The Effect of Setting-Culture Interaction on the Vocational Education of American Indians

JIM C. FORTUNE1 AND STEPHANIE BLECHARCZYK2

The theme of the paper addresses the interaction of cultural beliefs, community needs and setting characteristics on the design and evaluation of vocational projects. The paper utilizes, as a case study completed by the authors, one of several evaluations of vocational projects on or near Indian reservations. Definite influences were found in these evaluations, and the effects of these influences suggest a new perspective in project design and evaluation. Implications for nature of goals, expectations of success, choice of evaluation criteria, and interpretation of evaluation results are discussed.

Introduction

What is setting-culture interaction? When is its effect most relevant to vocational education? Setting-culture interaction occurs when factors native to a setting require a line of action directed toward success that is in conflict with an individual's values. Hence, setting-culture interaction is the dissonance-producing phenomenon which results when a conflict between cultural beliefs and setting conditions occurs. Examples of circumstances which possess strong potential for setting-culture interactions include: a pacificist in a battlefield during a siege; an apron-string bound youth in his first apartment; and a dieter in a bakery. The setting-culture conflict of interest here involves a conflict between work-home circumstances.

In areas in which there exists a prevalence of a minority culture, there is often a difference in societal mores related to work attitudes, career aspirations, economic needs, occupational values and basic understandings of the world of work. Subculture differences of interest include basic beliefs, history of employment, concepts of timeliness, reactions to supervision, economic need, fear of failure, and language barriers. Setting characteristics of interest include mobility, occupational diversity, status of job market, access, and resource availability. Depending on the nature of the dominant subculture and the degree of isolationism, these differences in relevant work characteristics can have differential effects on both the attractiveness and effectiveness of vocational programs.

Six Federal funding sources sponsor vocational education projects for Indians residing on or near Indian reservations. They are (1) set aside contract programs authorized by the Vocational Education Act of 1963 as amended by the Education Amendments of 1976; (2) discretionary categorical programs such as the Indian Education Act; (3) employment training programs such as the Comprehensive Employment Training Assistance Program and the Job Corp programs; (4) general educational aid programs for low income areas such as the Elementary and Secondary Education Act titles; (5) Bureau of Indian Affairs vocational education programs; and (6) specialized economic development and manpower programs such as those provided by the Economic Development Act and Community Service Act.

The programs designed for American Indians can be singled out in national evaluations as those most frequently found inadequate in design and ineffective with respect to standard vocational education evaluative criteria [2]. Reasons for the distinction of the programs include [1]:

1. limited grantee understanding of the process of administering a vocational education program;
2. difficulty in hiring and retaining qualified administrative and grantee training staff;
3. non-standard employment market and limited work opportunities near reservations;
4. little or no impact on the widespread unemployment of the target group.

Are these vocational programs as ineffective as they appear, or is their appearance of ineffectiveness caused by the insensitivity of the evaluation designs used? Still further, is there a force operating in these programs which contributes to both observed and illusionary program ineffectiveness? It is the purpose of this article to examine setting-culture interaction as one such force. Potential effects of setting-culture interaction on the design and evaluation of vocational programs for American Indians on or near reservations are discussed here in an illustrative case study.

Design Considerations

Traditionally, the design of vocational education programs is somewhat homogeneous and is taken from the results of a task analysis and/or an analysis of normative practice in the parent occupation. Mullowney [2], using evaluability assessment methodology in a study completed

---

1From Virginia Polytechnic Institute and State University, College of Education, Blacksburg, Virginia 24061.
2From Keene State College, 229 Main Street, Keene, New Hampshire 03431.
for the Department of Education, identified eight generic models of vocational education programs: (1) on-the-job training for occupational exploration; (2) introductory training entry model; (3) career education model; (4) exploratory training for occupational areas; (5) entry level skills development; (6) on-the-job entry level skills development; (7) advanced training models; and (8) on-the-job advanced training models. Figure 1 shows flow diagrams of these programs.

Studies of the vocational education of Indians report both the need for vocational education and apparent Indian receptivity of the training [3; 4]. The need is substantiated by the economic condition of Indians on or near reservations: over 25% of Indian households with a male head were below the poverty level; over 70% of Indian households with a female head were below the poverty level; and unemployment on or near reservations ranges from 30 to 40 percent [3].

