. New developments in educational programs contributed to the understanding by educators and the academic community that Indian cultural values were still operative. Also, Indian students found new resources and aids to help them progress toward degrees. All of the above set the stage for the re-generation of internal forces in the Indian communities.

V. Radical Change In Federal Government Policy

Indian Education became a national concern in the mid-60's. Senator Robert Kennedy voiced this concern in a speech in 1967 asked: "Can we not decentralize the administration of our schools, offering parents a voice in the policy of the institutions which are supposed to educate their children?" A year later in 1968 he became the

Chairman of the Special Senate Subcommittee on Indian Education of the parent Senate Committee on Labor and Public Welfare. Following his assasination the Subcommittee was chaired by his brother Senator Ted Kennedy. After two years of investigation of problems faced by Indians in the field of education the Subcommittee in November of 1969 labeled Indian Education as a tragedy and a disgrace. Its final report stated:

"I. The dominant policy of the Federal Government towards the American Indian has been one of coercive assimilation.

A. The policy has resulted in the destruction and disorganization of Indian communities and individuals.

B. A desperately severe and self-perpetuating cycle of poverty for most Indians...

III. The Coercive assimilation policy has had disastrous effects on the eeucation of Indian children. It has resulted in:

A. The classroom and the school becoming a kind of battleground where the Indian child attempts to protect his integrity and identity as an individual by defeating the purposes of the school.

B. Schools which fail to understand or adapt to, and in fact often denigrate, cultural differences...

C. Schools which fail to recognize the importance and validity of the Indian community...

D. A dismal record of absenteeism, dropouts, negative self-image, low achievement, and, ultimately, academic failure for many Indian children...

IV. The coercive assimilation policy has two primary historical roots:

A. A continuous desire to exploit, and expropriate, Indian lands and physical resources.

B. A self-righteous intolerance of tribal communities and cultural differences:"[19]

The cumulative effect of this concern and the knowledge of conditions highlighted in the Senate report resulted in a law signed

by the President on June 23, 1972, Title IV, PL 92-318, which was called the Indian Education Act. One of the most important elements in the new law was a provision for mandatory Indian community involvement. But perhaps more important the law also allows for 5% of the funds appropriated under Part A of the Act to go to non-local educational agencies operating schools, i.e. private Indian-controlled community schools. It was probably the recognition of the importance of this provision of the law that united a number of national Indian organizations in a major effort to move Congress to appropriate funds for this Act and to force the Administration to expend the funds once they were appropriated.

On July 7, 1970, President Nixon in a historic Policy Statement regarding Indian Education stated:

> Consistant with our policy that the Indian community should have the right to take over the control and operation of Federally funded programs, we believe every Indian Community wishing to do so should be able to control its own schools.[20]

Most recently in his message to the National Congress of American Indians meeting on October 9, 1973, in Tulsa, President Nixon stated:

> I have just signed the Department of Interior Appropriations Act for Fiscal 1974. It contains funds for the activities of the Bureau of Indian Affairs totally $561.1 million. This figure is a 22% increase over five years ago and represents just one of this Administrations efforts to launch a new era of progress for the First Americans . . .
> I am striving for Indian self-determination without termination and for close consultation with responsible Indian representatives on matters which effect the Indian future.[21]

In view of these statements by the present administration it would appear that Indians have never been in a better position for development. Yet the appearance is far from reality. Perhaps what is important is that policy statements have been made by both

Congress and the President. But an operative mechanism still does not exist that will allow the implementation of these policies.

VI. The Coalition of Indian Controlled School Boards

Two years ago, in October of 1971, seven representatives from four Indian schools met in Boulder, Colorado, to discuss the feasibility of, and to develop a strategy for, creating a coalition of Indian schools concerned with educational reform. The immediate issue that sparked the meeting concerned funding for three locally controlled Indian schools: Wind River Indian High School in Wyoming, Busby School in Montana, and the Loneman School on the Pine Ridge Reservation in South Dakota. Even though the President, the Secretary of the Interior and the Commissioner of Indian Affairs had all vigorously endorsed Indian control of Indian education, the bureaucracies under them had successfully blocked all efforts to turn over control of education to local Indians.

The BIA had been stalling for months rather than producing the money needed to ensure Indian control of these projects. The group at Boulder decided to ask representatives of Indian controlled school boards across the country to travel together to Washington to see what could be done about making the BIA fulfill the administration promises. Members of seven Indian controlled school boards from New Mexico to Wisconsin, with the support of at least three other boards, made the trip in late October of 1971. Through a series of meetings with officials of the BIA and Department of the Interior, as well as with Senators, Congressmen and the press, they were able to secure contracts for the Wind River and Busby schools

for the local people.

The Loneman question was post poned because of the Aberdeen Area Director's involvement in Oglala Sioux Tribal politics.

Because of the group's success in Washington and the need for continued liaison between Indian controlled school boards, the members of the Washington delegation decided to make their organization permanent. It was the first time Indians from local communities had banded together on a national basis to confront the fundamental questions in the field of Indian education. In December of 1971 the same group formally organized the Coalition of Indian Controlled School Boards with the following major objectives:

1. The assertion and defense of the rights of American Indians to self-determination with respect to the education of their children.

2. To provide the necessary legal, technical and community development assistance to Indian groups as they create their own school boards, organizations, education committees and schools.

3. To make locally-controlled Indian schools land organizations self-sufficient by training people in each community to organize and negotiate independently and directly with local, state and Federal agencies as well as State legislatures and Congress.22

In the past two years the Coalition has grown from its initial four schools to ninety-five member schools and organizations. It has been very active in coordinating national efforts and in working with other Indian organizations to put pressure on the Administration to get it to implement the Indian Education Act. The Coalition has played a key role in the current movement for self-determination in Indian Education. Its most unique aspect is that the board members while themselves from local communities are able to provide technical assistance to other local Indian communities. Thus a bond of unity has been built up between people of diverse tribal backgrounds

through aiding one another in the interchange of experience and ideas.

VII. The Theory Reviewed

It would be useful at this time to pull together the important considerations presented thus far. In discussing the elements of breakdown as well as the factors present in the generation of the beginnings of reversal the interaction of the fact of cultural clash and its attendant results remaining the prime factor in the contemporary educational process. The Senate Report of Indian Education acknowledges even more forcefully this notion when it uses the term "coercive assimilation." It is unnecessary, therefore, to defend this thesis. It leads directly to the most important element of education in the future -- Indian control. By definition self-determination is identical with development, if true self-determination is operative. What remains to be shown is that local control of schools is the key to total development if total development means concurrent development of human resources with institutional development. The question of causality becomes one of mutual causality: people are necessary for the development of institutions and institutions contribute to the development of the people.

In reviewing the theory of the threshold of fig. 2 page 8, it would be fallacious to conclude that we can and should push each child beyond the threshold hoping for "radical reversal." The theory shows the dialectic of "reversal" experienced by contemporary Indian leaders and that resulted in the development of new ideologies or "Indian dreams." The dialectic creates a process which

produces theorists who begin to articulate the goals of a social movement. Social changes idologies are rarely indentical, nor are the methods for achieving social change, yet contemporary American domestic movements are identical in the one respect of rejecting assimilation.

The theory of the threshold implies that children not be deliberately pushed beyond the threshold. By contrast it implies that the school should become a place of personal growth if the local community concerns itself with adapting the institutions to the conceptual and cultural base of the students and by extension itself. Although not explicit the implication that personal growth in such a setting will prepare the students to cope with the white world remains a constant factor. With a cultural base firmly fixed in his formative years the students should be able to proceed through vocational or higher academic education and be prepared to intergrate without assimilation if they so choose.

The conclusions about our contemporary movement to gain control of local educational institutions to be drawn from consideration of the image of the threshold are: 1) Dialectical reversal and the recovery of the "Dream" has already begun; Indian theorists and political activists are intensely involved in the current Indian social movement. 2) Indian children in government and public schools today are being pushed beyond the threshold. 3) The process of decline has produced unstable home environments which further compound the childs response to cultural conflict. 4) The environment of the classroom must be changed to reduce the intensity of cultural conflict and a mechanism of recovery must be instituted at the

community level.

A community controlled school wherein the community becomes the center for local involvement could serve both of these functions. Involvement by its very nature is therapeutic, it gives some meaning to existence. Involvement in a movement to recover cultural values in an Indian community likewise leads to recovery of the religious values. The religious values of Indian culture provide the key to social intercourse and solidarity.

VII. Tribal Control vs. Community Control

Throughout this paper we have discussed Indian community schools. For many tribes there would be no distinction between tribal and community schools. For the large tribes however this is an important distinction. Although the Coalition makes no distinction in so far as membership is concerned, the theory which they propose centers upon community control. There is no reason why tribal control should not also include community control. What is necessary is a tribal educational code, a resolution, or a chartering mechanism which would allow for local communities to become Tribal Educational Agencies. The tribes could then be a regulating agency in the sense that State Educational Agencies are to Local Educational Agencies.

In this sense the central tribal government would not interfer with the local community decision-making process but simply insure that there be no overt violations of financial or other regulations that are deemed necessary. This would in fact contribute to a solution of the structural problems of many Indian controlled schools on reservations. In some instances contract schools already have

chartered non-profit institutions with the state governments for tax exempt purposes. But a conflict soon develops between tribal control and community control when the tribal government perceives the control of education as a tribal political threat.

Such is the case on the Pine Ridge Reservation and to a great extent contributed to the support by district people for the occupation of Wounded Knee. Chairman Wilson systematically began to withdraw all community controlled projects. Included was a bilingual project in the White Clay District, the home district of one of Wilson's chief political rivals, Gerald One Feather. The Coalition of Indian Controlled School Boards supported Oyate, Inc. the local organization which is a Coalition member. Oyate, Inc. is an Indian State Chartered Education corporation set up to receive funds from the Office of Education via the BIA for the purpose of developing and administering a bilingual program for Loneman school. Without considering this dispute in detail, it will suffice to say that through ethically questionable means, the Tribal Chairman and the Aberdeen BIA Area Director conspired to take the contract away from the local community group, then replaced the original staff and in the process destroyed the program.

The BIA rationalized that it would be a weakening of tribal sovereignty if the wishes of the local community prevailed over the wishes of the tribal government. Oyate, and the Coalition acknowledged the argument of the BIA and suggested the compromise described above which included acknowledgement of both tribal sovereignty as well as community control.

The lesson to be learned from the Oyate experience is that

unless tribes have an Educational Code which frees education from the current tribal level political process, the educational process will suffer. Local control is not a threat to tribal government, in fact it strengthens tribal government, through strengthening local units of that government.

In the effort to develop new and comprehensive legislation for the finance of Indian community controlled schools, a section be included requiring tribes to establish non-political Tribal Educational Codes, or chartering mechanisms.

IX. Community Preparation

There will be no significant takeover problems on the part of Indian communities if technical assistance is provided. Indian communities for the most part have had a taste of local control through O.E.O. experience. The one requirement that is absolutely essential is that the community actually wants to take control. The BIA has declared that they will turn over control when an Indian community wants such control, yet they subtly generate fears in the community to prevent that desire from manifesting itself. When it is obvious that a desire for local control exists the BIA has generated Tribal Council political opposition. If this fails, that is, when Tribal Council endorses the desires of the community, the BIA thwarts local control by saying that they have no money in the budget for Contract schools. The experience of the Coalition has demonstrated that every Indian community has more than sufficient human resources to successfully run a community controlled school. Once the desire is expressed a minimum amount of technical assistance is

all that is required to get the project moving.

The major concern of legislatures or funding agencies should be that sufficient resources are allocated to provide technical assistance to the newly constituted community schools. Such technical assistance should be provided by Indian Technical Assistance Agencies such as the Coalition of Indian Controlled School Boards, the National Indian Educational Association, Indian Community Colleges, Tribal Educational Departments, or other appropriate Indian institutions. The mechanics of budget preparation, school planning, contract negotiations, staff selection, program development, etc., are not a problem once the initial experience is gained.

The community educational aspect of these decision making processes are of great value to the total community's perception of its own worth. Only fear of the unknown, fear of failure, prevents a local Indian community from manifesting its desire to control its own affairs. The most effective way to remove this fear is to have a board member from an Indian controlled school which is operational visit the community and talk about his school, the problems that the board faced and how they solved them, and describe his fellow board members. When Indian community members see people no different than themselves running a school, the fear vanishes.

X. The Social Change Process

The chart on the following page summarizes the discussion of community control. I have designated it as a process chart although it does indicate some causal influences. It reflects the experience of the politically active Indian community concerned with Indian

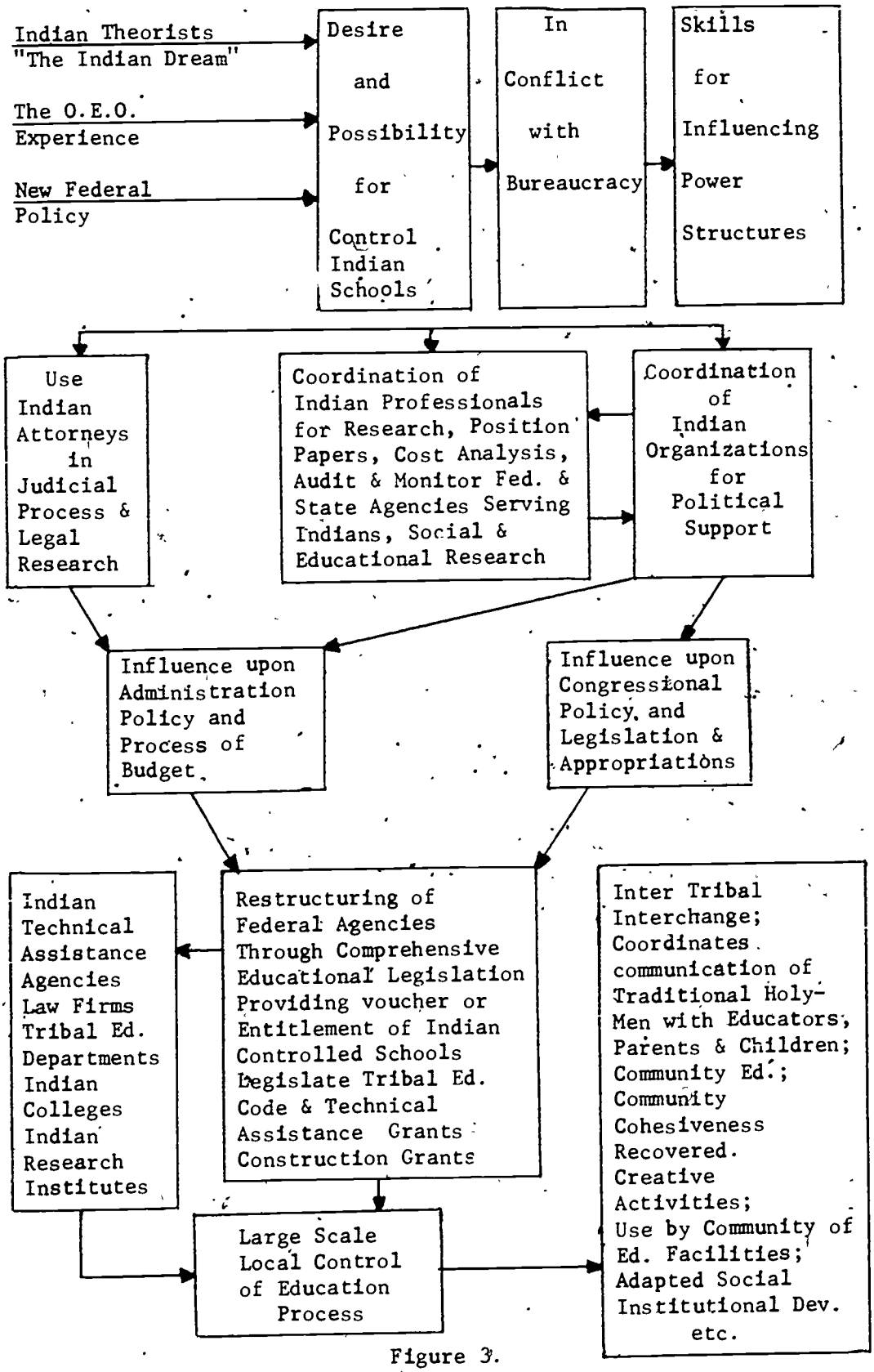
Indian Theorists "The Indian Dream"
The O.E.O. Experience
New Federal Policy
Desire and Possibility for Control Indian Schools
In Conflict with Bureaucracy
Skills for Influencing Power Structures
Use Indian Attorneys in Judicial Process & Legal Research
Coordination of Indian Professionals for Research, Position Papers, Cost Analysis, Audit & Monitor Fed. & State Agencies Serving Indians, Social & Educational Research
Coordination of Indian Organizations for Political Support
Influence upon Administration Policy and Process of Budget
Influence upon Congressional Policy, and Legislation & Appropriations
Indian Technical Assistance Agencies Law Firms Tribal Ed. Departments Indian Colleges Indian Research Institutes
Restructuring of Federal Agencies Through Comprehensive Educational Legislation Providing voucher or Entitlement of Indian Controlled Schools Legislate Tribal Ed. Code & Technical Assistance Grants Construction Grants
Inter Tribal Interchange; Coordinates communication of Traditional Holy-Men with Educators, Parents & Children; Community Ed.; Community Cohesiveness Recovered. Creative Activities; Use by Community of Ed. Facilities; Adapted Social Institutional Dev. etc.
Large Scale Local Control of Education Process

Figure 3.

control of educational institutions for Indians. This process is ongoing. Presently we are well above the dotted line on the chart. It remains to be seen whether Indian organizations will continue to work together to effect the needed change in legislation.

XI. Conclusion

Local control of education provides the most effective point of departure for restructuring of the Indian society from within. The profound changes of the past, the trauma of present cultural domination by white America wrought in the various tribal societies, and the forces of economic and political disorientation in the contemporary world make it impossible to return completely to the old tribal structures. Yet new structures are adaptations of the Old can be developed that fit the underlying world view of the people. Unless the development of the new structures is real, that is, is dominated by the Indian people, they cannot be functional.

The theory of local control of education as the key to the development of the Indian people has a major point in its favor: immediacy of contact and relationship with young and old, with parent and child. It also provides a structure for the Indian professional to root himself once again in his own environment and to explore in depth the wisdom of the tribal perspectives while using all the techniques of modern science. It provides the people in a local community with a focal point for community interchange, a focal point for cultural expansion in areas in which Indians excell but have never fully developed.

Indian people are among the most talented people in the world,

yet they have no forum for creativity. In the traditional societies every person was able to find a productive role which allowed him to develop his full potential as a human being. Today we are left with a society in which the Indian person cannot find a meaningful, productive, or creative role. Indian people must come together in such a way that they make decisions for themselves and draw on their own store of human resources. Local control of education provides one such mechanism or forum for creativity. It provides both employment at the local leval and the control of millions of dollars which could be used both as a lever to influence financial institutions to provide capital for Indian development and as prime tools for developing Indian controlled financial institutions.

Because local control of education is the most effective tool for the strengthening of communities it is also the most effective tool to bring about real change in tribal government, hence, self-government. If tribal governments build up community decision-making and control of resources this will serve to strengthen tribal government by opening up new options. The dangers of Indian sovereignty lie primarily in political conflict when the BIA and Tribal Councils attempt to politicize educational institutions thus forcing local communities to seek to establish themselves as state educational agencies or local educational agencies which are subdivisions of the states. To the extent that such agencies are subsequently dominated by state functionaries and state legislatures, tribal sovereignty is weakened.

The answer to this problem is not for tribes to oppose local

control, but rather to provide mechanisms within the tribal structures to allow for local control. The momentum within the Indian community is toward self-determination, but it cannot be and is not realized only at a tribal council level. The tribal president can no more be an absolute sovereign in tribal society than President Nixon can be in American society. Yet it remains for the political activists to discipline themselves to seek local control of education within the context of tribal structures, or to force the development of new forms of tribal government. If the practitioners of local control of Education root their political activities in the sound principle of Federal responsibility for Indian education through treaties and agreements, then even though they are forced to begin by using the mechanism of Indian controlled "contract schools," local educational agencies, or private schools, they can move the Federal government toward comprehensive legislation that will provide adequate financing and a national administrative agency or agencies that will allow for local control within the context of tribal sovereignty.

Footnotes

1. Statement, Birgil L. Kills Straingt & Abe Plummer, Coalition of Indian Controlled School Boards, Before Senate Subcommittee on Education Committee on Labor and Public Welfare, Oct. 31, 1973, on S.2852 & S.2853, p.1
2. cf. Martin Buber, I and Thou, Charles Scribner's Sons, N.Y. 1937, 1957
3. cf. Neihardt, John G., Black Elk Speaks, University of Nebraska Press, 1961, p. 43, "And while I stood there I saw more than I can tell and I understood more than I saw; for I was seeing in a sacred manner the shapes of all things in the spirit, and the shape of all shapes as they must live together like one being." This is the high point in Black Elks great vision when he is taken to the "center of the world." This passage gives a hint as to this way of knowing. It would be useful to contrast the spacial perspective of the Lakota and other Indian tribes, to the straight line perspective of Europeans. Black Elk is concerned with orientation and relation to the Earth, the Sky, the West, the North, the East, South. European man with his horizontal linear perspective sees only one dimension, from cause to effect, from beginning to end. The Lakota sought to stand in the "Center," he was not the center himself, nor did he have any illusions of his being the center as did Europeans, rather to stand in the center was to stand in relation to all that existed, and in particular to all that was important for the life of the people. The formula for knowledge then is not to seek the answer to the question; what causes this? It is rather to be immersed in attentivness at the center, in lived relationship which provides existential knowledge of all that comes within the sphere. It is not important to know why the bird flies south. It is important to know the bird and its relationship to all that is in time and space. The where and the when of the bird and its life giving power for the people are the things that matter. The where and the when of the Lakota and the direction he walks for the people are what matter.
4. Education Journal, Institute for the Development of Indian Law, Washington, D.C., Vol. 1, No. 8, p. 7.
5. Statement, Kills Straingt, Ibid.
6. Statements, Kills Straingt, Coalition of Indian Controlled School Boards, On BIA Realignment, Senate Subcommittee on Indian Affairs, Committee on Interior and Insular Affairs, Sept. 1973.
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10. 1970 Census, Subject Reports, American Indians, U.S. Government Printing Office, Washington, D.C., 1973, p.25.
11. Shelby, Lynn, Ed., "A Portrait of Indian Education in the 70's", (An unpublished Draft of the Institute for the Development of Indian Law, Washington, D.C., Draft-Oct. 1973) p. 23.
12. Neihardt, Ibid. p.276.
13. Neihardt, Ibid. p.280.
14. This discussion in large part is based upon the two years I spent as CAP Director for the Oglala Sioux Tribe.
15. Coalition's Newspaper, Vol.1, No.L, Oct. 1973, p.7.
16. Shelby, Ibid, pp.208-210.
17. Ibid.
18. "Higher Education Evaluation, Student Characteristics and Opinions", Indian Education Resources Center, Bureau of Indian Affairs, Albuquerque, N.M., 1973, p.3.
19. "Indian Education: A National Tragedy - A National Challenge", Report 91-501 of the Committee on Labor and Public Welfare, U.S. Senate Special Subcommittee on Indian Education, U.S. Government Printing Office, Washington, D.C., 1969, at 24.
20. Coalition's Newspaper, Ibid. p.6.
21. Ibid. p.6.
22. Coalition position paper, in files of Coalition of Indian Controlled School Boards, Denver, Colorado.

A THEORY OF VOCATIONAL-TECHNICAL CAREER EDUCATION

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Career and Vocational-Technical Introduction For American Indians

A fundamental purpose of American education is to prepare citizens to live a productive and rewarding life. The objectives of the students who participate in the nation's system of education are to acquire knowledge and training adequate to enable them to perform competently as citizens of a democratic society, to gain economic skills commensurate with their ability and career planning, to develop cultural understanding commensurate with their ability, desire and real or expected status, and to gain a sufficient knowledge of human relations to enable them better to enjoy, if not improve their life styles. The value of these goals to American Indian children, youth and adults is no less than it is t. other citizens. To pursue these goals fully is an inalienable right of every citizen.

For far too many young First Americans, our school system is currently failing in its essential mission. Adult Indians do not find the adult education and manpower programs provided by the Department of Labor and the BIA programs offered in schools available to them satisfactory to their purposes. Young Indian people, both on and off reservations, who remain in school, either Federal or local, complain that courses are dull and irrelevant, that their education is not opening pathways to a fulfilling adulthood. A substantial number of them score below their grade level in basic academic skills. High dropout rates, absenteeism, academic failure and drug usage signal their discontent.

Individuals, regardless of color or race, who have discontinued their formal education have made a desperate decision. They will find later that, being neither schooled nor skilled makes them unneeded in a dynamic society that responds to the needs of technological changes rather than to individual needs. School systems must recognize these people as a part of their natural population. They require alternative educational approaches which make education meaningful to the learner in his own culture and at his level of understanding. The lack of effective program structures to make life-time learning desirable and available, the lack of adequate publicity supported structures to make post high school training of less than baccalaureate degree available, and the lack of accessibility and availability of non-conceptual skill training for all age groups are prominent educational deficiencies of our world today.

From available information, and based on the experience at

hand, it would appear that the philosophy and design of the education reaching American Indians has been, for the most part, inadequate academically as well as vocationally. The aim and objectives of such strategies are more often unexplained than actively supported with adequate resources by proponents. Considering that governmental agencies have had rather direct control over both the funding of occupational education in its several forms and the education of Indians in public and government schools, one wonders why career and vocational-technical education was not made more fully available to them. It would appear that the concept and program fits well the needs of this group, indeed, even better than for the population at large which was described by Commissioner Marland in the following terms:

> A shockingly high number of unemployed youth are products of the general curriculum and we can expect small improvement until the general curriculum is done away with in favor of a system of high school education with but two exits--continued education and employment--and nothing else.

Statistics revealing the number and percent of unemployed Indians and the number and percent who prematurely discontinue their education suggest that educational needs of virtually all First Americans can be best met through an occupationally oriented education program. The purpose of this paper is to emphasize the need for a career education program of vocational and technical dimension for a group of citizens who have not received the appropriate understanding by governmental agencies. Although there are several definitions and descriptions of such programs, the special needs of Indian groups which can be met by a school based program which has the support of the community and other organizations and

agencies and relates to industry, perhaps Hoyt's definition is best able to guide this effort.

> The total effort of public education and the community aimed at helping individuals to become familiar with the values of a work-oriented society, to integrate these values into their personal value systems, and to implement these values into their lives in such a way that work becomes possible, meaningful and satisfying.

Career and vocational education as presented in this paper is the term applied to a comprehensive education envisioned for American Indian children, youth and adults which focusses upon careers. It begins in the first grade and continues through the adult years with educational activities that blend academic and occupational learning concepts into a unified program. This program then results in preparing people for careers through academic preparation for professions and/or vocational skills for effective employment. Vocational education is a basic part of the concept of career preparation as perceived for the purposes of this paper. Vocational-technical education deals with three broad purposes: to prepare each individual for employment, to help the individual update and upgrade skills and abilities, and to provide training in new occupational areas.

This career and vocational-technical education provides for a highly individualized form of education which accommodates the needs of Indian students and attempts to relate their education to their future life and career. The acquisition of occupational entry level skills is only a part of the objective of the program. Effective education for a career goes beyond occupational skills to enable students to live a productive and gratifying life.

The career and vocational-technical education program

envisioned here contains a pluralistic structure whose desired outcomes necessitate cooperation among all elements of education as well as support from industry and the community. The program must give consideration to the local and current situations in areas in which there is a concentration of Indian population. Emphasis in this program is placed upon school-related activities based upon the belief that the most comprehensive educational activity can be best presented by the school, but the concept does not negate the other units in providing cooperative educative experience opportunities.

An analysis of historical, philosophical, conceptual and theoretical literature offers substantiation that the antecedents of career and vocational-technical education are well founded. For the sake of brevity, reference is made to a limited number of educational philosophers.

John Dewey contributed to the concept in the early twentieth century. He opposed narrow, utilitarian theory or practice of industrial education. In contrast, Dewey contended that the potential for him was to satisfy native tendencies to explore, to manipulate tools and materials and to construct and create. He supported the view that occupation education afforded the learner knowledge of the industrial world and the fundamental processes of economic life that had previously been conveyed to the young through his experiences in the new home and the community. In essence, Dewey believed that industrially oriented education provided workers with the opportunity to learn of the social and cultural background of their vocation as well as the skills involved.

Alfred North Whitehead stated in 1929 in The Aims of Education:

> The anti-thesis between a technical and a liberal education is fallatious. There can be no adequate technical education which is not liberal, and no liberal education which is not technical....Education should turn out the pupil with something he knows well, and something he can do well.

In Slums and Suburbs, James Conant recommended abolishing student classification by labels such as college prepatory, vocational, or commercial. Rather, he recommended that counselors develop individualized programs for every student emphasizing sequences of courses leading to higher education or marketable skills upon graduation. A wide range of vocational and technical courses available to students, including adults, as employment conditions changed was a part of the Conant concept.

When addressing a national conference on the Development of Vocational Education Programs for American Indians, Anthropologist Anne Smith stated:

> Our government tried first to exterminate, then isolate, and finally remake the Indian into a second class Anglo mold. After 350 years of pressure, however, the Indian has still retained much of his cultural identity. The answers to the problem of how to treat the Indian educationally is cultural pluralism. Educators must develop an attitude of respect for and sensitivity to all culture and they must give Indians control of their own educational destinies.

At this significant national conference, the representatives of the BIA conceded the need for a closer relationship in its schools' curriculum between what is taught and what is to be encountered in the world outside of the classroom. It was also reported that programs supported by the Manpower Development and Training Act have been useful, but have experienced problems. At the same

conference, Mel McCutchan of the Affirmative Action Division of Sandia Laboratories suggested that more male Indians should be employed, that MDT training programs should include upward mobility and management, that the changing employment situation should receive greater consideration and job development needs attention if a reasonable employment after training is expected.

Recommendations which resulted from the conference included:

1. The development of specific programs for Indians and that a special component of the program be the recruitment of Indians and the development of jobs.
2. Training and recruitment programs should include recognition of cultural differences.
3. The inservice human relations training of persons who teach Indian students.
4. Increased representation of Indians on boards, committees and councils, increased cooperation between agencies and increased coordination among agencies.

Special Program Considerations

The Education Amendments of 1972 (P.L. 92-318) placed increased emphasis on the cultural contributions of Indians in the further development of Indian education in a number of ways. As laudible as the creation of an Office of Indian Education to be headed by a Deputy Commissioner may be, assurances are needed for lay participation of Indian citizens at the grass-roots level. Although lay participation will include citizens who are appointed by the National Advisory Council on Indian Education, local involvement of parents of Indian children and youth active participation on boards of education and of tribal representatives will be necessary to affect changes in programs at local levels. The amendments go far in requiring Indian participation in the planning, development,

operation and evaluation of programs for First Americans offered in public schools. This involvement should be the beginning of some creative linkages and effective program developments between public schools and Indian groups.

Rural Schools

The roots of American Indians are in rural lands. There have been substantial population movements which have not been to the advantage of the persons moving to the city. The lack of freedom and power to impose ones self upon the environment in positive and purposeful ways has been labeled psychic isolation. Acute, also, are the experiences of those persons who are relocated from reservations and rural areas into large metropolitan centers. Their new situation and requirements are unlike previous experiences which provided standards of behavior embedded in a mix of history, tradition, legend and religion.

The inordinate number of Indians who reside in rural areas suggest that special attention be given to career education arrangements for small schools in rural areas.

Attention is called to efforts conducted by New Mexico State University and Western New Mexico University. Also, Cochise County, Arizona, conducted a program which has reorganized vocational education into clusters, expanded guidance and testing, and provided mobile facilities, work-study activities and the use of computer-assisted information retrieval and decision-making facilities designed:

1. To develop a comprehensive program of occupational

orientation at the elementary and secondary school levels.

2. To provide special career guidance services to disadvantaged American school youth in the schools.
3. To provide a wide range of work experience for students.
4. To provide special classes for students not previously enrolled in vocational education programs.
5. To provide for intensive occupational guidance and counseling to those students leaving school.
6. To provide for local support for the various phases of the project after termination of Federal assistance.

Smaller Urban Areas

Indian relationships to local government and local services seem bewildering and tenuous. In our small cities, the Indian is not popular, he does not draw attention to himself and his needs and interests are not regarded and he becomes an invisible man. His presence may not be noted in census reports. The special needs and interests important to his emotional, physical and economic well being go undetected by city councils; to them he does not exist or constitutes no immediate problem.

The First American becomes the last American to benefit from governmental services when he moves to the alien environment of the city. The promise of urban life may have been great, but the experience for many has been to remain poor in the worst of housing with an existence characterized only by desperation and discrimination.

Residential Career Development Center

In those locations where adequate facilities are available and where concentrations of First Americans are found, a special

residential career development center--Indian developed and Indian managed from Indian families--would be a valuable program component. This type of undertaking permits a wholistic approach to career development. Experience with the Madera and Roswell employment training centers should be realistically evaluated in considering this recommendation. Assuming a positive finding, program dimensions in the residential center should include general education, skill training, family life and community services, health and health services, cultural identification activities, economic development services and provisions for normal community activities. Residential settings permit education in the additional areas of money management, sewing, home care, home planning, food and meal management, consumer education, personal grooming and physical fitness. Further concentration on the family as an institution possible by family unit counseling which permits counselors to coordinate each family member's activities with the entire program.

