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Sundry Papers I

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SUNDRY PAPERS I



*SCHOOL OF
EDUCATION*

**CENTER for
INTERNATIONAL
EDUCATION**

*UNIVERSITY OF
MASSACHUSETTS*

Center for International Education
School of Education
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SUNDRY PAPERS

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FOREWORD

Since its creation two years ago, the Center for International Education has devoted most of its energy to building a viable entity and to starting new programs. This collection of papers represents an attempt to begin to consolidate and analyze our efforts, and includes some of the first results of the Center's programs and adaptations of new approaches to problems in international education.

The papers reflect the diversity of topics and techniques which characterizes the Center. They are reproduced for the purpose of communicating with others interested in the field, rather than representing traditional academic-style research efforts. We hope the availability of this publication will give incentive to other Center members immersed in innovative programs to share their results.

The five papers also reflect the Center's three major thrusts: cross-cultural training, the teaching of non-western studies in US schools, and education for national development. Hartwell and Blackman explore one aspect of cross-cultural training in their work in microteaching with teachers in Navaho schools. Grant and Shuey tout two methods of making non-western studies more effective, by "using" foreign students and by employing film as a tool for understanding other cultures. Higginson and Hoxeng, both of whom are interested in out-of-school education, examine training schemes now being used in the Caribbean and in Mexico.

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CENTER FOR INTERNATIONAL EDUCATION

SUNDRY PAPERS

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USES OF FOREIGN STUDENTS

Stephen H. Grant

This year several school systems throughout the land are adding a new dimension to their curriculum--an international dimension. Teachers, school administrators, and curriculum specialists are recommending textbooks from the increasing supply of high-school level instructional materials available on non-Western cultures. One high school teacher has articulated a concern which may be wide-spread: "in planning or implementing a non-Western element in a curriculum, what is the greatest problem a teacher might face?" This paper attempts to provide one response to that real concern by the following logic: it may be that students do not react favorably or easily to the written word or even to stimuli from other media. An alternative, or in any case an additional form of communication is foreign students--they can provide a live, personable, real contribution to a learning situation.

This paper, which is based on ideas discussed with workshop participants as an introduction to how foreign student visits can be incorporated into a curriculum, begins by a personal reaction to the

term "uses of foreign students," followed by a description of the university setting for the foreign student presence. At this point the perspective changes from the university, furnishers of the foreign student resources, to surrounding towns as major potential utilizers of those resources. I submit a strategy to involve foreign students by asking these questions: 1. What are the goals of foreign student involvement? 2. What should happen in and out of class to attain these goals? 3. How is it known if the goals are attained? After looking closely at a specific example which illustrates these three points, I introduce a new dimension--the actual mechanics of contacting and involving foreign students. My conclusion is that while the paperwork of specifying goals and devising learning opportunities and evaluative mechanisms may seem of capital importance, those factors do not absolve one from handling the foreign student visitors with utmost solicitude and from being extremely sensitive to the foreigner's perceptions of the experience.

I would pause, redden and gulp a bit in pronouncing the word "use" referring to a person. "To use foreign students?" Then I met a Korean friend in the library stacks one day. "Why don't you use us more?" he complained. We shared our thoughts on the word use and came up with a phrase of an even more imperialistic flavor--exploitation. But what about "mutual exploitation?" The term borrowed from the annals of colonialism suddenly became wholly God-forgiven by the justi-

ficatory reciprocity!

The overwhelming primary objective of foreign students in this country is to earn an advanced degree--this is their exploitation; a conscious use of American educational institutions. I do not propose to question or reorder the objective priority listing of foreign students; I am in favor of increasing the influence foreign students have on American educational institutions--counter-exploitation.

The American educator--teacher or administrator--favoring the addition of any aspect of non-Western studies to a curriculum has the backing of a substantial foreign student population. When a president of the International Club at this university writes in his opening letter to fellow foreign students in the fall, "let us help get the American out of his shell," I say, "Yes, I accept that. I'll help open my shell and that of others."

Why has so little happened in the domain of foreign-American student interaction? I maintain that foreign and American students are in a similar position in that their calendars do not normally include time for mutual frequentation. They have neither the inclination nor (justifiably) the responsibility to organize mechanisms for interaction. If, however, opportunities for foreign-American contact are provided by the system, I submit that both sets of students will be willing to participate and do so beneficially.

Another reason so little has been done in this areas is the "system's" traditional failure to view the foreign student population as a resource. In the past, foreign student populations in American

schools, colleges, and universities have increased (with the predominant group being understandably at the graduate level) but, as Howard E. Wilson, former Dean of the School of Education at the University of California at Los Angeles has lamented, there is clear indication of "little correlation between the number of foreign students on campus and the effectiveness of their reception of their influence." How does an educational institution justify admitting more and more students from other countries? Of the six hundred foreign students at this university approximately two-thirds receive teaching or research assistantships or financial aid of some kind, including tuition and fee waivers. Does the university possess any notion of the returns for their considerable financial assistance to foreign students? My position is that the actual, practical day-to-day utilization of foreign students is typically far below that it should be.

Having recognized the need or the ill as being primarily internal to the university, I am going to propose that its cure come, partially, from outside the university. A propitious locus for foreign-American student interaction is through drawing foreign students from a central university pool to schools in surrounding districts. Far out in front in organizing city-wide resources and developing a tested and workable procedure for school visitations by foreign students is the "Ogontz Plan" of Philadelphia.¹ Any region may have the option of formally joining the Ogontz Plan system or it may tailor its international education program to local needs. In any case, the central questions to ask as one goes about setting up such a program are these:

1. What are the goals of foreign student involvement?
2. What should happen in and out of class to attain these goals?
3. How is it known if the goals are attained?

I will suggest some ways of approaching these questions.

What the system (an analogous procedure as applies to a school district would apply to a university Office of International Programs or a town international student committee, etc.) must first do is lay out goals for foreign student involvement. How would foreign students fit into the larger context of adding an international dimension to the curriculum? What benefits will hopefully be gained by having foreign students participate in the system's activities? The goals would typically be expressed in terms of (American) student learning or behavior. Most likely at the outset the suggested goals will be of the fuzzy variety--"to broaden the students' perspectives," "to foster a sense of world-wide community," "to learn appreciation for and tolerance of value systems of others." The specificity or overlap of the proposed objectives are not vital at the outset, although objectives must later be redefined to a state where they become measurable.

The next process is an inventory of instructional alternatives or learning opportunities to be provided to the persons serviced; again, typically, American students. F. Neil Williams of Huntington College, Indiana, offers an inventory in his article, "Making the Most of Foreign Students."² He prescribes the following forums and techniques for incorporating foreign students into an American school system: all-school assembly, academic classes (e.g. literature, language, history, religion,

stipulation that a deal must be negotiated, are given to the two privately before they play their scene. The American participant and the other Americans in the class will get a feeling for the Arab's love of conversation, his gift of argumentation, his special logic, his abhorrance of customers who are willing to pay the first, ridiculously high, price; in brief, the Arab's behavior during the scene will divulge a concept of human interaction in relation to monetary value which is not identical to what Americans experience when they go shopping in their home towns.

At this point the class and the two role-players discuss each participant's frame of reference and the different values underlying the manner with which each approaches the market. Perhaps by this time the Americans in the class, most of all the "tourist," will recognize some basic features of his own "cultural set" and have a feeling for the "other" cultural set.

As a further step it would be interesting to see how well the American could place himself in the Arab's shoes in such an encounter. To this end, the American and Arab could switch roles. With the Arab playing the American tourist and the American playing the Arab merchant the different behaviors are often so clearly displayed with heightened incongruence that deep-meaning realizations are born from the comic situation.

Up to this point the Americans in the class have been exposed to foreign behavior patterns in a particular circumstance. Having given an example of a goal and a learning opportunity designed to have the

student attain that goal, we now address ourselves to the third central point--evaluation. How good a job did the American do in his portrayal of an Arab merchant or what have the other American students learned from the role-playing and reverse role-playing? This appropriate question suggests that before introducing the learning opportunity, the teacher should have a notion of what behavior or attitude he will accept from the students to show they have successfully undergone the experience. Or if the success-failure line is appropriate, the teacher should at least have given some thought to how he will evaluate the learning. Past attempts involve a pretest/posttest application with standardized or teacher-made value scales. At any rate, it is useful--for the student's own learning purposes and as feedback to the teacher--for the student to consolidate the experience in his own way, to communicate to others how he reacted to the exposure to a foreigner. Another evaluative strategy would be to ask the Arab participant or another spectator how accurately the American portrayed the merchant.

Role-playing is just one means of capitalizing on foreign student presence in a class to try to understand the value structure behind certain behavior. And "manifesting an understanding of values different from his own" is just one goal which could be projected for a student. If a second goal is "the student will have a cognitive sense of what it is like to be a foreigner," one might conceive of the following learning opportunity. An American student first hears a foreign student talk about any aspect of American life which is basically from what he has known in his home country. This experience

may sharpen the American's perceptions on the differences between cultures. Then the American student should visit a foreign family, go on a field trip to Mexico or Canada, or to a nearby sub-culture (Polish, French-Canadian, etc.) and take special note of all that appears "foreign." A third goal might aim at an affective sense of understanding foreignness. In this case, an American student would hear a foreigner recount what it feels like in certain very "American" situations. Then the American would describe how he felt in a strange community. The spectrum of goals relevant to a program and the inventory of learning opportunities will give a direction and a sense of involvement to the organizers of the program so that the foreign student participation will be anticipated realistically and carried through with maximal benefit.

The planning hitherto described is mainly paperwork; the job of the program planners, perhaps with the help of experts. The mechanics of contacting foreign students and dealing with them during their visits are not unimportant details. After an initial overture soliciting foreign student visits, expectations are raised to a point such that the costs of disappointment are high. A school district near this university followed these steps in canvassing foreign student interest, and successfully carrying through with its "International Education Project." An initial letter was sent by the teacher in charge of the project to the six hundred foreign students on this campus. The letter was brief; it stated the nature of the project and the desire to have foreign students visit the schools. On a tear-off

section of the letter the students could reply if they were tentatively interested. The teacher personally came to attend one of the International Club meetings to present his project and answer questions about it. A month later the teacher sent the hundred students who had responded positively a longer letter explaining in detail the objectives of the project, and stating that either day-long or weekend visits would "make us very happy." A further questionnaire was sent to students to solicit information concerning precise days for visiting, topics to discuss, whether the individual would bring artifacts or slides, and whether he required transportation. Upon the student's arrival he was handed a brochure describing the town and the school he was visiting. For follow-up after the visit, the foreign student was requested to fill out a two-page questionnaire evaluating the experience. In this form were questions on contact with pupils and teachers, amount of preparedness of pupils, extent to which each party benefitted from the experience, advantages and disadvantages of the project, suggestions for improvement.

By the past description, this school system seems to have conscientiously prepared and followed up foreign student visits. In the lengthy evaluation report the school system published after the completion of the first phase of the project, teachers and pupils alike were wildly enthusiastic about their new experiences. It is only to guard against complacent paperwork that I recount the experience of an Israeli who participated in this program. My notes copied after hearing his account run as follows:

I participated in that program. It was awful, just awful! The students were not prepared. They didn't know where Israel was. Yes, and they were studying the Middle East! I asked the teacher for a map; he didn't have one....They didn't tell me what I should speak on. They told me nothing. So I began to talk about society and education. A pupil stopped me and said, "Why do you kill people?" I said, "What? Who told you that?" The answer was, "the man who came last week told us you were imperialists and killed with napalm." I wanted to see the Project Director. "I'm busy, I'm busy. I can't see you," was all I heard. That jerk! I had offered to bring a hundred slides of Israel--he said that he couldn't show them. I offered to come on my own time during an evening to teach the students folk dances of my country. The Director wasn't interested. And I got twenty bucks through the mail three months later. The Director's excuse was, "I'm having some trouble getting funds from the government these days." No, it was just awful!

Have your stated goals, suggested learning opportunities, evaluative mechanisms--that can all be just so much paper. It is so delicate and so much comes down to the skill of cross-cultural communication. In a recent article on new approaches to foreign student programs, Jack Kerridge maintains that the 110,000 foreign students in this country do not satisfy the objectives usually advanced in favor of international exchange just because they are students here. There must be a reaching out, and it takes a special hand with skilled gestures. "The first requisite is to recognize that a special effort and a special talent for understanding is required that is not necessary when people from the same culture work together."³ Yes, it is a problem. But the classic "foreign student problem" should be conceived not as culture shock, adjustment difficulties, brain drain, or other indicators describing foreign student behavior; the problem must be perceived primarily as a problem facing American educational institutions.

References

- 1 See "Foreign Students in American elementary and secondary schools," A National Survey of Professional Attitudes toward the Ogontz Plan for Mutual International Education, by William W. Brickman, International House of Philadelphia, 1968. 93 pp.

And see Taylor, Harold, The World and the American Teacher, ACCTE, Washington, D.C., 1968, pp. 161-162.
- 2 Clearing House, volume 40, March, 1966, p. 428.
- 3 Kerridge, Jack R., New Approaches to Special Programs for Foreign Students, International Educational and Cultural Exchange, volume IV, number 4, Spring, 1969, p. 33.

Micro-teaching in a Cross-cultural
Training Situation

Alfred S. Hartwell
and
Joseph Blackman

During the summer of 1969 the Center for International Education at the University of Massachusetts designed and ran a micro-teaching clinic as one component in a Cross-cultural Education Workshop, conducted by Abt Associates under contract to the Bureau of Indian Affairs. The workshop ran from June 7 through June 27, and included approximately 120 teachers, most of whom participated in the clinic.

The general design of a micro-teaching clinic has been described in enough detail so that we will not cover all aspects of the CIE clinic in this paper. (See bibliography) We intend to point out some of the unique factors that had to be considered for designing a.) a clinic for experienced teachers in an in-service workshop and b.) a clinic for teachers of American Indian students and to make some recommendations for future micro-teaching clinics dealing with this kind of population.