Although vocational training staff typically feel that employment and earning money are the primary reasons why Indian students elect vocational programs, students do not report these motivations as reasons for taking vocational programs. Usually, Indian students report interest in the area of study as the primary motivator for enrollment. More than 75% of the students who are successful still remain unemployed after program completion. School personnel frequently attribute this lack of employment to the lack of career information, to the absence of knowledge of how to obtain employment, and to the scarce labor market on or near reservations. Students generally have to leave the reservation area in order to use their skills, as action contrary to their cultural beliefs, giving the impression that Indian students are not motivated toward seeking employment [1].

How do these circumstances affect each of the models? Many Indians desire and need the occupational exploration offered in Model 1. However, reservation settings do not contain the wide range of jobs required by the design of Model 1 programs. Hence, the availability of these programs is only to those few who are willing to leave the reservation. Frequently, those Indians who enter Model 1 programs study under less than ideal settings due to feelings of guilt, home-sickness, poverty, and, often, language barriers which lead to limited program success.

Model 2 programs are frequently used to introduce American Indians to the world of work. However, the work experiences that are included in Model 2 usually have one or two limitations; either these work experiences are low status, low paying jobs offering little career appeal or are simulated experiences which require relocation for career pursuit. American Indians are frequently lacking in background required by Model 3 programs. Model 4 programs are limited in appropriateness for American Indians due to their limited experience with testing and the cultural bias of occupational testing procedures. Career entry at the level provided by Model 4 programs is frequently not available to Indians due to their limited educational attainment, discrimination, and their inability to compete in the mainstream of society. If relocation for employment was not required, Model 5 programs offer the concrete basic skills needed and appreciated by American Indians. However, the reservation setting offers little opportunity for post program utilization of skills gained. The on-the-job training offered in Model 6 is successfully received by those Indians who are employed in the setting, but this success addresses only a few and has very little overall impact. In a similar manner, Models 7 and 8 have little impact due to the absence of American Indians qualified for participation.

Evaluation Considerations

Wentling and Lawson [5] described major evaluative activities included in program evaluation. They are: (1) measurement of learner performance; (2) student follow-up; (3) employer survey; (4) program review; (5) evaluation of education and training staff; and (6) cost analysis.

The evaluation of vocational programs is most influenced by tradition in regard to collection of data and selection of criteria, two areas which are most sensitive to setting-culture interactions. Most evaluations of vocational programs include components based on the six activities. In national evaluations, activities are frequently conducted post-hoc by noncommunity based data collectors who use interviews and archives as information sources. Local evaluations are designed to fulfill reporting requirements and are often without thought, textbook emulations of existing models using traditional criteria.

In vocational education, measurement of learner performance has been greatly aided by traditional use of behavioral objectives and by the presence of measureable outcomes. Vocational education often uses standardized achievement, aptitude and attitude measures for program selection purposes and to document pre-requisite or entry level requirements. Criterion measures are sometimes used to assist individual performance. Criterion measures include evaluation of work samples, rating of on-the-job processes, rating of work procedures developed through task analysis, use of critical incidence techniques and supervisor or employer reports. Standard criteria for program evaluation included documenting percentages of those trained in an area who are employed in that area, occupational stability evidence, and time or amount of instruction received as well as training standards held for the curriculum.

In regard to vocational programs for Indians on or near reservations, many of the traditional evaluative criteria are inappropriate. The standard criterion of employment in the area in which training is received is rendered inappropriate by lack of local employment market and extreme poverty on reservations. If employment is necessary for program success, then it is highly unlikely that the program will aid Indians on or near reservations. From those gaining employment, little economic benefit to the service area can be garnered due to necessary relocation. Relocation robs the reservation area of talent, leaving behind more severe poverty. Therefore, a better criterion for program success might be regional economic gain.

Many American Indians are reared in the unique setting of the reservation where traditional work activities
Figure 1. Flow diagrams for eight generic models of vocational education programs.
and standard English are not an everyday experience. A
history of unemployment and lack of formal education
have left people without career awareness and assertiveness necessary to maximize the benefits of vocational
education. For most traditional vocational endeavors time
is needed for clientele to develop the fundamentals needed
to obtain the desired impact of training. Work opportu-
nities presently do not exist in many of these areas ex-
cept for the most skilled and experienced trademen,
limiting the probability of placement of the Indian
trainees.