Should a residential Program be developed, it is recommended that the average amount of time to be spent in a program by a family be one year. Upon completion of the program, employment should be guaranteed and assistance provided for placement in jobs for which program participants were trained. If necessary, assistance in relocating to the place of a new job should be provided in a manner similar to that currently provided by the BIA. Once families are relocated, follow-up should be provided to evaluate the success of the education received and the program in general as well as make known other services which may be useful to the relocated family.

Development and Coordination of Curriculum Laboratory

Plans should be made early in the life of the program to maximize resources for curriculum development and program coordination for this special group to be served. It is presumed that plans have been made for the establishment of a curriculum laboratory in career and vocational education especially for this program as has been developed by the twenty-five or more progressive state departments of education for their occupational education program.

A curriculum laboratory serves several purposes, but a special and overriding aim of the one envisioned here is that of a career development program designed for American Indian students to assure its responsiveness to their unique needs. In addition, a career and vocational curriculum laboratory for First American education should serve the following funetions:

1. The development, diffusion, and dissemination of curriculum
2. The coordination of curriculum effort with developments in educational technology and systems of delivery and administrative
3. The provision for inservice training of educational personnel in adapting to and using career and vocational curriculum materials with First Americans.

These functions should be performed in close liaison with curriculum-related and educational agencies. Such groups and agencies include but are not limited to the Bureau of Indian Affairs and its sub-agencies, State Departments of Education and their sub-agencies (vocational education, career education, teacher education, education for the handicapped, etc.) Division of Adult and Vocational Education (USOE), Department of Labor, etc.

Appropriate consideration should be given to the personnel space and facility needs of the curriculum laboratory so as not to

handicap the potential of this vital dimension to the fledging program. Without proper support of a curriculum laboratory, the program could become sterile in its ability to produce results and neither the program nor the laboratory will achieve desired objectives.

Assuming a modicum of coordination within the Office of Education, it seems possible to fund the proposed career and vocational curriculum laboratory for First Americans from currently authorized resources outside the program in question. It would perhaps require special consideration. It is known that in fiscal 1972, the Office of Education announced grant awards to states for the purposes of:

1. Improving the capabilities of State curriculum laboratories to operate as curriculum management centers and
2. Re-orient efforts toward curriculum development and management in career education.

If an interpretation of the law could be made defining First American Education as a special group to be served by funding as a "state," or if the Office of Education has discretionary funds that may be used for this purpose, the limited resources authorized for First American Education could be augmented for this important purpose.

To assure initial viability and continued effectiveness of the curriculum laboratory, it should become a participating member of the Curriculum Coordination Council established in 1973. The Council membership includes the Chief of the Curriculum Development Branch, Division of Vocational Education Research, Office of Education, and the directors of the federally funded curriculum centers. The Curriculum Coordination Council was established to establish a network to assure the sharing of information and to

avoid duplication of efforts. The specific purposes are:

1. To provide a mechanism for the sharing of information on curriculum materials and availability and other development.
2. To develop and recommend guidelines for curriculum and curriculum development with the ultimate goal of increasing the effectiveness of curriculum materials and enhancing their transportability.
3. To establish and maintain a system for determining curriculum needs in vocational-technical education and reporting conclusions to the field.
4. To coordinate activities in curriculum development, dissemination, and utilization with the aim of avoiding unwarranted duplication, enhancing quality of effort, increasing the transportability of curriculum materials, and improving the acceptance and use of curriculum materials.
5. To report these curriculum coordination efforts to the field.

The new program should become an integral part of this network in curriculum development. The benefits to the program would be further enhanced by sharing in the soon-to-be-developed guidelines for curricula and curriculum development later this year.

Relationship of Career Counseling and Curriculum

The career counseling approach that would seem to hold the most fruitful results with American Indians would be one that considers Native American Culture. Career counseling activities should be personalized to the extent possible and seek to provide educational experiences which prepare First Americans for job entry and advancement in a variety of related areas. To do so effectively, the curriculum should stress the importance of values and attitudes and include content and methods that help the students, regardless of age, to understand his or her potential in terms of career development through educational, training opportunities that are

open to him or her.

The above position is supported by the Vocational Education Amendments of 1968 which emphasized the relationship between vocational education and guidance and gave stimulus to a more humanized vocational curriculum. Vocational educators including Swanson, Nelson and Meyers stressed the desirability of an "academic marriage" between vocational education and guidance when they stated:

> The unique and dual purpose of the educational curriculum is to produce satisfied and satisfactory workers, a condition which improves job productivity and occupational tenure... Accordingly, curriculum planning should provide for adequate guidance of the learner's vocational development. The resulting curriculum should allow students to learn how to make intelligent vocational choices based on realistic occupational images and self-understanding.

> A good occupational experience program goes beyond the development of technical skills and knowledge. It includes the learning of competencies dealing with occupational adjustment-the matter of distinguishing what factors in a work environment the worker cannot control and those he can manipulate for his purposes. It also includes a large measure of investigative learning dealing with the nature and suitability of jobs and occupations as they relate to the learner's attributes, interests, strengths, and weaknesses.

There is a reciprocal relationship between the vocational-technical curriculum and career guidance that needs to be articulated in practice. By utilizing the principles of career education, from a common core of group activity, individual students can be guided toward the acquisition of knowledge, a new concept of self, and vocational competence in a variety of ways, largely determined by each person's characteristics and initiative.

The curriculum for vocational-technical and career education programs should reflect the following factors:

1. An understanding of human growth and development, the problems and processes of adjustment and the needs of

the individual as he or she goes through those processes;
2. An understanding of psychological or affective education in all educational activity;
3. An understanding and skills in promoting desirable human relationships; and
4. Training in the assessment of individual characteristics and his or her skills in relating these assessments to the development of the individual's potential.

The Cluster Organization of Curriculum

Vocational and technical education is undergoing a period of redefinition that has a direct influence on the curriculum and the breadth and depth and scope of the content that is offered to a wide range of student groups. One of the most noteworthy developments of the recent past is the variety of attempts to provide curriculum offerings that are much broader than the traditional positions that called for highly specialized curriculum leading to the development of some stage of craftmanship. Career development has been extended into the elementary grades, creating an awareness of employment as a normal part of life for most students, as compared to vocational education as a concept, there has been the wide spread utilization of the cluster approach to the organization of content and instruction.

The education programs operated by the Bureau of Indian Affairs have not kept pace with the developments in career development programs. Pupil Personnel Services Branch has recently considered the merits of career awareness as an appropriate dimension of its activities. Only the initial steps are being taken at this time, but career awareness should be an integral part of a vocational education program for First Americans. It should infuse

content about careers into all subject areas.

The Cluster concept of occupational training, which got its major initial attention in the mid 1960's differs from conventional organizational approaches both in scope and depth. The typical vocational education program of the 1960 decade and before is found at the secondary level and is designed to prepare the student for a specific occupation. The clustering of career training activities provides the student with early awareness and exploratory learning opportunities culminating in the development of job entry competencies for several occupations found in a cluster such as construction as contrasted with masonry, plumbing and carpentry. The cluster approach does not purport to produce a highly skilled craftsman, but a person who is ready for employment in any one of several jobs.

Maley defined the cluster concept as a form of vocational education directed toward the preparation of individuals for entrance into a spectrum of occupations. The occupations selected for a spectrum of cluster are those found to require the same proficiencies in a number of areas, namely measurement, communications, science, skill and mathematics.

The U. S. Office of Education has developed a cluster scheme which consists of 15 career clusters, which are:

Construction Occupations Cluster
Manufacturing Occupations Cluster
Transportation Occupations Cluster
Agri-Business and Natural Resources Occupations Cluster
Marine Science Occupations Cluster
Environmental Occupations Cluster
Business and Office Occupations Cluster
Marketing and Distribution Occupations Cluster
Communications and Media Occupations Cluster
Hospitality and Recreation Occupations Cluster
Personal Service Occupations Cluster
Public Services Occupations Cluster

Health Occupations Cluster
Consumer and Homemaking Occupations Cluster
Fine Arts and Humanities Occupations Cluster

The Office of Education has further refined the 15 career clusters by dividing them into a number of sub-clusters and more discrete functions at increasing levels of specificity.

Curriculum Validation

To be certain that the educational experiences which comprise the technical and career education curriculum provided for First Americans, are relevant, they should be validated. Validation is only one of many aspects of the complex process of curriculum development in vocational and technical education, but it is a pervasive aspect of that process. The reason for this is that validation measurements are taken at more than one step in the process and for more than one reason.

Cronbach suggests that validation is more than the process of examining the accuracy of a specific prediction or inference from a test score: validation means "to demonstrate the worth of." To validate is to investigate the success of the educational experience. Validation in vocational-technical curriculum design requires the designer to be somewhere on the continuum between empiricist and impressionist. Formal objective procedures should be weighed against informal judgment in all validation efforts.

A major requirement for assuring validated curriculum materials is that some type of systems approach or model be used in the development of the curriculum and its components. System, as used here, may be defined as the structure or organization of an orderly

whole, clearly showing the interrelationships of the parts to each other and to the whole itself.

As applied to a process (and curriculum development involves a step-by-step process), the use of the systems approach implies comprehensiveness of steps as well as interdependence of stages, components, and concepts. Systems analysis techniques enable the designer to do a better job of selecting the stage of the program operation he must validate. That is to say, they help him identify the relevant curriculum components with the outcome changes being measured.

The use of such an approach assures that all necessary assessments will be made. While there are many systems approaches, basic features to them which, in effect, tend to validate the process are:

1. Job sepecification or analysis
2. Specification of objectives
3. Development of preliminary curriculum system design
4. A cycle of development, test, revise and retest
5. Implementation and field testing the curriculum system
6. Follow-up and evaluation.

The curriculum is a sequence of learning experiences that processes from the simple to the complex. The sequence is (1) responses and associations, (2) verbal and motor chains, (3) discriminations, (4) concepts, (5) principles, and (6) problem solving processes. Inherent in the sequence are the lessons, modules and units of instruction. Terminal objectives must be stated so that validation measures contribute to the overall evaluation and accountability. The application of validation measures does not allow wide fluctuation in attainment of objectives; neither do they bring about perfect stability. They do help to control the

achievement of objectives.

Presented here as a model is the 12-step process developed by Butler.

1. Feasibility Study	This step requires an analysis of trends in job markets and occupational patterns; trends in economic, business, agricultural, and industrial expansion; types of jobs and worker competencies needed; availability of training programs and facilities, their costs; and other relevant factors.
2. Task analysis	After it has been decided that the program is needed, an occupational or job analysis is conducted to determine skills and knowledge required, kinds and level of performances demanded by the job, etc.
3. Development of training objectives	The designer prepares explicit statements about what a student must be able to do upon the completion of the training program--conditions and standards of his performance, etc. Both terminal objectives (unit, course, or program) and interim or enabling objectives (lesson, activity or module) are specified.
4. Development of criterion tests	Criterion tests are used in the early stages of the curriculum design to determine validity of the objectives and later to help perform summative evaluations of the entire course or training program.
5. Validation of the criterion test	This step is accomplished by administering the test to an untrained, unskilled group and to a trained, skilled group, and correlating the scores to obtain validity and reliability coefficients. The analysis is conducted to improve the test as a measuring instrument. This is one of the most important steps in the validation process.
6. Validation of training objectives	The test should contain at least one item for each objective, and possibly not more than five items for each objective, otherwise it becomes too long for practical purposes. Validating the test (Step 5) and validating training objectives can be accomplished concurrently, provided the test items are not at fault.
7. Development of learning sequence and structure	This step is carried out in accordance with the duties, tasks and activities provided in the job-task analysis. Activities, tasks, and duties are structured

(and learned) in both a vertical and horizontal sequence. The learning of one is dependent on mastering those that precede it. Most curriculum experts recognize that sequencing must be handled with a great deal of flexibility.

8. Development of learning strategies

The objectives and learning styles of students are the prime determinants in developing learning strategies.

9. Development of instructional units

A test model of the instructional system is produced. The curriculum system development plan and the instructor's manual or guide are needed. The system development plan includes the task analysis summary forms; validated objectives in validated sequence supported by a summary of the validation data, validated criterion test items in validated sequence supported by a summary of validation data; an outline of instructional strategies with associated content (objectives) identified; and production and testing plans for the system. The design and format of the individual learning units should contain the performance objectives; the knowledge and skills to be acquired, a list of tools, equipment, supplies, and references needed for the unit; a learning activity guide; interim progress checks and student self-evaluations; and an instrument to serve as a pre-test and/or post-test for evaluations by the instructor.

10. Validation of learning units

Each unit is tested and revised until 85 percent of trainees in the sample reach the criterion. Revision may require resequencing and adoption of new learning strategies.

11. Implementing and field testing the system

This step is carried out under actual classroom conditions. The instructor's role is established at this point and the instructor's manual developed. Field testing is the final phase of the systems development process. This means that the program is monitored, evaluated and revised continuously as long as it is in operation. A more appropriate term for this phase may be system institutionalization.

12. Follow-up of graduates

At this point, guidance and placement are brought into play, and planning for follow-up at one, three, five and ten year intervals can be started. Data obtained on occupational patterns, changes

in needed competencies, job adjustment problems, and work satisfaction indexes--all can be used to improve the instructional system.

A Program of Career and Vocational-Technical Education

The career and vocational-technical education program proposed here is a school-based model modified to receive the support, when feasible, from the employer implied in the employer-based concept, from the community implied in the community-based concept, from the family implied in the residential-based concept. This approach maximizes the potential of the school-based model and extends the greatest possible benefits of educational activities to the persons receiving the education. It seeks to develop in students a comprehensive awareness of career options; a concept of self which is in keeping with the work-oriented society; attitudes about work, school and society resulting for successful experiences and the ability to enter employment in an acceptable occupational area or to continue education at a higher level.

Program Concept

The program concept provides for the infusion of career development objectives into a comprehensive K-14 educational programs. This broadened time-frame permits students to become more intimately involved with and prepared to take advantage of the wide variety of career opportunities through school-related and supportive experiences. The infusion must be administered effectively to insure that every student receives an education which integrates

his academic skills, social development and career preparation so that after completing the program, or steps in it, his options are open to enter the labor market in a productive career or pursue further education. Students are to be provided a continuing awareness of educational choices for career planning which will lead to productive and contributing citizens.

Extensive guidance and counseling activities are essential elements in this concept to the development of self-awareness, self-confidence, and mature attitudes. Further, the more traditional vocational guidance activities such as the matching of interests and abilities against career potentials are not less important in this concept than with other approaches.

Obviously, the level of difficulty and breadth information is related to the age and development of the student. Units of instruction should be approached at different grade levels. Elementary students should study a wide range of jobs in society and their role and requirements. Junior high students should be provided opportunities to explore several clusters of occupations through experiences and observations in the community and industry as well as through classroom instruction. Senior high students should be given opportunities to exercise individual initiative in the pursuit of their selected occupational areas through job preparation for entry into work or for post-secondary education.

The program structure is pluralistic in learning activities and procedures and provides for the necessary cooperation among all elements of education as well as among the related industry and community dimensions. The concept of self which is in keeping with

a work oriented society is important to the development of positive attitudes toward work, and satisfaction with successful experiences. Understandings of the relationships between employment and education, and the development of self-respect, self-reliance, perserverance, initiative and resourcefulness are desired program outcomes.

Program Assumptions and Objectives

The assumptions of objectives upon which programs are based represent philosophical expressions. In conceiving a comprehensive program of career and vocational-technical education for American Indians, the following assumptions and objectives guided the planning.

1. Qualified American Indians will share in the governance, planning and administration of career and vocational programs for American Indians.
2. A complete program must provide opportunities for the youth and adults to participate in meaningful occupational exploration and choice, pre-employment occupational preparation to job-entry level competencies, inservice training for upgrading and promotion, both pre and inservice retraining as the nature of the labor force and occupational requirements change, guidance and employment counseling, basic and general education for beginning and improved educational skills, becoming a more effective family member and homemaker, and cultural and avocational pursuits as part of a full and worthwhile life.
3. A basic assumption and requirement is that career and vocational technical education is an integral part of a comprehensive and complete educational system.
4. Unemployment and underemployment are most often directly related to "employability" of which general and occupational education are major elements.
5. There will be developed a comprehensive integrated coordinated program of general education, occupational exploration and guidance, and vocational-technical education for youth and adults, It should result in a meaningful fusion of academic and occupational educational activities.
6. A complete, or adequate. program will be developed that includes a) guidance services, including career orientation and vocational guidance as an integral component; b)

exploration of the world of work; c) vocational-technical education; and d) initial job placement arrangements. Existing courses and programs should be modified to improve the attitudes, skills, and knowledge of all school personnel with respect to vocational education.

7. Related to occupational choice is the foundation for a successful adult work life. Acquaintance with and understanding of the broad world of work can only be developed over a period of time. All students must be given the opportunity to explore their capabilities so that they make meaningful decisions concerning their choice of a life's work.
8. Job placement and follow-up capabilities will be fully developed.

The performance objectives in careers are designed to introduce polarity toward career development throughout the school program.

The 8 basic elements are:

1. Self awareness that leads to self-identity
2. Educational awareness which leads to educational identity
3. Career awareness that leads to career identity
4. Economic awareness which leads to economic understandings
5. Appreciations and attitudes which lead to self and social fulfillment
6. Decision-making skills which lead to career decisions
7. Skill awareness and beginning competence which lead to employment skills
8. Employability skills which lead to career placement

Teachers in the program will develop goal statements suitable to the units taught, local situation, and grade level.

Program Measurement

Programs leading the development of careers should have measurable objectives. With measurable objectives for instructional programs, it is possible to determine the progress in programs as well as provide instruction in effective and efficient way. Measurement in career education, and more precisely in the vocational and technical courses, lends itself to criterion-referenced

standards as contrasted with norm-references devices. Norm-referenced tests are used in to measure student performance as compared to the performance of other students. Criterion-referenced tests measures students' status against an established standard of performance. The measurement of curriculum results against specific performance standards is consistent and is compatible with the concept of career education.

It is perhaps in this arrangement and context that career exploration is best achieved. Through the study of the community and job-related activities in natural situations, students gain the most realistic possible view of the work in a cluster of occupations and in a series of life situations.

Career Exploration

The involvement of potential employers, industry, and public agencies in cooperative relationships as an integral part of occupationally related program will be beneficial. The purpose of seeking the cooperation and assistance of these areas is to increase the relevance of education to the employment situation in the most realistic manner. Community participation in this manner broadens the base of the program by encouraging public and private employers to become actively involved in it. The result of a well planned, coordinated and executed community based activities will be an extension of the classroom into the community.

Job visitation is a primary means through which students may develop understanding, appreciation, and attitudes useful in making career choices. Study and observation of careers and the program

should be comprehensive in its use of individual and group counseling and observation and field trips which:

1. Encourage critical appraisal of jobs through direct observation
2. Provide students with a knowledge of what a job is like through direct observation
3. Expand the vocational horizon of students by providing a variety of work observation experiences
4. Provide real role models
5. Establish communication between students and workers
6. Provide students with factual, accurate, and up-to-date information about jobs present and future
7. Provide a setting where students may test their current career aspirations through direct observation
8. Create an awareness among students of the rapidly changing work world and the resultant implications of career planning.

Elementary Level Objectives

The sequence of career education activities for elementary school children rely heavily upon vocational guidance and should be guided by objectives such as:

1. Introduce the student to the world of work and career opportunities
2. Establish and hold the relationship of career education to academic content
3. Develop, through exploration, a self-realization related to abilities and interest for future career selection
4. To provide a wide range of career, knowledge experiences
5. To develop a desirable attitude toward the process of career choice
6. Encourage the student to understand that career selection is related to the need and abilities of the individual
7. Develop an understanding and appreciation of the interrelationship of the various careers in the world of work
8. To develop learning experiences which actively involve the students in grades five to seven in processes which are useful in making career choices
9. To develop materials and techniques which enable counselors to participate with the students and teachers in joint activities
10. To access students' interest in careers and guide them toward greater understanding of the process of career selection.

Junior High Level Objectives

During the junior high years students should be provided guidance, information, and opportunity for able exploration of clusters of jobs to gain an understanding of clusters and jobs of specific interest which will be of value in making career choices. A wide variety and range of manipulative experiences, field trips, observations, and cognitive information should be included in the career and vocational-technical education program for junior high students. Presented here are program objectives that have been recognized as having merit and sustaining value for this age group.

1. To develop an understanding of career development as a process of relating self to occupations,
2. To guide students to discover through interesting and meaningful activities that planning for career choices is an ongoing process,
3. To provide students with knowledge and experiences of the changing employment patterns and opportunities,
4. To develop an appreciation of human satisfaction found in work,
5. To develop positive attitudes toward effective employment and contemporary society,
6. To develop an understanding of the economics of employment and to gain a knowledge of the major occupational fields,
7. To guide students in ability to appraise interests and aptitudes in terms of job clusters as they explore a variety of career opportunities,
8. To develop an understanding and appreciation for the basic processes of production, processing and distribution in the American economy,
9. To develop an understanding and appreciation of employer's expectations, viewpoints and requirements,
10. To develop an understanding of the importance of career development opportunities offered in schools, industry and governmental agencies.

Senior High Level Objectives

It is axiomatic that secondary schools are preparatory

institutions for all students. The career and vocational-technical curriculum of the senior high school should provide for the selection and study of job clusters for career pursuits and skill training sufficient for the successful employment in the chosen career cluster. As in the case of elementary and junior high school programs, guidance in understanding self, potentials and social relationships are important considerations at the secondary level. At the high school level consideration should be given to tying together test results such as General Aptitude Test Battery (GATB) and career exploration. This arrangement could be developed on the basic philosophy that every student should have the greatest opportunity for occupational education with the individual's goals, interests, aptitudes and needs given appropriate attention.

The specific objectives for high school programs of career and vocational technical education presented here for First Americans are typical of programs that have proven successful.

1. To create an awareness of occupations and their value to individual and national interests,
2. To assist students in developing a desirable attitude toward career preparation,
3. To bring to the attention of students occupational trends and future needs,
4. To assist students in evaluating and coordinating interests and abilities with realistic occupational goals,
5. To assist students in a variety of experiences in the development of appropriate individualized career plan which best suits their interest and abilities,
6. To permit students to participate in the class management and decision-making process,
7. To develop understandings, appreciation and attitudes appropriate to the selected job cluster(s),
8. To develop skills essential to effective job entry,
9. To develop effective understandings of realistic options for career development through continued educational development and/or experience,
10. To make program provisions for placement and follow-up of all students.

Adult Level Objectives

Appropriate provisions should be made for the career development of persons who have dropped out of school for those who are beyond the normal secondary school age. Specific local program goals should include career-oriented educational activities for out-of-school youth and adults, who, for a variety of reasons, do not participate in regular school programs or who want additional learning opportunities.

Mass media may be useful to attract the attention of the out-of-school youth and adults to the program. Once adults are motivated through the mass media, agencies and programs must be set up that can handle the needs of these adults. These needs include central screening, counseling, training, and placement. These necessitate working with employers and other national/regional/and local orgainzations which will participate in the guidance and operation of the program.

The needs of dropouts and adults will best be met by a comprehensive career-oriented program centered on individualized learning activities. This program dimension should be strongly supported by well-staffed career development centers located in the community which provide tutorial, testing, and referral services aimed at identifying and developing students' career goals. Students who comprise this group should be permitted to drop in and out on a free choice basis. A close liaison between education and industry must be kept if community-based activities are to be kept abreast of new developments.

The objectives for adult and out of school youth are:

1. To provide specialized training to develop effective employability through increased skills,
2. To develop within trainees the value of the dignity, importance and interdependence of types of work and skills,
3. To help trainees gain first hand knowledge, understanding and appreciation of the changing employment pattern and opportunities,
4. To provide career guidance services that develop a positive attitude toward self and dignity that comes with successful employment,
5. To provide intensive skill development activities for those trainees who have not been previously enrolled in adult education programs and who terminated their formal education before graduation,
6. To effectively place trainees in jobs or job clusters for which they were trained,
7. To provide retraining in skills appropriate to work that has long-term possibilities,
8. To conduct job development activities with business and industry in career areas with a future,
9. To maintain follow-up activities for the benefit of trainees,
10. To modify the program to the changing needs and interests of trainees.

Indian Manpower Delivery System

It would appear that part of the problem lies in the limited resources allocated and dedicated to programs for Indians and the remedial nature of the objectives of these programs. The breadth of the concept of these programs has been inadequate to provide solutions to manpower development problems in terms of effective employment for a substantative proportion of Indians. The percentage of unemployed and underemployed First Americans remains higher than other groups in the labor force. The concept of training as contrasted with education may be a significant part of the reasons why American Indians have not responded as have other groups. The suggestion here is that appropriate consideration has not been given to the cultural and intracultural differences, bicultural forces,

social development and general educational needs.

Our national leadership has given philosophical support to the idea of manpower, career and adult development concepts. President Nixon in his August 11, 1969 message to the Congress said:

> A measure of the greatness of a powerful nation is the character of life it creates for those who are powerless to make ends meet . . . manpower training is a basic bridge to work for poor people, especially people with limited education, low skills and limited job experience. Manpower training programs can provide this bridge for many of our poor.

It is obvious that the desire of the Administration to train the working poor is great but the depressing aspect, at least for the professional educator, lies in the narrowness of the concept. An oversimplification appears to be that the work ethic will provide the drive to raise a non-productive member of society to a productive one and that gradually but surely the forces of deprivation will give way because of the working class status so attained. As noble as this objective appears on the surface, there is substantial evidence that training in itself is too narrow a concept to produce the medication needed to solve the social ills of today's society. Education implies an enlightened citizenry; part of which is their enlightenment about work and jobs. Career and vocational-technical education is <u>education</u> for work at its best in preparing disadvantaged members of subdominant cultures to cope with today's complex society.

This is not to argue against remedial programs as a part of a strategy for the development of Indians, but rather to support a full range of student personnel services for both youths and adults in terms of individual needs. The public schools should offer

Estimated Participation of Indians in Selected Manpower Programs

Fiscal Years 1969 - 1970

Program	Fiscal Year 1970 Total No. of Enrollees	Fiscal Year 1970 Percent Indian	Fiscal Year 1970 Total No. of Indians	Fiscal Year 1969 Total No. of Enrollees	Fiscal Year 1969 Percent Indian	Fiscal Year 1969 Total No. of Indians
Total	1,051,400	2.3	24,023	998,000	2.4	23,738
MDTA						
Institutional	130,000	1.8	2,340	135,000	1.5	2,025
On-the-Job Training	91,000	2.6	2,366	85,000	2.3	1,955
Neighborhood Youth Corps						
In-School	74,400	2.4	1,786	84,300	2.9	2,445
Out-of-School	46,200	3.1	1,432	74,500	2.4	1,788
Summer	361,500	2.8	10,122	345,300	2.9	10,014
Job Opportunities in the Business Sector	86,800	0.8	694	51,200	0.8	410
Concentrated Employment Program	110,100	2.0	2,202	127,000	2.4	3,048
Work Incentive Program	92,700	1.3	1,205	80,600	1.2	907
Operation Mainstream	12,500	9.2	1,150	11,300	8.7	983
New Careers	3,600	2.1	76	3,800	2.7	103
Job Corps	42,600	1.5	650	INA	INA	INA

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occupational counselling and testing, a basic education for adults whose earlier education failed, some outreach to find the under-motivated, health services, legal aid services, day care for pre-school children, transportation assistances, and other services necessary to assure that individuals can achieve the necessary education for success in work will be needed.

The BIA's education program does not include a well-developed career development program. A career-related activity conducted by the BIA that shows promise is a series of Career Guidance Institutes that are locally designed and operated educational programs which bring together educators and businessmen and women to identify current and future career opportunities for students and to explore the requirements and preparation needed for these same careers. The Career Guidance Institutes receive supplementary support from the National Alliance of Businessmen which tends to respond to criticism that BIA programs need a closer liaison with the world of work.

The goals of the institute are:

1. To upgrade existing career guidance programs so that teachers counselors and administrators will have knowledge, skills, and attitudes needed to assist students in embarking upon a realistic career goal-setting process,
2. To increase educator awareness of private sector career opportunities available to high school graduates,
3. To make educators aware of the need to match the career interest of in-school youth with the job requirements of private-sector employers,
4. To correlate preparation requirements and curriculum with student career choices and job requirements,
5. To expand the role of the teachers in classroom career counseling.

National leadership approached manpower development of American Indians by the establishment of National Indian Manpower Task Force in 1970. This was a response to Indian leadership which sought to increase opportunity for "self-determination." The Task Force recommended specific steps toward Indian involvement in the development of manpower policies designed to serve the needs of First Americans.

A major problem identified by the Task Force was that Indians in urban areas ususally constitute the smallest disadvantaged minority group in the local population. Contrary to popular misconception, the responsibility of the Bureau of Indian Affaris does not, generally, extend to Indians who have left their reservation. Yet, this misconception is often a factor in deptiving Indians in urban areas of the opportunity to benefit from programs designed for disadvantaged groups in the general population. Indians living in urban areas are faced with a series of harsh employability problems. While many of these problems are also experienced by other segments of the population, some are unique to the Indian. For most Indians, the language spoken in their reservation home is that of their tribe, and English is a second language. When Indian people migrate from the reservation, they have difficulty with English conceptualizations, both verbal and written.

Because of cultural and environmental differences, a majority of Indian people are not oriented to the work-world and the interpersonal "politics" of employment. Indian people are ill-prepared to deal with the pressures and mechanics of day-to-day living in the cities (finding jobs, housing, recreational facilities, supportive

services, etc.). Consequently, there is a natural reluctance to mingle with persons of a different culture and background. Not knowing about available recreational facilities or where other Indians may be located, and having recently arrived in a strange, lonesome environment, causes some Indian people to seek undesirable emotional reinforcements.

It should be recognized that manpower programs have been structured for disadvantaged persons in urban areas with the primary target population being blacks. Over the years, many of these programs have come under black control. Conceptually and operationally, these programs were aimed at persons who were members of an urban subculture and not designed for American Indians from a rural background and who have a distinct culture.

The National Indian Manpower Task Force stated its concern for the existing manpower delivery system in these terms:

1. Most urban manpower programs and some rural programs are planned, funded, structured and managed with no regard for potential Indian participants.
2. Existing urban manpower programs are dominated by white and non-Indian minority groups, none of whom are aware of, or sensitive to, Indian problems. Seldom are there Indians on the staff or among the trainees in these programs to whom Indian trainees or job applicants can relate. As a result, Indian people avoid most urban manpower programs.
3. With very few exceptions, the existing manpower system, controlled by non-Indians, has made no effort to locate, identify, perform any type of outreach among those Indians in off-reservation areas. Outreach is one of the most vital functions of urban manpower programs.

Manpower programs for First Americans must recognize the cultural aspects of Indians and tribes, and so far as possible, the training and administration components should be staffed by Indians. It is in keeping with manpower development philosophy, and career and vocational-technical education concepts that priority be given to

the maximum possible employment and training of Indian staff for programs dealing with Indian people.

Planning, Structuring and Funding of Manpower Programs for First Americans

There is need for more effective coordination of planning and execution of career development programs--career and vocational-technical education, manpower development and other skill training programs--that are designed to serve the Indian people. Increased flexibility to permit effective contractual arrangements would be desirable. To make manpower development activities more readily available to Indian people, it seems obvious that additional funds are needed. One recommended approach would be to centralize the coordination of career development activities in the Office of Education and draw upon resources from the several agencies that have legislated authority and funds (Department of Labor, Bureau of Indian Affairs, Department of Health, Education and Welfare).

The need for increased coordination of current manpower programs is not limited to those that are designed specifically for Indians. Writing in the October, 1973, issue of ALERT, the Arizona Superintendent of Public Instruction stated:

> County coordinators for career and vocational education who serve on area manpower planning councils, Council of Governments (CAMPS) admitted there is no coordinated institutional training information with non-institutional training information available for meaningful participation of county coordinators.
>
> A significant amount of manpower training is conducted outside of institutions established specifically for training purposes. Interviews with the directors of these programs indicated there is no functional coordination either between

these programs and institutional programs at the local level.

The funding of skill-development programs for Indians should involve Indian tribes and/or organizations as prime sponsors to the extent feasible and possible. Although it is possible for a tribe to act as a prime sponsor, under certain circumstances it may be advantageous for several small tribes to form independent corporations in order to be eligible for funding as prime sponsors. The Indian Development District of Arizona, Inc., (IDDA) is a good example of this kind of cooperative action.

The vehicle of state incorporated, nonprofit organization is recommended for urban areas. Many Indian tribes and organizations have followed this procedure with considerable success. Some tribes have formed intertribal organizations in order to become more effective as centralized administrative units which act as prime sponsors to operate a variety of programs. This concept has proved to be successful because it allows for greater flexibility in program planning, funding, structuring, operating and evaluating. It would be logical to further this approach in the manpower area.

The Task Force stressed the need to reduce the present gap between the approval to begin a program and the receipt of initial funds. This funding gap creates difficulties for program staff and enrollees, especially when they are not paid salaries or allowances for several weeks. It may also result in trainee dropout, due to the necessity of finding other immediate income. In addition, a project can be severely handicapped when funds for necessary staff are delayed.

Assessment for Training

Employment requirements must be changed. Industry must not rely solely upon a diploma or credentials for determining employability. A dropout should have as equal an opportunity of access to all jobs as graduates. Hiring should be based solely on the individual's ability to perform the job.