To design the clinic we felt the need to make certain assumptions about the needs of the population. To assess these needs, the CIE staff visited BIA schools in South Dakota, Kansas and Oklahoma, analysed video-

tapes taken in classrooms at these schools and consulted with Abt Associates who had just completed a year long study of the BIA educational system. The central problem teachers faced in the schools appeared to be the great difficulty they had in gaining students' interest and participation in the classroom. In many classes students were completely unresponsive to teacher questions, and would respond to direct attention with great reluctance. Many teachers by their own admission had given up trying to elicit responses from their classes, and lectured for the entire period or assigned classwork that did not require much interaction between student and teacher.

To meet these needs it was decided to design a micro-teaching clinic that stressed the skills teachers could use to achieve rapport with students, and techniques that increased student participation.

A second assumption we made was that experienced teachers would present us with two kinds of problems in the clinic. First they would tend to be more anxious about their performances than would beginning teachers, and this anxiety could interfere with the process of self-analysis that must take place if behavior is to change. Secondly, we assumed that teachers would believe they knew more about effective techniques of teaching Indian students than the workshop-staff, who had not had experience teaching in BIA schools. This attitude would make it very difficult for the staff to advocate the practice of any particular set of skills either to establish rapport with Indian students or to increase their participation in the class.

To deal with these problems the orientations were designed so that primary emphasis was placed on demonstrating the problems: achieving rapport and increasing student participation, and then a number of clearly defined and modeled skills for dealing with these problems were presented. The choice of the skills represented was then left up to the teacher; it was also legitimate for a teacher to define and practice a skill that had not been suggested.

Secondly, the process of self-analysis rather than supervisory analysis was stressed, so that the teacher's perception of what skill he would practice, and the effectiveness of that skill in the lab as determined from student and peer evaluations, as well as the replay of the video-tape, determined the evaluation process. The staff role was defined as that of a facilitator - one who might ask questions of the students, the peers or the teacher, but who would not necessarily evaluate the performance or suggest particular techniques.

One very successful way in which this intent was communicated was the use of models of particular skills on video-tape that had been made by selected participants. Rather than having the staff model the skills, relevant lessons taught by the participants were selected each day, and then used during orientations with the permission of the teachers who had taught the lessons. These teachers then became our "consultants" during the orientation sessions, and would explain the skill and discuss its effectiveness with the other participants. For those who would like to view samples of the models used in the workshop,

there is a one hour synopsis of model lessons available for viewing at the Center for International Education.

Another technique that was used effectively to communicate the problems of the classroom and skills that could be used to meet these was the simulation of a classroom situation followed by discussion. For example, to demonstrate the difference between an authoritarian and an open classroom environment in terms of student participation, we designed a game involving the construction of tinkertoy models under open conditions, followed by the same task under strict supervision. The discussion that followed brought out the psychological stress inhibiting participation in an authoritarian environment. The intent of both the simulation and the peer modeling presentations was to move away from a theoretical and deductive presentation of the problems and the skills, toward an orientation that would present certain events and have the teachers draw conclusions about appropriate techniques for themselves. Although this is probably a sound approach with pre-service teachers, we felt that it was particularly appropriate with experienced teachers.

The anxiety of the participants to the micro-teaching laboratory was considerably increased by the presence of the video-tape equipment, which for the non-technologically minded, presents a formidable threat. To reduce anxiety the initial orientation provided the participants an opportunity to see the equipment used, handle the operation of the camera, and to share their reactions to seeing themselves on T.V. This approach has added benefits with experienced teachers, in that many of

them have access to such equipment in their schools, but have not used it because of their technical ignorance.

Research at the Stanford micro-teaching laboratories has shown that student evaluations of teachers are the most accurate predictors of teacher ability. We therefore decided to use student evaluations throughout the clinic, using the measure of student affective response to the teacher as the major item on the evaluation sheets. Students evaluated teachers in each lesson by responding on a printed form to items such as "The teacher is interested in me." on a scale ranging from "none of the time" to "all of the time." This process produced considerable controversy during the discussion sessions of the orientation. Teachers felt that the student evaluations were much less useful than either the video-tape playback, peer suggestions, or the staff members observations. We suggested to the teachers that they could design their own evaluation forms for the students, and pointed out some of the considerations that should go into these evaluations. Very few teachers tried this, and most seemed to doubt that students could tell them anything that was really helpful, no matter what questions were asked. The difficulties experienced in this clinic suggest that for experienced teachers, especially those who teach students of a subculture, techniques to demonstrate the effectiveness of feedback from students need to be devised. Then teachers might be given the responsibility to design evaluation sheets or procedures in the micro-teaching clinic that could be used later in the classroom.

The major difficulties encountered during the clinic were logi-

stical. The scheduling process for the entire workshop was bewildering to many of the participants, for they simply did not understand the notation system used to designate classes and activities. After the first week, during which only about 50% of those enrolled in micro-teaching had appeared at times for which they had been scheduled, schedules were mimeographed for every participant, duplicates of which were posted each hour for the remaining two weeks. Over 30% of the participants missed up to two sessions (out of five) as well as orientations. This made it very difficult for them to get maximum benefit from the clinic (see Appendix I).

A second difficulty was with space: during peak periods there was no central area for students to move during their breaks. The halls at these periods were crowded and noisy with participants and students. A central holding area was needed, where participants and students could have talked and played while they waited for their lab sessions. A lesser problem concerned the use of staff personal making critiques of the participants performance. We found that it was important for observers to build up rapport with participants before they could effectively facilitate the process of teacher self-evaluation. Although it was emphasized to the observers that critiques should be non-directive, in some cases the zeal to change teacher's behavior caused resentment, especially with those teachers who were somewhat insecure with the other aspects of the lab. The need for instruments, such as Flander's Interaction Analysis, that the observer can use and which does not imply a subjective valuation on the teacher's performance is

indicated here. Secondly, a system of staff supervision is needed where discussion on the effectiveness of different approaches to facilitating teacher self-analysis can be considered, and perhaps tapes of sessions can be analyzed.

A problem that was anticipated, but which did not arise, was the difficulty in handling the Indian students in the clinic. We had assumed that Indian students would be unresponsive in the clinic, and would present attendance problems, as well as being reluctant to evaluate the teachers. Our orientation of the students in the week prior to the clinic was designed to get them interested in the micro-teaching process by showing them how the video equipment operated, and then to let them try it on their own. Their interest was immediate and enthusiastic. Many learned how to operate the cameras, and throughout the workshop enjoyed miming teachers, and operating the equipment during free periods. One indicator of the students' interest was attendance - there was not a single student absent from the clinic during the three week workshop without prior explanation and permission. One possible conclusion indicated is that micro-teaching can be a very effective tool in the motivation of minority group students, apart from the clinic's effect on their teachers. Certainly the critical factor of students' self-determination is greatly increased over the school environment through the fact that the students are paid workers, and that their evaluation of teachers have obvious and immediate consequences. It is clear from the responses of both the teachers and the students in the clinic that an in-service micro-teaching clinic with experienced teach-

ers, who are dealing with students from a culture other than their own (only about 5% of the participating teachers were American Indians) can be, from both the teachers' and the students' perspective, an effective and productive experience. The key to its success, we believe, lies in the emphasis placed on teacher self-analysis, where the tools of video-tape feedback, students' evaluations, and observers, objective assessments are used by the teacher as tools in a process of self-diagnosis. We believe that by giving the experienced teacher tools with which he can better understand and then measure the change of his actions we can provide the basis for extremely effective in-service training techniques. There are a number of recommendations concerning future workshops for in-service teachers in micro-teaching. These recommendations could provide the basis for research on in-service micro-teaching clinics or can be taken as indications of the directions we feel in-service training should move.

1. Initial Orientation. To reduce the anxiety of teachers, and to demonstrate the clinic to be an effective tool for non-threatening self analysis, there should be (1) a period in which each participant learns how to use the camera, (2) see himself on tape, (3) see models of the problem (i.e., tapes of non-responsive classes or disciplined classes, etc.), (4) see models of particular skills.

2. Diagnostic Session. The first experience in the laboratory should be one in which the teacher decides, after seeing himself on tape, the particular skills he will practice. Initially these should probably be very basic and simple: voice pace, reinforcers, eye contact, etc.

3. Subsequent Orientations. These should be inductive rather than lecture oriented. An example would be the game described in this paper that provided for a discussion on authoritarian versus open methods of classroom control. Orientation can be used to a.) define classroom problems - i.e., student attentiveness, classroom control, poor response to inquiry method, and b.) demonstrate skills - use of silence, set induction, higher order questioning, etc. (there is a critical need for research to establish the relationship between classroom problems and particular skills.)

4. Supervision. Supervision is a misnomer for the kind of relationship we feel is most effective; we thus advocate the use of the word observer for in-service micro-teaching clinics to designate the staff member in a particular lab. The observer should remain the same throughout the workshop for each teacher, and he should employ objective techniques for giving feedback (an adaptation of Flanders Interaction Analysis is a possibility). The observers should be taped in their sessions with teachers and an analysis of their effectiveness can be made at points throughout the clinic using Blumberg's interaction analysis.

5. Use of Models. We believe the participants in the workshop who demonstrate excellence with particular skills are the most effective models for in-service teachers. An effective way to use tapes of the better teachers would be to dub these lessons onto demonstration tapes that can constitute the basis for a resource bank of teaching models. (We found that even in a three week workshop it was quite possible to

build up about 15 such models.) These tapes can be made available after the scheduled hours of the lab, and provide ideas for teachers who need or want extra help.

6. Student Evaluation. Although research has shown that student evaluations are the most accurate predictors of teacher performance, many experienced teachers seem particularly threatened by this form of feedback. We feel that demonstration classes, where students are questioned, might demonstrate the usefulness of student evaluation. Also, teachers can be helped to design forms they would use to evaluate their own lessons. This practice could carry over to the school classroom and thus provide teachers with one form of evaluation throughout the year. With students too young to respond on written forms, a simple interview process can be used with good results.

7. Additional Suggestions For The Use of The Micro-Teaching Process

In the preceding section, analysis was made of elements of the micro-teaching process with suggestions for possible procedural and structural modifications which might be made within the framework of an in-service training workshop.

In the section which follows, brief mention is made of a number of other possible ways in which the essential elements of the process might be utilized in a variety of teaching and learning situations. The assumption here is that the process itself has intrinsic strengths which might be applied in a number of different ways.

1. Micro-Analysis - In this model, trainees begin by practice coding

of selected videotapes by the Flander's System of Interaction Analysis. After gaining proficiency in coding, trainees would then code "live" micro-teaching sessions in small groups and compare results, in order to work for a high degree of statistical reliability. After completion of this phase, trainees would learn how to plot a matrix across time as well as by code categories. A sample of sequential coding is available. After gaining proficiency in sequential coding, high and low interaction values would be assigned for the purpose of graphing. Trainees would then begin to plan micro-teaching lessons incorporating a planned sequence of interactions and teach them, comparing the resulting graph with the planned graphing curve.

The purpose of the process is to enable trainees in lesson planning to deal effectively not only with the sequence of content coverage, but with the sequence of interaction patterns which will best lead to mastery of the content. The available data does not yield much information on which teacher behaviors as categorized by Flanders lead to which student behaviors, but this information would be essential for anyone trying to extend a performance curriculum from teacher training to schools. Research would have to be done on category sequences to learn more about teacher-student behavior along two dimensions: first to find out which student behaviors followed which teacher behaviors. Secondly, it would be equally important to know which teacher behaviors followed which student behaviors. Data yielding such information might then be analyzed along subject matter and grade level lines to determine what differences if any exist.

2. Students As Teachers. In this model, which might clumsily be called "micro-studenting," students would take on the role of teacher in the same basic micro-teaching situation and process. One goal would be actually to train students to be teachers of other students, along the lines of the "Youth-Tutoring-Youth" projects now gaining credence in several urban areas. Another goal would be for students acting as students in the process to analyze their own behavior in Flanders-like categories in order to gain more insight into the relative effectiveness of these behaviors. Roles could be reversed and rotated to give all trainees greater understanding of both roles, and the parts in them.

3. Cross-Cultural Training. In this model, trainees about to depart for overseas positions in education, business, industry, religion, or even just extended travel, would interact with host country informants who would play the roles of various persons the trainee would be likely to meet and have dealings with during his sojourn. Flanders-like categories would be used to analyze the interactions which took place in short episodic situations set up in advance. After viewing tapes and hearing critiques from host informants, trainees would play out the same or similar situations again, as often as necessary, to achieve a categorization level appropriate to the role he would be fulfilling in the cross-cultural setting. The idea here is to combine the approaches used in Weinstein's Strength Training Clinics for teachers with some of the behavioral precision found in micro-teaching and Flanders interaction analysis, basing the evaluation of both upon perceptions of the

host informants.

4. Teaching English As A Foreign Language and Teaching English As A Second Language. In this model, the micro-teaching process is used to sharpen the aural - oral skills of trainees. Host informants are used, analysis categories are modified to focus specifically upon the relevant characteristics of this process, and role reversals are used to enable trainees better to understand the effects their teaching in this way might be expected to have upon students.

5. Micro-Gaming. In this model, teachers and curriculum developers who are constructing educational games to impart or subject matter concepts, use the process to test the game in various stages of development. Analysis of tapes enables designers to pinpoint strengths, weaknesses, unwieldy operations, areas of confusion, and so forth, before investing time and resources in a game design which subsequently has to undergo considerable modification after field testing.

6. Role Playing. In this model, teachers, administrators, and others who want to introduce a structural or curricular innovation into an educational system which they know will alter existing roles or create new ones, test the difficulties of the innovation by having trainees act out the roles in a simulated crisis situation, or a series of situations. In this way, innovators can know better in advance what pitfalls await them. And, not at all incidentally, trainees participating in the role play come to understand more fully the nature of the proposed innovation. Additionally, the micro-teaching process can be used to good effect to train persons to role play effectively. Analysis of

tapes can reveal those points at which a participant's stepping out of character caused an unreal permutation of the simulation. Role reversals are used again to explore the process more fully.