Due to lack of experience with standard English and
with standard tests and other cultural differences, many
traditional vocational measures are potentially biased.
This potential bias can interact with discrimination and
with poor self concepts to limit employment potential.
On or near reservations, these employment biases are
enhanced by the existence of poverty and chronic un-
employment. For those reluctantly leaving the reserva-
tion, these factors interact with the depression of leav-
ing the home community, of becoming non-Indian, and
coping in an alien environment.

The Choctaw Vocational Program Evaluation
An Illustrative Case-Study

Setting-culture interaction can often be seen in local
evaluation reports and in reviews of program efforts. The
recently completed evaluation of the vocational educa-
tion program serving the Mississippi Band of Choctaw
Indians residing on or near the Philadelphia, Mississippi
reservation is offered as an illustrative example.

Context of the Evaluation

Due to circumstances peculiar to this program, the
evaluative context has become very influential in regard
to; (1) availability of data; (2) nature of evaluation con-
clusions and recommendations; and, (3) tone of the
evaluation commentary. This context includes the follow-
ing; (1) the evaluation was a post hoc evaluation con-
ducted at the close of the program; (2) many of the par-
ticipants left the immediate community; (3) the program
did not receive continuation funding for the next year;
(4) a new manpower center with housing for vocational
training has just been completed; and (5) redesign and
survival activities are in progress in light of the funding
loss. This context served to limit student interviewing and
make student skill assessment unadvisable. This limited
nature of student data was counterbalanced by the degree
to which the circumstances allowed the evaluators to take
advantage of hindsight and interest in program survival
and redesign.

Setting Factors

Several setting characteristics serve as factors which
have limited the success of the program and as factors
which must be considered in the redesign of the program.
These setting characteristics are: (1) reservation setting;
(2) limited employment market; (3) bilingualism; (4)
history of high unemployment; (5) traditional lack of for-
mal education and local control of education (BIA high
school built in 1963) and (6) considerable personal con-
fusion and economic potential.

The reservation setting in central Mississippi com-
ounds the economic depression of the geographical area
with the isolation associated with reservation life. The set-
ing is remote from areas having either dense populations
or active tourist traffic, essential for rapid income com-
mercial development. The setting has a limited employ-
ment market due to the absence of any form of industrial
complex, the non-existence of principal products, and the
remoteness in relation to the small businesses and services
of nearby townships. The bilingualism of tribal residents
makes commuting to the local towns for employment
even more difficult.

Program Description

The Choctaw vocational program was designed to ad-
ress ten objectives in its third year. These objectives
were: ten Choctaw adults will be awarded certificates of
achievement signifying the completion of ten month
courses in the area of (1) wood trades; (2) metal trades;
(3) agriculture; (4) electricity; (5) fifteen Choctaw person-
nel who are employed by the tribal government will com-
plete twelve semester hours of academic college credit in
management and business; (6) the project director will
complete a comprehensive human resources and educa-
tion department; (7) eighty percent of those students com-
pleting the certificate program in wood trades, metal
trades, agriculture and electricity will qualify for employ-
ment in jobs which are considered permanent in nature
and in which at least the minimum wage is paid; (8) the
director of the management project will design an instruc-
tional program containing objectives, appropriate ac-

tivities, evaluation and follow-up activities for use in the
part-time program for middle level managers, and in the
program for training managers for a small business; (9)
students enrolled in the trades program will receive 300
clock hours of instruction in basic skills, personal/social
relations and job adjustment skills; and (10) fifteen small
businessmen or potential small businessmen will receive
training in the operation of a small business in the con-
text of a tribal business corporation.

The wood trades program focused primarily on con-
struction work with emphasis placed on applied construc-
tion. The metal trades program lacked the laboratory type
experience and failed to get underway. The agriculture
program emphasized landscaping and gardening experi-
nences. The management and business component oper-
ated at two levels. The first level addressed entry level
basic skills, primarily typing. The second level addressed
management skills in a seminar of course structure delivery
system. The electricity unit included a two course cur-
riculum in AC and DC and focused on wiring and small
appliance repair.