Standard tests administered in connection with manpower programs are culturally biased and do not provide an accurate assessment of Indian enrollees (GATB, Ammons Quick, Wunderlich, Kuder Preference). Until such time as culture-free assessment tools are available, current assessment methods must be replaced or supplemented by using Indians who are members of the staff, and wherever possible, of the Indian community to be served.

Efforts should be made to use Indians as counselors, because it has been demonstrated that non-Indians cannot effectively serve Indian clients. When it is not feasible to fund programs directly through Indian organizations, there must be greater involvement of Indian staff to fill professional positions, such as project management, counseling and training non-Indians for appropriate manpower programs or for a progression of manpower programs.

Placement and Follow-up

Current placement procedures followed by agencies or projects funded by the Department of Labor are geared to middle-class, non-Indian norms without consideration for ethnic factors. It is unrealistic to place a relatively nonacculturated Indian in an

employment situation without orienting employee and employer to possible problem areas. Individual job development efforts conducted by the existing manpower system for Indian graduates of manpower programs are not generally given the priority. The result is a lower placement ratio for Indian manpower program graduates as compared with other clients, as well as a greater percentage of placements in low-skill, low-wage jobs. Presently, post-placement follow-up is practically nonexistent. When it does occur, it is generally perfunctory.

Assessment and training should be so arranged to enhance the placement of Indians in appropriate jobs. It is highly recommended that Indian-oriented job developers be employed. This will benefit the Indian client by assuring consideration and understanding of his special employment needs. The job developer should orient the employer to the unique employability problems and strengths of his potential new employee. There should be a continuous effort of follow-up and counseling after job placement for a minimum of 90 days, or until the employee has become fully adjusted to his work situation. It is important to the success of the new employee that he is assisted in becoming knowledgeable about company rules, pay scales, personnel practices and rules governing organized labor where applicable.

Summary

The program of career and vocational-technical education proposed for American Indian children, youth and adults in this paper

recognizes the basic tenant tax supported education. It is based upon the philosophy of career education and encompasses the principles and practices of vocational and technical education. The focus is upon a programmatic concern for the career preparation of First Americans rather than upon specific organization, administration or logistical detail.

In summary, it can be said that the central purposes of education are to prepare the young to accept the reality of contructive pathways to adulthood, to help them engage in these pathways successfully, and to assist them in finding personal relevance in the life options available to them. The day in which academic preparation is the objective of Indian education should end immediately. One of the goals toward which Indian education must direct itself is the provision for every student at all levels to acquire the skills which will allow him or her to make a livelihood for himself or herself and for his or her future family, no matter at what level of the educational system he leaves. Such education should not be confined to the manipulative skills, but include capabilities in activities which contribute both to individual fulfillment and to society's maintenance and progress. To make Indian education become relevant to the needs of Indians and the needs of society, the entire program must be restructured to focus around career development so that both the needs of the individual and society will be met.

Career and vocational-technical education, as perceived here, is a comprehensive educational program focused on careers, which begins in grade one or earlier and continues through the adult years.

A comprehensive career and vocational-technical education includes a sequentially-developed education program offering career orientation, exploration, and job preparation for all students. A major benefit is that students' performance in basic subjects should improve as the entire curriculum is made relevant and more meaningful by being focused and unified around career education. For elementary and secondary education, the program includes a structuring of basic subjects, grades 1-12, around the themes of career opportunities and requirements in the world of work. In elementary school, students are informed about the wide range of jobs in our society and the roles and requirements involved. In junior high school, students may explore several specific clusters of occupations through hands-on experiences and field observation, as well as classroom instruction. They will be assisted in selecting an occupational area for further specialization at the senior high level. In senior high school, students pursue their selected occupational area, exercising one of three options--intensive job preparation, including the development of saleable skills, for entry into the world of work immediately upon leaving high school, preparation for postsecondary occupational education, or preparation for four-year college entry.

Those students preparing for postsecondary occupational education, including technical education and further skill development, or four-year college entry will continue to be provided with occupational cluster experiences including work experience where possible, with the academic subject areas being related to the professional area for which they are preparing. Students engaging in

specialized job preparation will be provided with basic academic skills essential for further education. Consequently, every student should leave the system with at least entry-level job skills and with facility in basic academic subjects sufficient to enable entry into further education.

The program should provide job information and skill development to Indian students to develop attitudes about the personal, psychological, social, and economic significance of work. Extensive guidance and counseling activities assist the student in developing self-awareness and in matching his interests and abilities against potential careers.

Finally, placement into an entry-level job or further education is guaranteed for every student in an effective career education program.

TESTING, EVALUATION AND THE INDIAN EDUCATION ACT OF 1972

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I. Introduction

The Indian Education Act of 1972, like almost all recent educational legislation, includes provisions that require evaluation. For example, under Part A of the Act, local educational agencies must "assess the special needs of Indian children...in joint consultation with the Indian community and the parent committee." Applications must "provide effective procedures for an annual evaluation." A condition of approval is that the application will include "...procedures to insure that the program will be operated and evaluated in consultation with the parents of the children, representatives of the communities to be served."

Under Part B of the Act grants and contracts "may be awarded...

to evaluate the effectiveness of Federally-assisted programs in which Indian children may participate," and "...applications must include a statement of...provisions for an evaluation of the program's effectiveness." Participation by the parents of the children to be served and tribal communities in the evaluation of the project is required.

Part C of the Act, organizations may apply for grants to support planning and demonstration projects which plan for, test, and show the effectiveness of programs for providing adult education for Indians. There must be participation by the tribal communities who will be served.

There is clear emphasis in the provisions of the Act on evaluation and on the involvement of local Indian communities in this evaluation. The language of the Act reflects the critical importance of evaluation in maintaining the quality of projects and maintaining their responsiveness to locally defined educational needs. The history of compensatory education legislation provides evidence of how federal education funds can be diverted from their intended purpose when effective, community-based evaluation is not implemented.

This position paper presents a brief summary of the history and status of testing in Indian education, a discussion of the specific purposes of testing and evaluation under the Indian Education Act of 1972, a list of necessary elements of a sound evaluation and testing policy, a discussion of the major issues related to evaluation and testing in Indian education, and a series of proposed position statements.

The terms evaluation and testing as used in this paper, and as used in the educational research and evaluation technical literature, have distinct meanings. Testing is only one source of data, among several, that is used in evaluation. Evaluation includes the assessment of the effectiveness of programs and projects. Evaluation encompasses needs-assessment, cost effectiveness, extent of impact, and similar concerns. A brief introduction to the major concepts of educational program evaluation is given in an Attachment.

It is extremely important to note that the term testing does not denote only the administration of standardized achievement or IQ tests to individual children though this remains the public image. In recent years testing technology has undergone fundamental and extensive change. Concepts such as criterion-referenced measurement,* item sampling, reference groups, summative and formative measures, and unprecedented developments in statistical methods and data processing have dramatically altered the practice of testing. The implications and possible utility of these developments for Indian education will also be discussed in the Attachment.

II. History and Status of Testing In Indian Education

Intelligence Testing

The intelligence of native Americans has been the subject of extensive investigation during the last 60 years. Literally hundreds of studies have been undertaken involving a wide range of IQ tests and many different Indian tribes. The following discussion relies heavily on Berry's (1968) survey of these studies.

IQ testing of Indians began in 1914 when Rowe and his wife

administered the Binet-Simon Test to some 250 Indian and 250 White children in Mt. Pleasant, Michigan. He explained the poor showing of the Indian children's test scores on the basis of "inferiority of native ability." Garth's conclusions (1921, 1922, 1923, 1925, 1927) suggested that plains and southeastern Indian's scores on the National Intelligence Tests varied with the "degree of white blood." The same conclusions were drawn by Hunter and Sommermeier (1922) using the Otis Intelligence Test. However, Telford (1932) found no support for this relationship when he administered the Draw-a-Man Test to North Dakota Indian children.

Although studies comparing the IQs of Indian and White children continue to be done (Berry notes Barnes, 1955; Bernadoni, 1961; Dorn, 1954; Evans, 1957; Jamison, 1959; Lloyd, 1961; Norman and Midkiff, 1955; Parmee, 1968; Safar, 1964; Snider, 1953; Winn, 1955. See also Blue, 1970; Crandall, 1970; Jayagopal, 1971; Peck, 1973; Sabatino et al., 1972), the validity of such intelligence testing was called into question as early as 1926 when Fitzgerald and Ludeman noted that Indian children did better on those sections of the National Intelligence Tests, the Terman Group Test, and the Otis Group Test which did not depend heavily on English language ability. Similar results were obtained in 1928 when Jamieson and Sandiford found that Indians scored higher on performance tests than on verbal (English) tests. When Likneberg (1928) controlled for many cultural factors, he found that Yakima Indians did as well as Whites on performance tests in the Pintner-Patterson series.

Several studies of Indian intelligence have been done using the Goodenough Draw-a-Man Test, claimed to be a more "culture-free" intelligence measure. Rohrer (1942) gave the Draw-a-Man Test to

1st-, 2nd-, and 3rd-grade Osage Indian and White children in public schools, and found that the mean Indian IQ exceeded the mean White IQ (103.8 compared to 102.9). Dennis (1942) gave the test to 6-10 year-old Hopi children, with an average IQ score of 108.3. When he gave the Draw-a-Man Test to Zuni children, Russell (1943) found an average IQ of 105.

Havighurst et al. (1946) gave the test to six through 11 year-old Sioux, Navajo, Papago, Zuni, Zia, and Hopi children with the result that seven of the nine groups of Indian children performed significantly better than the White children. This result was repeated with scores on the Arthur Performance Test, another of the more "culture-free" intelligence measures.

Thus, where cultural factors are taken into account, more recent studies show the intelligence of Indian children to be equal to, and in some cases, superior to, that of White children. In this regard, Havighurst's 1957 review of intelligence testing of Indians reflects these studies:

> The conclusion which is drawn by most social scientists from the data on Indian cultures and Indian intelligence is that the American Indians of today have about the same innate equipment for learning as have the white children of America.

At present, the findings of the social scientist have not found their way to the general public. Much publicity has been given to recent attempts by Jensen and Shockley to revive the discredited theory of racial genetic inferiority. Intelligence (or mental abilities) testing continues to be a widespread practice in the schools, and many teachers who have Indian students still believe in the innate intellectual inferiority of Indians.

There is, however, some indication that policies are changing.

A study of achievement and intelligence testing in the Northern Indian California Education Project (NICE), for example, led the investigators to conclude that

> ...there are no valid reasons for the continued use of the typical intelligence tests since they are contaminated by factors irrelevant to objectively measured academic achievement and unnecessarily biased against low income and minority groups (Bowlus, Miles, and Tarbet, 1973).

On the basis of this study, no intelligence testing is being done in the project. Another example is the recent recommendation by a task force within the Bureau of Indian Affairs that intelligence testing be prohibited in BIA schools. This recommendation will soon be official BIA policy (Bureau of Indian Affairs, 1972).

Achievement Testing

As with intelligence testing, achievement testing of American Indians has been extensive. Investigations have been done in a large number of Indian tribes using a wide variety of achievement tests.

For example, in one of the early studies, Hansen (1937) tested more than 1,000 public- and boarding-school Indian children and 500 White children on the Tracy Short Answer Test. He found the White students generally scored higher than the Indian students. Rupiper (1960) administered the California Achievement Test to 5,500 Indian children in Federal schools and 9,300 White children in the areas of the Federal schools, and reported that the scores of White children were significantly higher than those of Indian children.

More recently, in a study of the relationship between self-esteem and achievement for 100 Pima fourth-graders, Gardner (1972)

reported that the students scored significantly lower than (standardized) norms on the Metropolitan Achievement Test, Reading. Sabatino et al. (1972) compared 68 Chicano, 57 White, and 33 Navajo elementary school children in special classes on the Wide Range Achievement Test (WRAT) and the Stanford Achievement Test (SAT). The Navajo children were significantly lower than the White children on the WRAT, but there was no difference on the SAT. Fish (1970) found no differences among scores of 62 Indian, 46 Negro, and 143 White inner-city fourth and sixth graders on the Iowa Test of Basic Skills.

Achievement tests have been widely used as the basis for evaluation of Indian education programs. The most notable example of this is the three outside evaluations of Bureau of Indian Affairs schools done by Peterson (1948), Anderson, Collister, and Ladd (1953), and Coombs et al. (1958).

In the first two studies, 8th- and 12th-grade White and Indian children from throughout the country were tested on Pressey Diagnostic Reading, Pressey English, Arithmetic-Factor Abilities, Gates Basic Reading, and Orleans Arithmetic Computation. The ranking which was emerged was:

1. White public school children
2. Indian public school children
3. Indian Federal school children
4. Indian mission school children

In the Coombs study, the California Achievement Tests were given to 13,000 Indian and 10,000 White students in 11 states. The same rank order resulted from this study as in the other two.

Traditional, norm-referenced achievement tests are sensitive to the effects of poverty, linguistic background, and cultural bias.

Publishers' norms are rarely (if ever) appropriate for use with culturally-different groups. If the policy changes recommended by the BIA Task Force on Testing (Bureau of Indian Affairs, 1972) become official BIA policy, norm-referenced achievement testing will gradually be phased out of BIA schools, and will be used only for individual diagnostic purposes. The Task Force recommended that norm-referenced testing be replaced by criterion-referenced testing closely tied to curriculum and performance objectives.

This BIA recommendation is consistent with the trend in the field of education (the Experimental Schools Program and the Career Education Program, for example) away from using norm-referenced standardized tests in evaluation. Although norm-referenced tests continue to be used extensively, (in state testing programs, for example) there is a growing recognition of the drawbacks of norm-referenced testing and of the importance of criterion-referenced testing.

III. Purposes of Testing and Evaluation

A. Purposes of Testing and Evaluation Under the Indian Education Act of 1972.

For the Office of Indian Education to formulate reasonable positions on the issues involved in testing and evaluation, it is necessary to distinguish between those activities over which this Office has direct administrative control and those which it can only hope to influence by example and persuasion.

Those evaluation and testing activities over which the Office of Indian Education has direct control are specified in Parts A,

B, and C of the Act, as indicated earlier. In each case, it is clear that the Commissioner must be satisfied that there has been adequate participation by the people who will be served and by the tribal communities. The intent of the law is to locate the evaluative decision-making, to the maximum extent possible, in local Indian communities.

Under Part A of the Act, providing financial assistance to local education agencies, evaluation is indicated in three general categories: needs-assessment, annual evaluation as part of the plan submitted with the application, and evaluation in consultation with the parents and community-to-be-served as a condition of application approval. The language of the Act stresses local participation in each of these evaluation activities. Evaluation is a critically important tool for local communities to direct the focus of the proposed project in its planning stage and to keep the project accountable to the local community it serves for the effectiveness of the project.

Under Part B of the program, Special Programs and Projects, grants and contracts may be awarded to evaluate the effectiveness of Federally assisted programs serving Indian children. All applications must include "...a statement describing the activities for which funds are sought and include provisions for an evaluation of the project." Applications can be approved only if the U.S. Commissioner of Education is satisfied that there has been "...adequate participation by the parents of the children to be served and by the tribal communities...in the operation and evaluation of the project." (underlining ours). Again, evaluation is perhaps the primary tool by which the relevancy of special programs and projects

to the needs and interests of local Indian communities can be assured.

Under Part C of the Act, Adult Education, organizations may apply for grants "...to support planning and demonstration projects which plan for, test, and show the effectiveness of programs for providing adult education for Indians." Applications must include provisions for the evaluation of the proposed project's effectiveness.

There are evaluation and testing activities over which the Office of Indian Education can exert influence but not direct administrative control. Since Indian children attend a wide variety of types of schools (government-operated schools, local public schools, and parochial schools), they are subject to the testing and evaluation policy of agencies (including the various state departments of education) other than the Office of Indian Education. It is clear that this Office cannot make policy for these various agencies even though they may serve large numbers of Indian children.

However, by demonstrating professional leadership the positions taken in the implementation of the Act seem likely to influence the policy of other education agencies serving Indian children. The Deputy Commissioner for Indian Education and his staff will have the potential for considerable power-of-persuasion and access to public media, regarding the testing and evaluation policy of other agencies. Thus, if the administration of the Act brings into reality the participation of local groups in program evaluation and if it takes innovative and strong leadership with regard to the use of tests with Indian children, it is likely to influence strongly the policies and practices of other educational agencies.

B. Difficulties in Maintaining Local Accountability

The history of implementation of Federal compensatory education indicates that there are serious pitfalls to be anticipated in maintaining local accountability for the focus and effectiveness of projects and programs to be funded under the Act. In a review of the political history of Title I of ESEA, Murphy (1971) reports:

> ...Since the beginning of the program, evaluation has been high on the list of federal rhetorical priorities, but low on the list of actual USOE priorities. The reasons for this are many. They include fear of upsetting the federal-state balance, recognition of that little expertise exists at the state and local levels to evaluate a broad-scale reform program and fear of disclosing failure. No administrator is anxious to show that his program is not working.
>
> The matter is further complicated by the lack of agreement on what would prove whether Title I is "working." This confusion stems from covert disagreements over the relative importance of Title I's several purposes. These include breaking the federal aid barrier, raising achievement, pacifying the ghettos, building bridges to private schools, and providing fiscal relief to school districts. Depending on one's perspective and priorities, Title I may be or may not be working. If one views the program primarily as a vehicle to provide fiscal relief for a city school system, achievement test scores are hardly an appropriate way to measure success; the program is successful if fiscal collapse is avoided. The legislation, however, calls for objective measures, and if they show that children are not gaining in achievement it makes it difficult for Congressmen to justify their continued support of the program. At the same time, it is politically dangerous to be opposed to program evaluation. Therefore, inconclusive evaluations are politically acceptable, although they may provoke rhetorical wrath in the Congress, and exasperation in the Executive agencies.
>
> ...There are some examples, however, where the USOE has attempted to assert leadership. For the most part these efforts have been unsuccessful. This is best exemplified in USOE's attempts to establish two basic criteria--one calling for the establishment of local parent advisory councils and the other governing the concentration of funds. Since the beginning of the program, USOE has sought to involve parents in local Title I programs on the theory that the more parents were involved the better their children would do in school. In general, however, USOE has been unable to enforce this notion on the states. In 1969, three out of five schools districts did not have Title I local parent advisory councils.

> ...Creation of countervailing local forces to prod federal, state, and local officials to act more forcefully may be the most important step. Efforts to establish strong local parent advisory councils under the new federal guidelines could help produce more local responsiveness to the educational needs of the poor. Their demands for public accountability and a role in the development of programs could increase the influence of the poor at the local level.

It is clear that it will not suffice for the Office of Indian Education to adopt the evaluation and testing practices that have become typical of earlier compensatory education efforts. Delivering the promise of the Act will require innovation, use of the most recent developments in the field, and a clear commitment to develop the capacity for local participation in program evaluation. Insuring that local Indian communities have real authority for external evaluation of projects, developing the use of criterion-referenced rather than norm-referenced assessment, and assisting local Indian communities in the definition of criteria will be necessary.

IV. Elements of a Sound Testing and Evaluation Policy

A. Validity

1. The criteria used to judge the success of any educational effort must be consistent with the ideology and objectives of that effort. Just as the College Board found it necessary to change the content of their achievement tests with the advent of the "new" math and science curricula in the 1960's, the standards used to judge projects and programs in Indian education must be made to correspond to the intentions and practices of those projects. We must not attempt to measure weight with a ruler. If a program is attempting to transmit cultural values, ethnic tradition, or transmit the

values of cooperative endeavor, then visible criteria corresponding to these objectives should be used. Ideally, the criteria for assessing the effects of an educational program should emerge directly from the day-to-day functioning of that program (for example, knowledge of the structure of tribal government).

2. The criteria used to assess a program should represent a fair sampling of the total content of the program. The criteria should be defined and developed objectively. (They should not rely on testimonial statements.) Educational criteria should not be limited to the easy-to-measure (such as standardized tests) nor the "easy success" elements (criteria that would be achieved without the project) of the program. The criteria used for an evaluation of educational projects under the Indian Education Act of 1972 must reflect the pluralism of the projects and of the communities they serve. A valid evaluation system cannot impose a single standard on multiple and sharply different programs.

3. The criteria for judging the success of educational activities should accurately reflect the values and goals of the community served.

Performance criteria might include questions or workbook tests of the type found in standardized tests, teacher-made tests, workbook problems, and so forth. However, they might also include classroom and institutional characteristics such as attendance data, vandalism costs, and observor estimates of growth and development. The term criterion denotes any observable evidence of success or failure. Note that the above definition does not exclude unanticipated or unintended effects. Neither does it require a project to define "behavioral objectives."

B. Reliability.

1. The criteria used must be free of self-justification. Criteria must be believable as visible, reasonable evidence of success or failure. For example, if project personnel are merely asked to rate the success of an Indian teacher-training project, a suspicion of bias cannot be avoided. In contrast, an increase in the number of Indian teachers actually employed is persuasive.

2. To the greatest extent possible, educational criteria in this setting should make use of information that is unobtrusive--information created by the phenomenon itself. For example, a sharp reduction in dropout rate is a relatively "unfakable" indicator and does not take time from the instructional program.

3. The ultimate test of a criterion is empirical. If it is sensistive to the effects of the program over time, it will serve as an index of the degree of success. Thus, if 100% success is apparent before exposure to the program, or if no one performs up to criterion level after the program, either the criterion or the rationale underlying it is faulty.

C. Practicality

1. Whatever evaluation system is employed, it must be acceptable to teachers, pupils, and the community. No evaluation method is likely to yield useful information if that system is actively resisted.

2. Evaluation systems should be open, that is, the entire process should be free of mystification and psuedo-scientific jargon. Every aspect of it should be understandable and public. The evaluation should be a quick response system. To be useful in formative

as well as summative evaluation. It must provide feedback quickly. (Formative evaluation is conducted during the program development stage to assist the developers in clarifying objectives, identifying strengths and weaknesses, needs-assessment and similar activities. Summative evaluation is conducted after the program is implemented to determine program effectiveness, extent of impact, cost-effectiveness and similar characteristics of the program.)

3. The method of evaluation should not require unreasonable time or effort from teachers and pupils (as the use of standardized achievement tests often does). To the maximum extent possible the work of evaluation should not be done by teachers and pupils but by others.

4. The evaluative criteria must be responsive to changes in the various programs. Criteria must grow and change with the experiences of the schools or evaluation will become a barrier to change rather than a catalyst for improvement. Evaluation systems should be designed to be self-correcting.

V. Issues Critical to Policy Formulation

A. Pluralism

The people to be served by the Act are so culturally diverse as to nearly defy categorization. The Act uses the following definition:

> ...For the purposes of this title, the term "Indian" means any individual who:
>
> Is a member of a tribe, band, or other organized group of Indians, including those tribes, bands or groups terminated since 1940 and those recognized now or in the future by the State in which they reside, or who is a descendant, in the first or second degree, of any such member, or

Is considered by the Secretary of the Interior to be an Indian for any purpose, or

Is determined to be an Indian under regulations promulgated by the Commissioner after consultation with the National Advisory Council on Indian Education, which regulations shall further define the term "Indian."

Not only is it difficult to define who is an Indian (and Alaska Native), and who is not, but within the population included by the definition of the Act, the differences among people and groups of people are probably as great as the differences that distinguish them from "non-Indians." In Arizona, for instance, although the Hopi and Navajo are neighbors, they cannot understand one another's language. Within the Hopi tribe, there are two unrelated languages, neither of which are intelligible to most other Arizona Indians (Officer, 1956, pp. 3-4).

Estimates of the number of tribal groups vary but it is almost surely in excess of 200. Political, religious, and other differences within tribal groups, family groups, clans, and geographically defined groups exist. Further, the distinctions between urban and rural residents, reservation and non-reservation residents, and in some cases, the differences in values and goals among age groups complicate the policy formulation process.

It would be patently inappropriate to apply, or prohibit the application of, specific testing and evaluation procedures for all those served by the Act. A sensible testing policy for an Indian group that has for several generations lived in the metropolitan Boston area would almost surely be inappropriate for a widely dispersed and isolated Indian population in the Southwest desert. The education of all minority groups in the United States has suffered as a result of the fallacious assumption of homogeneity,

but no group has suffered more from this assumption than the people to be served by this Act. Any policy statements, or positions, taken by the Office of Indian Education with regard to testing and evaluation must surely have as a primary premise recognition of, and responsiveness to, this dramatic diversity.

B. Multilingualism

Despite several years of Federally-sponsored research, development and demonstration, the educational problems associated with bilingual populations in the United States have only begun to be appreciated. Those problems are particularly complex in Indian education. The Indian languages differ radically from English and Spanish, making the mastery of English particularly difficult for Indian children whose native tongue shares no linguistic roots with English or Spanish (Weaver, 1967). In the Sioux language, for instance, there is no word for "time." (Potts and Sizemore, 1964)

Many of the children and adults to be served by the projects administered by the Office of Indian Education are not bilingual but multilingual. Not only are tribal languages and English encountered, but also Spanish, a variety of Indian languages, and often differing dialects within these major language groups.

On a national scale, no truly satisfactory solution to the biasing effects of bilingualism on standardized achievement and IQ scores has been found. (This is not to say that in some instances standardized tests in English may not be appropriate criteria for success in a particular project.) It is important that any policies regarding testing and evaluation be sensitive to these sources of bias. Recent developments in criterion-referenced measurement and performance criteria, seem likely avenues for

avoiding these types of errors. It is possible to have tangible criteria for the success of a project or program that are not just linguistically "fair" but essentially non-linguistic.

C. Poverty

The complex of characteristics associated with families living in poverty, poor housing, inadequate health care, inferior nutrition, lack of mobility, and so forth, influence the test performance of children in these families. Since poverty and racial discrimination have traditionally gone hand in hand in our society, it has not been possible to discriminate scientifically between the effects of these two determiners of test performance. In the case of Indian children who have suffered from both, the distinctions may seem academic. Nevertheless, it is unrealistic to expect children of poverty-stricken families to perform as well on achievement tests as children from affluent families, regardless of ethnicity. Probably no identifiable group in the United States suffers more extensively and severely from poverty than do Indians and Alaska Natives. No educational reform regardless of its effectiveness and quality, is likely to fully compensate for the crippling effects of poverty. Even highly successful projects funded by this Act will not repair the recurring damage of poor nutrition, inadequate housing, and poor health.

Thus, the position taken by the Office of Indian Education on testing and evaluation, must reflect realistic expectations based on the level of poverty in various communities, since poverty does influence test performance. Though the Office may set high standards for the performance of <u>projects</u>, the influence of poverty on <u>children</u> must be faced realistically. The economic and social

affliction of poverty is not likely to be cured or compensated for in Indian communities by the Indian Education Act of 1972. Until that affliction is fully removed, Indian children will continue to suffer an educational handicap.

E. Cultural Differences

It is very likely that most Indian communities want their children to be capable of coping with, and in, the non-Indian culture that surrounds them and to also value the teaching of their own cultural heritage. In the population to be served by the Act, policy must not only reflect the difference between the White middle-class culture and those educational values generally shared by native Americans, but must also be responsive to the variety of goals and values within the Indian population. The content of existing standardized tests (both mental ability and achievement) is a direct reflection of the educational values of the affluent White majority of this society. But even if all children in the United States could be trained to perform well on such tests, the success of the educational system in serving educational values within minority populations would be overlooked. For example, Fuchs and Havighurst (1973) say:

> It is difficult and perhaps impossible to state what Indians want their children to get from the schools as Indians. In the first place, various Indian groups have different desires in this respect. For example, the thirty thousand Lumbees of North Carolina have lost their traditional language and now use English. They do not practice a traditional culture although they have pride in being Indian. They contrast enormously with the Navajo, who have a living language, living myths and religious ceremonies, and a vital tribal life which they wish their children to retain.
>
> Secondly, many tribes are divided among themselves concerning their expectations of the school as a teacher of Indian culture and history. Among the Hopi, for instance, one faction would limit the school to teaching the English language and other

skills necessary to do business in the outer world, while the tribe teaches the children their culture. Another faction would use the schools more fully to carry on the Hopi culture.

White people cannot usefully help to settle this kind of problem. Indians will work it out, and the schools, especially those on and near reservations, should follow the Indian voice.

Similarly, wide diversity is to be expected in such value-laden concerns as competitiveness, sex roles, economic ambition, and family allegiance.

VI. Position Statements

A. The authority for external evaluation of projects should be exercised by local Indian communities. The criteria by which projects are evaluated should be defined and developed in those communities (necessarily in cooperation with project staff).

The development of usable, locally-relevant, performance criteria will probably require some initial training and technical assistance (perhaps on a regional basis), some trial and error and continuing support and encouragement from the Office of Indian Education. As criteria are developed, tested, and revised, a computerized data-bank may be useful in the sharing of experiences by various Indian communities.

The position proposed here is a marked departure from existing evaluation practice. In most Federally-funded programs evaluation is permitted to be internal, that is, in control of school districts and project staff. This position is intended to give real authority for objectives and attainment of those objectives, to local Indian groups. It departs from the habitual use of standardized tests and exploits the most recent developments in the technology of

educational evaluation. It is not a comfortable, safe, position. It is, however, consistent with the intent and language of the Act and perhaps critical to the Act's success.

B. Mental ability, or IQ, tests should not be used with Indian children or adults. Tests which purport to measure intelligence or mental ability are invalid in culturally different populations. Such tests are developed to be predictors of success in traditional academic settings by pupils from the culturally-dominant population. They may, in some instances, be useful for predicting the success in traditional academic settings by culturally different pupils. However, they are unlikely to predict success in the attainment of non-traditional educational objectives.

Further, they in no instance measure "mental ability" or "native intelligence", even among White middle class children based upon the results of such testing. Many Indian children attend public schools in districts or states that require the administration of such tests. Though the Office of Indian Education cannot itself eliminate such requirements, it can by example and persuasion discourage these practices.

C. The use of norm-referenced, standardized achievement tests with Indian children should be discouraged. The sources of invalidity, bias, and misleading results in the use of these instruments with culturally-different groups has been discussed. Some projects funded under the Act may have sound reason for employing such tests. Consequently, the Office of Indian Education should not prohibit their use in projects funded under the Act. However, the full support, prestige, and influence of the Office of Indian Education should be available in Indian communities that

choose to eliminate the use of norm-referenced tests, and the practice of placing norm-based scores in pupils' permanent records.

D. An Evaluation Review Panel

As detailed earlier, the Act requires evaluation with local participation. It will be one of the responsibilities of the Office of Indian Education to insure that this type of participatory evaluation becomes a reality and that the quality of evaluation provides useful information at the local level. An Evaluation Review Panel should be organized to review projects and applications for adequacy of evaluation plans and degree of community participation in evaluation. Because criteria are to be locally-defined, this panel should be representative of a diversity of Indian communities. It is suggested that a seven-person panel with membership nominated by the National Advisory Counsel on Indian Education be established. This panel is likely to need initial training in the technical aspects of educational program evaluation and should have available to it the necessary technical expertise and staff resources.

Since approximately 1,200 project applications are expected in the first year, the computerized management information system now being developed will be extremely useful to the screening of the evaluation component of project applications.

The Evaluation Review Panel could establish screening procedures for the evaluation components of all applications. It could also investigate and assist those projects most deficient in local participatory evaluation. In this manner, it could serve as a safeguard against the domination of project objectives over community concerns, values, and objectives by project staff and other professionals.

*Criterion-Referenced Measures

Underlying the concept of achievement measurement is the notion of a continuum of knowledge acquisition ranging from no proficiency at all to perfect performance. An individual's achievement level falls at some point on this continuum as indicated by the behaviors he displays during testing. The degree to which his achievement resembles desired performance at any specified level is assessed by criterion-referenced measures of achievement or proficiency. The standard against which a student's performance is compared when measured in this manner is the behavior which defines each point along the achievement continuum. The term "criterion," when used in this way, does not refer to final end-of-course behavior. Criterion levels can be established at any point in instruction where it is necessary to obtain information as to the adequacy of an individual's performance. The point is that the specific behaviors inplied at each level of proficiency can be identified and used to describe the specific tasks a student must be capable of performing before he achieves one of these knowledge levels. It is in this sense that measures of proficiency can be criterion-referenced.

Along such a continuum of attainment, a student's score on a criterion-referenced measure provides explicit information as to what the individual can or cannot do. Criterion-referenced measures indicate the content of the behavioral repertory, and the

correspondence between what an individual does and the underlying continuum of achievement. Measures which assess student achievement in terms of a criterion standard thus provide information as to the degree of competence attained by a particular student which is independent of reference to the performance of others.

Norm-Referenced Measures

On the other hand, achievement measures also convey information about the capability of a student compared with the capability of other students. In instances where a student's relative standing along the continuum of attainment is the primary purpose of measurement, reference need not be made to criterion behavior. Educational achievement examinations, for example, are administered frequently for the purpose of ordering students in a class or school, rather than for assessing their attainment of specified curriculum objectives. When such norm-referenced measures are used, a particular student's achievement is evaluated in terms of a comparison between his performance and the performance of other members of the group. Such measures need provide little or no information about the degree of proficiency exhibited by the tested behaviors in terms of what the individual can do. They tell that one student is more or less proficient than another, but do not tell how proficient either of them is with respect to the subject matter tasks involved.