7. The 24-Hour Lab. In this model, the training agency sets up and operates a lab for trainees which is open at all hours for their use. Trainees in pre-service or in-service programs who are testing out skills in field situations should have ready access to a lab, to try out ideas as they occur in a low-risk setting, and to re-teach quickly lessons which have been disasters. Staffing of the lab may have to be carried out at some times by peers.

8. The Tape Bank. Trainers review tapes from each day's work in the training program and label them according to content, interaction categories, student age group, and skill categories. Tapes which demonstrate techniques felt to be of value to all trainees or at least those in that category are deposited in the bank for viewing by trainees. Similarly, trainers deposit in advance model tapes or tapes from other training situations which are felt to be relevant. Tapes of short lessons in each category are dubbed onto a single tape, providing trainees with 15 or 20 examples of the category on an hour tape.

St. Lucia and Martinique:

A sketch of economic development in two
Caribbean islands

F. L. Higginson

Martinique and St. Lucia, adjacent islands on the Antilles Windward Island chain, are divided by only thirty-five miles of water and expectably have much in common. Both of them are studded with rugged mountains and covered with lush tropical rain forests in the interior regions. Creole (a French-based language) is spoken by the vast majority of the peoples of both islands.¹ Approximately 90% of the permanent population of Martinique is black, 5% of Asian descent, and another 5% white.² Figures for St. Lucia are unobtainable but the composition is probably similar.

Subsistence farming is the main occupation on both islands; boosted economies with preferential markets for bananas, the main export crop, are what keep the two islands alive. Nonetheless, significant differences are apparent between the two islands both in the level of development and in the approach to it. The casual visitor is immediately aware of them: Martinique looks much more prosperous than St. Lucia: a divided highway, larger airport, more low-rent housing, more cars, cinemas, cafes, and more amenities for tourists. These

appearances, however, mask a reality that is not unlike St. Lucia's.

The two islands are facing enormous economic and social problems as are all the islands in the Caribbean: population growth rate which is a full percent larger than any of the European countries at their same stage of development; the growing imbalance between the productive sectors of the population and the under-20/over-60 groups; increasing emigration of the work force age-group and of trained man-power in particular; and the growth of foreign capital invested in the tourist industry. This paper seeks to provide some insight into some of the causes of these problems of the two islands, and to give an indication of what the governments of each are doing to promote economic and social development by reviewing the goals and results of two projects designed for this purpose, one in each of the islands, and to draw certain short-term conclusions which it is felt are applicable to both.

St. Lucia has slightly less than one-third the population of Martinique (100,000 people as opposed to 320,000, or about the population of Martinique's capital city, Fort-de-France) in about half the area (238 square miles as opposed to 420 square miles). Because at various times during its history, the island passed back and forth between the English and the French, the personal and place names on this British island are still predominantly French. Often the inhabitants, under British rule since 1803, exhibit a preference for responding in a kind of pidgin French, neither their native Creole nor English, when the visitor speaks to them along the wharves on in the market.

Little industry exists on the island, and tourism, as yet only nascent, is contrasted to the rapid growth of this industry in other islands like Antigua and Barbados. With the exception of some waterfront activity--the loading and unloading of the few cargo and cruise ships, and the charter vessels that put in there--together with the presence of a small number of British and Canadian banks, Castries, the "chef-lieu," presents the picture of a relatively large but sleepy island village with only the cries of the women in the market place or the grinding acceleration of a large diesel banana truck to disturb the peace.

Predictably, the vast majority of the working population of the island is engaged in farming, mostly at the subsistence level. Sugar, copra, cacao, limes, spices, honey, hides, and rum are all produced locally and exported in small amounts but the cash crop on which the island depends at present for the growth of its economy as mentioned above is bananas. Some fishing is done on a profitable basis as well.

The island's status as a territory makes its relationship to Britain much more tenuous than that of Martinique to France. This fact is in part directly responsible for its slower rate of economic development. Ostensibly, as a member since 1967 of the West Indies Associated States, St. Lucia enjoys certain economic benefits within the Caribbean and particularly from England on whom it continues to rely for technical assistance. Yet even at the height of Britain's colonialist expansion, St. Lucia scarcely could be said to have played a vital economic role and today she is understandably all but left to

her own devices by her former "protector" who has troubles enough of its own. Outside influence in the island has tacitly been relinquished to the United States, which has expressed more than subtle interest in controlling the entire Caribbean for strategic reasons. Yet despite its hopes to find favor with the St. Lucians, this country is doing little either militarily or economically to achieve its aims. For although the United States signed a 99-year lease in 1940 for the use of land for a naval base, it unilaterally dissolved the contract in 1964; nor is it committed to any technical assistance activities with the exception of some sporadic Peace Corps efforts.

The relative primitiveness of the economy as contrasted to that of Martinique has meant that unemployment is not yet a serious problem (though there is almost certainly extensive under-employment accompanied by a pervasive and lingering boredom and a general desire to emigrate; these attitudes are, however, always difficult to measure). Castries itself provides little incentive, either economic or social, to entice people from their farms in large numbers, though many youngsters between the ages of 15 and 18 hang around the yacht marinas in hopes of finding employment on one of the relatively few charter boats which makes Castries their base. It is doubtful that this situation can endure much longer since the over 3% annual population growth³ can not help but drive people from the land, much of it non-arable because of the ruggedness of the terrain, when they can no longer be supported by it.

Many of the island's farmers are tenants, working tiny plots of ground, though free-holdings are not uncommon. Often family land is

divided, as in any peasant society, between the family's various members. The plots vary in size between 20 acres for the larger estates down to a few hundred square feet. The land is extremely rugged, marked with steep cliffs and deep gorges, and thickly over-grown with flora run riot in an ideal growing climate. It is rarely, if ever, terraced for tree or other crops, most people preferring simply to hack out a modest patch on a hill-side for their personal use. The flat land in the valleys is almost entirely owned by the wealthier farmers who have free-hold title to the larger parcels.

A survey of school enrollment at the primary level is being carried out at the present writing. The Unesco Statistical Yearbook shows a figure of 93% of school-aged children enrolled in 1964 with 10% at the secondary level. However, one of the school teachers who had been employed by the Ministry of Education to conduct the poll for the region around Soufriere, one of the larger towns in the south of the island and with whom the present writer had the opportunity to speak, estimated that at most 70% of primary school-aged children on the whole island were actually enrolled attending school (including full and part-time) and added that the Ministry was aware of this fact but had no desire to change the situation for the moment until such time as funds would become available to expand secondary education.

The curriculum, as in other former British colonies, is based on the English primary school model, although efforts are being made by all of the islands to replace the reading primers designed for little English children with special editions having particular relevance to the Carib-

bean island cultures. Yet this tokenism is hardly sufficient to bring the school experience more than superficially into the lives of the people it is intended to serve. After six years at the most spent under the tutelage of sadly ill-trained teachers, school leavers return to their parents' farms to live out their lives, not in a constant race against death--the climate is an easy one to subsist in--with hardly a look back. In four or five years time, they have dropped back to almost complete illiteracy, retaining at the most the ability to speak a little English. Because the fate of the St. Lucians is, for the moment at least, so closely tied to farming, it is to this sector that the planner must turn to see what programs are being conducted to promote capital formation. One such, probably the most important financially, is the Union Agricultural Station.

Union was started in 1948. At that time it had a single objective to promote the cultivation of bananas on the large estates by demonstrating to estate owners the advantages of mechanized farming. The goal was both realistic and sensible since bananas already grew well on the island and promised a good return on investments. Growers faced one problem however in trying to expand the size of their operations. The under-soil, as in most tropical climates, is a fantastic tangle of thick roots and vines which are virtually impenetrable by horse-drawn cultivators; draft animals simply are not strong enough to do the job. Moreover, the hilly nature of the terrain rules out the use of wheel tractors as the power source. Only track vehicles--caterpillars--answered the needs of banana growers and they were too expensive to be

privately purchased. Faced with this situation, the St. Lucia government found itself obligated to start a machine service for farmers with of course the financial backing of Great Britain. Why it chose the model it did over, for example, a cooperative scheme which would include a machine operator training component, is not clear, though presumably political arguments for the choice weighed more heavily in the balance than purely economic ones.

The operation of the machine service has remained basically unchanged since the inception of the program. Land owners are encouraged to submit requests to Union for a specific job for which they need the Station's heavy machinery. A Union staff member travels out to the farm, surveys the land, decides on the equipment to be used for the job, and makes a cost estimate. The name of the farmer is then placed on a waiting list until such time as the machinery in question is free and/or another farmer with property adjacent to that of the first makes a similar request so that the two (or more) jobs can be done as one. The delays in meeting an individual's request are understandable in view of the problems, not to say the expense of transporting giant caterpillars, sub-soil cultivators, soil punches and the like around the tortuous roads of the island.

Both capital and recurrent costs were paid by Britain, which continues to subsidize heavily. A Director and corps operating staff--all native St. Lucians today--are hired by the island's Ministry of Agriculture who pays their salaries, the initial cost of the machinery, and the upkeep of the Station's buildings. The Director hires operators

for the tractors, mostly local, who together with the operational costs of the equipment--maintenance, etc.--are paid for by the fees which are charged to the farmers. This is the machine service program as it was conceived in 1948 and as it continues to be operated today.

In the course of the past twenty years, capital accumulated in the agricultural sector as planned. The larger growers, those for whom the service was initially conceived, have begun in the last few years to buy their own machinery. Because of this, Union is increasingly finding itself receiving requests from and servicing farmers with holdings as small as a quarter of an acre. Job grouping, formerly a matter mainly of convenience, has recently become almost one of necessity since a large tractor with whatever it is towing can barely turn around in the space. Moreover, fewer requests are being submitted now than formerly. In fact, much of Union's work load has nothing to do with agriculture; according to the Director of the service, the machines spend roughly half their time on road construction and repair. This change in the market situation would seem to indicate that the island's farmers have no further use for this particular program activity. Those that could use it, did; and those that could not, the subsistence farmers, still cannot. It was doubtless in recognition of this fact that a second program was elaborated within Union. Started roughly a decade ago, it was designed to train extension workers.

Twice yearly, a small group of some twenty cadets are recruited for a nine-month course in agricultural extension. Modest in scope as it is conventional in design, the course provides basic training

in the agricultural sciences. The top seven or eight in each class may, if they choose, go to the Barbados College of Agriculture or Eastern Caribbean Farm Institute in Port-of-Spain, Trinidad, for further study on completion of the Union course. Some are employed by the local government to work on the island and to travel about the villages giving lectures on the uses of chemical fertilizers and so forth.⁵ More often, however, they simply go to work as agricultural advisors for the larger estate owners. Their work is unexciting and unsung. With much of the Station's machinery sitting unused in the sheds, one wonders whether the local government and Union staff members might not give more unqualified support to the training activities of the Station.

The outside visitor gets the impression that in fact, those responsible do not yet understand the changes that are taking place on the island and the dynamics of the island's economic development. They seem unable to admit that the heavy machinery is no longer needed by the Station, that it should instead be sold to estate owners or the public works department, and that Union should now investigate how it could better serve the bulk of the island's working population, that is to say, the subsistence farmers.

Subsistence farming as it is presently practiced on the island must pass on here as elsewhere, for it can have no place in a growing economy as an anomaly to which, ironically, probably only the rich can aspire as a form of retreat from the modern world. Economically, the island cannot grow in a healthy and just manner so long as the majority of the people are employed in this manner.

And yet for the time being, this is how they are employed. Unquestionably the growing tourist industry will change the picture; but a decade at least will pass before it can offer an alternative form of employment to the vegetable farmer and one which he may indeed not even find acceptable. Hence it does not seem rash to affirm at a time which is so crucial to the molding of the island's future that public monies in general and the funds and talents of the Union Agricultural Station in particular which are not put to the service of the island's people are wasted needlessly and even immorally.

The situation is as potentially dangerous here as elsewhere, though the problem on St. Lucia is not yet pressing. While tourism is just beginning, the arrival of the white rich cannot help but arouse jealousy and resentment among the indigenous peoples. While the interregnum continues between the colonialist part of the British and the American capitalist future built on tourism, overt racial conflict is in abeyance. The provocation that manifest wealth in the midst of poverty represents to the poor is not far away: only 35 miles away, in fact, in Martinique.

Martinique is a French "département," the equivalent of one of our states; in other words, it is constitutionally a part of France as much as Seine-et-Oise or Rousillon. Its inhabitants have full voting rights, social security, and a number of other advantages, the most important one being the combination of complete medical insurance coverage with the "allocations familiales" paid to every family with three children

or more. This official backing of "more Frenchmen" is an instrument of foreign policy which has roots which reach far back into French history.

Fort-de-France, the island's capital, is alive with activity; the streets, lined with outlets of some of Paris's famous department stores--Prisunic, Au Printemps, Galeries Lafayette--are filled with people. The visitor is immediately struck by the fact that most of them seem to be under twenty, as in fact they are. The percentage of young people under 20 rose from 50.8% to 52.8% for a 4% increase between 1960-1965.⁶ This is in the day. At night Fort-de-France presents quite another picture: after 3 a.m. the streets are filled once more, but with hundreds of women, many with sleepy bedraggled children clinging to their hems. Scuffling around in tired sneakers or men's shoes, or more often bare-foot, with rush brooms and pails in their hands, they have been hired by the Ministère des Départements d'Outre-mer (DOM), or the Ministry of Overseas Departments, to do the jobs that nobody else will do: removing the garbage and refuse that collects in the streets during the day, sweeping them and washing down the sidewalks.

This kind of contrast permeates life in Martinique. The majority of the young people who throng the busy capital **by day** and give it this look of prosperous activity are unemployed. Statistics apparently are not available for the number of youngsters coming to the capital every day from the country to look for a job or at least some alleviation of the boredom that characterizes their village existence. It is known that many return at night to their parents' huts in the interior, occasionally accepting to remain for a day or two to do the odd jobs, and

then drifting back to the city.