Perhaps due to the timing of the funding or the early
inefficiency of the vocational program when training was attempted without appropriate facilities or the current staff, the vocational education program has generally operated without specified relationships to related tribal activities. The tribal economic plan emphasizes industrial development and is written at a level not easily translated into the specifics of vocational training. The tribal construction company was in operation prior to the funding of the vocational program and has established a structure which did not provide the learning experiences or jobs that could support the wood trades program. On the reservation, supportive activities and jobs were not available for metal trades and electricians. Overlap of activities to support the agriculture program was limited. Hence, the only area where a supportive structure existed, was in the management and business component. One of the most detrimental factors in the development of the vocational program is the omission of stipend support for participants. The extreme poverty and absence of student support mechanisms forced the program into competing with other activities through which students received financial support such as CETA and part-time employment outside of the areas of study.

**Program Impact**

**Accomplishment of the Objectives**

Generally the objectives stated for the third year of the program were not met. The following inventory indicates progress made toward their accomplishment: (1) eight of the sixteen wood trades students received certificates; (2) no certificates were given for the metal trades program which never got underway; (3) one certificate was awarded in the agriculture program; (4) one certificate was awarded in the electricity course; (5) seven Choctaw personnel completed the twelve semester hours of credit and 48 of 61 business students completed basic typing courses; (6) efforts to generate the human resources plan have been redirected toward program modification; (7) forty percent of the certified students were placed in positions related to their area of training; (8) the middle-level management curriculum is being completed; (9) certified students received the 300 hours of instruction but due to self-pacing, other students failed to achieve this level; and (10) competing tribal affairs tended to dilute the interest of the business component.

**Other Impact Evidences**

Other evidences of impact include: (1) placement and retention of two certificate holders with a company off reservation (2) two trainees obtained GED's after vocational program participation; (3) several trainees obtained employment in distantly related areas prior to certification; and (4) several on-reservation projects in construction, building repair, and landscaping were completed.

**Recommendations**

Program redesign must focus on the following: (1) more effective planning; (2) creation of employment opportunities; (3) diversification of curriculum to meet tribal business needs; (4) penetration of community indecision and apathy though career education and stipends; (5) establishment of linkages with contiguous community and tribal activities; (6) development of means to accreditate training to off-reservation clientele; (7) advantage taken of technology and natural assets; and (8) investigation of service occupations and services which the tribe currently purchases from off-reservation communities.

The planning should begin with a needs assessment and a survey of potential employees. The analyses of these data should provide descriptions of trainee potential, occupational interest, potential in the employment market and sources of training experience support. The demographic survey currently being conducted by the tribal planning office should provide some helpful information. Cooperation through secondary school counseling should provide a vehicle through which occupational interest assessment can begin. Assessment of post-secondary and off of school adults must be conducted through the manpower programming or within the structure of a new vocational program.

The extension of this planning should involve the generation of linkage needed to provide program support. These linkages include: (1) linkage to the economic development; (2) linkage to current tribal enterprises such as the construction company, credit union, maintenance staff, etc.; and (3) linkage to external accreditation sources to facilitate on/off reservation employment.

Efforts must be made to reach the community and develop a pool of trainers. A special outreach component should be planned such that the following activities may be made operational: (1) a file of potential employers should be developed with commitments to internships and the hiring of certificated trainees; (2) the program should operate a financial support system through which stipends and program funded projects can be provided to the community; (3) the development of a trainer development center which would combine the bilingual support component, a career education component, a counseling program, and an occupational testing service; (4) the implementation of a referral center to coordinate vocational programming with other adult education and manpower activities of the tribe; and (5) the implementation of support services such as day care, guidance, interview and application training.

Several potential program areas should be explored for the development of vocational training. Both the small population and the depression of the area dictate that the mass training will not serve to reduce the current 35% unemployment. Technology, service occupations and tribal needs offer the greatest potential for successful training areas.

Due to the fact that opportunities for employment are needed on an immediate basis and that commerce and product distribution are the major tribal contacts with the surrounding business communities, distributive education is one of the instructional areas which should be investigated.
To be effective, the design of vocational programs for American Indians on or near reservations must include:

- Considerations for cultural and language differences which limit the curves of off-reservation employment; an awareness of a non-standard employment market; provisions for the lack of work experience and background on the part of the trainees; and recognition of the necessity to affect the local tribal economy. Evaluative criteria of these programs must be based on these requirements rather than traditional evidences of program success.

**References**