In large part, achievement measures currently employed in education are norm-referenced. This emphasis upon norm-referenced measures has been brought about by the preoccupation of test theory

with aptitude, and with selection and prediction problems; norm-referenced measures are useful for this kind of work in correlational analysis. However, the imposition of this kind of thinking on the purposes of achievement measurement raises some question, and concern with instructional technology is forcing us toward the kind of information made available by the use of criterion-referenced measures. We need to behaviorally specify minimum levels of performance that describe the least amount of end-of-course competence the student is expected to attain, or that he needs in order to go on to the next course in a sequence. The specification of the characteristics of maximum or optimum achievement after a student has been exposed to the course of instruction poses more difficult problems of criterion delineation." (Glaser, 1963)

Major Concepts in the Evaluation of Educational Programs

It is the purpose of this manual to offer suggestions for making the evaluation of educational programs useful. It is intended for use by the staff of school districts and other agencies who are responsible for program evaluation. The information given here is to help educators understand the purposes of program evaluation, to help in planning the evaluation activities, to help in maintaining the quality of the planned evaluation, and to help educators develop a comprehensive evaluation design.

By "program" we mean an identifiable set of activities, directed toward a defined population, with explicit objectives. Often funds from different sources, having similar goals and

objectives, are directed toward a single population. The evaluation of such multi-funded programs cannot be expected to isolate the specific effects of each funding source. The program, however, can usefully be evaluated and this consolidated evaluation can be reported to each of the funding sources.

By "evaluation" we mean the process of obtaining and using reliable information about the nature, extent, and effectiveness of an educational program. Evaluation should not be limited to test scores or to testimonial statements. Useful evaluation of an educational program will make use of whatever reliable information is relevant to planning, developing, maintaining, and improving that program.

Why Evaluate Programs?

A primary purpose of the evaluation of educational programs is to meet a responsibility to parents and other citizens. If education is to have constructive public support and involvement, sound information must be made available. Citizens must know what needs the program is intended to meet; they need to have a realistic picture of the objectives of the program. Citizens also need an accurate description of the substance of the program, and they will need information about the effectiveness of the program.

Similar information is necessary for school districts to meet their responsibilities to the state and federal agencies that administer public funds. These agencies in turn, are responsible to a larger public and must provide the information necessary to an informed citizenry.

Evaluation is essential to the management of educational programs at every level--from the individual pupil to the national policy. The allocation of human talent, materials, and other resources is based on estimates of objectives, program content, and effectiveness. It is the evaluation process that yields these estimates. Beyond the management of current programs, good planning for new or modified programs is also dependent on useful evaluative information.

Good evaluative information may have multiple uses. For example, data about the progress of individual children in a particular subject (say math), may help the teacher offer materials and learning opportunities tailored to the needs of each child. This same information, aggregated at the classroom or school level, may be useful in allocating resources and personnel (such as aides). At the district level the same information, combined with similar data from other schools, may be used in reporting to the school board and the public, may provide a sound basis for making applications for future funding, and may serve to identify unmet needs that call for program planning.

The multiple uses of evaluation occur throughout the various stages of an educational program. Table 1 indicates some of these uses.

Good evaluation is <u>useful</u> evaluation. It is not the reliability of instruments, nor the prestige of a consultant that assures good evaluation. Program evaluation should be of practical utility to pupils, parents, teachers, staff, and responsible agencies. Useful program evaluation is timely, relevant, understandable and of course, feasible. To be of real use to the various participants

TABLE 1

SOME USES OF EVALUATIVE INFORMATION AT VARIOUS LEVELS

	Level					
	Individual	Class or Group	School	District	State	Federal
Preliminary Information						
Needs Assessment						
Diagnosis						
Clarification of Objectives						
Progress Information						
Program Description						
Program Development						
Summary Information						
Effectiveness of Methods						
Modification of Objectives						
Extent of Impact						
Effectiveness of Program						

of an educational program, evaluation needs the cooperative effort of those participants.

The Elements of Useful Program Evaluation

We believe there are several critically important elements of educational program evaluation. These elements are tangible criteria, relevant and accurate instrumentation, an evaluation plan, program description, able and cooperative people, and the use of and reports of the results.

Tangible Criteria

One of the basic elements of a useful program evaluation is the identification of tangible criteria of success. Without a clear statement of what is to be accomplished, evaluation is difficult if not impossible. For each major objective of a program there should be clear and concrete ways of knowing whether, or to what extent, that particular objective has been achieved. Program objectives related to the cognitive development of students often use achievement tests as criteria, however non-test criteria (such as the performance objective "The pupil will be able to list five basic elements of graphic composition") are also useful. Objectives and corresponding criteria are frequently stated in terms of non-cognitive observables (attitudes, psychomotor skills, self-concept, health practices, etc.). The criterion in any case should be selected or devised to fit the objective. The mere availability of a criterion measure, however widely-used, should not influence the statement of program objectives.

Many program objectives and criteria may be stated in terms of institutional or programmatic indicators. For example, educational programs may be designed to show effects on attendance data, frequency of parent participation, proportion-of-students seeking further instruction, or the frequency of use of materials and facilities such as libraries or drop-in centers.

In some circumstances the process of formal measurement will change the behavior being assessed. Unobtrusive indicators are useful in such instances, when responses may be contaminated by more intrusive measurement techniques.

It is often useful to employ more than one criterion in determining how well a particular objective has been achieved. For example, primary-grade pupils' attitudes toward classroom equipment and facilities may be assessed both through interview and classroom observation.

For program evaluation to be useful it need not deny either unintended effects or non-measureable objectives. Performance of previously stated objectives need not be the only source of evaluative information. In some instances important unanticipated effects can, and should be documented. These unforeseen effects may be particularly useful in planning and defining objectives for the future. Also, any educational program is likely to have some objectives that are not immediately subject to tangible criteria. Though criteria cannot be specified, these objectives may still be important. So long as a sufficient proportion of the objectives are criteria-related, useful program evaluation is possible.

Relevant and Accurate Instrumentation

Criteria can only be assessed by some form of documentation. The method used to document a criterion is often called an evaluation "instrument." Though tests of all sorts (aptitude, achievement, interest, etc.) are widely used as instrumentation in program evaluation, many other forms of instrumentation are also important. Interview guides, observer check lists, attitude scales, content analysis forms, and forms for recording various educational processes are all useful instruments in program evaluation. Good evaluation instruments have two fundamental characteristics; relevancy and accuracy.

No matter how precise or widely respected, an evaluation instrument is worthless if it does not correspond to the program objectives. For example, if an objective is for ten-year-olds to be able to write simple sentences, a vocabulary test is not the most relevant instrument. In testing, this characteristic of an instrument is called "validity." Whatever the type of instrument, it should document the information relevant to a program objective.

An instrument should be accurate as well as relevant. Once we are confident that an evaluation instrument is going to produce information about <u>what</u> we intend, we can be concerned about the accuracy of that information. For example, asking pupils to solve one arithmetic problem of a particular type will not provide as accurate information about their skill as will performance on five such problems. Accuracy in testing is called reliability. The need for accuracy is associated with all forms of instrumentation. The training of observers and interviewers, and similar procedures, are used to improve the accuracy of instrumentation.

Instruments that are inappropriate because of physical handicaps of respondents or for cultural or linguistic reasons are likely to produce information that is neither relevant to program objectives nor accurate. In fact, misleading evaluative information may be produced by poor instrumentation.

An Evaluation Plan

Educational program evaluation is unlikely to produce useful results or to be conducted effectively without planning. Evaluation activities involve many kinds of people (pupils, teachers, administrators, consultants, data processors, and others). The participation of these people, at the proper time, and with the appropriate materials, requires forethought and preparation. Several important considerations in planning are evaluation design, efficiency, data collection and editing, analysis, scheduling, and budget.

There are many ways that the evaluation of a particular educational program may be structured. The structure of evaluation activities calculated to produce the most useful information is often called the evaluation design. Basically, program evaluation is intended to answer the questions a) were the program objectives achieved b) would they have been achieved without the program, and c) how did the program achieve its objectives? Design considerations include the use of reference groups and the timing of information-collection.

Reference groups. Reference groups are frequently (but probably not frequently enough) used to compare the status of participants in the program to similar people who are not affected by the program. This allows references to be made about the objectives, directions, and effectiveness of the program. Generally, three kinds

of reference groups are used: control groups, comparison groups, and norm groups. Control groups are typically formed when pupils (or other participants) are randomly assigned to program activities vs. non-program activities. This random assignment assures comparability of groups and unbiased inferences. Random assignment is often not feasible in educational program evaluation though it is a powerful design tool and should be used whenever possible. More frequently, existing intact groups of pupils are involved in educational programs and comparable groups (in other classes, schools, and districts) may be identified. When these groups, called comparison groups, are administered the same criterion instruments as the people in the program, evaluative judgments can be made about the program. When neither control nor comparison groups are feasible, or when a larger or more categorical reference group (such as handicapped) is needed, norm groups may be used. The norm groups of standardized tests are the most common example of this type. However, district, county, and state performance information is also frequently available. Since such norm groups were not designed to be comparable to any one particular program group, caution must be exercised in basing evaluative inferences on them. In general, good design calls for selecting and using the most comparable reference group consistent with other planning considerations.

The timing of information-collection is another major design consideration. Three general time intervals are often used: preliminary (pre), progress, and summary (post).

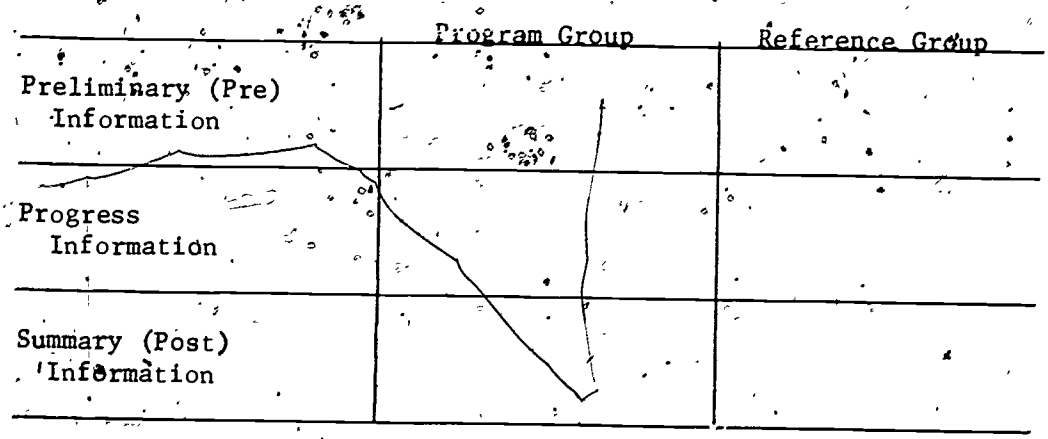
Pre-Post Designs. One good evaluation design uses pre-post criteria information and a reference group. In a pre-post design, a measure of performance is taken before the program has begun and

after it is over. The performance of a reference group of pupils, not involved in the program, is measured at the same times. The effect of the program can then be gauged by comparing the performance of the two groups.

A posttest-only design is useful when a pre-test might alter the effects of the program being evaluated. Such a design involves taking a measure of performance only at the end of the program. The performance of a reference group of pupils outside the program is measured at the same time; by comparing the performance of the two groups, the effect of the program can be determined.

Collecting evaluation information in an educational program while it is in progress can be especially useful. Such an evaluation design can indicate strengths and weaknesses in the program and can serve as a basis for improving the program. On the other hand, teachers and others can use the information from this type of design both in planning future activities and in determining which pupils need particular services or materials.

The design elements of reference-groups and time-of-information-collection may be combined in many ways, depending on the nature of the educational program and other planning consideration. The "building blocks" of evaluation design may be pictured this way:



Some, or all, of these design elements might be used in a single program evaluation. They should be selected to make the evaluation as useful as possible.

Sampling. Another part of an evaluation plan concerns efficiency. Where large numbers of pupils or other participants are involved in a program, the evaluation can be done more efficiently and economically by using person-sampling and item-sampling. Person-sampling involves measuring the performance of a randomly-selected sample of pupils in a program. The performance of this sample can provide a good estimate of the performance of the entire group of pupils.

In item-sampling, each pupil in a program completes only a randomly-chosen portion of the measuring instrument. For example, each pupil might be required to complete only ten of the one hundred items on a multiple-choice test. Through item-sampling, a good estimate of how the entire group would perform on the entire test can be obtained without administering the entire test to each pupil. It is also possible to combine person-sampling with item-sampling. For instance, a sample of the pupils in a program could each complete a sample of the items on a test.

Data-Handling. Data collection and editing are essential parts of an evaluation plan. Preparations must be made for the distribution of instruments, the training of people in the use of the instruments (to protect validity and reliability), and for editing data. Most information collected in field-settings will have some recording errors and occasionally directions are misunderstood. It is important to plan for editing (or quality-control) as part of the information-collection process. No matter how sound the design,

or how careful the analysis, information contaminated at the source is of little evaluative use.

Analysis Plan. Analysis and summarization of the information to be collected should be carefully specified before the evaluation plan is put into action. The nature of the analysis will be based upon the design. Sometimes we find that the design selected is impossible to implement because information was collected in such a way that it cannot be analyzed. Planning the analysis will concern such problems as combining data, types of scores, observations, ratings, scaling, coding, choice of statistics, and discriminating between trivial and important results.

Scheduling. Everyone involved in the evaluation process will probably, at some point, be concerned with the schedule of activities. To avoid poor use of people and resources and to assure good quality information, the sequence of activities should be explicitly scheduled. To be sure, the schedule may be revised as the plan is implemented, but many evaluative problems may be avoided if they can be anticipated.

Similarly, the costs of evaluation should be anticipated. Evaluation usually cannot be supported by the funds designated for the program operation itself. Budgeting for evaluation is the only way to be sure that a well-planned evaluation can actually be performed. By including this budgeting function in the evaluation plan, it is frequently possible to avoid waste and duplication of effort. For exapmle, it may be possible to combine information-collection activities and costs so that multiple uses are made of the same units of information.

Program Description

A plan for useful evaluation should include an accurate description of the important characteristics of the program: the age, ethnicity and language, ability level, number, and socio-economic status of the pupils, the number and types of teachers, aides, counselors, and any other persons involved in the program; the specific materials, methods, and activities planned or undertaken in the program; how long the program lasted or will last and/or how often the materials and methods of the program will be used (that is, continuously, an hour a day, one day a week, etc.); and where the program took (or is taking) place--there may be many different schools in the program, there may be a school-within-a-school, or there may be off-site services which are part of the program.

Too often, evaluation results overlook the necessity of describing <u>what</u> was evaluated. It is of little use to know that "x" was, or was not, an effective program.

Able and Cooperative People

Probably the single most critical element of educational program evaluation is the contribution of the people participating. Program evaluation can be useful only if the people involved are able to make the contributions expected of them. In many instances, this means that people must be informed, sometimes trained, and certainly given the time and resources necessary to accomplish their part of the task. Pupils, school staff, parents, and consultants--all must be capable of fulfilling their responsibilities.

Even when able, people cannot be expected to make their

contribution to program evaluation if they view the process as threatening, a nuisance, or lacking in utility. Cooperation often must be won by demonstrating the usefulness of program evaluation to the people it is intended to serve.

Using and Reporting Results

Useful program evaluation is a continuing cycle that contributes to needs-assessment and diagnosis, program planning, refinement of objectives, allocation of resources, program modification, and summative decision-making. Individual pupils may be seen using evaluative feedback from peers, aides, teachers, and parents in just such a cycle.

Those responsible for educational programs in school districts will find program evaluation useful in clarifying and making concrete the needs-assessment that was the basis for instituting the program. Preliminary meausres may result in some modification of the original needs-assessment. As the program progresses, needs may change or be met from various sources. Progress information can be used to keep the program consistent with changing needs. Summary evaluation also will reflect on the needs-assessment and may indicate unanticipated problems.

Objectives may prove to be unrealistically difficult or previously attained. Program evaluation pre-measures are useful in the refinement and clarification of specific tangible objectives. Summary evaluation information may suggest elimination, modification, or addition of particular objectives.

Program planning should be based on relevant and accurate evaluation information about the past performance of the program

and its various elements. The allocation of resources, similarly, may be improved and kept up to date on the basis of evaluative information. The program may be modified in content and method as evaluative data begins to indicate the relative strengths and weaknesses of its elements. And finally, policy decisions regarding the value of the program to the public, in relation to the priorities of the community, should have foundation in accurate information about the effects of the program.

These possible uses imply that the information produced by program evaluation is reported in an understandable form, on a timely basis, to those who can use it. School boards are, of course, important users of program evaluation information. Sometimes overlooked as users of evaluative information are district and school staff, parents, pupils, and the general community served by the schools. The results of program evaluation can be presented through news releases, interviews, and by press coverage of school board meetings. These recipients of program evaluation are, and should be, also the sources of the information. Their cooperative involvement produces useful program evaluation.

EARLY CHILDHOOD EDUCATION PROGRAM MODELS FOR INDIAN COMMUNITIES

by

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I. Introduction

Section II of this paper offers suggestions regarding the generic problem of instituting an experiment or demonstration to test the efficacy of proposed approaches in early childhood education. The section draws heavily from the experience of Stanford Research Institute in the longitudinal evaluation of the national Follow Through program since 1968. (See list of references) Thus, Section II will include a brief review of the planned variation concept as it evolved in Follow Through. It also contains some discussion of dilemmas that characterize any major demonstration of quasi-experiment in a natural setting. The final part of Section II presents a conceptual model for program evaluation. We have found this model useful in categorizing evaluation issues and

providing foci for evaluation activities.

Section III of the paper opens with some questions that deserve consideration in appraising the relative effectiveness, attractiveness, or appropriateness of instructional models. Following that, several models are described according to observed process characteristics. These data are drawn directly from technical reports by SRI. Finally, in response to the request to suggest specific early childhood education models, I have also included some discussion of findings that appear to be acceptably dependable for policy guidance. I must emphasize that these will be findings that are acceptably dependable for reducing uncertainty about policy decisions rather than findings that are acceptably dependable for scientific conclusions. The section includes descriptions of approaches that have shown either most consistent positive effects or effects of substantial magnitude in at least some of their applications. I will not be able, however, to identify nine different models or even necessarily ones that are "most appropriate" to urban, rural (non-reservation), and reservation applications.

The final part of the paper (Section IV) contains a preview of some work now in progress which shows some promise of yielding useful generalizations from which "new" models might be synthesized or older models refined. These findings are highly speculative at this point but derive from analyses of relationships between process and outcome variables across a substantial portion

of the range of variation created by the national Follow Through program.

II. Program Evaluation And The Planned Variation Concept

The precise origins of the term and concept of "planned variation" are unclear but the label has been used in the past five or six years to describe the national Follow Through program and a related substudy under the Head Start program. "Planned variation" refers to a program in which intentionally different educational improvement models are tried out in various situations. Since the concept is associated so intimately with the Follow Through program, and since most of the discussion that follows draws from the Follow Through experience, a brief review of the evolution of the Follow Through program may be helpful.

A. The National Follow Through Program

Congress authorized Follow Through in 1967 under an amendment to the Economic Opportunity Act to provide developmental and educational services for poor children in primary grades who had experienced Head Start or equivalent preschool. A large-scale service program, roughly similar in scope to Head Start, was envisioned originally and reflected in the enabling legislation. Appropriations were not sufficient, however, so the program was recast as an R&D program even though the language of the legisla-

tion itself was never changed.

Since Follow Through was authorized under the EOA, the Office of Economic Opportunity had responsibility for it just as they did for Head Start. OEO transferred funds to the Office of Education for program administration, but OEO retained a vested interest in the program's design and management.

Follow Trhough began in the 1967-68 school year when 52 projects were initiated in 40 purposively selected school districts. All these first projects were of the type that have come to be called "self-sponsored;" that is, each local district conceived and began to implement its own concept of a "best" or most appropriate program for impoverished primary grade children through grade three.

During 1967-68, the Follow Through program office in OE refined the concept of planned variation to more nearly approximate a systematic experiment. Various recognized proponents of early education approaches were invited to serve as "model sponsors" to install and support their approaches in one or more project locations. This mode of sponsorship began with the 1968-69 school year. Local preferences for models or approaches were honored--districts chose their preferred approach (within loose limits) following a sort of "courtship" with interested sponsors. Principles of local autonomy and mutual preference determined the sponsor-to-district affiliation rather than some evaluation design considerations. At the start of the 1968-69 school year, there

were 106 projects and 15 sponsors, counting self-sponsored and parent implemented projects as "sponsor" categories. About half of the projects initiated in 1967-68 affiliated with a sponsor and the remainder continued as self-sponsored projects.

Some projects were added in 1969-70, bringing the total number to 160. In addition, six new sponsors joined the effort. More sponsors and a few more projects were added in 1970-71, bringing the total projects to 177 and the number of sponsors to 22. A few more projects and two more sponsors were added in 1971-72 to bring the project total to 180 and sponsor total to 24. The project list in 1972-73 totaled 173. There is no need here for details on project terminations, voluntary or otherwise. There have been a few. Also, a sponsor opted out in 1969-70. About 92,000 children were involved in Follow Through in 1972-73, but certainly not all were involved in the evaluation sample.

The following are points to remember about Follow Through as problems in its evaluation are assessed:

1. The selection of districts, schools, teachers, and children to be involved in Follow Through was judgmental and guided by rules of individual district or child eligibility (e.g., districts in poor communities or children from families that were poor by OEO poverty guidelines). None of the choices (with the possible exception of some participant selection within a project) was random.

2. Control groups were not established simultaneously with

the experimental groups (i.e., Follow Through participants) by random selection from sets of children eligible for participation. All control groups were established after-the-fact.

3. The mode by which sponsors affiliated with school district was purposive in the extreme and led to substantial imbalance in characteristics across projects within sponsor categories and between sponsor groupings.

4. Each model sponsor entertains a somewhat different set of objectives or program priorities. Also, every individual project applies some additional variations on sponsor's objectives that will be sought locally. The measurement effort necessary to embrace the full sweep of all objectives held by all sponsors and all individual projects has never yielded gracefully to solution. As a consequence, it is inevitable that the measures obtained can be criticized with some justification by any sponsor or project as not including "all the things we're trying to do."

B. Evaluation of the Planned Variations

The innovative "planned variations" idea is the unique aspect of the Follow Through experiment and the key to understanding the plan for assessment. The fundamental purpose of the Follow Through experiment is to find educational strategies that might be used to improve the effectiveness of the American primary schools for disadvantaged children. Thus we have evaluations of

alternative early education models that differ from one another and from the alternative offered by the primary grades of the present school systems.

Each sponsor has designed a program of education or intervention for disadvantaged children or a way of changing the "significant others" in their environments. (The programs of some sponsors are not directly concerned with instruction of children, but attempt to change school and community interactions.) Each sponsor has somewhat different immediate and intermediate objectives and different theories about child development, educational disadvantages, and education in general. Each also has different methods of implementing the program that he believes will enhance the school performance and presumably the "life chances" of poor or disadvantaged children. The Follow Through evaluation provides the opportunity for assessing these approaches only against a single set of criteria.

Evaluation of the national Follow Through program then consists primarily of determing which approaches are effective in achieving a specified set of developmental or educational objectives for children and a variety of changes in parent-community-school relations.

The specified set of objectives for children are the primary criteria for the evaluation of effectiveness. But the evaluation also gives consideration to elements in the children's environment that influence development--family, neighborhood, and community

setting as well as the school. Although the Follow Through program was initiated with the purpose of increasing the "life chances" of the children, it is only possible to evaluate performance on objectives presumed to be intermediate to that final goal. Objectives on which the sponsored educational alternatives can be compared are, broadly speaking, those that are held for all children at the end of the third grade. These are that children (1) be excited about learning, (2) feel good about themselves and their own competence, and (3) have mastered basic reading, language, and arithmetic skills that will help them to proceed successfully in the rest of their school experience.

The Follow Through evaluation lends itself primarily to policy decisions that deal with selecting nationally robust models for improving existing instructional programs for disadvantaged children. Federal education officials will presumably determine the most appropriate educational models to offer in their compensatory education programs. Thus, administrators anticipate information about which educational models raise achievement of disadvantaged youngsters in academic skills and which educational models create positive attitudes toward school on the part of poor parents and their children. The results of the evaluation will be pertinent to such decisions when data from a large enough sample of children who have completed the educational programs associated with the several sponsors become available.

Since it is possible that sponsored programs will not be

equally effective in all situations (ranging from inner-city ghetto to rural Appalachia, from highly unionized to nonorganized teaching staffs), it will be important to establish evidence of relative effectiveness of programs on a project-by-project basis. An evaluation performed at this level (which must await the development of a far greater and more representative data base than is currently available) will provide a basis for decisions at local levels about which programs appear to be most appropriate to particular situations.

One must remember also that the only things common to Follow Through treatments are that some (unspecified) nutritional, medical, and other services supplemented some (at least nominally differentiated) experimental educational programs. When the "treatment" is defined this loosely it is difficult to distinguish "treated" groups from comparison groups. Poor children who are compared with Follow Through children are likely to have had a primary grade supplemented by services under another name (Title I or Title III ESEA, hot lunch programs, etc.). Under these circumstances, differential effects of Follow Through and non-Follow Through "treatments" would be extremely difficult to detect.

C. Issues in the Evaluation of Large Scale Programs in Natural Settings

Efforts to evaluate Follow Through as a Program and to derive conclusions regarding the efficacy of various Follow Through models

have helped clarify a number of fundamental issues. A basic one, which seems much more clear today than it was six years ago, is whether the idea of planned variation can be fitted to an experimental design or whether planned variations might be better conceived as defining categories for a correlational analysis.

D. The Experimental Model of Evaluation

The logic of the planned variation concept implies comparisons among models. In addition, if these comparisons are to lead to explanatory conclusions about the reasons why, and the conditions under which, various outcomes are associated with different models, then an experimental design would seem to offer the most appropriate model for evaluation. Carrying out an evaluation patterned after an experimental design implies that the following conditions can be established:

1. That the treatments (i.e., the implemented models) will be stable over a reasonable period of time.

2. That the treatments will be monitored more or less continuously to assess stability and provide detailed descriptions of treatment.

3. That an approximate balance can be achieved in the numbers of instances in which each model is applied.

4. That adequately matched nontreatment controls are available for contrast.

5. That a common core of acceptably valid measures can be ob-

tained uniformly across all treatment and control groups.

In practice, these conditions have proved exceedingly difficult, if not impossible, to achieve.

E. Treatment Stability

Stability of treatment implies that formal evaluation will not begin until the models have undergone formative revision and a period of implementation. This need for an implementation or "shakedown" period was not appreciated fully at the outset of the Follow Through evaluation, although it quickly became evident during the first year (1968-69) with sponsored models. Subsequently, it was decided that no project would be formally evaluated until each model sponsor had worked in that location for at least one school year. This decision, although accepted as necessary, was somewhat arbitrary. Left largely unanswered are critical questions regarding the procedures by which models do become refined and acceptably installed. It is an empirical fact that implementation of Follow Through models has proceeded more quickly and smoothly for some approaches in some locations than for other approaches in other locations. An adequate analysis remains to be done, however, of the mechanisms, procedures, resources, and other conditions under which implementation occurs most effectively. The question of the "implementability" of an instructional model under a variety of local conditions is not a trivial one and ought to be studied more fully than it has thus far.

F. Treatment Description

Frequent monitoring of classroom and other processes is feasible but exceedingly costly. Nevertheless, such process descriptions are essential if one expects to develop dependable generalizations about associations between outcomes and processes. More or less continuous monitoring, through observation and other verifiable records, also is necessary if circumstances exogenous to the model but exerting some influence upon it are to be incorporated in the analysis. (An example of an exogenous event external to the treatment but influencing it would be a labor dispute that closed or seriously disrupted school functions.)

G. Balanced Number of Cases

It may be possible to obtain an acceptable balance of treatments by conditions and a sufficient number of instances of each combination. To do so, however, will impose some restrictions on communities or school boards in the choices they can make from among proposed models. This restriction was never imposed systematically on the school districts selected for participation in Follow Through. As a consequence, the number of projects per model varied from 1 to 20. In addition, the distribution of projects was uneven according to such variables as school organization (systems with and without kindergarten programs), district size, regions of the country, rural or urban locations, and racial and ethnic

groupings. An adequate evaluation design modeled after an experiment would require some limit on the number of different models to be compared and would impose some restrictions on choices that could be exercised by communities participating in the evaluation. In Follow Through, probably a desirable upper limit in the number of different models would have been 12 (in contrast to the 24 models that existed in 1972-73) and the minimum number of locations in which each model was installed should not have been less than 6.

H. Nontreatment Controls

The establishment of nontreatment controls poses political problems as well as design difficulties. In Follow Through, control groups were created after treatment groups had been specified. In many locations it proved impossible to identify acceptably similar groups for comparison; in some instances, even though appropriate groups could be found, they could not be induced to participate. If a control group design is attempted in an evaluation of an experimental program such as Follow Through, it would be desirable to identify sets of eligible participants within defined locations and then make random assignment to treatment or control groups from this total set.

When the evaluation focus is on an instructional model, the minimum unit probably must be an entire school since it usually is impossible to keep classroom groupings intact. Some migration from school to school within a district will occur, but this migration

is far less than the mixing that typically takes place as pupils progress from grade to grade within a school.

The identification of sets of eligible participants and random assignment from the sets to treatment or control groups runs afoul of convictions that many people hold strongly about the service characteristics of a program intended for economically disadvantaged pupils and families. This may not be the only reason why control groups were not established in conjunction with treatment groups in Follow Through but it certainly was an important one.

I. Common Measures

Defining a common core of measures to be applied to all treatment and control groups is feasible and was achieved in Follow Through. Agreeing on the form and content of the common core of measures, however, is not a simple task. Any combination of measures will be vulnerable to criticism on grounds of program or curricular invalidity. This will be so especially when the models differ substantially from one another in the objectives that are salient for them and the timing by which they seek these objectives.

J. An Alternative Evaluation Orientation

One of the consequences of the planned variation concept has been a tendency to think of the program models as "packages" that are robust enough to produce desired outcomes regardless of the

locations in which they are applied. This concept of treatment packages (i.e., a clearly delineated set of training manuals, administrative procedures, curriculum materials, and accountability mechanisms) probably should be discarded as unrealistic.

Rather than considering each program model as a treatment package, it probably makes some sense to consider each combination of model and location, with all of its diverse characteristics, as a sample from a population of treatments. This view concedes the impact of local influences on models. It also acknowledges the genuine contribution that the planned variation concept has had in amplifying the range of variation in treatment beyond that which was likely to occur "naturally." It also suggests that an appropriate model for evaluation--and in many ways, a superior model for evaluation--may be regression or correlational analysis rather than an experimental design that demands nontreatment controls.

Some of the problems encountered in the Follow Through evaluation could be reduced if correlational analysis were accepted as a more appropriate model for assessing the relationships that exist among combinations of instructional approaches; pupil, teacher, school, and school district characteristics; and community characteristics and expectations. Some losses in explanatory power might be experienced, but the potential explanatory power of an experimental design in a natural (i.e., essentially uncontrolled) setting may be illusory. For example, if the correlational model, rather

than the experimental model, is followed as most appropriate, then naturally occurring variations (i.e., "regular" classrooms) also may be included in the analysis. Sampling theory would assume even added prominence in planning. The prospect of deriving population estimates seems more feasible. Options such as successive cross-sectional samples might prove superior to longitudinal ones which are characterized by severe attritional losses.

No magic would be wrought by shifting the evaluation orientation toward a search for associative regularities and away from group versus group contrasts of differences. Most of the conditions described previously as essential in the application of an experimental design to evaluation would remain relevant to the correlational model. For example, continous or frequent measurement of treatment still needs to occur so that process variables can be identified and recorded. A common core of outcome measures also is required. However, the importance of treatment stability, balancing of treatments by nominal type, and matched nontreatment controls can be reduced or ignored. Obviously, one expects that some orderliness will emerge from correlational studies of process and conditional variables in relation to outcome variables, and that this orderliness can be codified in guidelines for action. These guidelines would take the form of generalizations about the stability of relationships rather than being expressed in the language of experimental procedures.

Planned variation, viewed in the context of correlational

analyses, comes to mean that one plans to assure a wide range of variation in treatments and conditions within appropriate strata of grade spans, community types, levels of funding, and other variables. This view, however, does not demand high similarity from place to place or time to time within the same nominal approach. Correlational studies would group or stratify treatments according to their observed similarities rather than according to their nominal categories. A priori classifications of approaches according to the identity of proponents or according to idealized descriptions would be abandoned in favor of classifications based on empirical evidence.

K. A Conceptual Model for Program Evaluation

Public policy decisions are essentially political in nature; that is, they are responsive to strong pressures to act or not to act on certain issues. Research evidence can provide a powerful rationale to undergird decision-making because it is more objective than the pressures of stakeholder groups. Thus, a fundamental purpose of policy-oriented evaluation is to determine the worth of a procedure, technique, or program as a basis for making decisions about future actions. In its most rudimentary form, the task of program evaluation is to produce information that permits one to decide whether--or more analytically, the degree to which--under various specified conditions, certain desired states of affairs have been achieved. The rudiments of a model for program evalua-

tion are illustrated in Figure 1. (Adapted from "Conceptual Model of Implementation, Outcome, and Process Foci of National and Local Program Evaluation," Stanford Research Institute, Menlo Park, California, unpublished paper (1973).

The top rows of boxes in Figure 1 denote intentions or assumptions that can be stated as testable hypotheses--e.g., "if a certain program is implemented under specified conditions, then certain desirable effects will be realized." Two classes of propositions are implied by the blocks shown in the top row of the sketch. The first proposition holds that the program as conceived will be realized in the actual program; i.e., the program (ideal) at the federal or state level will be rendered in the program (real) at the local level. Thus program efforts as written into plans or guidelines constitute the independent variables, and changes in local programs define the outcome or dependent variables.