This age group, the 16 to 20 year olds, is causing concern all over the world, and Martinique is not immune. Between these ages young people pass from adolescence to adulthood and from student to worker status. According to estimates by the French National Statistical Institute (INSEE), there were 34,110 young people in this age group in 1967, or 10% of the total population. A population growth rate of 2.6% adds about 8,000 Martiniquais to the island every year. In the last census,⁷ the total population was 327,000; it is presumed to be about 350,000 today. INSEE has also calculated the dependency ratios for Martinique: for every 100 adults there are 125 persons under 20 years of age and 18 over the age of 60. The contrast with Metropolitan France is striking where 100 adults have in their charge 64 young people under 20 and 35 over 60. The heavy responsibility placed on the active segment of the island's population is especially poignant in view of the high rate of illegitimacy. Unofficial estimates place the figure of all children under the age of 15 born to unwed mothers at 40%. Many are unquestionably those who can be found in the streets in the middle of night, struggling to earn enough to feed their many off-spring.

Unemployment is a serious problem on the island as it is in most developing countries, and especially among young males. Employment rates have been derived from a 1961 census and are presumed to be constant (Morel, 1968, p. 16). The total population of the 15 to 24 age cohort is 62,200. Of these, 26,100 are employed, or 42.1% of the

total. It is optimistically calculated on this basis that 29% of all boys and 47% of all girls in the 15 to 19 age cohort are unemployed. Many of these will of course be officially enrolled in school though not actually attending classes. But for the same group in Metropolitan France, the figures are 2% and 8% respectively. Basing our assumptions on the unknown precise daytime figures for the population of Fort-de-France, there are, at a conservative estimate, over 10,000 jobless young people wandering the streets aimlessly every day, that is at least 10% of the recognized population of the city.

The problem of unemployment is less serious because less pressing in rural areas where odd jobs like gardening or a day of fishing are always an option. But in a gradually transforming economy, and especially in the kind of colonialist atmosphere permeating that economy, young Martiniquais are more and more adamant in their refusal to "stay down on the farm," living a life of poverty and consummate boredom. By the same token, they will not accept jobs that they consider to be personally demeaning, jobs like domestic service in household or hotel, or jobs in industry and small enterprises in which they will be placed under an employer who will order them around, or where they will be asked to work as a part of a team. Their attitudes toward employment are clearly reflected in the supply and demand situation on the job market (Morel, 1968, p. 111-113). There is an annual need for 140 trained waiters. Presumably as a response to the number of applicants, only 12 places are provided for in all the various vocational schools combined. This leaves a deficit of 128 empty places yearly. The situation is similar

for professional laundresses and receptionists. Conversely, there is a yearly excess of 205 agricultural equipment drivers and maintenance men, 147 too many brick layers and interior finishers, and excesses in high but decreasing amounts throughout the building industry. And finally, the high rate of unemployment at the moment is a function of the post-war baby-boom which hit Martinique as well as Europe and the United States. Youngsters now come of age are seeking work on market where trade and capital growth have leveled off in the last few years leaving no space for the newcomers. They not only constitute a drag on the economy but pose a real and continuing threat to civil order.

Most of these young people are under-educated which of course contributes to the unemployment situation. The DOM is especially concerned with the case of the semi-lettrés or non-acculturés, the semi-illiterates that constitute 40% of the 90% school enrollment of children under twenty. Over a third of the school population are repeaters, often more than once, and it is not unusual to find youngsters of 15 who are still in primary school. The DOM is aware of many of the reasons for this situation, most of which are not confined to Martinique: poorly qualified teachers, no technical back-stopping from teaching supervisors, conseillers pédagogiques, ill-conceived, badly-built school buildings, bad school administration, inappropriate educational priorities, poor or non-existent career counselling services.

To the outsider, and to many Frenchmen as well, the most blatant of the errors committed is that of continuing the emphasis placed on

traditional academic education in the humanities. After passing through the French system, especially in this colonialist environment, most youngsters in the French overseas territories show a strong disinclination to having anything to do with a field, trade, or discipline which involves service of any kind, or where an excessively heavy emphasis is placed on the manual skills. Most rural employment is ruled out a priori as well as employment in fields like hotel management or industrial machine operation. Part of this prejudice can be traced to social prestige attached to specific jobs but many positions are shunned simply because they are badly paid, unstable, and have no system of professional advancement. They leave school, usually having prolonged their studies to the maximum, and failed their final examinations. Unequipped with any of the skills for which employers are prepared to pay, they nevertheless consider that they have educated themselves out of the category of jobs for which unfortunately their nonexistent skills alone qualify them.

Several solutions have been tried by the French government, none of them particularly successful. One such is the program known as Service Militaire Adapte (SMA), or Adapted Military Service. The SMA is included in the list of programs or activities which satisfy the requirements of the "Service Nationale." Concretized by Law No. 65-550 of July 9, 1965, "Service Nationale" is an obligation of all Frenchmen between the ages of 18 and 60 and includes military service per se, alternative forms of military service (like SMA), and extra-military service (like the teaching program familiarly known as "la Cooperation").

The last two forms of service are designed to promote development in the overseas departments, territories, and former colonies.

SMA falls under the chapter heading of alternative forms of military service, though it is administered by the DOM rather than by the Defense Ministry. Officers in charge are military men; the teachers and instructors under their orders are mainly recruits from Metropolitan France who have applied, and been accepted, to fulfill their military obligations in this manner.

The young people from the overseas department who take part in this program are also fulfilling their military service obligations. SMA seeks to provide them with technical skills that they have not acquired during the course of their schooling. Teaching these skills is its main stated operational goal; but there are clearly two others, no less **important** though they do not seem to have been the subject of a formal policy decision by the DOM or the Ministry of Defense.

For example, the SMA has a role to play which it recognizes full well, in alleviating the unemployment problem. Teaching **skills is one** way of dealing with the question; another is by transferring unemployed persons from where there is no work for them to where there is. Martinique and Guadeloupe are much more densely populated than Guyane, also a departement. Part of the SMA program is designed to transfer trained recruits from the two island departements to the mainland forests of Guyane, also a departement.

The other major goal is educational. No technical assistance program in the Third World can be concerned with human capital formation

alone. There is also a change to operate in the individual's attitude to himself, to society, and the relationship between himself and society. The official argument for SMA is predictably cartesian. The islanders, though predominantly black and considered tacitly to be inferior to white Metropolitans, are nonetheless French. Thus they pass through the same rigid very centralized educational system as all other Frenchmen. That they have emerged with an inadequately formed identity is due to special circumstances; they must be put on the right track and it is for the French government to retrieve them. For a Frenchman to speak Creole, or at best imperfect French is inadmissible; it makes him one of the non-accultures. Accordingly, while providing skills, the SMA program also seeks to fill in some of the cultural and linguistic gaps left unfilled by the school system, so that recruits will emerge thinking and talking like the Frenchmen they are.

One glaring hole is apparent in this apology for SMA: these Frenchmen are discouraged from going to Metropolitan France to work in the fields for which they have received training; they are denied the privileges of full French citizenship including the right to travel freely within the country and advancement in their professions. Moreover, they appear to be expected to assume the special historical role of the hardy Americans who by blood and sweat opened up our West. The difference is that the cash incentive is not remotely comparable; nor are the Martiniquais personally motivated to this sort of adventure where even the least aware among them knows full well that he is both being disposed of and used. These facts cast a not entirely flattering

light on the role that the program's supporters expect its recruits to perform in the service of French history.

What are the skills taught by the SMA program? When the program was started in 1961, recruits were primarily taught to operate heavy road-building machinery. The majority of the training groups were sent to Guyane to clear forests and open up the interior by building lines of communication among the villages. The program was small at first, not only because of its limited budget, but also because there were few applicants for training that entailed being shipped off to the end of the world that Guyane represented for them.⁸ In all fairness, one must admit that thanks to the efforts of the SMA, private speculators and technical assistance, this departement has come a long way and the prospect of going to work there is no longer greeted with the resistance it was formerly.

Now, almost a decade later, the program offers training in ten specialties: carpentry, masonry, industrial machine operation, painting, plumbing, electricity, heavy road-building machine operation, animal husbandry, bookkeeping, and hotel-keeping. Training usually lasts 16 months, the normal length of military service. After they have been selected from a pool of applicants, the recruits spend two months in basic training. During this time they are subjected to the same activities as ordinary soldiers: drilling, discipline, physical training. This collective activity under an authority is designed to teach young people who (outside the classroom) have never had to live according to a schedule or answer to anyone, not just to function efficiently during

their training period but more important to live and work in a modern society built, obviously, on Western values. Every year a few of the recruits (between 6 and 10%) are found to be totally unprepared for skill training on entrance into the SMA and are placed in a group called the nonorientables to be given special language training and general education; their "basic" can last up to six months. The other recruits spend the half-year after completing basic training learning the fundamentals of the various specialties listed above in special camps, designed to provide the appropriate environment for the exercise of a given skill as well as the necessary equipment. Afterwards they pass into the third and final stage known as the periode de perfectionnement. This period of supervised skill-building takes place in an applied, on-site situation, usually on a job contracted for by the government; generally it lasts eight months. When a recruit has completed these several stages, he can sit for an examination which, if he passes, earns the right to a technical diploma equivalent in value to those offered by similar training courses offered by the Ministry of Education or the Ministry of Youth and Sport but not in lieu of military service. The most exceptional completers can extend their term of service or, much more rarely, go to Metropolitan France for more advanced studies in the military and later, if they meet the required qualifications continue in a Grand Ecole or Ecole Technique. These then are the mechanics of of the program.

Most educators outside of the program consider the quality of the training provided by SMA instructors to be very good. Students are

chosen at the rate of one out of every five applicants. Most are young people who have dropped out of school toward the end of their secondary school or who have failed their "bac," the secondary school leaving diploma. This generally high level of education means that they are, as a rule, sophisticated enough in their own perception of their future to have seen the advantages of meeting requirements of their military service in this manner. In fact the real problem with the SMA is not in the recruiting, nor in the selection, nor indeed in the actual training. Rather it is a question of external productivity: the program has great difficulty in placing its graduates in the job market. Although, as stated above, one of the functions of the SMA is the raising of the general cultural level of its recruits, the outsider is probably safe in assuming that even for the SMA directors the problem of unemployment among its own graduates is so basic and so serious that they might be justified in ceasing all further activity in order to devote their entire attention to determining the causes.

The unemployment situation is viewed by SMA officials as follows: even if the program's graduates are able to find employment in their field, they must usually accept wages far below their legitimate expectations. Many seek employment in the public sector which offers reasonable salaries, stable employment with an established system of promotions, the paid vacation guaranteed to Metropolitan Frenchmen, and pension plans. But this sector has long since passed the saturation point (of course the need continues for more qualified secondary school teachers).

Morel (1968, p. 63) refers to the crying need for industrial technicians, agronomists, doctors and other qualified personnel. The employment picture in the private sector is far from bleak; but SMA staff and local government officials have many complaints to make about the attitudes of private employers toward SMA graduates. For example, they suspect local hotel operators of looking at the SMA training course in their field with suspicion because they are afraid that highly trained employees will bring their own incompetence to light. Also, SMA graduates are, on the whole, more expensive, and officials accuse employers of being ignorant of basic investment principles and reluctant to cut their profits in order to improve the efficiency of their operations by hiring better trained and therefore more expensive labor. Unscrupulous competition in the training field also undermines the employment and even career chances of SMA learners. Many "pseudo-institutes" give poor quality instruction at very high prices and offer an ersatz diploma. Unable to differentiate between SMA and its competitors, employers complain that having to provide additional in-service training at considerable extra cost to correct bad habits in supposedly trained labor is more than they should be expected to accept.

The foregoing analysis of the SMA's goals and problems appears overly simplistic. The program is seen by its organizers as a model for teaching controlled behavior in a social group within a future industrialized economy, a model in which heretofore jobless recruits receive high-quality professional training that afterwards need only be put into practice--if employers can be found. My own observations of SMA's

problems, as they relate to some of the more evident problems faced by the island as a whole, led me to quite different conclusions.

The SMA, like the Etat-Major (Chief of Staff complex) where it is located, seems to live in splendid isolation. Originally conceived in response to a real if only partially felt need, it seems to bear little relation to the realities of everyday life in Martinique, and one would assume elsewhere where it is functioning. One of the reasons for this situation is the administrative tangle in which it is enmeshed. No less than four Ministries are involved, at least implicitly, in the planning of the program. SMA is an Army program, but it is not, as stated above, under the authority of the Ministry of Defense; rather, it is under the Ministry of Overseas departements (DOM). Its vocational training function would normally make it the responsibility of the Ministry of Education, while the fact that it concerns young adults in an out-of-school context would under other circumstances place it within the purview of the Ministry of Youth and Sport which is responsible for adult education in the francophone countries. Not all of the four Ministries have had a say in the elaboration of the program; but the professional and administrative competences needed to direct it better are so spread out that sound advice has just not been available when needed.

The program it will be revealed, is professionally staffed by the Army, which not only assigns its career personnel to key administrative posts but also recruits the specialized instructors, most of them civilians, for the various courses. Unfortunately, career officers regard assignment in the SMA as something of a slap in the face:⁹

working with what are essentially civilians and supervising training in non-military fields is felt by them to be personally degrading. Moreover, they consider this option for young people as a dereliction of the duty of each Frenchman to serve in his country's armed forces. The Director of Training, SMA/Martinique, was very frank on this point;¹⁰ he stated, however, that although he had resented this assignment at the outset, he had decided that since war seemed for all intents and purposes to be a thing of the past, the manpower and expertise of the army should now be used to serve the cause of development. In his eleven months as Chief of Training Operations, he had become extremely interested in what he was doing and demonstrated considerable understanding of the problems of unemployment among out-of-school youth with which he had had no experience prior to his present assignment. The powers-that-be do not seem, however, to share his new enthusiasm; the budget of the SMA program has been stabilized over the last few years, and because of inflation and devaluation has fewer funds to work with today than a few years ago.