At the local level, however, specific programs are perceived as both a consequence of overall efforts and a cause of other outcomes or dependent variables. Thus, the second proposition is that specified local programs (as influenced by the overall effort and complete with their structural and functional properties) will lead to or cause various desired outcomes to occur. These outcomes are defined primarily at the level of persons served by the programs (e.g., an increase in some academic skill, such as reading). In this proposition, the local programs become the independent variables and person variables become the ultimate outcomes by

which to judge program impact.

The bottom row of Figure 1 distinguishes the actual programs and observed outcomes from the intended programs and desired outcomes shown in the top row. In effect, the bottom row denotes the empirical world--a program, more or less similar to an intended one, is implemented and some effects, more or less similar to those desired, are observed.

The identified processes that link observed programs to observed outcomes define the foci of causal analyses. The results of such causal analyses may provide the bases upon which decisions about future programs can be made. These analyses are essentially direct tests of the class of propositions in the form "if X, then Y," where X denotes program processes and Y denotes the measured consequences of participation in these processes. These consequences may be observed in individuals or institutions, such as schools or families. For simplification, it is assumed that intended program outcomes or objectives may be accepted essentially as stated by program proponents, and that the specification of evidence of program effectiveness or program success (success criteria) is best suggested by them. Operationally, this results in efforts to assemble a matrix of objectives that represent the kind of questions to be asked in seeking evidence of program accomplishment. The forms of appropriate measurement are as varied as the performance in question, and may include direct observation of behavior in natural or contrived settings, analyses

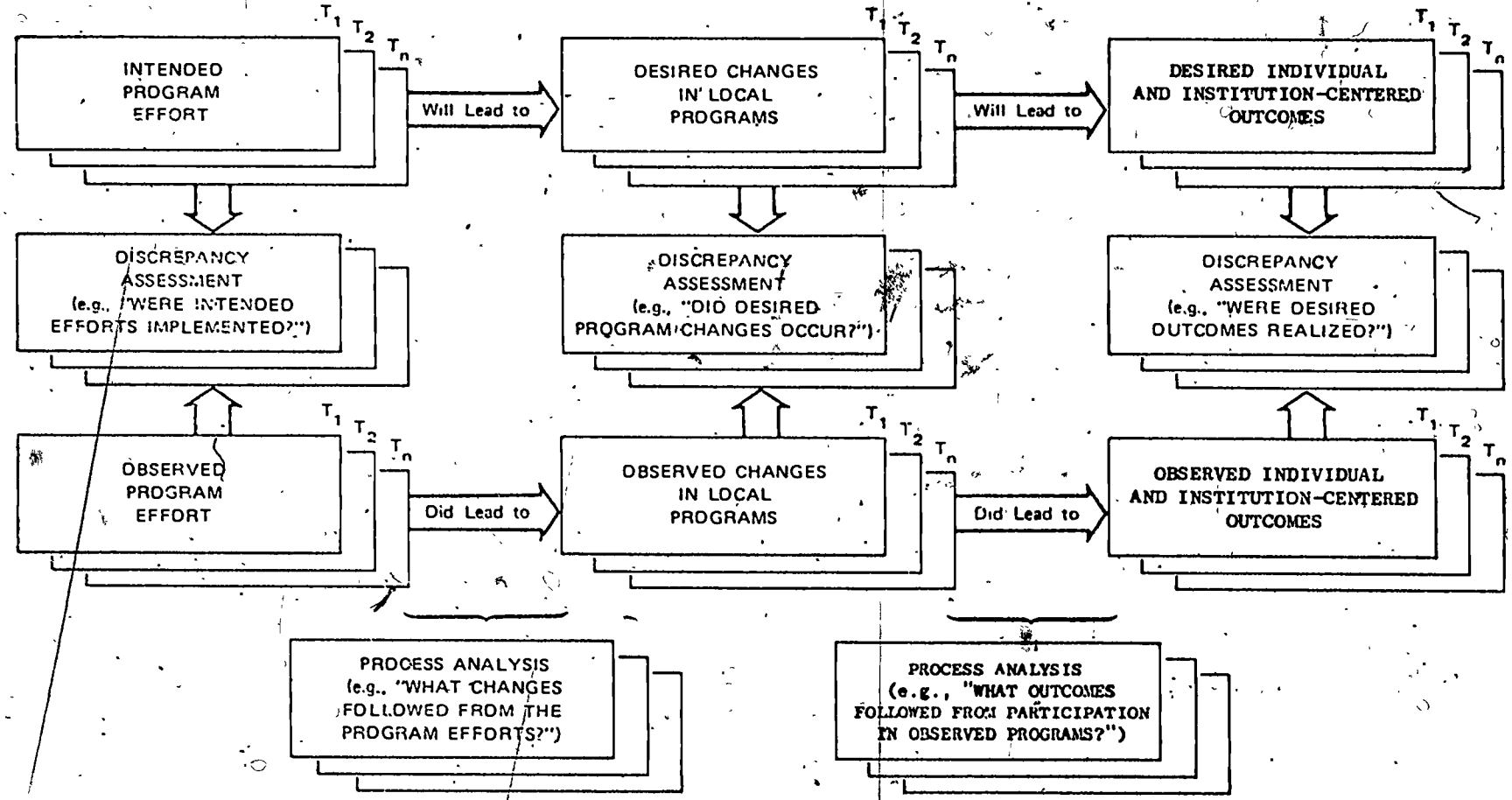


FIGURE 1 IMPLEMENTATION, OUTCOME, AND PROCESS FOCI OF NATIONAL AND LOCAL PROGRAM EVALUATIONS

of products, responses to interviews or tests, and so on.

The nature of the programs and outcomes, either intended or observed, may change with time, as the superimposed boxes in Figure 1 (T_1, T_2...T_n) are meant to illustrate. This is particularly true of longitudinal programs. This time dimension also permits Scriven's useful distinction between formative and summative evaluation to be illustrated in Figure 1 (Scriven, 1967). Changes in the form and the substance of a program by stages from Time 1 (T_1) to Time n (T_n) denote the evolution that a program may undergo. For simplicity, Figure 1 does not attempt to show how the results from contrasts between observed and intended states or outcomes at Time 1 may be used to modify conditions at Time 2 and beyond. However, such changes can, and probably will, occur as differences are detected between that which was intended and that which was produced. Deciding what changes should be made during program development constitutes the rationale and function of formative evaluation.

Figure 1 also highlights a basic evaluation dilemma: if the desired outcomes are not realized, is it because the program was faulty in concept (the "theory" failed) or because the program was inadequately or incompletely implemented (the implementation failed)? Analytical comparisons between observed and intended programs and observed and intended outcomes permit one to deal, at least partially, with the dilemma. Analyses directed toward explaining differences between observed and intended programs can

address the issues of program implementation. If one can specify, and to some degree explain, differences between observed and intended programs, then it becomes more nearly possible to interpret differences between observed and intended outcomes a attributable to weaknesses in implementation or inadequacies in program concepts.

III. Applications of Follow Through Models to Indian Education

A. Considerations in Appraising and Selecting an Instructional Model

The following sets of questions suggest a framework within which to assess various Follow Through models for their applicability to Indian education. These questions are offered in lieu of specific recommendations regarding Follow Through models that appear appropriate for application in locations with an Indian constituency. The desires, expectations, resources, and other characteristics of one community may differ so markedly from those of another that it would be presumptuous for anyone unfamiliar with specific details to make recommendations. The questions listed, however, are basic ones that ought not to be overlooked in any appraisal of potential programs prior to adoption.

1. Who are the stakeholders that should help specify goals and success criteria? This issue is fundamental. It is a two-pronged issue for it requires decisions regarding the identity of persons who ought to participate and it also acknowledges the

subjective character of educational goals and criteria for judging program success. With respect to the selection of participating stakeholders, one also must ask whether all stakeholders will have equal weight in decisions or whether some should be considered "more important" than others. For example, legitimate stakeholders in the appraisal and selection of an instructional model for their schools might include school governing boards, tribal leaders, parents, school administrators, and teachers. It also may include representatives from federal, state, or local government agencies that contribute to the funding of the program. Occasionally, outside experts or authorities might be asked to assist. Thus, not only is it important to consider who should participate but the weight that will be given to the judgments of each. Finally, there are procedural questions regarding methods of assembling and combining judgments to arrive at choices.

2. By what evidence will program success be judged? This question attempts to force specification of success criteria in terms that permit objective measurement and rational evaluation to occur. The question challenges decision makers to identify the kinds of evidence that would persuade them that a particular program was successful against the criteria of goals and objectives earlier defined.

3. How can evidence of success by gathered? This question raises the issue of whether or not the success criteria are measurable. An unmeasurable criterion is no criterion at all. However,

the fact that no techniques exist to measure certain outcomes does not necessarily mean that the outcome must remain forever unmeasurable. If a means cannot be identified for measuring a criterion or outcome that is considered to be very important, then some attention must be given to developing the measurement technology before initiating the trial of the approach or program. There is some danger of reacting to wishes rather than reality when planning for the evaluation of a new instructional procedure; it is hazardous to initiate the experiment and trust that means for measurement will be developed in time to contribute to the evaluation. A strong argument can be made for recommending that evaluation be planned within the limits of the existing measurement art. For example, it may be considered very important that an educational program help children develop a strong sense of self-worth. If, however, no acceptable measures of this attribute exist, then this objective probably should be relegated to a lesser rank of importance or the inconclusiveness of any estimate ought to be accepted in advance since there can be no guarantee that acceptable measurement procedures will be available by the time they are needed.

4. How should the evidence be weighed? The following three classes of criteria can be used to illustrate the relationship between the salience of objectives or goals and the kinds of evidence or measures that might be sought.

a. Academic achievement. The acquisition of basic skills

such as in language and mathematics, may be primary goals of an early education program. This is particularly likely to be true where there is also acceptance of the position that Indian children should be able to function in the majority culture and economy. Declaring academic achievement objectives as important is not necessarily antithetical to goals of cultural identity that may be very strong in an Indian community. If one does not expect children to remain isolated from the majority culture, then at least "survival skills" probably are essential. An element of the academic program might include bilingual instruction, beginning with the vernacular as the language of instruction and the probable second language (e.g., English) considered as a subject of instruction.

The measurement of academic achievement may or may not be a problem depending on the willingness of various stakeholders to accept certain evidence. For example, a great many tests exist (and others can be fairly readily contrived) for measuring skill in the use of language, mathematical concepts, and so on. One occasionally hears acrimonious debate, however, about the acceptability of particular tests. Other sources of evidence probably should include judgments of teachers (independent of test data) and reports and impressions from parents based on children's behavior in the home.

b. Socio-emotional development. This class of criteria includes such variables as a sense of self-worth, cultural identity,

and socialization to prevailing values. In this latter regard, it seems important to clarify expectations regarding assimilation into the majority culture (or at least the kind and degree of commerce that will be sought or experienced with other cultures) by Indian children as they grow up. If there is not an expectation of continuing existence in a reservation or enclave culture, then children must understand both their own heritage and its values as well as the values of the majority culture.

It is far easier to acknowledge these criteria in abstract terms than it is to explicate them or to specify the means by which evidence of their achievement can be obtained. In general, direct systematic observation of children's behavior and reports from persons who regularly observe children less systematically (e.g., teachers, parents) probably will need to be relied upon. Other techniques, such as thematic analyses of artistic or literary production also may be considered.

c. Political control. Power by the adult Indian community may be a dominant objective either in itself or in relation to child-centered objectives such as those noted above. In some locations, it can be expected that goals of self-determination and control will override in importance details of programs in the schools. One can argue that socio-emotional growth objectives and academic skills can be learned better and applied with greater relevance under conditions where political power is exercised locally. For example, self-esteem and sense of self-worth un-

doubtedly are influenced by perceptions of self-determination and fate control. As another example, ability to exercise effective political control requires intellectual competence and skills if the affairs of an institution as complex as a school are to be managed effectively.

B. Differentiating Follow Through Models According to Process Characteristics. (Material in this section was drawn primarily from two sources in the reference list: Classroom Observations (1972) and Stallings (1973).

A central purpose of the national Follow Through program was to encourage the development and refinement of improved approaches to early education. Each of the sponsored Follow Through approaches is intended to offer an alternative to the kinds of school experiences traditionally encountered by poor children during their primary school years.

The best evidence that the planned variation concept in Follow Through has resulted in systematically different approaches comes from data obtained through meticulous observations of samples of classrooms over the past four years. These classroom samples have not included every model sponsor. The samples also have been limited in the number of different projects, grade levels, and classrooms included within any set subscribing to a given model. Within these limitations, however, some generalizations can be made.

1. Sponsored approaches do discernibly differ from one

another for many process variables.

2. Process characteristics for various Follow Through approaches predictably depart from characteristics observed in non-Follow Through classrooms for many process variables.

3. Analyses of process data present strong evidence of instructional activities and components that correspond well with descriptions of intended approaches, thus validating in part the concept of planned variations in Follow Through treatments.

Two cautions are important in reviewing the data from classroom observations. First, considerable variability can be seen across projects (i.e., locations) within each of the sponsored approaches on several of the process measures. For example, in analyses of data obtained in 1970-71, a large number of process variables were aggregated into five factor scores. On 2 of the 5 factors, but not on the other 3, differences between locations within a sponsored approach were consistently small for all but one approach observed. These two factors, then, generally differentiated the sponsors from one another since the variability within the approach across locations was substantially less than the variability between approaches. This is not to suggest, of course, that only two factors are needed to describe the several approaches. For example, some of the sponsored approaches showed relatively small differences between locations on more than two factors.

A second caution follows from the small number of projects

observed and limited number of observations that were made. Even though several days each year were spent in observing each classroom in the sample, we cannot be sure that the days selected for observation represented fairly and fully the variety of activities characteristic of the approach. The consistency of data from year to year, however, lends credibility to findings from the observations.

In 1971-72, the number of variables derived from classroom observation records was increased beyond that in the preceding year. A factor analysis was performed on 65 selected observation variables. Varimax rotations were performed on 5, 6, 7, 8, 9, and 10 factors. The 9-factor rotation accounted for 57% of the matrix variance and provided factors that were more interpretable than those from the other rotations. The loadings of each variable on the 9 factors are summarized below. Factor scores (the combinations of scores on all 65 variables weighted according to the factor loadings) were computed for each classroom observed. Table 1 displays classroom means and standard deviations of factor scores by individual sponsors and by all Follow Through and all non-Follow Through classrooms combined. The operational definitions of each of the 9 factors appear in the paragraphs accompanying Tables 2 through 10 that follow Table 1.

The process characteristics of observed classrooms shown in Table 1 also can be displayed graphically. Figures 2 and 3 are

shown for illustration. Figure 2 is based on data shown in column 2 of Table 1 and Figure 3 is derived from column 4 in Table 1.

We have emphasized the observed process characteristics of several Follow Through approaches since one's initial, or even continuing, preference for an approach often is more influenced by the activities and style of the classroom than by the measured outcomes of academic achievement or other criteria. Some people even may consider it more appropriate to judge an approach on the basis of observed processes than on the basis of measured outcome. In the subsection that follows, outcome data will be described for five of the approaches whose process characteristics have been summarized above.

C. Factor 1: Stimulus-Response-Feedback (.0951 variance accountable).

This factor describes a stimulus-response-feedback system of stimulation. The variables that load positively indicate direct and immediate interaction between adult and child. Variables that load negatively show teachers disengaged from interactions with children.

A classroom scoring high on this factor might have frequent situations like the following: An adult would use a highly verbal and direct approach of questioning, requesting, or commenting. Children, in turn, would respond by performing the task or answering the question. The children would then be acknowledged,

Table 1

MEANS AND STANDARD DEVIATIONS OF STANDARDIZED FACTOR SCORES, BY SPONSOR

	Factors								
	Stimulus-Response-Feedback	Small Group Activities	Range of Emotion in Social Behavior	Child Initiative	Formal Instruction	Divergent Questioning	Individualized Work Setting	Academic Equipment and Materials	Children Not Engaged With Adults
Far West Lab (FW)									
Mean	-.484	- 128	-.200	.982	.028	1.074	.348	912	-.061
Std. Dev.	.818	670	.763	1.787	.583	.798	.988	.965	.523
U. Arizona (UA)									
Mean	- 327	.287	.042	.345	-.778	.938	-.161	- 406	-1.127
Std. Dev.	851	.750	.748	.860	.735	.887	.454	.288	.602
Bank Street (BC)									
Mean	-.725	.667	-.221	.423	.059	-.549	.220	-.381	-.209
Std. Dev.	.860	.758	.314	.846	.770	.599	.592	.566	830
U. Georgia (UG)									
Mean	-.252	914	.195	.454	.595	-.708	- 081	-.564	- 217
Std. Dev.	701	572	.564	.789	.785	.387	.554	.400	.548
U. Oregon (UO)									
Mean	.565	1.439	.691	-1.081	1.151	-.478	-.885	-.881	-.244
Std. Dev.	1.075	1 138	411	.379	.751	491	.799	.513	317
U. Kansas (UK)									
Mean	299	1.604	-.616	-.218	.726	273	.001	-.197	- 361
Std. Dev.	1 216	422	.860	.799	678	1.870	.770	444	.595
High/Scope (HS)									
Mean,	650	805	-.263	.143	-.743	1.058	-.223	-.010	1 462
Std. Dev.	551	.581	1.677	.749	.894	1.285	1.330	.797	1 106
U. Florida (UF)									
Mean	476	.739	.108	.216	.108	-.554	-.697	2.328	-.472
Std. Dev.	850	393	1.052	.896	.589	.570	.532	1.024	.771
EDC (ED)									
Mean	-1 196	.344	.470	-.932	-.522	-.334	.386	.000	-.457
Std. Dev.	1 121	476	981	.479	.567	.448	.492	.705	.664
U. Pittsburgh (UP)									
Mean	1.375	-.459	-.750	.012	-.291	-.287	2 354	-.916	.436
Std. Dev.	572	.450	.365	.478	1.065	924	1 011	.256	.656
ILM (IL)									
Mean	- 211	.261	.320	-.128	.201	-.320	.602	1.226	.997
Std. Dev.	.731	.576	.813	.853	1.067	.420	.533	1.130	.845
Southwest Lab									
Mean	.435	-.472	.486	-.748	-.456	.533	-.693	-.261	-.162
Std. Dev.	906	885	606	.497	.658	1.838	.414	.483	.497
Total Follow Through									
Mean	.006	.444	-.103	-.040	-.024	.077	.089	.146	- 014
Std. Dev.	1 086	898	.938	1.014	.952	1.084	1.101	1.104	.981
Non-Follow Through									
Mean	-.012	-.876	-.203	.079	.087	-.151	.175	-.287	.028
Std. Dev.	.845	.519	1.130	1.015	1.114	825	.746	.752	1.117

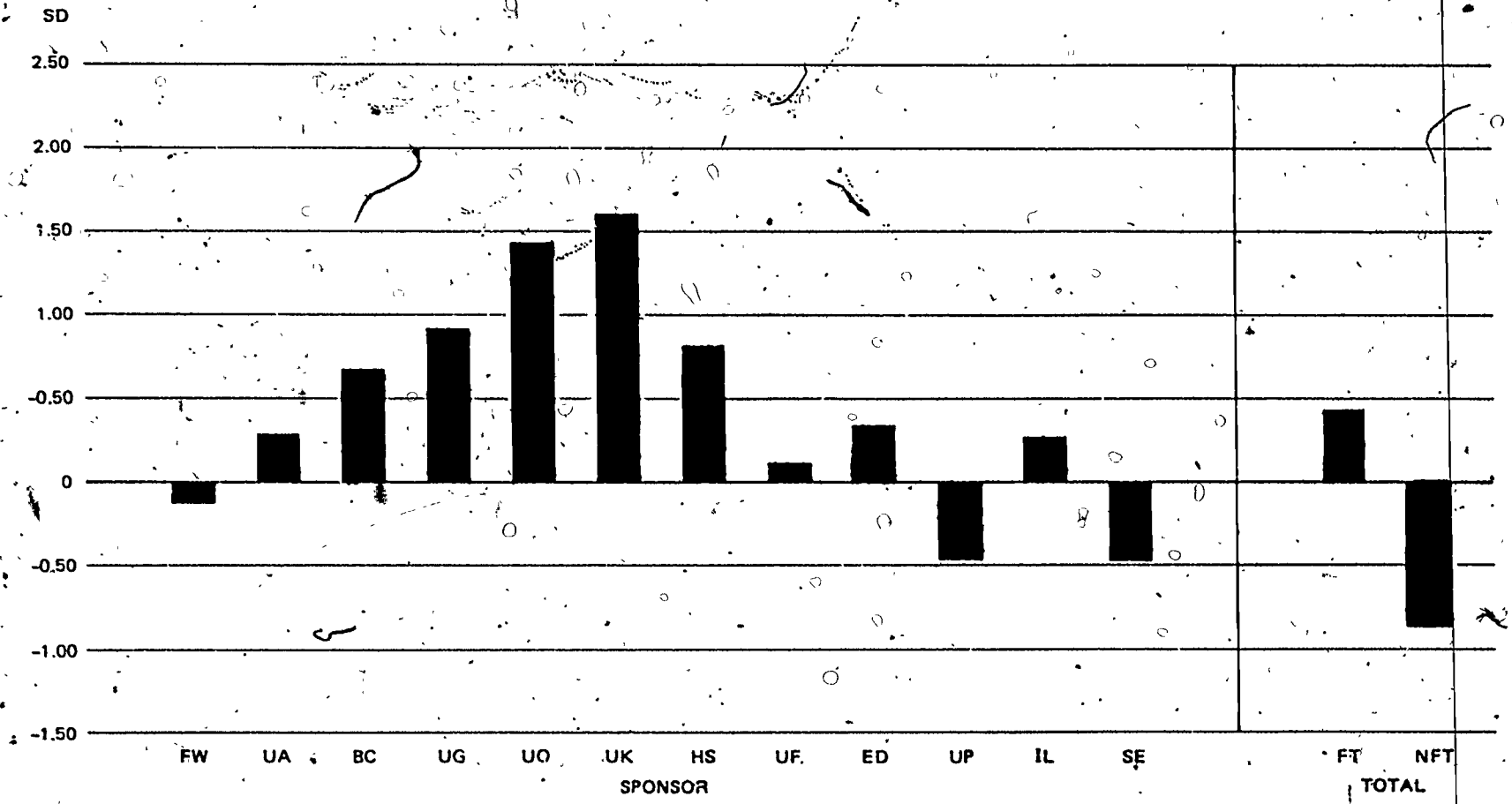


FIGURE 2: COMPARISON BY SPONSORS OF FACTOR 2, SMALL GROUP ACTIVITIES

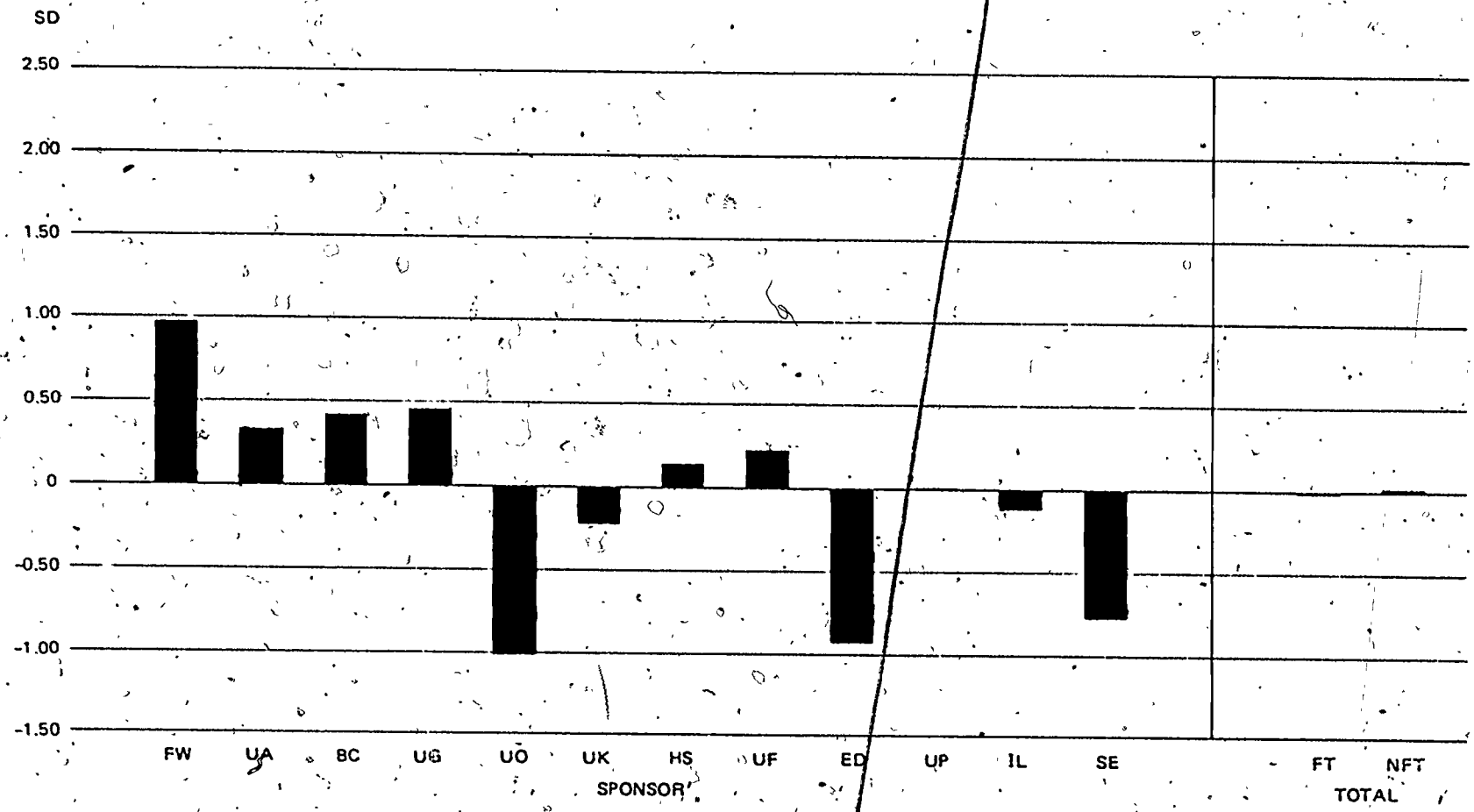


FIGURE 3: COMPARISON BY SPONSORS OF FACTOR 4, CHILD INITIATIVE

praised, or corrected for their task performance. Such direct questioning and requesting might influence the kind of response a child would make. Since speculation is not usually expected when a direct question is asked regarding specific information, the inability of a child to answer correctly might compel him to give no response at all. The child who does reply is likely to receive some reinforcing feedback.

Table 2
FACTOR LOADINGS OF SELECTED VARIABLES FOR FACTOR 1, STIMULUS-RESPONSE-FEEDBACK

Variable	Loading
Child responding	+.77
Adult giving request or command to children	+.70
Adult asking direct question of children	+.70
Adult giving task-related acknowledgement to children	+.62
Adult giving children feedback for academic response to adult academic direct question	+.53
Child not responding	+.47
Adult praising children in task-related activity	+.35
Use of concrete objects in certain activities	+.32
Adult attentive to children	-.48
Adult in motion	-.49

D. Factor 2, Small Group Activities (.0884 variance accountable).

This factor contrasts classrooms with small activity groupings, where a wide selection of materials were used in the instructional process, with a large group classroom setting in which one teacher instructed the entire class. Classrooms with a high score might look as follows: Arithmetic and science would be taught in small groups by teachers and aides using (1) math tools such as weights and measures and (2) science materials such as batteries, plants, and animals. The adult/child ratio would be high, allowing for a wide variety of activities to occur. This flexibility on the part of adults would be less likely to occur in settings where one teacher had responsibility for a large group of children and had fewer materials available.

Table 3

FACTOR LOADINGS OF SELECTED VARIABLES FOR FACTOR 2, SMALL GROUP ACTIVITIES

Variable	Loading
Teacher with small group in academic activity	+.74
Arithmetic, numbers, math	+.74
Aide with small group in academic activity	+.74
Use of science equipment, plants, and animals	+.73
Adult/child ratio	+.59
Wide variety of activities	+.53
Use of concrete objects in certain activities	+.47
Aide with two children in academic activity	+.29

Variable (Factor 2 cont.)	Loading
Stationary desks in rows	-.35
Teacher with large group in academic activity	-.69

E. Factor 3, Range of Emotion in Social Behavior (.0792 variance accountable).

This factor suggests that a positive and negative range of emotions are not mutually exclusive within a classroom. It appears that the freedom to express happiness and displeasure is often found in the same classroom. Classrooms scoring high on Factor 3 would probably have both adults and children openly revealing their feelings, whether positive or negative. Adults seem to act as a model for behavior; if they exhibit negative behavior, so do children. This is usually recorded through the affect or tone of actions. Adults attempt to modify misbehavior of children through a mixture of suggesting alternative behavior and making firm statements regarding limits.

A clear distinction is made between the feedback system for behavior and the feedback system for academic accomplishments, since the latter dimensions loads negatively on this factor.

Table 4

FACTOR LOADINGS OF SELECTED VARIABLES FOR FACTOR 3, RANGE OF EMOTION IN SOCIAL BEHAVIOR

Variable (Factor 3, cont.)	Loading
Adult showing negative behavior	+.73
Adult giving children negative corrective feedback for behavior	+.72
Child commenting to adult	+.46
Adult commenting to children	+.42
Any child or children showing negative behavior	+.39
Adult giving children positive corrective feedback for behavior	+.37
Child showing positive behavior	+.23
Adult giving children negative corrective feedback in task-related activity	-.29

F. Factor 4, Child Initiative (.0673 variance accountable).

This factor describes a situation of children taking verbal initiative: asking direct and speculative questions, making task-related statements, offering opinions on the work of others, and sharing portions of home life. A high scoring on this factor suggests children feeling accepted in the environment and self-confident, feeling free to express both positive and negative behavior.

Table 5

FACTOR LOADINGS OF SELECTED VARIABLES FOR FACTOR 4, CHILD INITIATIVE

Variable (Factor 4, cont.)	Loading
Child initiating interaction with an adult	+.75
Child asking direct question	+.70
Child making productive statement	+.68
Child giving acknowledgment	+.48
Adult interacting with child or children in task-related activity	+.48
Adult not responding to children	+.48
Child sharing life experience	+.40
Child giving request or command	+.35
Child showing positive behavior	+.35
Child asking open-ended question	+.26
Any child or children showing negative behavior	+.24

G. Factor 5, Formality of Instruction (.0576 variance accountable).

This factor contrasts a formal setting for teaching reading and arithmetic with a more flexible setting. In classrooms scoring high on this factor, there would be frequent occurrence of academic work which would be conducted in a setting of stationary desks in rows, and textbooks and symbols rather than objects would be used in academic activities. The adults would ask questions regarding the academic material and would provide immediate feedback to student responses. In general, the students would be involved in task-related activities. The setting would be consistent with the traditional emphasis on academic tasks,

with a minimum of movement or manipulation of material.

Table 6

FACTOR LOADINGS OF SELECTED VARIABLES FOR FACTOR 5, FORMAL INSTRUCTION

Variable	Loading
Academic events	+.89
Use of textbooks, workbooks, symbolic objects in academic activities	+.70
Child engaged in task-related activity	+.66
Child responding with academic theme	+.65
Reading, alphabet, language development	+.64
Adult instructing children in academic activity	+.62
Adult giving children positive corrective feedback in task-related activity	+.51
Adult giving children feedback for academic response to adult academic direct question	+.43
Stationary desks in rows	+.41
Adult motion	-.34
Adult instructing children by using objects	-.36
Movable tables and chairs for seating	-.39

H. Factor 6, Divergent Questioning (.0513 variance accountable).

This factor describes a situation where adults and children would ask open-ended questions requiring some generation of ideas.

on the part of the receiver of the question. Classrooms scoring high on this factor would have adults serving as models in asking such thought-provoking questions as, "How can we earn money for our zoo trip?" "How did you feel when the bus broke down?" or "How many patterns of ten can you make with these blocks?" The children would not only respond to such questions but would also ask divergent questions in return.

Table 7

FACTOR LOADINGS OF SELECTED VARIABLES FOR FACTOR 6, DIVERGENT QUESTIONING

Variable	Loading
Adult asking open-ended question of children	+.92
Child responding to adult open-ended question	+.91
Adult giving children feedback for academic responses to adult open-ended question	+.67
Child asking open-ended question	+.38
Adult showing positive behavior	+.20

I. Factor 7, Individualized Work Setting (.0391 variance accountable).

This factor describes a work setting where a child would receive individual attention from a teacher or an aide in reading or arithmetic instruction. Classrooms scoring high on Factor 7 would probably be flexible in the physical arrangement of furniture. Academic study would be individualized, since the adult/

child ratio is high and the teacher and aide would interact with children on a one-to-one basis. Praise, rather than negative correction would be given for task performance.

Table 8

FACTOR LOADINGS OF SELECTED VARIABLES FOR FACTOR 7, INDIVIDUALIZED WORK SETTING

Variable	Loading
Teacher with one child in academic activity	+.73
Aide with one child in academic activity	+.64
Open classroom	+.48
Movable tables and chairs for seating	+.29
Adult praising children in task-related activity	+.27
Adult giving children negative corrective feedback for task-related activity	-.29

J. Factor 8, Academic Equipment and Materials (.0346 variance accountable).

This factor describes the materials and equipment used for teaching reading and arithmetic, science, and social studies. The adults in classrooms scoring high on this factor would use audiovisual equipment, games, and language experience charts to teach reading, arithmetic, science, and social studies. They would primarily work with two children at a time. The children would show interest and would attend to the teacher and materials.

Table 9

FACTOR LOADINGS OF SELECTED VARIABLES IN FACTOR 8, ACADEMIC EQUIPMENT AND MATERIALS

Variable	Loading
Use of tapes, records, films, or TV in academic activities	+.73
Use of games in Activities 4 and 5	+.64
Use of language experience charts in Activity 5	+.63
Teacher with two children in academic activities	+.45
Child attentive to adults	+.35
Single contained classroom	-.21
Open classroom	-.36
Noise level	-.46

K. Factor 9, Children Not Engaged with Adults (.0557 variance accountable).

This factor describes a situation where children would not be interacting with adults. Classrooms scoring high on this factor would probably have children working alone on reading or arithemetic assignments but free to move about the room commenting and offering corrective feedback to each other. One interpretation for the negative relationship with adult positive behavior might be some adult impatience with children moving about and talking to each other.

Table 10

FACTOR LOADINGS OF SELECTED VARIABLES IN FACTOR 9, CHILDREN NOT ENGAGED WITH ADULTS

Variable	Loading
Child participating in general action	+.65
Child waiting	+.55
Child commenting to other children	+.51
All child motion	+.48
Child giving corrective feedback	+.38
Child instructing self in academic activity	+.35
Adult showing positive behavior	-.29

L. Some Measured Outcomes of Selected Follow Through Approaches and Narrative Descriptions of Sponsors' Intended Approaches.

Five Follow Through approaches have been selected for special attention in this paper. These five approaches have shown reasonably consistent Follow Through-favoring findings throughout the longitudinal evaluation thus far or have shown particularly dramatic outcomes on one or more occasions or have shown both. The five approaches selected are those identified with Bank Street College of Education, University of Oregon, University of Kansas, University of Florida, and Southwest Educational Development Laboratory. Summaries of outcomes for each of these approaches are preceded by narrative descriptions of the sponsor's intended approach. These summary descriptions have been reviewed by each sponsor and accepted as a reasonable abbreviated description of

their approach and philosophy. All findings summarized below are derived from the SRI technical report the 1969-71 period of the evaluation (Emrick, Sorensen, and Stearns, 1973).

Bank Street College of Education: Intended Approach

Basic to the Bank Street approach is a rational, democratic life situation in the classroom. The child participates actively in his own learning and the adults support his autonomy while extending his world and sensitizing him to the meanings of his experiences. The teaching is diagnostic with individualized follow-up. There is constant restructuring of the learning environment to adapt it to the special needs and emerging interests of the children, particularly their need for a positive sense of themselves.

In this model academic skills are acquired within a board context of planned activities that provide appropriate ways of expressing and organizing children's interests in the themes of home and school, and gradually extend these interests to the larger community. The classroom is organized into work areas filled with stimulating materials that allow a wide variety of motor and sensory experiences, as well as opportunities for independent investigation in cognitive areas and for interpreting experience through creative media such as dramatic play, music, and art. The cognitive areas of primary concern are the capacity to probe, to reason, and to solve problems. Teachers and paraprofessionals working as a team surround the children with language that they learn as a useful, pleasurable tool. Math, too, is highly functional and pervades the curriculum. The focus is on tasks that are satisfying in terms of the child's own goals and productive for his cognitive and affective development.

Bank Street supports parent involvement in each community by providing materials interpreting the program and special consultants, as well as by joint planning for home-school interaction. Parents participate in the classroom, in social and community activities related to the school, and as members of the local Policy Advisory Committee. Parents may receive career development training with either graduate or undergraduate credit. Parents and teachers pool their understanding of each child's interests, strengths, and needs as they plan his educational experiences in and out of school.

Staff development is an ever-evolving process for administrators, teachers, paraprofessionals, and local supportive and sponsor staff. It is conducted both on site and at the College. Programs are geared to the specific needs of each project and are guided by a sponsor field representative familiar with the history and dynamics of a given community in cooperation with local staff. Self-analysis is stressed in both the teaching and administrative areas. Bank Street's 50 years of experimentation as a multidisciplinary education center has demonstrated that a flexible, child-oriented program requires more, not less, planning and study. Staff development aims at providing a repertoire of teaching strategies from which to choose on the basis of the adult's increased understanding of individual children.

In moving from the broad, conceptual framework to the specifics of implementation, Bank Street supplies diagnostic tools for assessing child behavior, child-adult interaction, the physical and social milieu of the classroom, and the totality of model implementation. These instruments are used by trained observers and in self-analysis to increase model effectiveness and stimulate joint planning of changes needed in the classroom and in teaching behavior, community relations, parent involvement, and administrative practices.

In addition to continuing services on site, Bank Street develops slides, films, video tapes, and other materials for adult education. These supplement the materials developed for use in the classroom, such as the Bank Street basal readers and language stimulation materials. Field representatives, resource persons, program analysts, and materials specialists meet weekly with the Director of the Bank Street program to share experiences, continue conceptual development of the sponsor's role, and to plan institutes and workshops differentiated on the basis of requirements of specific communities and participants.

Summary of Effects

Bank Street data are available from five different projects. In four of these projects kindergarten was the entering grade and, in the fifth project, first grade is the entering level. Cumulative two-year effects are available in all five projects for children who entered the program in Fall 1969. First year effects

for children who entered the program in Fall 1970 are available in two of the five projects.

Evidence that the Bank Street model is achieving its objectives is somewhat mixed from project to project but, in general, positive findings have exceeded negative ones. In addition, the Bank Street model is highlighted in this paper for the particularly dramatic results that it showed in the project in which first grade was the entering level.

This notable Bank Street project is located in a city of moderate size in the Southeastern part of the country. Nearly 900 pupils are participating in the project; more than 90% of the Follow Through pupils are black. Follow Through pupil performance on an overall measure of Achievement and on a submeasure of Quantitative Skills was substantially higher than similar measures for non-Follow Through pupils. In addition, first-year effects for children who entered in Fall 1970 showed statistically significant Follow Through-favoring findings on the measure of overall Achievement, the Wide Range Achievement Test, and subscore measures on Reading Skills and Language Arts. These data suggest that the Bank Street approach, in at least that location, is demonstrating consistently favorable results and is becoming better implemented with each year.

University of Oregon: Intended Approach

The sponsors of this model insist that a child who fails is

a child who has not been properly taught and that the remedy lies in teaching the skills that have not been mastered. The model attempts to bring disadvantaged children up to the "normal" level of achievement of their middle-class peers by building on whatever skills children bring to school and to do so at an accelerated pace.

Using programmed reading, arithmetic, language, art, and music materials and behavior modification principles, the model employs strategies to teach concepts and skills required to master subsequent tasks oriented toward a growing level of competence. Emphasis is placed on learning the general case, i.e., developing intelligent behavior, rather than on rote behavior. Desired behaviors are systematically reinforced by praise and pleasurable activities, and unproductive or antisocial behavior is ignored.

In the classroom there are three adults for every 25 to 30 children: a regular teacher and two full-time aids recruited from the Follow Through parent community. Working very closely with a group of 5 or 6 pupils at a time; each teacher and aide employs the programmed materials in combination with frequent and persistent reinforcing responses, applying remedial measures where necessary and proceeding only when the success of each child with a given instructional unit is demonstrated. At the same time, the teacher aides are working with other small groups throughout the classroom in a similar manner. Training in implementing the model includes local summer workshops for all teachers and teacher aides and inservice training during the school year.

Family workers, who are usually parents themselves, personnally contact all project parents to acquaint them with the program and teaching materials; inform them about their children's progress; and encourage them to attend Policy Advisory Committee meetings, visit school, and participate in training leading to work in the school. Parent workers also instruct parents in the use of materials to supplement the school program in the home and attempt to organize parents experiencing special difficulties into problem solving groups. On occasion, they contact local social service agencies where special assistance is needed by individual families.

Evaluation is an ongoing part of the program. Tests are administered at the beginning and throughout the year to determine if children are being taught the skills required by the model and at what rate. The tests are administered by parents especially trained for the job. Continuous test data provide a positive gauge of teacher performance and allow for timely remedial action when the program appears to be implemented improperly or students appear to be falling behind. Video tapes of teachers and aides

executing training tasks are used both to determine and to correct specific difficulties. Bi-monthly reports are issued to teachers reporting the progress of individual children and classroom summaries.

The parent Policy Action Committee participates actively in the model, focusing attention on the needs and interests of parents, recruiting parent aides, and assisting in writing the Follow Through proposal. The model is firmly committed to support a parent-community-school partnership in the operation of its program. The sponsor feels project parents must have the right to judge the effects of the program for themselves, both to provide criteria of program success and to guide efforts at program improvement.

Summary of Effects

Eight samples from five different projects sponsored by the University of Oregon were analyzed over the 1969-71 period. Second year effects for children who entered the program in Fall 1969 were studied in all five projects and first year effects for children who entered in Fall 1970 were studied in two of the five projects.

The University of Oregon model deserves attention in this paper since, in general, the magnitude of achievement scores tends to exceed the average of other Follow Through models. An unequivocal interpretation of this program's impact is not possible due to serious difficulties in achieving an appropriate match between Follow Through and non-Follow Through control groups.

The potential impact of the Oregon approach is seen most dramatically in one of the projects in which first grade is the entering level. This project is in a small town in the Southeastern

portion of the country. About 90% of the pupils in the program are black. Follow Through pupils in this project were markedly higher than their non-Follow Through controls on the measure of overall Achievement, the Wide Range Achievement Test, the measure of Quantitative Skills, the measure of Reading Skills, and the Language Arts measure. All of these differences were not statistically reliable, but the magnitude of the differences between Follow Through and non-Follow Through pupils was consistently large.

University of Kansas: Intended Approach

The behavior analysis model is based on the experimental analysis of behavior, which uses a token exchange system to provide precise, positive reinforcement of desired behavior. The tokens provide an immediate reward to the child for successfully completing a learning task. He can later exchange these tokens for an activity he particularly values, such as playing with blocks or listening to stories. Initial emphasis in the behavioral analysis classroom is on developing social and classroom skills, followed by increasing emphasis on the core subjects of reading, mathematics, and handwriting. The goal is to achieve a standard but still flexible pattern of instruction and learning that is both rapid and pleasurable.

The model calls for careful and accurate definitions of instructional objectives, whether they have to do with social skills or with academic skills. Curriculum materials used describe the behavior a child will be capable of at the end of a learning sequence and clearly state criteria for judging a response as "correct." They also require the teacher to make frequent reinforcing responses to the child's behavior and permit the child to progress through learning tasks at his own pace. The child earns more tokens during the initial stages of learning a task and progressively fewer as he approaches mastery, the object being to move from external rewards to self-motivated behavior. Since a child with few tokens to exchange for preferred activity is likely to be a child needing more attention, the system guides the teacher in evaluating her own performance.

In the behavior analysis classroom, four adults work together as an instructional team. This includes a teacher who leads the team and assumes responsibility for the reading program, a full-time aide who concentrates on small group math instruction, and two project parent aides who attend to spelling, handwriting, and individual tutoring. Parent aides are employed on a rotating basis with other parents. They first serve as classroom trainees for a period of several weeks; some of these parents, in turn, become aides for a full semester. Full-time teacher aides are employed from the latter group. The short trainee cycle allows a great number of parents to become directly involved in the program. They then carry its main features into the home situation.

Careful staff planning is an integral part of the behavior analysis daily schedule. Each day includes planning sessions, periods of formal instruction, and special activity periods during which the children exchange their tokens for an activity they choose. Instruction and special activity periods alternate throughout the day, with the amount of time for instruction increasing as the amount of reinforcement required to sustain motivation decreases.

Evaluation of the model begins with an entry behavior inventory and diagnostic tests that determine where each child should begin a sequence of instruction and that also help to monitor his progress through the sequence. The curriculum materials used also provide for periodic testing and monitoring of achievement gains. Throughout the school year a computerized record-keeping system issues the teacher a weekly progress report on each child that also reports progress for the class as a whole.

Generally, implementation of the behavior analysis model proceeds in three phases. In the first, the sponsor supplies substantial advisory support and training in the procedures and techniques of the program. In the second, local leadership takes over and local staff training coordinators assume more and more of the training and support responsibility. Finally, only periodic consulting with the sponsor is needed.

Summary of Effects

The University of Kansas model is represented in the evaluation by three projects, all of which are in schools where kindergarten is the entering grade. Second year effects for children who

entered the program in Fall 1969 are available in all three projects and first year effects for children who entered the program in Fall 1970 are available in two of them.

The University of Kansas model deserves attention for the notable effects it displayed particularly in the first year in one project and in both years in another. Its most dramatic project is a rural one in the Midwest. About one-fourth of the children in the project are black. In the first year of that project's functioning, Follow Through children showed significantly superior performance to non-Follow Through controls on the measure of overall Achievement, the Wide Range Achievement Test, the test of Quantitative Skills, and the measure of Reading Skills. This same relative superiority was not maintained in the second year but the level of performance of Follow Through children remained elevated in an absolute sense.

University of Florida: Intended Approach

As the name of this model implies, its primary focus rests on educating parents to participate directly in the education of their children and motivating them to build a home environment that furthers better performance on the part of the child both in school and in life. Basic to the model is recognition of the fact that parents are a key factor in the emotional and intellectual growth of their children and that they are uniquely qualified to guide and participate in their children's education.

The Florida model is designed to work directly in the home. It is not classroom oriented in the traditional sense of having a preset curriculum or prescribed teaching strategies. It is developmental in its approach, changing classroom organization, teaching patterns, and the curriculum as needed to integrate learning activity in the school with that in the home. Learning

tasks are developed that allow the home and the school to work as instructional partners. Thus, responsibility for curriculum development resides in the community, and the curriculum is the product of parent and school staff cooperation.

Paraprofessionals play an especially significant role in this model, working in the home and in the classroom. Mothers of project children are trained as both teacher auxiliaries and as educators of other parents and are assigned two to a classroom. They work half-time assisting the teacher and the rest of the time making home visits, demonstrating and teaching other mothers learning tasks developed to increase the child's intellectual competence and personal and social development. While in the home the parent educator also actively solicits ideas and information on which strategies are working from the parents.

In addition to her instructional role, the parent educator acts as liaison between the project overall and the home, serving as a referral agent for medical, dental, psychological, or social services. She informs the parents about Policy Advisory Committee meetings and other school/community functions in which they should become involved. Her experience with the children in the classroom setting as a teaching assistant enables her to keep individual parents up to date on their child's specific needs. This highly active role of the paraprofessional is crucial to the operation of the Florida model.

The teacher supervises the classroom activity of the parent educator and assists her in planning and carrying out her assignments in the home. Conversely, the teacher modifies her own activity on the basis of knowledge obtained from the parent educator's reports on the home. Parents are invited into the classroom not as passive observers but to participate actively in the instruction. Through such persistent contact the teacher learns and grows along with the parent and obtains a second basis from which to guide preparation of learning tasks.

Recognizing the role of the Policy Advisory Committee is basic to the program. Each school develops a "mini-PAC" that participates in the activity of the larger Follow Through PAC. The larger PAC group is involved in staff selection, budgets, working with project professionals on development of home learning tasks, and in strengthening all components of the program.

Both preservice and inservice training are provided by the sponsor in implementing the model. A workshop at the University of Florida trains a cadre of teachers and parent educators along with such other key personnel as Follow Through representatives,

principals, and PAC chairmen. People attending this workshop, in turn, conduct workshops at the project site. Video tapes made in the classroom and in the home guide the sponsor in addressing problems pertinent to model implementation and development. Projects also provide the sponsor with copies of their home-learning tasks, weekly observation reports, and replies to attitude questionnaires. All such information is collected subject to review and approval by the PAC. The flow of information among the sponsor, the local education agency, and the parent community reflects the team partnership emphasis of the model and gives the education of individual children its direction and shape.

Summary of Effects

Three projects comprised the University of Florida sample. Two of these projects are in schools in which kindergarten is the entering grade and one is in a school without kindergarten.

In many ways, the University of Florida model showed more dramatic cumulative effects than any of the Follow Through approaches in the evaluation. One of its projects (in the West South Central region, located in a town of moderate size, somewhat remote from a metropolitan area) showed unusually high outcomes for children who began the program in Fall 1970. In that project, Follow Through children significantly exceeded their non-Follow Through controls on the measure of overall Achievement, an index of Attitude Toward School, the Wide Range Achievement Test, the measure of Quantitative Skills, the test of Reading Skills, and the Language Arts measure.

In another project in which kindergarten was the entering grade, very similar findings also were shown by children who entered the

program in Fall 1970. This project was located in the South Atlantic region in a metropolitan location. All of the participating pupils were black. They significantly exceeded their non-Follow Through controls on the measure of overall Achievement, the Wide Range Achievement Test, the Quantitative Skills measure, and tests of Reading Skill and Language Arts.

Southwest Education Development Laboratory: Intended Approach

The Southwest Educational Development Laboratory (SEDL) model is a bilingual approach first developed for classrooms in which 75 percent of the pupils are Spanish-speaking, but it can be adapted by local school staffs for other population mixes. In all cases the model emphasizes language as the main tool for dealing with environment, expressing feelings, and acquiring skills, including nonlinguistic skills. Pride in cultural background, facility and literacy in both the native language and English, and a high frequency of "success" experiences are all central objectives.

The theory applied by the model is that concepts first learned in the dominant language can easily be transferred later to a second language. Step-by-step sequenced procedures are followed in teaching language patterns, and both teaching techniques and materials are designed to develop a hierarchy of thinking processes, specific terminology, and symbols. Drills, games, and exercises are used to overcome individual linguistic problems.

Focusing on content in teaching language, all classroom activities reinforce language development. The Kindergarten program concentrates on the following skill areas: visual, auditory, motor, thinking and reasoning, discovering and exploring, and English language structures. Oral communication precedes reading and writing in the First and Second Grades. The responsibility for instruction is on the teacher rather than on specified texts. The Third Grade component of the model serves as a transition, guiding the teacher to adapt standard curricula to the unique needs of the bilingual children, thus preparing them to function effectively in a traditional Fourth Grade.

The model stresses a high degree of adult-child contact. Teachers and aides are constant language models, assuring the child he can succeed and reinforcing him with recognition and praise. Kindergarten classes are usually divided into three or four groups, with the teacher and aide working with one group while the other groups work independently. All groups cover the same material, but those progressing more rapidly are given expanded materials. In the First and Second Grade classes, the teacher presents a lesson to the whole group with visual aids and books, and then the children work in small groups or as individuals with enrichment materials based on the lesson.

Optimal staffing includes a bilingual teacher skilled in the methodology of second-language teaching and a bilingual aide in each classroom. Staff development coordinator and evaluation activities are also required of local project staff. Staff development aimed at continuous professional development of district teachers and administrators is a supporting component of the model. Summer training workshops for local Staff Development Coordinators result in ongoing training and assistance at the project site. SEDL has designed a series of training modules that include manuals, video tapes, and filmstrips to help teachers implement curriculum materials in a way consistent with the cultural and linguistic needs of the child.

The model seeks to accelerate the child's success at school by encouraging a positive expectation of achievement in the parent, and parents are invited to take part in classroom activities. Parent involvement is regarded as essential, and special materials are available for the parent to use at home to reinforce the child's Kindergarten experience.

During the past three years, the model has been modified and improved on the basis of pupil progress reports, teacher feedback, and other formative evaluation data.

Summary of Effects

Even though this model was represented in the evaluation by only one project in the 1969-71 period, it deserves special attention in this paper for two reasons: (1) it is a bilingual program (as the sponsor's description reveals) and (2) its cumulative

effects over a two-year period have shown strong Follow Through-favoring results.

This project is located in a large eastern city. The Follow Through classrooms were both racially and ethnically mixed. At the end of two years, the Follow Through pupils showed significantly superior performance on the measure of overall Achievement, the Wide Range Achievement Test, the test of Quantitative Skills, and the measure of Reading Skills.

Generalizations about this model must be tempered, of course, by the fact of only a single project in the evaluation. The curricular approach, however, is intended to be especially well suited to pupils for whom English is not the first language. Thus, despite the limited evidence of impact, the approach warrants attention in this paper.

IV. Prelimimary Findings From Work In Progress

A. Background

Dr. John Emrick and colleagues at SRI are undertaking some additional analyses of Follow Through data from 1971-72 in an effort to identify major components of variance in criterion scores of pupil achievement in reading and mathematics. This work, which is still preliminary and not yet ready for public reporting, is part of a longer-term effort to identify teacher determinants of classroom learning.

The findings are subject to revision pending further analyses and refinement of the analytic model. Nevertheless, an overview of the design logic, the measures and variables involved, the procedure followed, and preliminary results is appropriate for it suggests means by which "new" instructional approaches might be synthesized from a subset of Follow Through approaches that have been part of the longitudinal evaluation for some time.

Emrick's work is based on a sample of 12 planned variations represented in 12 Follow Through locations. The sample was restricted to data collected during the 1971-72 school year, and includes 42 kindergarten classrooms and 30 first grade classrooms from schools which did not offer kindergarten.

The sponsored planned variations for kindergarten classrooms are Far West Laboratory, University of Kansas, High/Scope Educational Research Foundation, Education Development Center, University of Pittsburgh, Interdependent Learning Model, and Southwest Education Development Laboratory. The sponsored models for entering first grade classrooms are University of Arizona, Bank Street College of Education, University of Georgia, University of Oregon, and University of Florida.

The design logic involves a components of variance analysis of post-test scores in terms of both pretest and process data.

B. Measures and Variables

Data collected on 42 kindergarten and 30 entering first grade

classrooms which were included in the 1972 classroom observation sample consisted of three categories of measures:

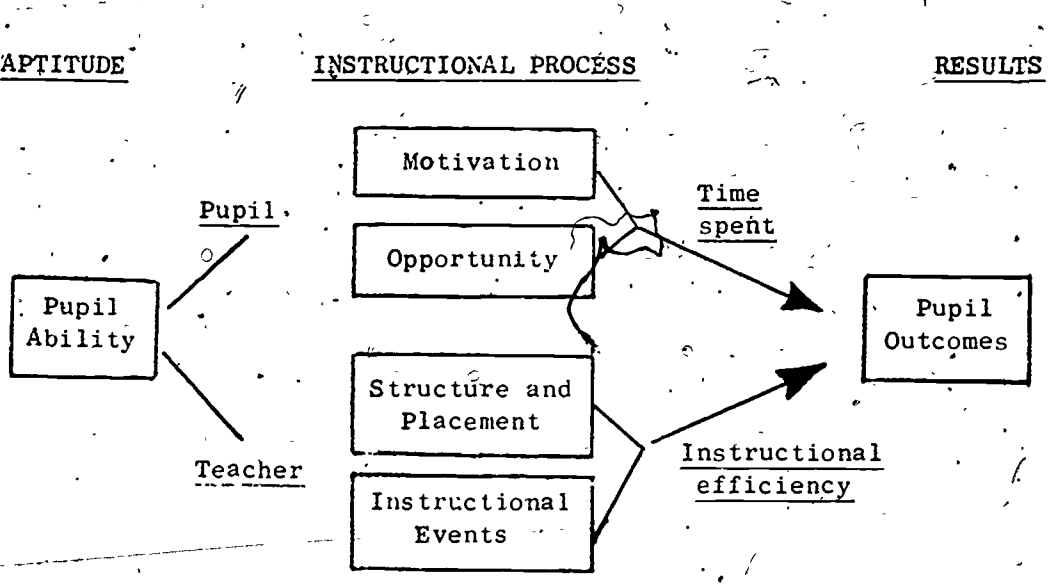
1. Entering or baseline test performance obtained in Fall 1971. These measures reflected the incoming academic abilities of the sample classrooms in areas of mathematics and verbal skills (spelling and reading) as obtained on a modified version of the Wide Range Achievement Test, the Peabody Picture Vocabulary Test, and the Pre-School Inventory.

2. Classroom observation protocols, which provide samples of classroom organization, resources and utilization, curriculum and emphasis, and teaching style. The SRI Classroom Observation instrument and procedure are described in greater detail elsewhere (see especially Stallings, 1973).

3. Year-end test performance of these classrooms, obtained in Spring 1972. Again, measures of academic abilities in reading and mathematics were obtained, this time of the 1970 Metropolitan Achievement Test.

C. Procedure

The procedure Emrick employed to evaluate the research model was multiple regression analysis. The first step involved the development of operationally defined representatives of variables in the basic model. This model is as follows:



The logical and operational definition of these components are as follows:

Ability-- A construct used to reflect the basic incoming skills present in a classroom grouping of pupils. This variable consists of a single sum of WRAT, PPVT, and PSI total scores, averaged at the classroom level.

Motivation-- A construct used to reflect the pupil's tendency to engage in learning activities when opportunity exists. Since motivation is generally a consequence or function of external motivators (e.g., praise, encouragement), the construct is defined in this study as the relative incidence of teacher praise and encouragement for general and specific pupil behaviors in relatively narrow activity ranges.

Opportunity-- A construct designed to describe the relative proportion of classroom activities which are directly relative to criterion variables. This variable is defined as the frequency of overall observations in which the dominant classroom theme (or teacher behavior) involved mathematics or reading activities.

Structure and Placement-- A construct designed to reflect the extent to which the teacher's strategy or method involved differentiation and individualization of pupil instruction. This variable is defined as the sum of observed occurrences of (1) situations other than large-group instruction by the teacher; (2) teachers, aides and volunteers working with individual children on academic subjects; (3) the relative use of academic materials, such as books, teaching materials, etc., for mathematics, reading, and social studies; and (4) the relative occurence of children working without adult assistance on academic tasks (e.g., workbooks).

Instructional Events-- This dimension reflects the relative incidence of teacher/pupil instructional interactions. This variable is defined as the observed incidence of pupil responses to teacher-presented issues (generally academic), the extent of teacher feedback and acknowledgement to these responses (whether academic issue or general issue), and the general pattern and frequency of teacher acknowledgement of pupil task related activity.

These variables, as defined above, were each summarized as single values associated with a given classroom. The criterion

measures -- spring classroom performance on standardized achievement tests (MAT) -- were then regressed on these predictor variables under three models:

1. Process Determinants, or the regression of criterion scores on the four process dimensions.

2. Ability Determinants, or the regression of criterion scores on pre-scores alone.

3. Total Explanation, or the regression of criterion scores on all five variables (process and ability scores).

The total variance represented in the criterion dimension can be viewed as consisting of four components:

1. Variance uniquely due to incoming ability of the pupils (i.e., independent of what teachers do).

2. Variance uniquely due to classroom and teacher variables (i.e., independent of ability factors of the pupils).

3. Shared ability and process variance, or that variance which could be due to process or ability, since it overlaps.

4. Error, or unexplained, variance.

Thus, the components of variance are conceived as follows:

1. Total variance explained = Multiple correlation coefficient squared (R^2) when all predictor variables are employed.

2. Variance due to error = (100) - (Total variance explained).

3. Variance due to pupil ability = (Total variance explained) - (Variance explained by classroom and teacher process variables).

4. Variance due to process variables = (Total variance ex-

plained) - (Variance explained by pupil ability variables).

5. Variance shared by pupil ability and classroom process = (Total variance explained) - [(Variance due to pupil ability) + (Variance due to classroom process)].

D. Overview of Preliminary Results

Since the analytic model, as well as the results obtained from its application, are still undergoing review and criticism, it would not be appropriate at this time to imply reliable findings by reporting the statistical results in detail. Some general propositions can be proposed, however.

1. Descriptive statistics (means and standard deviations) of ability, process, and criterion variables from the kindergarten and entering first grade samples show that the two groups were reasonably comparable on the process or instructional dimensions. The test dimensions, however, reflect differences between the two grade levels.

2. The regression analyses for both classroom groups suggest that between 70% and 80% of the total variance in the criterion measure can be attributed to the combination of pupil ability and instructional process predictor variables. (Thus, 20% to 30% of the variance is unexplained or attributable to "error.")

3. Between 35% and 45% of the total variance may be explained as shared by the pupil ability and instructional process variables.

4. About 10% of the total variance appears to be accounted for uniquely by the pupil ability variables.

5. About 25% of the total variance appears to be accounted for uniquely by the instructional process variables.

If these preliminary findings withstand critical review and further analyses, some important theoretical and practical implications may be derived from them.

Although about half of the criterion variance appears attributable to pupils' "incoming" ability, a substantial increase --perhaps 25%--in criterion variance explanation appears possible with some knowledge of instructional dimensions.

Instructional process dimensions appear to have greater predictive value at these entering grade levels than does pupil ability alone. This finding, if confirmed, challenges the belief that antecedent variables are the dominant predictors of classroom outcomes. In lay terms, this finding says that what teachers do and how effectively they do it makes a very important difference. In test score terms, it suggests that--other things being equal--teachers who are most effective and efficient in conducting classroom instruction may produce average classroom achievement test scores that are well more than one standard deviation above those of teachers who are least effective and efficient.

A NEW CURRICULUM DESIGN FOR NATIVE AMERICAN SCHOOLS

by

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Like all American public schools, Native American controlled schools are confronted with the issue of how to improve the curriculum and the relevancy of what is taught. In the effort to be different and distinct as Native Americans, and yet to use innovative approaches from the public school system, they are facing the problems all new schools face as they strive to discover their central purposes. They are adjusting to the newness of the school they control, while resolving what it means to be a Native American.

The problem in curriculum development, then, is two-fold: how to identify with and be distinctly Native American, and how to become educated to cope with the modern world. To be educated without addressing the question of background and ancestry is insufficient. Every man and woman is educated in and through his own culture. There is no generally systematized Native American school system through which a specific curriculum for Native Americans can be

transmitted, and within which Native American children and youth can identify.

In this paper I would like to discuss briefly first the issue of the Native American identity question and how it relates to the curriculum itself for Native Americans. I would like to suggest a sample outline of a Native American school curriculum, and show how it can maintain flexibility by a program of coordination with a curriculum committee, the school board, and its affilitated Coalition.

Cultural Identity and the Curriculum

The school itself can be the formal organization through which a tribe or nation seeks to redefine itself. Culturally, there are several elements each school can seek to preserve by writings, photographs, and illustrations: its language, its past, its family practices (including sex and games), its beliefs.

For example, the elders of the tribe can speak what they know into records that can later be transcribed and edited into books the tribe sponsors and distributes in its own name. The Alabama Creeks, for example, have nearly completed this process. The important point is unless such tribal documentation already exists, it is crucial that it become a part of the school curriculum each young Native American looks to for his past and cultural heritage.

The current cultural quest is not only a confrontation with Western Civilization and its culture. It is also a continual search for its own. Few civilizations can survive long on oral tradition, even though the oral tradition must always remain an important link in any cultural transmission chain. What is important to the tribe

must be documented so that a record exists for present and future generations to inherit and cherish.

The perennial crisis between young and old is not necessarily a cultural problem. It is not as critical as the identification of important cultural aspects that the young must know if they are to pass on the cultural fullness of people. The young will nearly always be different in the popular sense in ideas, dress, language and music. What is important is that the young have a culture to learn even if they leave home and move away. That can only happen if, while away, they can re-experience the culture in their private lives through readings. The writing itself enriches the culture as does the reading about a culture's history.

I believe that the first priority in curriculum for Indian controlled schools is the writing and publication of a series of comprehensive books, by the tribe, explaning the elements of the tribe or nation it considers to be a most crucial for the young to know. The project ought to be a combined effort of the whole tribe, not just a few individuals willing to write.

The importance of this effort is that these books become the basis for a cultural foundations program for the curriculum of the school, and the guiding principles for future curriculum development. The project cannot be haphazard. A general outline of some of the important features might look like this:

1. Description of the Family
   a) role of father and mother
   b) role of children towards parents
   c) role of older children to younger
   d) role of relatives to the family
   e) relation of family to community

2. Description of Tribal Community
   a) role of elders and leaders
   b) tribal activities
   c) ceremonial functions
   d) marriages and burials

3. The Relationship of One Tribe to Another
   a) oaths between tribes
   b) treaties and agreements
   c) cooperative ventures

Besides the more general and historical descriptions of the tribe, specific descriptions might include everyday activities such as the importance of food. Topics written about could include: its preparation, choices of food, some kinds of food also used as clothing, sacred foods, certain foods for certain kinds of activities--before battle for instance. I discuss this example in more detail later in this paper.

Assuming that each tribe possesses a modest but perhaps incomplete account of its culture and history, the next step is to insure that it becomes the basis for the school's curriculum. The two projects can proceed together simultaneously but they must be coordinated. One possible approach is through a thematic development in the traditional social studies, whereby units could include: law and governance of Native American affairs, the family, modes of education, food gathering and eating practices, and beliefs and sacred practices. Through the documentation of its culture, the tribe can engage in the process of revitalizing its youth with the force of its past roots.

Each tribe, as a part of its cultural documentation, can record how the environment or nature influences the tribe and what it is and has been. What, for example, has been the influence of the wind on the tribe? Perhaps it holds a spirit meaning. Has the wind been

favorable to the rotation of crops and food production? Has it meant dust storms which led to migrations? What is the importance of water to the tribe and tribal history? Is there any special significance to water to ceremonial functions? Is water plentiful or in short supply? How is water stored? Where is it stored? How is it carried over great distances? Are there special minerals that are important to tribal history? Are they used practically or are they ornaments? How has turquoise been used, and why has it become a symbol more than others of the Native American image?

Whatever the tribe or nation considers important needs documentation. Some of the more specific items that each tribe can record for itself in the detailing of its history are:

1) The manner in which the individual as a child acquires the culture of the tribe

2) changes in the group life which occur as a result of adaptations from other cultures. (For example, if one tribe interacts because it lives close to another tribe, what specific elements of that tribe's culture help to form its culture).