Also, the SMA is receiving perfectly legitimate competition from other, equally ambitious, programs. The Cours d'Enseignement technique and Cours de Formation professionnelle des adultes provide training in many of the same fields and have the same difficulty placing their graduates. To my knowledge, little, if any, effort has been made to coordinate these courses in order to assure standardization of training in each field; to avoid overlap, especially when one establishment can clearly provide better training in a given field than another; and to

improve recruitment and selection procedures as well as provisions for terminal placement.¹¹ On the contrary, there seems to be some suspicion, resentment, and even overt rivalry among the "fonctionnaires" in charge of the various programs.

For the SMA itself, it is not clear how the courses in the syllabus were chosen; but it is obvious that they were not chosen in response to economic demands and the same can probably be said of the other training programs. The basis for decision as far as the SMA is concerned seems to have been equal parts of tradition, hunch, and convenience, such as, for example, the presence on the islands of heavy road-building equipment already owned by the Army. These criteria are of course perfectly valid but their derivation does not indicate a very scientific approach to assessing labor supply and demand. This assessment seems to be borne out by the considerable surprise expressed by the Director of Training at the number of applications he had recently received for the SMA course on the technique of laying carrelage, the ceramic tiles that the French are fond of putting on their floors. Over 100 applications have been received for five vacant places. This rush on a single course may well reflect the fact that with the influx of tourism, many new hotels and probate houses are being built, most of them requiring tiling. If this assumption is correct, Martiniquais youngsters are much more aware of the laws governing the labor market than those responsible for the SMA. In any case we saw earlier that there is a growing back-log of empty positions in this field. This career holds the added attraction of being for all intents and purposes one's own boss. Equally, one may well

wonder why, when it is known that a yearly excess of 205 tractor and road machinery operators exists, the program continues to turn out drivers for whom the only application of their expensively acquired skills is as bus drivers. It seems the only equipment around belongs to the Army.

While these suppositions may be contentious, one can at least affirm that the SMA Directors had not adequately measured the market demand for the various specialties for which training was being provided. Manpower studies have been carried out by INSEE, the Ministry of Education, and the Ministry of Labor, and no one has as yet attempted to establish training requirements on the basis of manpower needs. Even career guidance is a new exercise and is not available from any authoritative source within any of the institutions providing technical training. For SMA's part, they have limited themselves to remarking that their graduates are having difficulty in finding employment. Their first survey on what happens to their graduates is at present under way but the question of employers' attitudes is still a matter of conjecture. Until planners and educators come to terms with it, technical training institutes will continue to turn out products for which there is little market.

Unemployment can be traced to cultural sources as well. The island society is matrifocal, partly as a function of the high rate of illegitimacy referred to earlier, which means that the male offspring enjoys a privileged relationship with his mother who cares for him to the limit of her capabilities. She dotes on his every wish long after he has become a man, thereby removing any real necessity for him to

leave the family nest to go out and find work. Conscious of the fact that there is no real need for him to do so, he adopts what by European standards is a very leisurely attitude towards finding and keeping a job.

But there is another problem, far more serious, which is the question of whether there will ever be a market for all the graduates of SMA, as well as the products of technical and vocational groups in the school system. The answer is, unfortunately, that in all probability even if employers were prepared to pay acceptable wages for skilled labor, even if there were enough skilled labor to meet present demands, and even if the young job applicants, skilled or unskilled, were to accept the financial and material conditions of employment now being offered them, there would still be substantial unemployment among Martiniquais youth. Nor is there any reason to expect a radical change in the situation in the near future. Tourism will figure strongly in the future of the island's economy. This statement is true of Saint Lucia, and it is true of Martinique. Tourism is mainly a capital intensive industry in which many of the young islanders will find no place. The only solution to this bleak prospect is to plan on developing handicrafts and small industry and especially those that are adjuncts of the tourist industry. These activities will only begin to show marginal returns after marginal increases in the skilled labor force are made.

So far the French and the islanders themselves seem to be approaching the problems of manpower planning with a dangerous and even tragic naivete. Every year millions of francs are poured into the economy of

of the island to jack up the economic infrastructure of the agricultural and industrial sectors, and every year the unemployment rate rises steadily among those who have received at least ten years of school. This kind of situation can only lead to an eventual clash between Martinique and the Metropole that will, of course, seriously threaten France's hold over the island.

When and if a blow-up takes place, the clash will be partly attributed--and rightly so--to class and racial bigotry on the part of the central government. Already--while not legally authorized to do so--the DOM Ministry is exerting considerable pressure to prevent unemployed Antillais from going to Metropolitan France in search of jobs; while at the same time thousands of Spanish, Portuguese, Italian, and ex-French African workers are allowed into France to work every year. The French government argues that it does not want a "brain-drain" to hurt the island economies; the real reason behind their refusal to allow Martiniquais freedom of movement is, one suspects, that they do not want something like our Puerto-Rican problem on their hands. Foreigners in Metropolitan France are required to have residence and work permits which are only granted for short periods and may be recalled at any time. The jobless Martiniquai in France is French and has as much right to stay there as another Frenchman.

The situation is not yet explosive. Nevertheless young Martiniquais are seeing their hopes frustrated one by one: no acceptable employment at home, no employment at all in France. How much longer are the islanders going to feel that their present status as citizens of France

is to their benefit? Programs like SMA are going to be a vital part of the answer to this question.

An attempt to draw these two islands together for any purpose at all must take into account the caveat which any one familiar with the islands will tender, namely that the similarities referred to in the opening paragraphs of this study are deceptive. The Caribbean native himself will say that each island people has highly individual characteristics, that ways of life, values, food, economies are all particular to the culture to which they are attached and cannot be generalized upon. Bearing this in mind, one can however make certain concluding observations on the basis of the foregoing which apply to both St. Lucia and Martinique.

We have seen the extent to which the economies and people of both islands depend upon agriculture both as a livelihood and as a means of accumulating capital. The disenchantment with this way of life coupled with the strain put on the productive capacity of the land by the rapidly expanding populations of the two islands are going to place a terminal date on the predominant economic importance of this sector in the near future. The emigrants from this sector, together with their offspring, all share a general low-level of education with no specialized skills. Education will be increasingly important for them as individuals seeking to better their state, and especially for human capital formation upon which the growth of the economy naturally depends.

Particularly insidious is the problem of boredom in the two islands. This phenomenon, less strong in the more populated islands, is at least partially responsible for the rural exodus in the first instance and the clutch of people seeking to leave the islands in favor of a much riskier situation in New York which holds out the carrot, while keeping the stick well-concealed. Discounting Puerto Ricans, there is already a vast Caribbean community in that city. Boredom is something to be reckoned with by all who are interested in rural community development but it has a corollary in the Caribbean island context which gives cause for special concern. Those coming to the city to escape the tedium of the land are attracted by its lights and aura of excitement. Where these commodities are in greatest concentration is in and around the tourist spots. Wishing at the outset to keep the closest possible contact with the source of their diversion, it is in the hotels and night-clubs that the islanders will seek employment.

Tourism is the industry which will take root most naturally in the islands which are rich in the requisite natural resources--sun, beaches, scenery, and of course, plenty of cheap labor. But it is not only capital intensive; the capital is entirely exogenous. These two facts alone are enough to promote serious friction between the haves and the have-nots. But other variables having a long history of incompatibility are introduced: rich white Americans; poor local blacks employed in degrading positions of personal service to whites--cleaning their bathrooms, making their beds, feeding them, carrying their bags. The mix is volatile and calls attention to the urgent need to develop other

alternatives.

Looking to education to provide all the answers is placing an unfair stress on its capabilities. Nevertheless, through the medium of education, work attitudes can be changed and skill built so that industries, small and large, can be made viable in their own right and competitive on the world market. Where weaknesses exist in the educational structure, bold and thorough remedies must be taken. At the moment, the lack on both islands of any comprehensive educational plan is conspicuous. Without one, projects like Union and the SMA will be palliatives.

FOOTNOTES

1 Differences in dialect are substantial, however.

2 Statesman's Yearbook, 1969.

3 Derived from figures shown for birth and death rates appearing in the 1969 Statesman's Yearbook.

4 While the latest (1968) edition of the Unesco Statistical Yearbook is out, the figures for St. Lucia are generally incomplete and badly out of date.

5 Birth control in particular.

6 INSEE--Statistique du mouvement de la population des D.O.M.

7 Conducted in 1967.

8 In all fairness, one must admit that thanks to the efforts of the SMA, private speculators and technical assistance, this departement has come a long way and the prospect of going to work there is no longer greeted with the resistance it was formerly.

9 It is not clear whether from a career point of view an SMA assignment is in fact a set-back.

10 In an interview with the author.

11 Recently two new career advisory offices have been created but are as yet little used.

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INTERVIEWS

Captain B. Tillaut, Director of Training, Service Militaire Adapte,
Martinique, Etat-Major, Fort de France, Martinique.

Mr. S. Prout, Director of Machine Services, Union Agricultural Station,
Castries, Saint Lucia.

Pre-Occupation and In-Industry Education

James Hoxeng

Occupational education and training need to be seen in perspective. Although they are normally contrasted with 'regular' education -- the former utilitarian and pedestrian, the latter more concerned with Truth, Beauty, and Goodness -- the dichotomy is not so neat as one might think.

This is especially true historically. Using the U.S. system as an example, Joel Spring (Spring, 1970) points up industrial involvement in education. For instance, the idea of kindergartens originated as a way to free mothers for work. Sometimes the feed-in from schools to work was more direct: M.L. Nelson, in Massachusetts, started school children working one hour a day at age twelve. Home economics courses were originated by corporations (and later adopted by schools after some pressure from industry) to help homemakers make better use of the pay packets brought home from the factories. On a slightly more bizarre note, the National Association of Manufacturers pushed Spanish teaching in public schools with a view toward opening up Latin American markets.

John Galbraith also admits the influence of industry on curriculum:

"Modern higher education is, of course, extensively accommodated to the needs of the industrial system ... secondary and primary education have been less accommodated ..." (Galbraith, 1967: 370 and 376). (Galbraith goes on to plead for educators to assert the "values and goals of educated men" (Galbraith 1967: 376), rather than those which serve the production of goods.)

The point of this possibly overdrawn series of examples is that general education as well as specifically occupationally-oriented education has been and is aimed (to some extent, at least) at serving the needs of industry. Whether this represents ethical/philosophical problems for educators is not a concern for this paper. My purpose shall be to examine that part of the educational system designed to prepare people for occupational roles.

Historically there has been little agreement as to how this should best be done. Hugh Warren in a UNESCO-sponsored study of vocational and technical education (Warren, 1967) mentioned "spheres of influence" which have shaped training in various areas. He listed (1) France and the former Union Française countries; (2) the Scandinavian countries; (3) the USSR and eastern Europe; (4) the USA, Canada, and U.S.-assisted countries such as Korea. To these I would add (5) the U.K. and her former colonies; (6) China, and (7) the Latin American countries following the lead of Brazil. Even at this the list is probably incomplete. The World Yearbook of Education for 1968 (Lauwerys and Scanlon, eds.) was titled Education Within Industry, and provides 14 national studies of industry and vocational training. These show stark differences in

philosophies with respect to flexibility, length of study, apprenticeships, and pragmatism vs formalism in general.

In this paper I shall firmly and modestly eschew major issues. Following are (1) a limited look at 'conventional wisdom' in occupational education and training and (2) the results of some interviews with corporations and training organizations in Mexico City during February, 1970. (Given that international opinion on occupational training is diverse, and probably irreconcilable, I hasten to admit that this is written out of a U.S. context.)

I

CONVENTIONAL U.S. WISDOM IN OCCUPATIONAL TRAINING IN UNDERDEVELOPED COUNTRIES

The "conventional wisdom" label is intended as a rationale for grouping those ideas presently accepted by the leading writers in the field. It is almost certainly not conventional vis-à-vis the general public. For purposes of this paper, it serves as a summary of present best thinking on occupational training and industry-related education. As with other conventional wisdom, it should not be accepted as totally correct.

1. General education is needed as a foundation for specific training. It would be difficult to find disagreement on this point. The reasoning leading to this conclusion is largely inductive, stemming from observation of performance by workers with and without general education. Reasons offered for this pattern are numerous. Most can be

linked with the rationale that general education (at the least basic literacy and numeracy) leads to understanding of the economic process, and the nature of change in the world. It is usually said that general education should aim at producing graduates who are flexible and adaptable.

A strict definition of this general education is difficult.¹ It can be easily agreed however that it should include basic communication and quantitative skills and citizenship, and that those parts which are culturally tied should be tied to the indigenous culture rather than borrowed from another.

A corollary to point (1) is that citizens should get as much general education as they and their country can afford. (Staley, 1968: 10). This follows from the principle that schooling should be universal. (UNESCO's stated aim is that all nations of the world should offer universal primary education by 1980.) In real terms this means underdeveloped countries should aim at providing secondary education for all their children, and post-secondary for a healthy percentage -- the same aim as exists in the major developed countries. Access to education is viewed as a human right, not something reserved for a privileged few.

¹This is again a culturally tied matter, and would differ between and within the various spheres of influence mentioned in the introduction. One example of the kind of general education seen as utilitarian was developed in Sylvania's Project Delta training program for hard-core unemployed in 1968. Their "core course" included the following: Arithmetic processes, general grammar, reading and discussion, self-expression, effective communication in industry, industrial and technical vocabulary, expressions - opinions and arguments, grooming and personal hygiene, practice interviews - motivation, and emotional/social adjustment to supervision and criticism. (This list is obviously more work-oriented than most general education, but is more interesting for it.)

A second corollary is another inductive conclusion reached by most educationists: Persons acquiring virtually any education will want jobs in the modern sector. In spite of considerable exhortation to the contrary, students leaving school at almost any level gravitate to urban areas, and spurn further involvement in traditional sectors. In countries like the U.A.R. where the percentage of schooled population is high relative to employment opportunity in government and/or the modern sector, the dislocation is severe.² In less developed countries it is less critical mainly because the schooled population is still relatively small.