3) how one becomes a member of an individual group within the tribe. If there are social groups within the tribe, how does a man or woman join?

4) what ~~is the process by~~ which a young person assumes manhood or womanhood in the tribe?

5) what is the role of elders, and at what approximate age does one become an elder?

In effect, what the Native American must do is construct his own anthropology, taking upon himself the task of revising what is essential to suit his purposes. If he finds the current stage of anthropology as now taught in the colleges and universities repugnant to him, his goal will be to take what he finds critical to his own interpretation of his History and life and to begin recording that for

his future posterity and for use in his controlled schools. The objective is to begin the development of a history and study of his language, culture, mores, customs, behaviors and beliefs that he finds acceptable, principally because his hand is on it.

Beyond that his record of his affairs can begin to project the values of the culture he knows, has inherited, and plans to transmit to his young.

It may be important to distinguish what is important in the national sense of his tribe from what is important to himself as a Native American as a part of that Native American culture. For example, the culture may be defined as pueblo, or plains hunters, or northwest coast, and yet within that grouping there are scores of individual tribes or nations. It may not be important to logically describe subgroups, but nevertheless the issue of tribe or nation as apart from geographic culture will likely have to be defined.

The fact remains that if the Native American is tired of being studied by anthropologists it is time that he begin to study himself more fully and to document his own case histories and stories. Clearly, it is the basis for his own curriculum development in his own school. A culture is the way people live. The Native American today needs to describe for himself how he lives that future generations of Native Americans can do justice to the culture they will inherit.

Assumptions About Curriculum Planning for Native American Schools

I plan to make several assumptions about curriculum planning for Native American schools prior to designing a curriculum package.

The first assumption is that the curriculum for Native Americans

is constructed around the motivation and interest of the children and youth the curriculum is supposed to serve.

The second assumption is that the central role of the curriculum is to develop the children's capacities to learn how to learn.

The third assumption is that grading and evaluation be based on individual competencies and performance and not grade levels or age levels.

The fourth assumption is that the total curriculum be environmentally oriented.

The fifth assumption is that the teacher is to be a part of a totally integrated curriculum planning and teaching team.

Let's analyze each of these assumptions in more detail.

Motivation and Interest

One of the more important objectives is to develop a liking for learning in all the children and youth. Liking learning is not necessarily liking schooling. The school can recruit teachers who genuinely have a fondness and warmth for the children and who have a rich sense of humor. The best tactic for teachers is to give the students feelings of continually rising sense of accomplishment by arranging tasks so that they can master them, and by making sure they recognize and succeed in their goals. The work does not as a result have to be easy, but it must be meaningful to the student and challenging. All teaching techniques will not consequently succeed with all kinds of students. It may be important to sift the high achievement and high ability students from those with low achievement aspirations and low ability.

Developing the Capacity to Learn How to Learn

The object of this goal is not only to encourage a student at whatever age to change his behavior as a result of experience, but also to enjoy changing his habits to want to learn more. This assumption or principle imbedded in the design of curriculum planning is not repeated acts of memorization. It is more closely associated with the idea that certain kinds of behavioral activity will tend to broaden a child's capacity and willingness to want to learn.

Grading Based on Individual Performance

What follows from transforming individual characteristics by varying the learning situations, is that grading and evaluation cannot necessarily be standardized. Consequently, merely improving scores through continual practice is not the goal. It is not just the development of a new response that is central, but the interaction of past responses to new behaviors: the transfer of learning experiences. Both the teachers and students must receive feedback, be reinforced for his responses, and provide information to him that will be useful in future responses.

Environment as the Total Curriculum Theme

The North American Native has a deep and abiding reverence for all of nature, and living things. He is patient with the living earth, and knows that it cannot be technologically disturbed without damage. That sense of mystery and love that has so permeated the Native American past ought to be the central core of the whole school's

curriculum. It ought to be the focus around which all else is grouped. Once the task is largely finished on documenting the history of the tribe, much of that can be used to further the environmental studies.

Social studies in particular can be an investigation between the natural environment and the man-made environment. Examples can be: the food chain, states of energy, the animal world, and so on. The point is the tradition of the Native American has always been the environment. It is even more important that it continue to be the focal point of Native American learning in the future.

The Differentiated and Integrated Teacher

As a part of the new design for Native American schools, the teacher in the new scheme of things must be instructionally competent and differentiated according to teaching abilities, while as the same time be coordinated as a part of an integrated curriculum planning team. The organization of this team will be described later.

I make no pretense about attempting to equate the goodness or the quality of Native American schools to each other or to any other school's system. What I propose is a curriculum design that makes certain assumptions about the purposes of education for Native Americans.

I assume, for example, that it will be the decision of the school board or the tribal council to educate boys and girls separately or together. The fact that boys and girls have been apportioned to different curriculums in the past will weigh in that decision.

Schools are for the education of the young, not necessarily exclusive, but primarily. Schools exist in order that the children have something in the culture to be transmitted. There are ways in which the culture can identify the physical, emotional, and intellectual maturity of the children and youth, so that the culture or tribe can know when the process of schooling is ended.

I assume that the schools will not be simply vestiges of the former Bureau schools or replicas of traditional American schools. Schools will be supportive of the Native American way of life, and stress Native American life roles. Teachers chosen for teaching roles in the schools will be representative of life roles the Native Americans consider culturally important, whether that be agriculture, religion, hunting, crafts-making, art or whatever. The school will be a form of preparation for life, although not entirely. And, lastly, that the process of Native American schooling will last from the early years until some point in adolescence.

Psychological Suggestions for a Native American Curriculum

There are scores of ways the Native American child can learn about his culture and other cultures. Native American schools will hopefully not become centers of punishments and rewards, where the rules of order and the curriculum have become hopelessly entangled. The traditional school system in America constitutes a lack of social consciousness about the aims of education, other than that everyone ought to have as much as possible.

Some of the ways in which children can learn are through the following:

* by muscular or psychomotor association. A Native American child who executes a large number of ceremonial movements while he is learning tribal traditions through ceremonies will tend to remember the traditions well if he engages in the complex series of movements himself. Going through the movements of learning something is one of the strongest forms of memory association.

* by doing. When a child is taught the complex performances associated with fishing, he learns best by actually doing in conjunction with the instructor; for example in readying the fishing equipment, baiting the hook (or readying the spear), and stalking and catching the fish.

* by symbolic association. The display of symbolic emblems throughout the school should represent the best in the culture. The child ought also to be led to the actual places where the history of his tribe has occurred, to observe first-hand the geographic locations his people hold dear.

* by dramatization. Acting out is a strong form of cultural learning. There are simply scores of traditional stories in every tribe and culture which tell about its past. Storytelling can be a prelude to dramatization. Pantomime is another rich source of dramatic acting. Children can perform for each other, and act out the rich lore of the tribe and culture.

* by trials. It is often painful to learn. Although the Native American curriculum should not be an endurance contest, there will likely be units of the curriculum that require exhibitions of endurance or skill in physical trials. In the modern sense, the use of a physical trial to help the young man prove himself to the tribe

may seem primitive, nevertheless, if the culture stresses the necessity of some form of trial for both the young man and young woman, there should be provision in the curriculum for sufficient preparation (if preparation is a part of the trial).

* by art. This is not to say that this is to be art education. Education by art and through art is not education in art. Children and youth can learn whatever processes or content is relevant when they physically manipulate a paint brush, a musical instrument, a pen, or clay, or any form of artistic instrument. At all costs, the Native American school and curriculum must avoid the blackboard paralysis of the American school system, and experiment with alternative ways of helping the children learn.

The Development of a New Curriculum Design

All course offerings will emphasize the environment and its importance to the modern day Native American as well as the Indian of the past. Thus, the total curriculum will consist of elements which stress the following:

* the protection of life, health, and living
* the securing of a living
* the securing of learning (education in the formal sense notwithstanding)
* expressing emotions and beliefs
* working in groups (the development of social and civic responsibilities)

The total curriculum package is an aid in the development of meaning for the Native American within the native tribal culture, and the total Native American context. It is supposed to be a widening of experiences for the school aged Native American to permit him to come to grips with the two worlds of the Indian and non-Indian.

There are some more important parts of the environment that contemporary Native Americans can concern themselves with that I would like to mention here. It will not be possible to catalogue a complete curriculum guide for all Native American schools, but it is possible to sketch some detail of what that type of education for the young Native American ought to be.

Although the general theme of the curriculum I am suggesting is environment, that does not mean that that is limited to solely the natural, nonhuman world of flora and fauna. The point is that the child learn the interactive aspect of the world with himself and others.

But he should also learn not only the nature and extent of the world around him and his relation to it, but also the peculiar values of that nature that the tribe has intuited. The world of flora and fauna and weather have peculiar features in different parts of the country and the meaning each tribe places on weather, for example, can profoundly affect the values the child learns. Different tribes have dances for the eagle, the coyote, the deer, the buffalo and the ceremonies surrounding the hunt, the capture, and the celebration of the tribe's victory. The child should learn the spirit meaning of the different animals.

It may also be necessary for the tribe to document and prepare its culture for the children's learning. For example, how does the tribe view itself in relation to the rest of the world, even other Native American groups? Is the tribe like a flower in nature that acts in harmony with other natural things? Does it view itself as isolated from the rest of the world, even other Native Americans?

Is it expansive in relation to its orientation to other groups, or contractual, drawing in and resisting notions of any change? Does it make attempts to extend communication to other groups, whether or not Native American? Is it hostile or pacific in those relations: does the tribe still divide the world into friends and enemies? How does the tribe stand in relation to its past? Does it view itself as superior, or a part of a superior force?

The answers to these kind of questions will help determine the nature of the values to be transmitted about the environment and its attendant curricular units.

For instance, one of the most difficult value questions Native American schools will have to respond to is, Who owns the environment? In one sense it is a frivolous question. But in another it goes to the heart of the differences between the Indian and non-Indian cultures. In typical "American" culture (which in many ways can only be described in relation to another culture, and has little generic features to distinguish it) land is bought and sold as personal. How the Native American views the land can enrich not only the Native culture, but perhaps the whole non-Indian as well.

The design of the curriculum will consist of several elements, some principles of organization, and the relationships between content offerings. I propose that the principle areas of curriculum design and principles of academic orientation be grouped around the following:

I Energy and Matter
This thematic grouping could consist of math, and the physical and natural sciences.

II Language and Culture
This thematic would allow for the teaching and learning of language(s), the social sciences, and Indian life and ways.

III Spirit and Life
This thematic allows for the development of art and literature, poetry, religion, and the spirit ways of the tribe.

IV Law and Economics
This thematic will permit the development of consumer skills the roots of order (law), and managing money or other resources.

V Physical Development and Health
This thematic allows the school to develop the child's psychomotor skills and physical, emotional and mental health capabilities.

I believe that these five general themes or patterns of the total curriculum will help preserve the best of the traditional American school curriculum, while allowing for the introduction of distinctly Native American content offerings. Within the general context of the environment, these five broad areas can provide an integrated and unified approach to most conceivable content areas or subjects planned.

For those schools that already have a curriculum which has been nearly literally assumed from the traditional school, the planning necessary to make the adjustment to a new curriculum will require the same kind of transition a new Native American school would. Five broad areas can provide a framework for curriculum organization for any school.

These areas can be given sequentially over long periods of time, several years for example; or, they can be given intensively, for example one year at a time. The way in which time and the curriculum interact ought to be a issue of prolonged debate. The assumption should not necessarily be that each unit or broad concept area be given equal treatment or be taught for the same length of time.

The five broad concept areas are ways of organizing the knowledges to be taught and learned. They are also ways in which the

culture and Native American history can be absorbed. They are not necessarily a grouping or set of skills necessary for making a living. In that sense they are not specifically vocational.

Example of a Teaching-Learning Unit

Assuming the environment as the central theme, let's take an example of what a curricular unit might look like in the general area of Energy and Matter. This broad area could encompass the basic skills of math, and the physical and natural sciences. But its principal objective would be in the application of the use of those basic skills in solving problems in the broad area of Energy and Matter.

A typical unit, or series of units, might look like this:

I Food from the Land

- arable lands (cultivation & use)
- grazing lands
- soils
- pasture and forest lands
- sources of food
  - a) productivity
  - b) methods of harvesting and storage
  - c) processing and distributing (including (marketing and consumer acceptance)
- food from the sea

II Water

- precipitation and water tables
- water as power
- estuaries and tides (for coastal Indians)
- fish spawning sites
- methods of fishing and techniques

III Energy Resources

- industrial power and waste
- fossil fuels (including coal and oil)
- natural gas
- solar energy

nuclear energy.

The mathematics component could be the use and application of measuring skills to solve problems associated with the environment and its use. I submit this could be done at all age or grade levels. Students could find out about their community land resources and investigate county or regional libraries to find out what information is used in the determination of decisions about land use and water use. Thus, a constant problem in curriculum design--integration--could be accomplished with a built-in intergrated force, the environment as the central curriculum emphasis.

This particular example of a curricular unit could further be differentiated by showing how the land protects life and hinders it, how it secures a living, how it is a source of learning, how emotions are expressed about it, etc., thus further helping to integrate the relationship between the Native American child and his native environment.

The important point in this development is that the basic skill, mathematics for example, does not itself become the subject to be taught, rather, a human environmental problem becomes the focus and all traditionally known disciplines or subjects are used as tools to solve problems. The broad area of Energy and Matter does not itself become the sole subject to be known, but the theme around which curricular units the community desires essential to know can be learned by the students. All of these broad areas, can be revised as appropriate to accommodate the interests of the tribal community.

Instructional Innovation: Differentiated Staffing

Creating a totally new and integrated curriculum for Native American schools is a rare challenge to disregard much of the dead baggage of a traditional school curriculum. In other words, Native American schools have a unique opportunity to do much of the innovative techniques many public elementary and secondary schools find difficult to put into practice. There is no reason Native American schools have to adopt wholesale all traditional practices, or resign themselves into adopting the same instructional practices. Native American schools can practice both their own brand of curriculum suitable for Native American children, while experimenting with some innovative techniques.

One such innovative practice is the creation of entirely new personnel and teaching practices. Native American schools could adopt a system of differentiated staffing whereby teachers, medicine men, and community resource consultants could together respond to the teaching needs of the school. While, for accreditation purposes teachers would be mainly responsible for instruction; other community personnel, familiar with Indian lore and background, could help instruct the teachers in the former ways of life of the tribe.

The system of allowing teachers, community leaders, such as members of the tribal council, and project directors, to interact flexibly with students, can be more productive and conductive to student learning than a fixed student-teacher ratio. But the key is not only flexibility for the staff, but purpose and design in the curriculum.

A possible model for differentiated staffing for Native American schools could consist of the following kinds of specialized

personnel: curriculum, media, research, testing and diagnosis, guidance, and logistics. This panel of experts could combine to form an academic senate to supervise the whole curricular and instructional program of the school or system. The responsibilities of the academic senate would be to oversee the changes necessary to insure student progress, and to capitalize on teacher strengths and competencies. The concept of differentiated staffing recognizes that there are different teaching skills, and that some teachers possess skills others don't have. Most schools have not committed themselves to organize the school around differing teacher skills and capabilities.

I would suggest that each school have at least one master teacher, preferably Native American, who is elected by teachers. This teacher would have knowledge and superior teaching skills of curriculum in more than one academic area, and of Native American culture. A group of teacher instructors would then constitute a teaching team for an area of study, but preferably an integration of Native American ways of life with some basic skills or disciplines.

Each teacher appointed or elected to each teaching team would have a special competence in either large group or small group instruction, lab supervision, or independent or tutorial study. The rationale for different experiences in the team is so that each team will have complementary skills in a broad area. Then, each team might have a broad level of responsibility across age levels or grade levels. Thus, a teaching team with a master teacher leading it, could have responsibility for the math-science curriculum K-12. Each team would then be backed up by a team composed of the team of specialized

personnel mentioned earlier.

It is traditional of American schools that there is a social distance between the teacher and any member of the class. The teacher is set apart, and generally does not relate to the emotional, family or community life of the child or youth. In kibbutz schools, on the other hand, there is a social closeness of the teacher to the school community. The children are able to perceive him or her in socially different roles than that of teaching.

Hopefully in the Native American schools there will be a new awakening to the culture's importance, and a winnowing of the critical cultural units the children are to learn. There could easily be a tendency for a particular tribe to submerge the child in the culture without considering the process in which the child is to learn it. It is the tribe which must make the determination of what the child is to know. It is the responsibility of the tribe to determine what the curriculum shall be, not just the teacher in the privacy of the classroom. The tribe should see to it that specific cultural roles in the community be taught by community representatives rather than just salaried teachers. The children should learn life roles from those who live them.

The school can imbue the child and youth with the desire to seek out opportunities for learning new concepts, roles, styles. The school, in other words, need not rely on compulsory education to maintain youths in a special setting to learn. The tribe in its school should allow for alternative routes to varied ends, some of them obviously personal, for the individual within the milieu of the tribe or community.

Part of the instruction ought to take place in the evening and at night, for example during ceremonial functions. In fact a great deal of the instruction could easily take place in the ritual--even simulated--of ceremonials. The process of Native American schooling ought to be a combination of native rituals and some concept of preparation for life.

The idea behind presenting differentiated staffing as an alternative to the traditional staffing pattern is so that administrators in Native American controlled schools can capitalize on their highly competent teachers and match them with special student needs. Now that is easy to say, but traditional personnel practices are usually arranged for administrative convenience and not flexible client use.

Subject matter has dominated the way in which schools organize the teaching staff; and, although, some changes have been evident recently, especially in elementary schools, the majority still operate based on fixed pupil-teacher ratio.

I noted in one of my assumptions that I assumed the schools were principally for the young. By that I meant to differentiate between schools that function both for the education of the young and the education of the community, through adult program, basic education and the like. The school can serve that purpose, but my conjecture would be that it doesn't. But that does not mean that adults and elders are to be excluded; rather that the school is not principally for their benefit. I would see the adults and all kinds of community volunteers and aides engaged in a concerted effort to help in the process of preparing the young for admission to the world and

especially the Native American community.

Consequently, I would see the entire community as a resource to help in the instructional program. Obviously, not all members of the community can be professional instructors or be engaged in professional experiences. But there isn't an adult, especially those interested in preserving an ancient heritage, who isn't interested in passing on something from his own life and experiences that isn't relevant to the young.

For example, rather than hire a full-time social studies teacher, the school could set aside a portion of the school day for the sharing of experiences with a rotating group of community representatives who participate in this particular program. It would not likely be for school credit. It would be, however, the epitome of transmitting the culture to the young and the near-adult.

How often do the young have an opportunity to share with the elderly their mutual concerns and anxieties? The community school is the ideal place for the young and old or near-old to share life's ambitions and dreams. The Native American school is the perfect place for instituting an evolving dialogue between all community members, a place where the ancient stories can be retold, where young and old can talk freely, where education about each other transpires. It isn't utopia. It can happen if people want it to.

Youth Tutoring Youth

The concept of youth teaching youth is an historically novel concept. Sometimes because of age or cultural gaps, some teachers or aides or older volunteers have been unable to identify or cope

with some of youth's unique problems, especially special learning handicaps. But youths from similar persuasions sometimes can.

Many school systems, after having examined the youth teaching youth concept, found that it supplements the regular curriculum and adds to the traditional teaching strategy of one teacher and several students. Older students help younger students with similar learning deficiencies. In most cases potential Native American dropouts could be used to help instruct in those practice sessions where both the youth-teacher and the learner are having difficulties. I have seen sixth-graders remediating math problems with second-graders in which both were having difficulty.

The implementation of a youth instructor program is simple, involves literally no expense, and helps some students having trouble learning a particular subject become more motivated because they have to help someone else in it. Youth teaching youth helps eliminate the distinction between who's a learner and who's a teacher. All Native American students in Native American controlled schools can be encouraged to interact both as learners and mutual tutors.

It has always been true that one of the goals of American education has been to imbue the student with a sense of civic and community responsibility. It seems to me that there might not be a better way than by allowing the students to assume some instructional responsibility while attending school. We all know that the best way to learn something is to teach it.

The program can involve more than just helping in practice drills. Many youths find that showing pictures helps the younger students with their reading problems. Many have made up stories from pictures and

from magazines. Sometimes they let children draw their own pictures from the stories read or written. Still others make up games for the children to play. Such games can be made from ordinary materials like pencils, paper, crayons and cardboard...inexpensive creative playthings. They might include color matching word games, or simple crossword puzzles or puppet theaters to get the children to act their stories out.

One student volunteer used a tape recorder with a small group of children to interview local residents about the war, the cults of the young, drugs, and similar contemporary problems. The playbacks made for animated discussion later among the children, and became grist for writing stories, for spelling lessons, and for drawing pictures.

Surveying Aide Activities

The task for Native American administrators is to match personal competence and career plans with the developed functions for the school. This is as true for teachers as it is for aides. Aides don't want to do just the clerical chores any more than teachers do. But because there are supporting activities and services necessary to the instructional program, someone has to have responsibility for them.

Aides and teachers need to be differentiated and rotated in assignments so that all share in different kinds of supportive responsibilities, even some of the unsatisfying ones. One possible way of reviewing a comprehensive aide program, or of beginning one, is to conduct a survey of activities teachers think aides could manager and direct, how well prepared they must be, how they could be trained and

by whom if they are not well prepared, and how often aides could perform it.

A sample activity survey form might look like the one on the adjoining page. The survey could form the basis for dialogue among all school personnel about how to revise the aide program, or how to begin one. If an aide program already exists, a survey could test teacher perceptions against aide perceptions.

The traditional form of aide assignment is to a particular teacher or classroom, perhaps to a teaching team. If the person is an instructional aide, the role and kinds of job responsibilities are not always precisely determined, nor perhaps should they be.

As is the problem when teachers assume new leadership roles, the designing of a new scheme of delegating aide responsibilities must be premised with some assumptions.

First, aides, like teachers, do not easily follow a stereotypical pattern. Their strengths and weaknesses will not always show up in personnel files, interviews, or in routine tasks. With training, with experience, with supportive supervision and career counseling, they will likely be future teachers and administrators. Second, no one conforms universally to a job description or position assignment. Individuals nearly always bring to their jobs how they think it is to be performed. In a way many define the job as how they perceive it should be accomplished. As a result, administrators cannot disregard the uniqueness of the individual (likely part of the reason he or she was hired originally) in assessing and assigning roles and functions.

A model for personnel utilization needs a justifiable basis other

TEACHER AIDE SURVEY

AIDE ACTIVITIES	How important do you consider this activity?				How well prepared must an aide be for this activity?				Who could instruct an aide in how to do this activity?					How often should an aide do this activity?			
	very	moderately	slightly	unimportant	superbly	significantly	moderately	none	supervisor	administrator	teacher	another aide	other (describe)	as required	often	seldom	never
minor health problems																	
cafeteria monitoring																	
student discipline																	
hall patrol																	
settling student differences																	
minor academic counseling																	
conducting class quizzes																	
directing small groups																	
field trip supervision																	
enforcing school policy																	
planning class activities																	
reviewing class materials																	

than that the staff needs to be reorganized. A model is a way of looking at the requirements for staff numbers, not a way of outlining exactly what everyone will be doing. But looking at staff requirements based on students has not been the normal procedure. Administrators tend to think of the staff requirements as the number of rooms, teachers, and students, and the happy ratios that result. It is the rare school that blends the best of staff competence with students' needs, and makes adjustments as those variables change over time. It is sometimes left to chance that the best kind of learning interaction happens at all. Flexibility in staff use demands something more than change.

But the beginning premises is that the kinds of tasks needed precede the assignment of responsibilities. The starting point is not the teacher or the room, but the nature of the activity. Flexibility in personnel utilization is responding to the questions; what needs to be done, and who do we have to do it.

I believe that there is a progression of responsibilities relating to the instruction and supervision of students. If someone demonstrates competence we ought to make provision for accommodating it. If an aide shows success in dealing with small groups, then he or she should assume some responsibility for small group discussion (provided there is no conflict with state or local statutes). Deciding on whether or not an aide experienced with managing small groups and tutorials is as qualified as an inexperienced teacher, may be one of the tougher administrative decisions.

Somewhere between total instructional responsibility and janitorial services lies the role of the aides. There are enough diver-

sified supportive services in the school, particularly the secondary school, to justify the unique kinds of non-instructional activities aides could perform besides just cleaning blackboards or mimeographing dittos.

No one aide will be an expert in all activities. But learning about the various facets of the school's operation may be more important in their career planning than just being slotted in one position with one teacher in one classroom. What an aide does can be as remarkably diverse as the administration can devise. The concept that makes an adult want to be of service to the school is an example of an altruistic commitment that needs grooming and nurturing. The gradual evolvement of learning opportunities and team building skills for professionally maturing teachers and aides will provide flexibility and maximum staff motivation.

This whole section on differentiated teachers has but one rationale; to acquaint educators for and in Native American schools with the possibilities of alternative patterns of using teachers, volunteers, aides and other staff personnel in positive, constructive, useful way, one that is educationally meaningful and community oriented.

Curriculum as words in textbooks is meaningless. The real curriculum is what the teacher teaches. And, consequently, the way in which teachers are organized can have a profound impact on what is taught. My opinion is that a program whereby teachers can respond flexibly to student needs is the program which will not only be of greatest benefit to the student but will be a commitment to future and needs of all Native Americans.

Curriculum Administration and Organization

Curriculum improvement will have little impact on Native American children and schools unless the efforts can be coordinated. I recommend that each tribe establish a curriculum committee responsible for overall school reforms and innovation in curriculum. It should report to the schoolboard through the chief school administrator.

The Curriculum Committee--if one does not already exist--should become a forum for parents to take an active role in the school's activities, and a responsible unit through which other groups can work. In developing the responsibilities of the Curriculum Committee, and the school board: 1) urealistic expectations and 2) confusion of roles can occur.

The ultimate responsibility for operating the school rests with the school board. However, the extent to which the school board can share this responsibility is a matter for each Board to decide. However, the school board can delegate much of its responsibility in curriculum development to a Curriculum Committee, much as it can assign responsibility to an administrator. How much responsibility for the development of curriculum each committee receives is a matter for each board to decide. However, each board should determine this important question before the formation of any Curriculum Committee. Each member selected for service on the Curriculum Committee should understand what his assignment entails prior to accepting membership on the Committee. The Committee's work should clearly be limited to curriculum, and not become involved in personnel, budget procedures,

equipment and supplies, or other administration problems.

The Curriculum Committee should be limited in its scope to curriculum and should not function as a new organization designed to replace other advisory groups established to advise the school board. The tenure of the Curriculum Committee should be spelled out by the school board, and should be clear to all serving members before they accept membership. The school board can have alternatives for membership tenure:

1) One or two year tenure for all members--a new group formed each period.

2) Staggered tenure to provide continuity of membership--initial assignments for 1 year, and 2 year periods with new members added completing their term, new members serving 2 years.

The responsibilities of the Curriculum Committee at the mimimum should include but not be limited to:

1) Overseeing all curriculum projects and developing new ones.

2) Setting curriculum goals and priorities.

3) Reviewing and approving curriculum plans for the school.

4) Advising the school board of the nature and extent of community participation in curriculum development (parents, teachers, students, tribal officials, etc.)

5) Evaluation of curriculum.

At the time the Curriculum Committee is set up, there should be orientation and training sessions conducted by the school board or under their auspices, to acquaint each member and other potential members about the purposes of the Curriculum Committee, its projected work and plans for school curriculum improvement. The determina-

tion of the size, method of selection, and criteria for membership should be the responsibility of the school board. However, some suggestions may prove helpful:

1). Teachers should be a majority of those represented.

2) Parents should be included.

3) Perhaps a School Board member.

4) A tribal official.

5) Some representative students.

6) Community officials.

The school board may find that asking itself questions about who should be on the committee may be useful: Does the member bring educational skills and resources to the Committee? Does the prospective member have a high standing in the tribe or community? Would the prospective member help maintain school support for new proposals? Does the member have the support of community organizations? Would teachers selected be knowledgeable about other aspects of curriculum other than their subject teaching matter?

Again, the purpose of the Curriculum Committee is not to establish a new structure that hinders the school's goals. It is to provide a means for all those interested in curriculum work in the schools to participate in a meaningful way, and to take an active role in curriculum improvement. It can provide a way for community leaders to plan. It can provide students an opportunity to discuss and influence programs intended for them. It provides school leaders a chance to seek new ideas, approaches, and feedback.

The curriculum model proposed in this paper will not be a panacea for the problems of the Native American school. That will take

considerable involvement of the community, parents, selected students, teachers, and consultants. But the curriculum model I propose is a beginning way for looking at how Native American educators can structure the learning content so that their children and youth can discover meaning through their own culture and that of others. Their schools will be only one, though perhaps one of the most significant, institutions in that process.

The Curriculum Committee must continually ask, "What is to be taught?" It will have to consider how the individual achievement of children results in mastery of subject. Without actually proposing an agenda, I would like to offer some principles of curriculum, in the form of questions, which can be used for discussion amoung the Curriculum Committee members. I call them questions about substantive and procedural dimensions.

I. Substantive Dimension

1. What is the basis on which content is selected?
2. What is the appropriate balance in the curriculum?
3. What are the purposes of general education? Vocational education?
4. What philosophical basis underlie the curriculum you advocate?
5. What psychological basis underlie the curriculum you advocate?
6. What are the weaknesses of these bases?
7. What is the relationship between curriculum, purposes, evaluation, instruction?
8. What are the elements in curriculum?
9. What is the role of the structure of knowledge in curriculum development?

II. Procedural Dimension

1. Who is responsible for curriculum?
2. Who really develops curriculum?
3. How do you change curriculum?
4. Why do you change curriculum?
5. What is the role of student, teacher, administrator, community, state department, Federal government in curriculum

development?

6. What are some critical studies and issues in curriculum development?

These two dimensions will help in resolving more satisfactorily the central issues about the content of what is learned in the school. Other considerations will include:

Scope. The sense of belonging to a particular community will be a part of the response to the question of what is taught and learned. The importance of any specialized education lies in fulfilling both mastery and belonging to a group.

Logic of Sequence. The order in which concepts or skills are taught may be arbitrary as long as the individual units are interdependent logically so that students can perceive relatedness. That sequence within a discipline is a succession of experiences which is consistent with the goals of that study and the overall goals of the environment and the particular theme.

Developmental Factors in the Sequence. Some of the key psychological considerations will be whether or not students are ready for certain kinds of instruction or programs. As children grow and mature their ability to participate in different kinds of learning experiences will be organically and developmentally different, and may consequently require new instructional approaches.

Selection in the Curriculum. The interaction between the maturing needs of the students specific learning experiences will constantly present to the Curriculum Committee the necessity of revising components. Other social realities in the community will dictate new structures, and ways in which certain elements need to be selected in and others selected out. The current constitutional

issues and crisis in government is one example. A community concern, such as the strip mining in four corners, might be another.

The Use of Disciplines. An academic discipline is a way of discerning knowledge from opinion. The mediator of that now is the teacher. Proper use and knowledge of the academic subjects will accelerate students' growth in understanding. How the academic disciplines, and the thematic arrangements I propose with representative ideas, like Energy and Matter, relate with the critical problem for the Curriculum Committee and all teachers. It is important that careful planning be the hallmark of both the Committee and the teaching teams.

Lastly, there are two crucial concerns that the Native American community will have to address as it begins the transition from traditional to specifically Native American curriculum development; language and special education.

I have assumed that each Indian controlled school board will have already dealt with the issue of language in the curriculum, that both the native language and English will be taught in the schools. Improving language and communication skills, however, will be of continuing importance. The curriculum through which any school functions, particularly an organically whole and ethnically homogeneous curriculum for a Native American school, will encourage open and spontaneous communication. It will do so through a knowledge and appreciation of their languages and cultures.

It may be necessary to organize much of the curricula, and, therefore, many of the teachers, around the special education needs of the children. There will be many who will likely be classified

as children with special learning disabilities--of widespread concern in educational communities everywhere. More children are being diagnosed as candidates for special education remediation than ever before, and Native American children are likely not an exception to this policy.

My recommendation would be that this special education need be first diagnosed and then be given top priority in the curriculum development effort. Conventional programs do not serve the interests of these children. It is necessary to devise curriculum programs that diagnose and intervene early in the child's development.

Conclusion

The twin main goals of a Native American curriculum; planning for curricular innovation and reform for Native American schools, are compatible and interrelated. The preservation of the enormously rich heritage of all Native American groups needs local institutional support. The Indian controlled school is the central institution which can commit itself to insuring that heritage's preservation.

I think that in order to prepare the children and youth for whatever life positions and roles they expect to assume that the school must also be prepared to make realistic assumptions based on child development strategies, not subject matter orientation. Fundamentally, these assumptions are no more nor less than what I would propose for any school preparing to embark on a divergent school role. The assumptions are child development oriented. The same holds true for the psychological suggestions.

The development of a new curriculum design is a major departure because it changes the traditional school's objectives and forces them to become interrelated with an overall goal - the environment. I have not given specific performance objectives because each school should prepare its own. But the sample teaching-learning unit is only one sample way in which each school, academic senate, or curriculum committee can begin to prepare areas of study within each broad field or representative idea. Perhaps there could be task forces within each broad area.