A second point of general consensus could be:

2. Present secondary level education is not relevant and/or is too academic. This would in the main hold true for general and vocational secondary schools. General secondary education is directly useful only to those who continue into university courses, a distinct minority in all underdeveloped countries. For the rest, most of the courses have no specific applicability to their work when they leave school.

It is further agreed (with the possible exception of parts of Latin America³) that vocational schools do not generally provide their students with relevant skills for the job markets they enter upon leaving school. P. Foster's "The Vocational School Fallacy," (Foster, 1965) is one of the best-stated and most-quoted statements of this view.

²India is of course the favorite example of this situation, but Malcolm Kerr describes the U.A.R.'s similar predicament in like terms (In Coleman, 1965:184-191.)

³An as-yet unpublished UNESCO study of technical education in Columbia showed a very high rate of return to vocational training in that country.

Because equipment is expensive, instructors are difficult to both find and keep, and curriculum, once adopted, is difficult to change, even the best traditional vocational schools find it difficult to keep up with the changing job demands of the modern sector. And they are costly -- a vocational secondary school's per-pupil cost can be nearly 10 times as high as that of a general secondary school. (Al-Bukhari, 1968:173). Also, vocational schools are notoriously unpopular, with students (who apply only if they are turned down by general secondary schools) and employers (who find vocational graduates difficult to work with because of their apparent lack of germane expertise and exaggerated sense of the excellence of their own abilities and education.)

Agreement, then, is generally reached that the best solution is a comprehensive secondary school. Eugene Staley describes this system: (Staley, 1968:111-112)

"A single set of comprehensive secondary schools serves both those youngsters who are probably headed for early employment and those probably headed for university. There is no sharp distinction between the two groups, in fact no firm identification of them in the earlier years. Both share in a common school experience. Both receive a common core of general education and participate together in extracurricular activities. Gradually, on the basis of demonstrated aptitudes and interests, students are guided individually into 'channels' or 'streams' which have different emphases (for example: pretechnological, agricultural, commercial, homemaking, health occupations, university preparatory.) Opportunities for cross-over from one channel to another remain open."

Staley justifies his preference for this system on grounds of democracy (dual systems perpetuate class distinctions), child development (discovery of latent aptitudes and interests), optimum use of human resources, educational efficiency and cost (relative to a dual

system), and of educational content (everyone should learn some basic things, as mentioned earlier.)

[Nowhere in my readings have I encountered anyone who advocates dropping general secondary education in favor of a vocationally oriented curriculum. Yet one wonders if some of the points made in Foster's article could not be applied to general secondary schools, relative to, say, a comprehensive Adult Continuing Education program.]

So although vocational schools are in disfavor, and traditional apprenticeship is generally considered by U.S. theorists to be an outmoded means of education, with too great a potential for abuses⁴, they do agree:

3. Occupational training is a necessity, and should be planned with reference to the needs of the employment system; further, the burden of training and funding should be placed upon employers as much as possible, through incentives and legal requirements.

The first clause of this third point seems obvious: training is surely needed, simply to learn one's job, and it makes sense to gear it to the kinds of jobs that are and will be available.

Further, as was mentioned earlier, industrial needs have been seen to have considerable effect on education whether it is labeled 'occupational' or not.

(Two attitudes are tacit in the clause: first, a conviction that some kind of economic planning is likely to be a reality in the future --

⁴For example, the recent Philadelphia Plan developed by Labor Secretary George Shultz was an attempt to rectify long-term exclusion of blacks from progress via apprenticeship into various craft unions.

so that educators will have an idea of the kinds of jobs for which people will be needed in years ahead; and second, that formal occupational training is superior to the informal "sitting by Nellie"⁵ often practiced in the past. In today's work the first assumption is probably correct enough to require no further word; more on the second later.)

To go on to the second clause, the difficulty in most underdeveloped countries of putting the training burden on employers is simply that the great preponderance of available work is in peasant agriculture, where there are virtually no employers. In Tanzania, for example, only 4% of employment is in the modern sector (Kimesera, "Workers' Education" In Resnick, ed., 1968) and most of that in firms too small to handle or need any training program. In Mexico, on the other hand, the modern sector and enough of the firms which comprise it are large enough to make single-firm training programs and training organizations necessary. (Davis, 1967). Other underdeveloped countries generally range between these levels.

A means of applying the training burden fairly to employers was developed in Latin America. Starting with Brazil in 1942, national organizations for occupational training have been set up in seven Latin American countries, funded by a payroll tax of one or two percent levied on employers.⁶ This basic innovation has been adopted and modified by other countries, most notably Great Britain in its Industrial Training

⁵A British phrase (naturally).

⁶Staley 1968:131-134. The countries: Brazil, Columbia, Venezuela, Argentina, Peru, Costa Rica, and Ecuador. Chile and Mexico have similar organizations, but they are government funded.

Act of 1964. (Staley, 1968:136-138). That Act created Boards for various industries, whose task it is to oversee and help arrange for training and continuing education of workers of all ages. The Boards also have an evaluation assignment, and training they consider substandard gets a firm no credit toward satisfying its training assessment. This program is much more sophisticated and undoubtedly much more expensive than any which has preceded it. It also makes specific provision for continuing training throughout one's working life, which includes retraining in case of job obsolescence.

This leads to another area of agreement:

4. Those already working learn more readily and efficiently than do youngsters prior to entering the job market. Virtually no one disagrees with this, and theorists encourage establishment of a working relationship between 'regular' educational institutions and employing organizations. (Interestingly, China seems to be doing more of this than any other country today.) (Hook In Lauwerys and Scanlon, eds., 1968). It demands adjustments and reallocations of priorities which are difficult to organize -- "sandwich" programs, evening courses, curricula of "non-standard" length, and so on.

Considerable training effort is being made by industry in this area. A questionnaire circulated by H.F. Clark and H.S. Sloan to 482 of Fortune's top 500 companies showed that in 1957, approximately 3/4 had educational activities for their workers, both in and out-of-plant. Most were aimed at foremen, supervisors, and junior executives. (Clark and Sloan, 1958.)

A corollary to the above is that training or education closely tied to subsequent work opportunities may be very effective. Belitsky

(Belitsky, 1969) has examined private vocational schools in the U.S., and found them to be efficient, worth considering making better use of. About 1/3 of the students in these private trade and technical schools (examples: TV repair, auto mechanic, computer programming -- not cosmetics, business or barber schools) are public school dropouts. They are cost-effective enough so that large publicly held corporations (ITT, Lear Siegler, Control Data, and Litton Industries are some examples) are beginning to purchase and operate them as subsidiaries. There are between 3000 and 7500 of these schools in the U.S. now; regulation and standardization are at a minimum. They operate on a profit basis and are flexible enough to adjust to the changing job market. Something similar is happening in the Philippines (Landé In Coleman, ed., 1965) because of otherwise unsatisfied desires for education.

Finally, wisdom would say:

5. Concentrating on only one facet of occupational training and education won't accomplish much. Improvement will come only with broad, coordinated change on many fronts. Examples may be unnecessary, but for instance, if the 'regular' education system is immutable, opportunities for using it to set up a core curriculum for those not in school would be limited. "Sandwich" courses require cooperation from both employers and training institutions. Economic planners need to exchange information with educators, and so on. Staley calls it "orchestrated" change -- maybe that's a good word, even though disharmony is an inevitable accompaniment of change.

II

In the time I had available in Mexico I was unable to do a comprehensive survey of industrial involvement in training. The alternative strategy I adopted was to get an overview and then to pick from it some examples for further examination. I attempted to stay away from traditional vocational schools, and avoided making judgments as to whether specific programs constituted 'education', or (merely) training. I was fortunate in that some of the people I met are in strategic positions vis-à-vis the position of industry in Mexican education.

Large-scale industrial involvement in training in Mexico is generally a phenomenon of the 1960's. A few programs date before the beginning of the decade, such as the Institute for Scientific Administration of Business (Instituto de Administración Científica de las Empresas), supported by the strong employer's association (Confederación Patronal), the National Productivity Center (Centro Nacional de Productividad), founded by industry and government in 1955, and the Center for Training of Operators (Centro de Adiestramiento de Operadores), begun as a Point Four project in 1955.

Most of the action has come in the second half of the decade, however, as a number of organizations and consulting firms have been established to abet the growing interest in and desire for employee training.

Some other generalizations can be made: Impetus generally comes from the employers and trainers rather than from the workers themselves.

(Luis Abad of ARMO estimated that 90% of the men taking courses there do so because their company requires it.) Also, there is apparently little reluctance to share ideas and techniques, since training is a new venture for most. AMECAP (Asoc. Mexicana de Capacitación de Personal), begun in 1966, is a voluntary association of some 80 dues-paying individuals and corporation trainers who gather regularly to swap information. They also plan joint research in the future. Presently, however, the total training being offered by industry in Mexico seems miniscule compared to the overall educational need. (Indeed, from both the IIEP information and from conversation with Ivan Illich in Mexico, it seems the total resources of all kinds available for education look small compared to projected goals ...)

Third, the emphasis on training is going to increase a great deal in the near future. This is due in part to the growing awareness of the need to upgrade personnel, but also on May 1 of this year a new law will require every enterprise to organize permanent or periodic courses to professionally develop their workers. This will not happen immediately, but in subsequent negotiations with the unions it is likely that employers, recognizing the direct advantage to themselves, will opt for providing courses in lieu of other 'requirements' such as providing housing. In any case, every organization with whom I spoke has plans for considerable expansion in the near future.

Government also is planning on considerable growth in the private sector of the education budget in the next ten years.

Below are statistics excerpted from figures and projections compiled by the Bank of Mexico's Office of Human Resources.

Financiamiento de la Educacion Nacional

miles de pesos de 1960

	<u>1960</u>	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1980</u>
pri. educ. budget	584,544	1,189,243	1,257,543	1,509,600	2,739,194
total educ. budget	3,316,911	6,047,352	9,422,443	15,124,600	25,008,194
producto interno bruto	155,900,000	214,289,000	298,650,000	427,100,000	611,950,000
gasto total en educ. con respecto al	2.13%	2.91%	3.32%	3.79%	4.43%

Evidently between 1970 and 1980 the private education budget is expected to grow by roughly 125%.

I found three listings describing courses available to Mexicans, most of which are offered by organizations in the private sector:

The US Chamber of Commerce office in Mexico City lists courses available to executives. Completed in January, 1968, the list is somewhat outdated.

USAID compiled a book, Training Possibilities in Mexico, a few years ago, copies of which are almost unavailable now. They are now letting contracts for an updated version which should be available in about six months.

Stanford Research Institute in 1968 did a study "Management Education and Recruitment Sources in Latin America" for five companies -- IBM, Singer, Gillette, Adelatec, and Merck, Sharp and Dohme. The purpose was to examine Latin American management training institutions, and appears to be very complete.

Many firms in Mexico are running their own training programs. Among these are Petroleos Mexicanos, Celanese Mexicana, IBM, Cia Mexicana de Luz y Fuerza, and Volkswagen. In the limited time I had available I was able to interview trainers from three of these: Ford, Nestle, and IBM. Descriptions of their programs follow.

Ford is described as having one of the best training programs in Mexico. It is also one of the oldest and largest, having been begun about 10 years ago, and with some 15,000 men having been in the program since that time. Last year 1800 men were trained, some by training organizations (see the next section of this paper), and some directly by Ford's program under its Office of Personnel Development, with an annual budget of US \$300,000.

Examples of courses given directly by Ford follow:

Technical - Heat treatments, Metallurgy, Shop Mathematics,
Industrial Engineering, Quality Control.

Supervisory Development - Hourly Supervisors, Staff Supervisors, Supervisory Manual (apparently written by and for Ford), Human Relations, Labor Relations, Speech, Reports.

Safety - First Aids, Industrial Safety, Fire Combat.

Outside courses attended by Ford employees seem to be largely aimed at middle-management. Examples include Problem Solving and Decision-making, Analysis of the New Work Law, New Marketing Techniques, and Costs and Budgets.

Ford uses testing and questionnaires in continuing evaluation of the effectiveness of their program, and anticipates expanding involvement in this area.

Nestlé - Since 1965 Nestlé has begun an enlarged training program and has invested capital in their Instituto Nestle de Capacitación (INDEC) an impressive training center 38 kilometers outside Mexico City, in which training courses are conducted from February through November each year. In 1969 approximately 1000 employees took courses at INDEC under the direction of Nestlé's Centro de Capacitacion. Only the top four executive officers of the company are exempt from requirements to take courses at INDEC -- these, I was told, generally go either to Europe or the U.S. for their training.

Courses are grouped under three general headings -- Administration, Marketing and Production -- and are short, ranging from two days to one week. 50 courses were given in 1969. There are three levels of instruction for each employee classification, from Section Chief to Receptionist. An employee is not allowed to begin the sequence until he has been employed by Nestlé for three months (I did not obtain employee turnover figures, but gathered the rate is considerable),

but then to qualify for advancement he is expected to progress through the appropriate sequence, one course per year. An employee may be promoted, however, before he has completed the course sequence for his job.

In addition to the formal INDEC courses, the Centro de Capacitación staff of six executives and three secretaries attempt in other ways to reach Nestle employees. The Centro publishes monthly mimeo papers for various employee classifications, aimed at inculcating good work habits and attitudes. The February 1970 issue aimed at Nestle secretaries, titled Aquí en Secreto, has as its topic 'The Telephone as a Useful Instrument'; the issued aimed at Chiefs (Jefes Nestle), titled Una Mejor Forma, asked "How Goes your Team?"

Another effect is in the requirement that Nestle branch managers each month teach a course, prepared by the Centro, to his employees. Every four months the Centro sends him a test covering the material taught, which he administers and returns to the Centro for correction and subsequent advice as to whether performance is satisfactory.

In addition there are 'specialist' courses for specific training of higher-level employees like branch manager. These however are not run directly by the Centro, and are longer term, lasting up to 1 1/2 years.

Finally, the Centro has prepared Manuals outlining content and criteria for all Nestle jobs.

There is a quality of earnestness and determination about Nestle's training program, a firm belief that it is necessary and will

be fruitful. At least this is certainly the case in the Centro de Capacitación, although I find it difficult to believe the quality of dedication evidenced there could be generalized throughout the entire company!

IBM - The first response from Señor Edgar Mackey, head of Administrative Education for IBM, was that a major part of their educational effort consists of contributing to schools and organizations which give the kind of skills IBM needs. Two examples of recipients are the National School of Agriculture (somewhat incongruously), and IACE (Instituto de Administración Científica de las Empresas), which is mentioned later on in this paper.

IBM's own training program concentrates on three areas -- Customer Engineering (Maintenance), Sales, and Administration. The scale of these programs is quite small. I could obtain enrollment figures only for the administration area, which trains some 250 per year, almost all of them already IBM employees who are being upgraded. The sales school, on the other hand, makes its three-part curriculum (Systems, Programming, and Operation) available to IBM customers as well as IBM employees. The point is to enable customers to use IBM equipment to full advantage.

ORGANIZATIONS INVOLVED IN OR SET UP SPECIFICALLY FOR TRAINING

As mentioned in the first section, a considerable number of organizations have training either as their central purpose or as one of their major activities. I was able to talk with people from four organizations of this type: Centro de Adiestramiento

de Operadores (CAO), Peat, Marwick and Mitchell; Servicio Nacional de Adiestramiento Rápido de la Mano de Obra en la Industria (ARMO); and Camara de Comercio de Mexico.

There are a number of others about which I could obtain only general information. Following is a list with brief descriptions:

Centro Nacional de Productividad was one of the first of this sort. Established in 1955 jointly by Mexican and U.S. industry, the Mexican government, and USAID, CNP concentrates on courses for skilled and supervisory personnel. As is the case with many of the other organizations of this type, CNP courses are generally offered in the evenings to enable those attending to continue their daily work uninterrupted. Their courses are generally 20 to 40 hours, spread over a period of two to four weeks, and cost 1500 or 2000 pesos. Class size is supposed to be from 8 to 15. Course content varies from supervisory and administration techniques ("delegation of authority -- theoretical and human aspects", "importance of carrying out work with a method", and so on) to investigations of markets ("sources of information and methods of contact", "processing the responses", verification of the sample and obtaining statistical conclusions", and so on).

El Instituto de Administración Científica de las Empresas (institute for scientific administration of enterprises) was begun around the beginning of the 1960's with the backing of the Confederación Patronal (employers' association), a move viewed by some as anti-union. IACE organizes seminars, generally importing talent

from the U.S. In February, for example, a 2 1/2 day seminar titled La Actuación de los Ejecutivos brought in Dr. Leonard Sayles from Columbia University. The course was intended for "general managers, high-level executives, and directors", and the charge was 3,500 pesos per person, including lunches.

(There is a good deal of money available for high-level management training, as will be further borne out by subsequent examples.)

The Instituto Panamericano de Alta Dirección de Empresa (advanced management institute) was begun in about 1965 with support from the largest Mexican companies. (It is also thought to be controlled by Opus Dei -- or at least some of its directors are associated with Opus Dei in Spain.) IPADE uses the Harvard Case Method, and is for top management personnel only. A company's president must attend courses in order for other executives to be admitted. Courses are held once a week for about half-day at the Instituto's hacienda (equipped for simultaneous translation if necessary), and are expensive. I was told of a recent example: a course consisting of 36 half-day sessions cost 32,500 pesos.

As a "social contribution", IPADE created ICAMI, the Instituto de Capacitación y Adiestramiento de Mandos Intermedios, for middle-level executives and supervisors. An ICAMI brochure profiled their typical student as being between 25 and married, making between 1500 and 3500 pesos monthly, having completed primary or some secondary education, with more than six years' experience and fewer than 10 subordinates, and of above average intelligence and ability.

The basic ICAMI course meets for 22 (1 1/2 hour) evening sessions over a 10 week period.

In 1967 the American Management Association set up a Management Center which has been doing well, although I was told that for various reasons it has been slipping lately. Unfortunately I was not told the specific reasons. I was given an example of the economics of the Center, however: Mounting a program which costs 50,000 pesos could likely attract 50 participants, each paying 5000 pesos.

Peat, Marwick, Mitchell is an example of the growing number of consulting firms locating in Mexico City and also offering courses. Dr. Miguel Jusidman is in charge of PMM's Human Resource Center. A young psychologist, he is, he told me, one of fewer than ten men in Mexico today with expertise in organizational psychology, and is consequently in demand. PMM's next siminar is aimed at high level management, and will concentrate on motivation and small group functioning. I neglected to ask what its cost will be,

Centro de Adiestramiento de Operadores was one of the first of the recently established training organizations. Its original purpose, as established under USAID's Point Four program, was to train operators of heavy equipment who would then work on highway construction projects throughout Latin América. I did not learn whether that specific mandate had been met, but CAO's present curriculum contains additional subjects quite unrelated to the operation of heavy equipment. They include training Volkswagen mechanics, diesel machanics, automatic transmission specialists, and others. There are some general education

classes included in the courses, such as arithmetic and geometry for the workshop, Technical English, and Human Relations.

CAO's general requirements are that students be at least 17 and have had at least six years of school, and that they qualify medically and in a psychological examination administered by a CAO-employed psychologist. About 10% of all applicants are weeded out by this.

The courses are generally full-time (up to 45 hours per week), and last from two to sixteen months. There are three terms per year, with about 450 students enrolled each term. Staff, consisting of professors, administrators, mechanics, and service personnel, totals about 60.

The Mexican government donated CAO's physical plant, with the understanding that it must be used for teaching. Operating budgets come from student fees (60%), government subsidy (30%) and the Mexican Chamber of Construction Industries (10%). Engineer Eduardo Moya, General Director of CAO, emphasized that scholarships and other financial assistance are made available to qualified needy students, so that lack of money need not hold them back.

CAO is considered successful and two new centers are now in the planning stage, one in Guanajuato and the other in northern Mexico.

Another school in the north of Mexico is the technological institute in Monterrey. I was not able to visit there, but learned that the Instituto Tecnológico y de Estudios Superiores de Monterrey opened after World War II and supported by private business interests in and around the city, and by some U.S. companies with branches

there. It also gets support from the Mexican government lottery and from student fees, which are among the highest in Latin America.

The curriculum is largely in mechanical, electrical, and civil engineering, and is quite strongly tied to the U.S. because of the textbooks used and the fact that many of the faculty (and the president) are U.S.-educated.

The Chamber of Commerce of Mexico began offering courses in 1966. They began with three: Income Tax, Marketing and Retail Sales. Response was good in 1967, 68, and 69, 12 courses of 16 hours each were offered all in the evening. Enrollments ran from 15 to 17, and averaged between 50 and 60.

The Chamber of Commerce hires as teachers businessmen and teachers from the area, and charges relatively modest fees (typically 450 pesos for 8 two-hour sessions.) Sr. F. Hernandez views the courses as a public service. Questionnaires are used continuously to determine the nature of demand for courses as well as general satisfaction with what is offered. Present courses include Accounting for Executives, Credit and Collecting, Financial Planning and Updating for Salesmen.

The Chamber of Commerce also conducts correspondence courses, using its magazine (which goes out to the Chamber of Commerce's 25,000 associates) as the distribution vehicle.

Here as in the other instances, plans are to expand the offerings because the response continues to be satisfying.

The government of Mexico is, as has been noted, partially supporting many of the training just described. It is also, as would be expected,

involved in some programs where it is or will be footing the entire bill. One of these is the Servicio Nacional de Adiestramiento Rapido de la Mano de Obra en la Industria. (Rapid Training of Manpower in Industry). ARMO was created in 1965, but began operations only in February, 1968. The Mexican government built the center, and is providing 3/4 of the first five years' operating costs (which total about \$4 million). The other 1/4 comes from the UN Special Fund. At the end of the first five years the Mexican government will take over the entire cost.

Needs for training are ascertained by ARMO engineers, who visit industries in the Federal District and surrounding areas, and then develop teaching materials for each course. All of ARMO's offerings are technical (as opposed to administrative) courses -- electronics, electricity, mechanical drawing, principles of reinforced concrete construction, and so on. All courses are given in ARMO's buildings, well-equipped (or being equipped) with machines from Czechoslovakia, France, Germany and Denmark (supplied through the UN Special Fund) which are typically used by Mexican industry. Staff, comprised of engineers, teachers, and administrators, totals about 50.

Once decisions on course offerings have been made, announcements are sent out in general release. Enrollments are unlimited, but class sizes are kept small by starting another if more than the maximum (usually 12) should apply. There are no charges for the courses. About 90% of those who enroll do so because their company requires them to.

Requirements for admission to courses are that the student has been working for his company at least six months on a job which is closely related to the course he plans to take, and that he be able to read, write, add, subtract, multiply, and divide. Some courses for foremen and supervisors are given with a specific view toward their becoming able to teach their subordinates more effectively in the actual work situation. According to Luis Abad of ARMO, this is a major problem in Mexican industry -- foremen tend to have as little as possible to do with their minions.

Enrollments are still at a fairly low level (about 400 in 1969), but rapid expansion is foreseen and five regional centers are planned.

CONCLUSION

OCCUPATIONAL TRAINING'S IMPORTANCE FOR DEVELOPMENT

As was mentioned earlier, the short-run importance of occupational training in an underdeveloped country depends on the size of the modern sector. Where the modern sector is small, and individual entrepreneurs are scarce, the modern sector will likely be heavily weighted with expatriate companies. This can conceivably be used to good advantage if the host government exercises its leverage to encourage the establishment of regulated training programs.

The major single employer in most underdeveloped countries is of course the government. Their training programs should be (as is increasingly the situation in the U.S.) examples for the rest of the modern sector. Reality is too often quite different, with government "raiding" private enterprise for qualified workers.

Two factors in occupational training are of prime importance: first, that training of indigenous workers at all levels be made obligatory, as has been done in Mexico; and second, that efforts be made continually to maintain a balance between educated manpower and employment opportunities. (Paukert 1964:351) Then whatever a country's growth pattern, the probability of severe dislocations can be lessened.

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A BRIEF HISTORY OF ATTEMPTS TO BRING THE STUDY
OF MAN TO MAN: ANTHROPOLOGY AND EDUCATION
AND THE USE OF FILM IN ANTHROPOLOGY

G. Kenneth Shuey

PART I. ANTHROPOLOGY AND EDUCATION:

I will use the term culturation to include both enculturation,-- the transmission of a culture to the members of the culture, and acculturation--the transmission of a culture to people outside that culture. Education is the institutionalized form of culturation.

The sub-discipline, Anthropology and Education means the cross-cultural analysis of culturation. It represents a thrust in Anthropology given impetus by the Culture and Personality investigations toward applying the study of Man to the benefit of Man. What is of benefit to Man is a big question which was attacked in the Nineteenth Century by Durkheim, Comte and other pioneers in developing scientific studies of social phenomena. Educators like Horace Mann and John Dewey worked to rid education of religious dogma and replace it with scientific

forms of investigation. Education is subjective by virtue of its existence as an affecter of behavior. Anthropology attempts to be objective. The input of Anthropology into American Education has come about in response to Twentieth Century American values of utilizing scientific methods in the study of Man toward its own social benefit.

Education, being subjective, has as its philosophical base that well-integrated, efficient means of cultural transmission are necessary for human stability. Anthropology joins Education to apply the study of Man to institutionalized transmission of culture.

The term "applied Anthropology" seems redundant since, presumably, Man studies Man, or anything else, because he hopes to benefit from the study. Malinowski (1945:5) said, "...science begins with applications... as soon as a theory is true it is 'applied' in the sense that it is experimentally confirmed." So Anthropology and Education is the application of the study of human behavior in cultural contexts toward Education. It is both the understanding of the processes in cultururation and the affecting of cultururation.

The behavioral sciences in Education have been dominated by Educational Psychology and Educational Sociology. Educators rely heavily on psychological testing and counseling methods. But with the popularization of the Culture and Personality writings came a realization of the influence of culture in shaping personality. Education is about "shaping personality." Since the discovery that personality does not exist outside of culture, educators decided they had better understand culture. They need to know something about value orientation, function of tech-

nology, processes of change, group traits and relationships as they apply to cultururation (McLendon 1966:251).

Linton's Study of Man (1936) presented readily understandable conceptualization of cultural phenomena, materialization of concepts like: status and role, universals and integration. Integration, as put forth by Linton is the degree of unity achieved by a culture. This is of course what Educators are after.

Margaret Mead said that the study of child development is the major approach to the study of culture (1947:70). Educators seek to understand how these concepts enter into the cultural transmission department, both how they affect cultururation, and that everybody ought to understand them. So there is a growing thrust for a broader dose of social sciences in the curriculum as well as a need for understanding cultururation by those who are involved in the system. Mead's offerings have obvious implications that these are better ways to bring up children than we use.

The early efforts of the culture and personality writers were directed toward teaching a tolerance for diversity. One cannot read Mead or Benedict's descriptions of sexual freedom in other societies and be tolerant of a social organization which produces guilt complexes and perversions. Writing just after World War II, Elgin Williams (1947: 84-90) pointed out the complexity of the problem and the lessons of Anthropology. He explained that tolerance for all cultural diversities might be a bitter pill to swallow for someone like a survivor of Hiroshima, or whatever Jews might be left in Western Europe for example. So Education wants more than to teach tolerance for diversity, but that a

social traits and the needs which cause them must be understood in order that needs can be satisfied by non-destructive means. As Benedict put it, anthropology's job is "...to scrutinize different institutions and cast up their cost in terms of social capital, in terms of the less desirable traits they stimulate, and in terms of human suffering and frustration (1934:229)." Sapir, Kardiner, and others who were connected with psychology--and psychology being connected with Education were thrusting psychology into everything. Sapir attempts to philosophize in "Culture, Genuine and Spurious" (p. 308) that an understanding of cultural processes ought to tune people into the development of "...a profounder harmony of life, a deeper more satisfying culture." (p. 317)--precisely the goals of Education. Of course opinions vary as to what "profounder harmony of life," or "deeper more satisfying culture" are, so we look to science to provide rational answers. George Spindler (1955:257) gives the following definition of the role of anthropologist in Education: he contributes a wider perspective in seeing the process of Education as a cultural process; his studies break down ethno-centrism and present an objective cross-cultural approach to educational objectives; he teaches cultural awareness.