The importance of community involvement and participation cannot be underscored enough. Differentiated staffing is an approach for looking at that kind of community participation. Equally important, it is a way of organizing the professional staff to respond flexibly to the student's learning and maturational needs. Hopefully, that organizational pattern will not become a new rigid orthodoxy. Part of the key to successful curriculum installation is the responsiveness of the instructional program. That means that teachers must be trained and willing to adapt themselves to new situations as they arise. It also means that positions and roles must conform to a variety of responsibilities outlined by each school. The idea is to match specific teaching competencies with specific learning needs.

The Curriculum Committee's formation is to be instrumental in aiding curriculum planning and implementation. Once it begins to hinder that development its usefulness is curtailed. Consequently, each school board should consider carefully the specific functions of the committee and its probable attendant task forces will perform and be responsible for before its formation.

PERSPECTIVE ON MANPOWER PLANNING

by

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I. Introduction

This paper seeks to establish the philosophical premises which should undergird manpower planning and training which focus on education and teacher education for Indian peoples. It is limited to: (1) the characteristics of the manpower needed based on the needs of Indian people, (2) the nature of training programs needed to assist in meeting manpower needs, and (3) general criteria for selecting institutions to provide this training. This paper does not treat in any detail the quantitative aspects of the problem but it does provide a basis for costing the training in a manner consistent with the criteria developed.

Overview of the Problem

Indian peoples have educational needs which are unique and which

have not been met. The net result is that Indian children, youth, and adults are now under-educated and no adequate plan now exists to alleviate this condition. The problem treated in this paper is to develop the philosophical premises from which manpower training programs should be developed and implemented.

Quantitative Perspective

There are approximately 250,000 Indian people between the ages of 5 and 18; about two-thirds attend public schools, almost one-third attend Federal schools and less than ten percent attend mission and other type schools. By any standard measure, these children and youth generally manifest at a critical level the results of past inappropriate, unresponsive and ill conceived educational opportunity: lower achievement, higher dropout rate, fewer college entrants, more severe problems of adjustment, higher unemployment, lower self-confidence, poorer self-concept, lack of pride in cultural heritage, and others.

Those who survive the system to entrance into higher education are few, and even though they have certain disadvantages, their tenacity and broader, options permit success but rarely relevancy to treat the problems and potentials of their people.

The specificity of the plight is well documented and will not be treated further in this paper but any reader unfamiliar with available statistical data should become familiar with it.

Basic Premises

There are several basic premises which undergird this paper. These premises are presented as being fundamental to the development of any successful program designed to meet more responsibly and more responsively the educational needs of Indian people.

1. Indian children, youth, and adults have not had opportunities to alleviate a general circumstance of educational disadvantage and its inevitable consequences: low achievement, high dropout rate, severe problems of adjustment and self-concept, high unemployment, low self-confidence, lack of pride in cultural heritage, and severely reduced options and alternatives in each determining his own future.

This historical exclusion of Indian peoples from equal educational opportunity and current lack of a comprehensive approach to treat normal needs as well as those cumulatively developed have compounded a problem that was and is complex by its nature. The problem is now one of ameliorating and compensating for learning and perceptual conditions as well as developing and implementing educational programs which will not continue to create those conditions requiring corrective action. Results of past (and some current) inequities are no longer in question; approaches which simply expand or improve current practices and conditions will have little impact on the problem.

2. Most attempts to design programs for Indian people have been fragmented or unworkable -- even though intent has often been humanitarian -- the net result has usually compounded the complexity of the problem by misdirection of energy, talent, and resources and has tended to delay rather than accelerate treatment of the problem.

Many programs have been conceived, designed, funded and implemented in efforts to provide better educational opportunities for Indian peoples. Most -- in and of themselves -- have been defensible; the common thread of failure has been their fragmentation or their preclusion by factors extraneous to the program but impinging

upon it. In anticipation (and hope) of success, new directions have been minimal. Probably the most important and most ignored principle of education for Indian people has been that positive learning will not result from instruction that is internally inconsistent and trivial to the intended learner. For example, a teacher who has no respect for the Indian heritage cannot teach a child respect for his own heritage by the study of Greco-Roman-Hebraic culture. The compound nature of this problem, for instance, cannot be treated by influencing either variable and ignoring the other. Programs, to be effective, must treat both. (To avoid misinterpretation, the treatment of both variables does not remove fragmentation if such does not occur within a comprehensive plan).

3. The state of isolation -- including cultural, vocational and educational -- without knowledge of or viable right to exercise selection of options and alternatives is an infringement on the rights of any individual; the right to determine one's own destiny based on knowledge of and access to alternatives is inalienable.

There are many ways and means to remove an individual's options and alternatives; hence his right at best to determine his own destiny; and at least, to participate in such determinations about his destiny. Until recently, the removal of options was often blatent racism, which at least was on the surface and easy to identify. The removal of options, however, has become generally much more subtle: isolation, learning environment, underprepared and ill-prepared teachers, biased content (often unintentional), lack of career counseling, lack of job opportunity, biased teaching and class prejudice under the guise of science, delayed decision making, unequal financial support, equal treatment of differences, unequal treatment of commonalities, ignorance, and so forth. Any individual without

knowledge and understanding of the alternatives available to him cannot make an intelligent choice. Predetermination of anyone's future is wrong - morally, educational, ethically and economically.

4. Man's interdependence to all of mankind is increasing; higher tolerance for differences -- political, social, cultural, and linguistic -- is a requisite for all peoples. Each culture has a vital interest in creating a better understanding of it in other peoples of the world.

In addition to being provided with equal opportunity, the Indian peoples need to help others. This demand and need of the modern world requires action to dramatically increase the capabilities for research, development, and dissemination of information about Indian culture and heritage.

5. Opportunities are required to dramatically increase the competencies of Indian personnel for leadership positions at school, local, state and national levels.

Education is complex and decisions about education and the conditions of education are made at many levels other than in the classroom. Even though the classroom teacher is most vital, leadership personnel at other levels have more opportunities to influence decision making about Indian education. Any comprehensive program for Indian education must include training opportunities for Indian people for positions of leadership as school board members, Federal and state education agency personnel, local school leadership personnel (principals, supervisors, counselors, etc.) and for community leadership positions. There are compelling reasons why this action should be taken to provide opportunity, success models, etc.; but these are no more important than is the need to impact decision making and leadership groups with people who can contribute to an improved decision making function. Indian leadership personnel can

certainly bring to such groups more and better understanding about the unrealized opportunities and potentials of Indian people. Such a mix is also vital to establishing cross-cultural understanding and the identification and treatment of mutual educational developments and improvement. The problem of meeting the educational needs of Indian people is complex and will require concentrated effort and planning to assure that the positive results normally expected from one program element is not precluded by omitting another vital and crucial element (e.g., a teacher well prepared to be responsive assigned to a school with uninspired leadership and under financed support services).

6. A massive manpower development program for people working with and for Indian children is needed.

Until a massive manpower training program is developed for people working with and for Indian children is mounted, the severity of the problem will increase exponentially. Many approaches have ignored the fact that untreated problems tend to become more serious the longer they remain untreated. The projected cost in loss of human potential and self-realization is incalculable; the projected cost in dollars will grow greater at a dramatic rate. From a humanitarian or an economic position, or from both, the wisest course of action is to mount a massive program immediately before greater loss occurs.

7. Many of society's institutions are tradition-bound, process oriented and unrealistically regulatory; programs for Indian people must be developed in institutions which have the capability to accommodate internally the innovative and "cutting edge" types of programs which indeed can be responsive to needs.

Unfortunately, most of societies institutions cannot or will not respond to many of society's most crucial problems. Some, for

example, many universities have established other missions which preclude responsiveness to current needs; others are simply staffed by people incompetent to respond. Programs for Indian people must be developed in an educational environment that can be responsive and that can muster the talent needed to mount the needed programs. In all probability, a cluster of community colleges focusing on programs for Indian people, community resources, and society oriented universities will be required in order to capture the variety of resources needed. Simple adaptations of existing programs have little chance of success.

II. Characteristics of Manpower for Indian Education

A. General Needs of Indian People

Simply, but cogently, Indian people need educational opportunity which is responsive to their circumstance. In order to assure such an opportunity, a comprehensive plan must be developed and followed which includes as its most crucial component a manpower training plan and a delivery system for it. The plan must include a design for training manpower as teachers as well as other professional level leadership personnel and also policy makers. The plan should be conceived and supported nationally and implemented within a new system of relationships of Federal, state and local participation.

To avoid misunderstanding, it should be stated that Indian children, youth, teachers, administrators, and leaders have need for much the same results of responsive education as everyone else has, but because of certain conditions, the same results cannot be

obtained by following the traditional process.

For example, Indian people and other people seek as a result of education certain opportunities and options:

1. The opportunity to know their own cultural heritage and the polycultural nature of the U.S. and the World and the option to choose a life style and future based on knowledge, wisdom, and equal access.

2. The opportunity to know about career education, the opportunity and the option to select a path and to have access to vocations and professions for which they have prepared.

3. The opportunity to learn to understand themselves and to build positive self-concepts and to live lives that are acceptably filled with pride, honor, respect, accomplishment and contribution to the society of which they are a part.

Obviously these examples are incomplete in terms of the expected outcomes of or results of education. Minimally, they serve to establish some common results but most importantly they demonstrate results that are unobtainable for Indian people who are simply thrust into the mainstream of education or for those who are educated in isolation from the opportunities and options of the mainstream of American society. The apparent dilemma simply reinforces the need to treat the question within a well designed plan which includes manpower development within a context of training designed to prepare people for the task of meeting the needs of Indian people.

B. In order to focus on those needs of Indian people which have the most critical implications for manpower training, and also to delimit these needs to make planning feasible, needs which are tran-

scending have been identified:

1. Schools for Indian Children and Youth

   a. Need for opportunity to pursue education in full knowledge of career education opportunities, adequate counseling and guidance, responsively designed educational programs, and help to assure access to careers pursued.

   b. Need for instruction and conditions of instruction to build pride in and understanding of the Indian heritage.

   c. Need to comprehend more fully their own culture and its relation to others through the "injection of new knowledge and ideas from one culture into another" (Taylor), thereby giving greater vitality to both.

   d. The need for a learning environment in which teachers and administrators are behavioral models of both interculturalism and pride in heritage.

   e. The need for exposure to resource teachers who teach from wisdom and experience in a "community-based" educational thrust.

2. Preparation Programs for Teachers and Other Educational Personnel

   a. The need for the delicate but crucial balance in preparation programs which combine didactic methodology for cognitive learning with field-based supervised experience for cognitive-affective dissonance and for non-formal learning and understanding.

   b. The need for content and methodology to be both generated and adapted to the needs of Indian people within a

planned program.

c. The need to be highly skilled in developing instructional objectives, individualizing programs, and utilizing community and professional resources.

d. The need for in-depth study of Indian heritage and culture.

e. The need for in-depth study of cultural backgrounds of peoples expanded to include cultures of minorities and interrelations to the whole of humanity.

3. Research and Training Programs For Non-School Personnel (School Board Members, State Agency Personnel and Community Leaders)

a. To meet the need that policy makers and decision makers about education have to know and to understand more about the needs of Indian people and their resolution.

b. To meet the need that policy makers have in deciding about conditions of education and certification of personnel needed for Indian education with quality research and information.

c. To provide training to leaders to prepare them better to exercise their responsibilities for developing schools that are responsive to all children and youth for whom they exist.

C. Basic Questions and Conflicts

There are several basic questions which must be treated and resolved if viable programs for Indian people are to be planned and implemented. This section of this report will identify selected

basic questions, the points of major disagreement or difference and the rationale involved. Finally, a recommended position will be taken on each basic question -- not necessarily as a final answer, but certainly as a catalyst to deliberation, debate and resolution. Basic questions are not separable in all cases because indeed most are interrelated to at least one other basic question. The following questions are separated for convenience:

1. "Melting Pot" and "Cultural Pluralism"

Some authors in describing (or subscribing to) these concepts have assumed extreme positions, almost to the point of being fascinated by the bizarre. This has tended to reduce understanding rather than to enhance it.

The "melting pot" extreme has come to mean to many the forced assimilation of people into or toward the Anglo-Saxon cultural ideal. Pertinent to this position is that it was a social theory of a new American culture for voluntary immigrants but excluded indigenous peoples (Indians and Mexicans) and involuntary immigrants (Negroes). It fostered the notion that the culture resulting from the mix was greater and better and superior to any single culture which contributed to it. The educational consequence was predictable - to melt is good, not to melt is bad; people who melted were good, people who didn't or couldn't were bad. The assimulation implicit in the "melting pot" did not in fact exist; however, many problems were created by it for minority groups.

The "cultural pluralism" extreme has been stated very complexly to mean very simply de jure or de facto segregation or cultural isolation. Freedom has been defined as the right to impose a mono-

cultural system from generation to generation, i.e. mandatory cultural pluralism or predetermined fate for an individual. The extreme position, i.e. cultural imposition, is as educationally and socially unsound as is multicultural imposition.

The terms "melting pot" and cultural pluralism" are inadequate to use in terms of Indian education or in fact for any educational goal for any group of people. Bicultural Education is the concept which best describes and best contains the acceptable goals explicit in the "melting pot" and "cultural pluralism" philosophies. The "melting pot" notion of cultural progression -- any culture being open to enrichment from without as well as from within -- is sound and desirable for society. Its soundness deteriorates immediately, however, if it excludes any one culture from impacting another, or begins to impose -- directly or indirectly -- elements of one culture into another. Cultural progression can only evolve, not be mandated or imposed. The "cultural pluralism" notion that no school should have a preferred educational style based on a preferred cultural style -- including mainstream culture -- is sound. It is also sound that a school environment should be respectful of and adapted to any child or any cultural background and that the mode for his learning and relating that emanate from differences should be so reflected.

Bicultural Education is proposed as a transcending philosophy for developing the premises from which the educational need of Indian people may best be met. As a concept, Bicultural Education has two major dimensions:

a. Each child and youth has the right to an education in a learning environment in which his culturally based mode for

learning is equally important as any other mode. More specifically personnel who guide his learning need to be aware of his and other cultures and be technically and professionally competent enough to adapt their teaching and subject to his learning style if culturally based.

b. Each child and youth is provided with learning opportunities and experiences which:

1) Permit him to experience an in-depth cross-cultural learning experience through understanding a culture substantially different from his own, and

2) Permit him to learn and explore the mainstream U.S. culture, utilizing his own culturally based learning style (Castaneda).

Bicultural education is mostly related to the above concepts; however it has broader implications for world responsibility. Perhaps if a solution to this poly-cultural society can be discovered during this century, the U.S. will be able to resolve how nation-states may survive before the world is blown up. An examination of the international/intercultural dimension of teacher education may provide a better perspective of the vitalness of bicultural education. Attachment "A" provided an overview which will be helpful.

2. "A Well-Prepared Teacher Can Teach Anyone" and "A Teacher Must Be Prepared Explicitly For The Cultural Context In Which He Teaches."

The profession of teaching is increasingly complex and the position that a well-prepared teacher can be responsive to the needs of any group of children with whom he works is mythological. The true meaning is that a teacher prepared in a traditional teacher

education program is well prepared to teach in a typical school of White, middle-class, protestant children who are in the mainstream of culture and wish to retain that status. Indeed, teachers too must be more specialized if schools are to break the organizational mold in which the development of cognitive competencies subsumes all other considerations; especially, teaching to the norm, inculcating well-established community values, and so forth.

Conversely, a teacher prepared in a single purpose program may become ineffective rapidly if overspecialization is at the expense of some basics needed by all teachers.

Even though there are some elements that are common to some of all teacher education programs, it is true that special programs are needed in order to assure that special needs will be met. The fact that programs are and should be individualized and tailored to the needs of the prospective teachers, as well as responsive to the nature of the position for which she is being prepared, does not imply that many elements will not be common to many programs.

The most important issue to be treated is that Indian people need to be prepared to teach Indian children and youth and other children with whom Indian children and youth are educated. Prospective Indian teachers should not be trained in isolation, by race or culture.

3. "Disadvantaged State Is Result of Inferior Culture" and ". . .Result of Preclusion From Equal Opportunity And Access."

Certainly there is adequate information and knowledge to shatter the myths that differences equate to inadequacies, and that it is the responsibility of the pupil to adapt to the teacher and her style.

Any teacher, and certainly those working with the disadvantaged, must understand the pupil's world and guide learning experience accordingly.

It is well documented that problems of the disadvantaged are compounded by the lack of equal opportunity not only in the provision of responsive education but also in equal access to jobs, higher education and, perhaps just as importantly, from the uninhibited right to pursue their own culture and heritage without penalty.

Perhaps the single most important conclusion is that teachers and others who work with Indian people must have an awareness of the realities and be able to behave with understanding, cope with the problems and be skilled in guiding learning. Teachers who "tend to confuse race, class, and ethnic bias with academic standards" (AACTE) must be better educated or must be removed from the ranks.

4. "Only Certified Personnel Can Teach" and "Many People and Diverse Experience and Levels of Education Can Enhance Learning."

Debate about "education" and "schooling" is moot. Children, youth and adults learn from many sources and each has his own best learning style which may or not conform to the group. Program design should include provisions for extensive utilization of community resources and for many levels of personnel to work with Indian people. A differentiated staff is not only sound in terms of the organization of instruction but is also requisite to clustering the talent needed to provide an acceptable level of educational opportunity for Indian people. This is more germane to the Indian child who has lived in a culture isolated from not only the mainstream but also from other minorities. A curriculum and the method and mode of instruction

cannot be developed to be appropriate to the uniqueness of Indian children without extensive input from wise but non-certificated people.

III. Nature of Training Programs Needed

Training programs for manpower to work with Indian people should be based on needs. Even though needs should be assessed regularly and continuously, enough data and experience are now available to support the following conclusions about the nature of training programs which should be mounted:

A. Training programs should focus on providing support for Indian people to be prepared as teachers* and for other roles in education and ideally should operate in concert with in-service programs for teachers who work with Indian children.

Two critical needs which must be interrelated in planning manpower programs for Indian people are: (1) new teachers need to be prepared who are Indian, and (2) teachers who teach Indian children--Indian and others -- need to be provided with training and re-training. For maximum impact and in terms of effectiveness, efficiency and economy, pre-service and in-service programs need to be planned and implemented in concert. Characteristics of teachers and prospective teachers are such that great mutual advantage can be realized. The basic concept is that those "in-training" both learn and teach one another. For example, an Indian pre-service teacher may lead a seminar on Indian culture and learn from one of the "students" (another teacher) about curriculum planning for individualizing instruction.

*In this context, teacher includes classroom teachers, principals, supervisors, counselors and those professional personnel who work in schools.

B. Training programs should be developed cooperatively by those to be trained and those who will provide the training and should be targeted to particular clusters of explicit circumstance.

The key planning element for providing Indian people with responsive and equal educational opportunity is to require from the Federal level that eligibility for program support is contingent upon the formation of a cluster which can and will be able to design programs responsive to specific needs. For example, the design of a program for manpower in a Federal School will and should vary sharply from one for personnel for manpower in a public school with Indian children in attendance.

The complexity of the problem requires Federal leadership to stimulate the local and regional action necessary to develop specific plans to treat specific circumstances.

Recognizing the nature of the challenge, it is clear that the clusters will probably include the schools with Indian children, community leaders, community colleges with a focus on Indian affairs and others on vocational education and universities with capability in minority education programs for the range of personnel needed. This combination of resources can mount a program better than any one of combinations could.

Planning grants are critical to the success of designing and organizing programs and should always be the first phase of any projected program.

C. Program design should be consistent with the nature of the problems and opportunities present.

1. General Education

All manpower trained should pursue several common elements in

their programs. They should be competent in: (1) knowledge and understanding of the cultural heritage of Indian people, (2) knowledge and understanding of the problems and potentials of minority groups, (3) understanding the nature of educational decision making and its impact on equalizing educational opportunity (or not doing so), (4) knowledge of intervention processes, (5) knowledge of career education, (6) in-depth understanding of cross cultures and also mainstream U.S. culture, (7) organizing learning for individuals and tailoring programs to individual learning styles, and (7) fundamental knowledge of what they are teaching and of teacher education basics.

In developing requirements or guidelines for general education, greater detailed specificity may be counter-productive because the most important input needed is the creativity of those who will develop and manage the proposed program. A single design for how to accomplish or attain program goals may tend to unduly restrict the development of new approaches. The measure for evaluation should be how well the design assures attainment of the general education major targets which have been identified.

2. Teaching Personnel

Teachers -- both pre-service and in-service -- must pursue a complex program, much of which will be clinically and field based. They must become proficient in interrelating content to teaching - learning situations in which instruction becomes highly individualized. They must be able to work effectively as a part of a teaching team and have great skill in the utilization of community resources. In effect they will become classroom managers much more

than classroom teachers who tell children and youth about knowledge. Their role, in practice, will be expanded from guiding learning to creating conditions conducive to learning, adjustment, and career education.

The most critical components for the teacher, in addition to the general education specified are:

a. Skill in individualizing instruction.

b. Skill in adapting content and methodology to a variety of culturally based learning styles.

c. Ability to plan cooperatively and carry out responsibilities and roles as a part of a team effort.

d. Skill and creativity in utilizing community and other resources -- people and materials.

e. Ability to infuse the curriculum with career education information and guidance.

f. Competency in program design and organization and means of evaluating effectiveness of own teaching.

g. Competency to evaluate learning of children and use of results to adapt content and methodology.

3. Career Education Personnel

A vital part of any manpower training program for Indian people must include the crucial resource position of career education specialists. This term is used to define a position which functions to provide conditions which assure that children and youth become knowledgeable about the full range of careers and receive appropriate assistance in preparing for the career they choose and having access to it. It combines the traditional separation of counseling for

vocations or for pursuit of higher education. It makes no predetermination about anyone's future but does provide the information necessary for each person to make wise and realistic choices about his future.

Career education is as much a concept as it is a process, and as such, must permeate the educational structure from the lowest to the highest level. Because of this, the career education specialist will work with teachers, the community, colleges, and employers as well as working with children and youth.

The most critical components of training for the career education specialist are:

a. Knowledge of careers and conditions and requirements.

b. Skilled in counseling, guidance, testing, measurement and evaluation.

c. Knowledge about peculiar difficulties which minorities confront in career selection and placement.

d. Leadership capabilities to work with teachers, administrators and employers.

e. Expertise in personal adjustment counseling.

4. Administrators

The typical school administrator is ill-prepared to cope with most of the major problems of administering a school with a substantial number of Indian children. His role is normally complex and is compounded by the need he has to be knowledgeable about the educational environment needed and the ability not only to direct resources to program needs but also to communicate what the needs are to the total school clientele. Work with teachers, parents, community

leaders, government representatives from many agencies and at many levels in and of itself is demanding; understanding what to communicate is more critical than simply ability to communicate. Both are necessary if the function of the administrator is to be successful.

In addition to the general education requirements specified earlier, the administrator must have basic preparation in educational administration and supervision and also focus on the following specifics to prepare him to provide leadership for the education of Indian children:

a. Extraordinary capability in community leadership and utilization of multiple resources for education.

b. Capability in human relations, planning, and strategy building for educational development and improvement.

c. Strong personal and professional understanding of the problems and potentials of Indian people.

5. Community Leaders

Many of the most important decisions about education are made by people outside of education. The most crucial people are those who serve policy making and trusteeship roles -- the school board members. Any comprehensive manpower development program should include a component for training and orienting school board members with a focus on policy formulation which most affects Indian children. His training partially in concert with the major dimensions of the general education component and also technical assistance in policy formulation are vital to improving the conditions of the education for Indian people.

IV. Criteria for Institutions

Unfortunately, most institutions of higher education are unwilling or unable to respond to many of the most crucial needs of people in a forthright manner. Whatever the reason -- incompatibility with goals, tradition and/or organization bound, political expediency, or simply incompetency -- the net result is that the criteria for selection of participating institutions is of utmost importance.

If a reasonable program for manpower development is to be realized, it must utilize the combined resources necessary to make it viable. This is true not only because the needed resources are not available in any one institution, but also because the nature of the program demands a mix and a balance which because of function cannot be centered.

Participating institutions must first of all have the resources needed for the program and secondly, be capable of utilizing them with flexibility and in concert with others. Both conditions are necessary because restricted expertise or flexibility without competency are equally underproductive.

Based on current circumstances, the composition of the group of combined institutions will rely heavily and primarily on community colleges and universities. Certain community colleges have, with admirable results, focused on meeting the educational needs of the community they serve, and in selected cases, this includes meeting the needs of Indian people. This circumstance provides what is probably the unique opportunity to fulfill a major part of the program. Even though these institutions are overburdened in accomplishing

their present mission, by expanding their resources, they must also assume certain responsibilities for providing education for teachers, who in the final analysis, are the great multipliers of effectiveness for massive numbers of people. The selection of these institutions is simple: They must be focused on meeting the educational needs of Indian people and be willing to work in concert with others.

Criteria for selecting institutions of higher education at the university level is more complex and difficult. The following criteria are proposed as minimal:

A. Capability to Internally Accommodate the Program.

1. Admission requirements and opportunity to grant credit and award degrees must not preclude providing programs for groups of people to be trained. For example, if a group of 10 in-service Indian teachers and 10 preservice Indian teachers, and 2 career education specialists and 2 administrators and 20 teachers who teach Indian children are identified in a cluster for joint training, all must be admitted and be able to pursue credit courses and degrees.

2. Credits must be accepted and transferred without restriction.

3. Field based and clinical learning must be recognized without prejudice as legitimate learning experiences.

B. Personnel expert in the fields required are available and have demonstrated competency.

C. Expert personnel who are available can and will be assigned to the project.

D. Innovative program approaches are accepted and encouraged.

E. Consortial arrangements are feasible and are recognized as being equally important to standard practices.

F. Program will receive support from the administrative level and creative direction from leaders knowledgeable about minority problems and potentials.

These criteria appear reasonable for institutions with interest in and concern for providing equal educational opportunity for all people; however the number of institutions which can meet them and also have the needed resources is small.

V. Summary Statement

The plight of Indian people is the most severe of any minority group in America. Circumstances and understanding are now such that a major breakthrough is feasible and indeed probable. The key to a major thrust forward is dramatically improved manpower development programs, particularly for personnel for children and youth. The resources needed to substantially reduce the problems and to realize the potentials of Indian people now exist. To bring these resources to bear on manpower development programs will require a superior quality of leadership and dedication to new directions and new thrusts heretofore not realized. The challenge is too important to ignore; the opportunity is too great not to realize.

Attachement A

PERSPECTIVE ON THE INTERNATIONAL/INTERCULTURAL DIMENSION OF TEACHER EDUCATION

People in America and indeed people throughout the world place an awesome responsibility on schools. This reflects not only a pinpointing of responsibility but almost a naive faith in the capability of education to provide learning experiences and opportunities which indeed will be responsive to any problem at any point in time.

There are countless examples in the literature which demonstrate that the attainment of societal goals necessarily directs the means for their attainment to converge on the schools. George Counts, in attempting to reduce the complexity of statements concerning goals of free people throughout the world stated them simply as combining to form two transcending goals: survival of liberty and survival of civilization. From this more general level to a more specific charge, President Johnson stated that "the conduct of our foreign policy will advance no faster than the curriculum of our classroom." Both Harold Taylor and Stephen K. Bailey point out the complexities and responsibilities of the age in which we live and conclude that we must educate people for world responsibility. A goal is also stated implicitly in the hearings on the International Education Act: "an educational system must today produce citizens who are equipped with the knowledge, sensitivities, and competencies for functioning intelligently in the vital and extensive areas where diverse cultures meet and must accommodate without the biases and misinformation which generate fruitless tensions and devastating conflicts." To over simplify this very

complex problem, it can be stated that the major educational problem in the world today is to create a society of people who are tolerant of peoples of different race, color, culture, faith, linguistic background and political idiology and thereby produce popular characteristics which make feasible that government's, as Commager suggest, "resort to the council of reason to solve national and international difficulties."

It is obvious that if we are to arrive at this level of civilization, teacher education must have a new dimension. Charles Frankel removed our option of having or not having an intercultural dimension in teacher education when he pointed out "there was a time when Americans had a choice; to educate for world responsiblity or not to do so. This freedom of choice is no longer theirs. Whatever they do they make a decision that has international impact -- schools educate or miseducate for world responsibility but they cannot avoid doing one or the other."

In addition to pragmatic reasons for teacher education being infused with an intercultural dimension, any one culture would be enriched through a continuing process of new ideas, values and approaches which provide alternatives. Furthermore, man's personal fulfillment in a free society is dependent on fulfilling his moral commitment to upgrade the quality of life for all peoples. Leestma asserts that ethnocentric education is obsolete but admits that essentially it continues.

The goals implicit in these statements can be attained only through the knowledge, wisdom, attitude and understanding that indeed support them. This is the fabric of education. Unless teachers are

prepared and helped to foster them through curriculum and their own behavior, their attainment is unlikely; failure to understand man's interdependence may be his last modern mistake.

Teachers should get an international dimension in order that the profession be able to train teachers who are behavioral models of internationalism and interculturalism through utilization of a methodology of behavioral consequences and cognitive-affective dissonance employed consistently in the context of intercultural attitudes and behaviors. Professionally and specifically for teacher education programs, the above statement reflects an aspiration which has validity and virtue but not one which is operational to any extent. It may well reflect where we are going; however, it does not reflect how we arrived. Most of our present efforts in international education that relate to educating people are based on a very broad and expanded definition of the basic sociological concept of cross-cultural experience. This concept is simply that anyone, by understanding a culture substantially different from his will gain not only an understanding of that culture but also a better understanding of his own. Colleges and universities teach area studies, international studies, languages and many other courses with an international or intercultural flavor or dimension. Planned and unplanned activities designed to provide direct international or cross-cultural experience are provided. Hopefully, all of these combine to provide teachers with the possession of information and the wisdom to recognize internationalism as a concept of oneself as a member of an international community. It means behaving interdependently rather than independently.

No simple answer will provide us with a key to why we have had

so many notable failures in attempts to foster intercultural education. We cannot but be influenced by many of these notable failures, however. Commager's observation referring to our approach to the problems of our relations to the rest of mankind is vital when he stated "never in history, it can be confidently asserted, have so many been exposed to so much, with results so meager." We cannot help but be influenced by the rise of provincialism and by opposition to many major efforts to extend existing structures and programs to include the international and intercultural dimension; and by the general lack of support -- financially, morally, and programatically. The increasing incidence of cases of lack of confidence in society's institutions is directly related to a condition which has evolved in which our tolerance for gross incompetency has no workable boundary and our penchant for compatibility reduces our most potent organizations to low risk, single purpose entities. These conditions often combine with the result being that all new thrusts are constrained by the lowest common denominator of compromise and security. One may deeply fear that the U.S. has lost much of its historical ability to institutionalize change and has forced change to occur outside of the system rather than to become a part of it.

More pragmatically, however, perhaps we have not learned one of the lessons we teach in cross-cultural education. We seem to be relying on facts as a means to influence behavior contrary to the compelling evidence of John Useem and others that factual knowledge is the least significant dimension of understanding across cultures; yet we continue in our approach by subsuming behavioral changes from simply providing people with more information and with a better

quality of information. There is no dearth of information about the need for a new intercultural dimension in teacher education or how to meet that need, but indeed there is a problem of strategy in most of the approaches we have followed. Further, in the U.S. our failures in developing responsive education for minorities, including Indian people, are directly interrelated to the following facts:

a. The research base for the intercultural dimension of teacher education is imprecise and underdeveloped and few institutions are engaged in improving this base.

b. Many policy makers are incorrectly and dangerously assuming that there is a direct correlation between levels of understanding and intelligence (as now measured). We are relying on people to make judgements and decisions based on transcending principles and expecting, because of demonstrated intelligence, that they will do so. There is overwhelming evidence that many intelligent people are still predisposed to maintain the status quo in spite of the fact that such boundaries may well result in disaster.

c. Many of our professional organizations in education make decisions on the basis of internal political expediency and have so emulated the behavior of the political structure that indeed many of our organizations with the greatest potential continue to operate at the lowest common denominator of compromise.

d. Many activities which are proposed and implemented with a design to attenuate bias and prejudice indeed simply reinforce existing biases and prejudice.

e. We have lost too much of our boldness and brashness.

f. We have overemphasized creating specialists at the expense of extending most disciplines to include the intercultural dimension.

These statements of failure are oversimplified but do give a different premises from which to begin to consider the basic question of "What do we do about it?"

Obviously, the first point that should be made is that development in cross-cultural education will continue to proceed on a broken front. The profession must continue the good practices it now has, learn how to make them better, and increase the number of people influenced by them. Secondly, those who are committed to some transcending principles must make a more intense commitment and not be discouraged by the lack of general acceptance of what is believed to be of the utmost and urgent importance.

In addition to proceeding on this broken front, the single most important new direction we should consider is to reduce the popularly believed incompatibility of bicultural education with the foreign and domestic policies of the United States. Many people continue to misinterpret and therefore are not willing to support at the program or a political level improved bicultural education activities.

The second most important direction is for leadership personnel to be provided with a better understanding of the interrelationship between intercultural education and the resolution of local, state, regional and national problems. The potential of creating in peoples a sense of world responsibility is a long range goal; nevertheless, it requires and its vitalness compels each individual, each school, each university and each government to look beyond itself and its

own problems to its larger responsibility. This is no easy task, because in spite of our best efforts in education, selfishness for what is closest to an individual or a group continues to constrain many decision makers. Until many more leaders do understand and support transcending goals, we will continue with ethnocentric behavior. Kissinger supports this point in his statement "...America has never been true to itself unless it meant something beyond itself. As we work for a world at peace with justice, compassion and humanity, we know that America, in fulfilling man's deepest aspirations, fulfills what is best within it."