And the limitations: the anthropologists tend to be ethno-centric about his science--the study of Man often becomes The Study of Man. He is not always careful in making cross cultural comparisons and in studying small integrated societies Anthropologists tend to oversimplify. Spindler calls for research in indirect learning, in the functioning of roles, e.g. there are few male models in American Education, and in

cross-cultural research.

Kardiner (1939) emphasized indirect learning; Cora Dubois contributed studies of Alorese discipline; and the Whiting group's study of Six Cultures (1963) are examples of anthropology's main contribution to education.

George Kneller (1965), an Educator, points out that the Anthropologist shows us an awareness of the diversity of cultures, the impress of culture on human behavior and personality, and how much or how little human behavior can be altered. And as Redfield noted (1959:4) its limitations are that it understands groups better than persons and it does not go deep into individual nature--least of all into the unconscious. Whereas other scholars study certain aspects of a culture, Anthropology seeks to relate all aspects to the culture as a whole, whereas other scholars concentrate on certain advanced cultures of the industrial West, the Anthropologist turns to all cultures, past and present (in Kneller 1965:3).

Cultural change theory has become important in the context of Education since the onset of the great foreign assistance programs after World War II. It represents attempts to export American culture and has generated a great deal of confusion about who is changing what. Not only are formal politics involved, but making decisions about what is right for one's own culture is quite a different thing from making decisions about what is right for someone else's. Change theory is very often concerned with man-power development, implying that the economy (usually technological exchange feature typical of American culture)

rather than the individual is the important thing.

Education is at once conservative, in that it attempts to transmit already accepted behavior; and innovative, in that it attempts to change behavior according to its philosophy. At the root of Anthropology and Education is the study of factors which change behavior or hold it constant. Four questions are asked about cultururation (from Nicholson 1968):

1. What is presented? From Linton comes the concept of "universals."

These are ideas, habits, and other conditioned responses common to all adults considered sane in a society. A new term for this is prescriptive behavior--the behavior each individual must learn in order to achieve minimum adaptation to his society. For example, in America: English language, writing, arithmetic etc. are prescriptive. Alternative behavior is the latest dance steps, short-hand, calculus, etc; cultural patterns are also presented, they give coherence, continuity and distinctive form to the society. Values, both overt and covert, are presented. From culture and personality specialists come 3 features of the learning situation:

Content - the substance of what is presented

Context - social and biographical circumstances accompanying presentation. (age, sex, level, position, stratification)
- method of presentation (how it is presented)

emotional response to some degree is a variable which pervades every learning situation.

So in large complex societies, the pie is cut up into more pieces than in others where the pie itself is smaller. Smaller societies offer a major portion of the cultural base as prescriptive behavior, whereas in

plural societies alternatives are the largest category of learned behavior.

The school in our society presents much of prescriptive behavior. There are many factors which influence what is presented: sex, race, philosophy, religion, some values are presented as prescriptives, others as alternatives. Anthropology and Education asks: what is presented to all? And what is presented to select individuals? In the context of acculturation (culture change), form of behavior is more easily transmitted than content.

2. Who presents cultural behavior? The major concepts contributed by Anthropology are the status and role of the donor. Anyone is a potential donor and the culture defines the institutionalization of the donor: e.g. teacher, police and clergy are institutionalized donors. As cultures change, one of the main things that happens is the definition of new roles and new statuses. What other roles reinforce the donor role? Who is sanctioned to transmit culture? Who in fact does transmit culture?-- movie actresses, commercials, etc. Margaret Mead, in Cultural Patterns and Technical Change (1955b) observed the problem which arises from the failure to recognize the extent to which different individuals, different occupations, classes, and cultures depend on implicit learning from artifacts, on empathetic, insensitive and identificatory learning and on gestalt learning. The donor is a model with whom the learners identify. Other symbols which alert others to donor status are titles, clothing, language usage, etc.

3. Who learns cultural behavior? The most important factors in any culture are sex, age and social status. These are criteria which

the society uses to allow participation in learning.

4. What is learned? Enculturation; acculturation; direct learning--intended transmission of specific content; indirect learning--(a byproduct of direct learning or learning by imitation), model personality (du Bois)--most common personality traits, similar experiences, child raising customs etc. yield similar personality traits. What is learned, then, is related to what one has access to. Benedict and Mead point up examples of learning and un-learning e.g. a fear of adult behavior, not teaching sex to adolescents, but expecting them to cope with it. Although the major introduction of Anthropology to Education came from culture and personality the whole scope of Anthropology has relevance to the educator's goals. As Psychology is concerned with function of individual behavior so is Anthropology concerned with function of group behavior--Malinowsky contributed methods and theories toward understanding the function of cultururation processes. It was a realization of the scope of education, that it wasn't just a matter of schools, but of processes of cultural transmission which exist in all cultures. And it has recently led to new searches for alternatives to school and alternatives to curriculum.

PART II. THE USE OF FILM IN ANTHROPOLOGY:

The development of the use of film in Anthropology is rooted in the same movement as Anthropology and Education. From culture and personality studies came the desire to communicate the study of Man in whatever way possible, through the formal Education network and through the developing visual media.

In an address to the American Anthropology Association Margaret Mead called for unity and communication among the social sciences, for greater use of equipment like film, the computer, etc. "...if we stop to think where astronomy and biology would be if they had treated the telescope and microscope in as casual, unaware, and irresponsible fashion as Anthropologists have treated the camera and the tape recorder, the strange archaic palsy that has come over parts of our science is only too clear (1961: 480)."

Robert Flaherty is often called "The Father of the Documentary Film." The subject of his documentation, even though contrived and artistic, is ethnography. In his words, his films were made to "celebrate." Flaherty is now almost a mythological figure, he is said to have developed the film shot for "Nanook of the North," frame by frame, using the arctic sun shining through a tiny hole in the wall. Film making today is another thing entirely. Refinements of portable equipment make possible more accurate and more complex celebrations of life than Robert Flaherty could make.

But what have not changed are attitudes toward films of people acting out their daily lives. The ethnographic film is still in its infancy. At any ethnographic film conference the question is forever raised, "why film?" And the answer comes that film is that particular ethnographer's way of communicating what he sees. For some reason, when film is considered for ethnography, it is expected that some magic system will be devised which will make it completely objective. This is no more possible than devising a system for making field notes completely

objective.

"Film is so false, there is so much room for trickery, one can control space and time"(Crichton 1965:79). Agreed, and the same can be said for writing. Crichton further states that there is no such thing as "reality" in film. As soon as you introduce a camera into a situation you are necessarily being selective "...Therefore it is better to be selective in the first place on the basis of research analysis." (p.79)

Robert Gardiner (1957:348): "...it is...human to perceive faultily much that is visible...sight is a selective process." Film is used to communicate selected perceptions from the Anthropologists' study of the society. It is the sharing of experiences that is important. Gardiner points out the great similarity of film to the processes of perception and selection, film is a way of making human feelings better known.

It is easy to shy away from responsibilities involved in communicating feelings. Spreading your study out to mass audiences can leave you wide open. Crichton explains that the film-maker must decide what message is to be conveyed, to whom, how? The answer may even be that film is not the best medium to communicate a particular problem. Any film is only as valuable as its maker's knowledge. "The big companies do make social documentaries but social change is shown as being merely another name for the smooth flow of progress...technical problems are permissible, sociological ones are not. Furthermore, many politicians, whose images are placed with the future, do not welcome the unit which wishes to film aspects of traditional ways of life, or of an evolving society." (1965:80)

Mead felt that understanding ethos is essential to the study of any culture. Coming of Age in Samoa, Growing Up in New Guinea and Sex and Temperament attack the problem of understanding "...those intangible aspects of culture referred to as ethos," --defined by Bateson as "a culturally standardized system of organization of the instincts and emotions of individuals (Mead 1942:xi)."

Their earlier attempts to understand emotional character were criticized as either too journalistic or too analytical. In their studies of Balinese character they attempted to investigate emotions associated with activities through the use of photography. The photographs serve as illustrations of Mead's observations. They prove nothing. But they show a great deal. If one is making a comparison of, for example, the allocation of resources in Bali with that of another culture, he would benefit very little from the photographic study. Whatever use he might make of the study depends entirely on the adaptability and accuracy of Margaret Mead's recording methods, not on the photographs.

The value of the study is that it communicates some insight into Balinese life--insight which is only as valid as the recorder's eyes can make it.

Robert Gardiner was responsible for "Dead Birds," a film which offers the viewer the sharing of a specialized form of warfare in another culture. By itself it is of limited "scientific" value in that it leaves much data unconsidered and unanalyzed. But it does allow the viewer to share to some degree the experiences of the people. It is one thing when CBS goes out for a week with a large crew to film an aspect of a culture,

and it is another thing when an Anthropologist-film-maker does. Ethnographic film attempts to communicate what the ethnographer sees through his own eyes plus it offers the chance to view it again and again. In skillful hands a camera can communicate an experience and an analysis of it. Films can communicate "...fragments of a larger time time and space... within the limits of the people who use them." (Gardiner 1960:149)

Under Gardiner's direction the Peabody Museum Film Study Center undertook a combined research and production project among the Kung Bushmen in the Kalahari Desert. The project involved 250,000 feet of film--5 days and 5 nights of screen time. Five major subjects were selected: The Hunters, the Gathers, the Players, the Tythms, and the Seasons. The Hunters now has a wide-spread distribution; John Marshall, its photographer, has continued in ethnographic film-making.

"How can photographs function other than illustration?" This has been John Collier's (1957:843) principal question. He poses it against modern ethnology's major orientation: "...a deep distrust of visual observation." Anthropology is more concerned with what a man thinks than how he looks (1957:843). From his research in the Maritines of Canada he learned that interviews assisted by photographs offered a shorthand for information and, more important, the graphic image can stimulate expression of values and release submerged reactions.

In his recent book Visual Anthropology (1967), Collier describes how a man taking pictures can become a part of the society. By being a photographer, everyone knows what he is doing, if he is wise, he will be able to use that to his advantage (p. 10). From Redfield's Chan Com

comes the idea that since a community is an integrated chain you can begin anywhere and you will be led throughout (1967:10 paraphrasing Redfield 1959). Collier speculated that the passage of one day with all the members of one family would be a synchronous view of the whole, offering details which might never be considered otherwise (p. 16). This has been done best by Education Development Center, Inc. in their films of the Netsilik Eskimos and by the Peabody Kung studies--all of which were preceded by extensive field investigation.

Film offers anthropology "...the emotional character of culture and the psychological content of human relationships (Collier:133)."

In 1967 John Adair and Sol Worth undertook a project wherein Navaho were trained in film making and were given the opportunity to conceive and make whatever film they desired. The project was designed to see if: 1. people in another society could use film "language," 2. if it would assist in on-going research, 3. if this will enhance our understanding of how the Navaho perceives his culutre, 4. to assist in guiding innovations (1967:76-78). This project represents an attempt to understand the Navaho from their point of view. It is a technique which is now gaining popularity. The National Film Board of Canada is using it in New Brunswick, Art France (of Univ. of Massachusetts) in Brownsville, and The Films of the Inner City are examples of this.

In addition to Ethnographic usage of film, there have been attempts to use film as a recording device in research. Studies of Child development by Gesell, Gajdusek and Sorenson, wherein specific aspects of customary child behavior are filmed and compared across cultural lines.

This has led to the establishment of a Research Film archive at the National Institute of Health.

Other applications include filmed demonstrations of particular aspects of culture, films of an entire ritual, of specific techniques such as pressure flaking, or of a dance.

CONCLUSION

In summarizing Anthropological theory Harris (1968:234) states, "...the announced goal is to explain social facts in terms of social facts, rather than ideas in terms of ideas (from Durkheim, Compte, and Maus)... 'social life is essentially practical. All mysteries which mislead theory to mysticism find their rational solution in human practice and in the comprehension of this practice (from Marx).'"

But with such a complex thing as social behavior, where, in any important problem, the variables are liable to be infinite, the restriction of inquiry into only those areas where the scientific method can be used is to limit the significance of a study to the moot alone. So we have Levi-Strauss (1967:16) "...the originality of social Anthropology: it consists not in opposing casual explanation and understanding, but in bringing to light an object which may be at the same time objectively very remote and subjectively very concrete, and whose casual explanation may be based on that understanding, which is, for us, but a supplementary form of proof... (Anthropology is) less proof than guarantee." The Culture and Personality studies focus on deep understanding of what the actor thinks and feels. It represents an attack on something too complex for

purely objective and empirical study, yet of great significance to Man. It emphasizes the humanistic value of social science, but whenever that becomes over-emphasized it is pulled back into line by movements for objectivity.

Both Anthropology and Education and the use of film in Anthropology represent attempts to communicate to the common man knowledge gained from the scientific study of Man. They are attempts to fill the gap between the esoteric language necessary to the disciplined conceptualization and ordering of social phenomena and the common language of non-scholars. The study of many societies has yielded a great deal of knowledge about man's dual needs for individuality and companionship, knowledge which might assist the growing populace of homosapiens to inhabit the same planet more comfortably and harmoniously. No one can expect everyone to delve into the study of Man so completely as the Anthropologist does. But, though the gap is wide the concepts involved are logical. For Anthropology to benefit Man, selections and generalities must be made to spread the knowledge around. The job of selecting and communicating are the essential tasks in Anthropology and Education and the Anthropological film.

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