A case study of a model teacher training school in Ivory Coast: student characteristics and participatory behavior.

Stephen H. Grant
University of Massachusetts Amherst

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A CASE STUDY OF A MODEL TEACHER TRAINING SCHOOL IN IVORY COAST:
STUDENT CHARACTERISTICS AND PARTICIPATORY BEHAVIOR

A Dissertation Presented
BY
STEPHEN HALL GRANT

Submitted to the Graduate School of the
University of Massachusetts in
partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION
June, 1972

Major Subject: International Education
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A CASE STUDY OF A MODEL TEACHER TRAINING SCHOOL IN IVORY COAST:
STUDENT CHARACTERISTICS AND PARTICIPATORY BEHAVIOR

A Dissertation
By
STEPHEN HALL GRANT

Approved as to style and content by:

David R. Evans
(Chairman of Committee)

[Signature]

[Signature]

[Signature]

[Signature]

June, 1972
The objective of this thesis has been to portray coherently and honestly my research experience in Bouaké, Ivory Coast during the school year 1970-1971. This experience concerns namely the pursuit of three research inquiries which were designed to be particularly appropriate questions to ask in the first years of the model teacher training school in Bouaké. Since I was involved in the initial stages of an innovative educational enterprise, I considered it important to present more than simply the findings which the data analysis generated. I tried to describe also the process of performing social science research in the Ivorian setting. Hopefully, tying the research topic to the working conditions at the school would increase the usefulness of the study to future researchers.

I want to draw the reader's attention to one potential difficulty of cross-cultural research: working in a foreign linguistic zone. All the field research activities were conducted in the French language. (I considered myself linguistically competent to perform research in a Francophone area because I had earned an advanced degree in French, had lived many years in French-speaking countries, and spoke French in the home.) The documentation from the
research project, however, is written in English. I have translated quotations from texts, questionnaires, and information gathered from students and from other informants. I believe that the risk of misunderstanding or unfaithfully translating is at a minimum.

I have debts of gratitude to express to persons and organizations in Abidjan, Ivory Coast. I deeply thank the Ministry of National Education which authorized the study to take place. I was fortunate to receive pertinent up-to-date documentation from the Bureau of Developmental Studies of the Ministry of Planning. The Bureau of Planning and Statistics in the Ministry of National Education willingly gave me not only counsel but copies of relevant documents it had produced. Members of two research institutes, the Institute of Ethno-Sociology at the University of Abidjan and the Bureau of Educational Guidance (S.O.P.E.D.) in the Ministry of National Education advised me on certain problems I might encounter as a researcher in Ivory Coast.

The Center for International Education at the University of Massachusetts in Amherst provided firm support throughout the doctoral program. While in Amherst I benefited from the Center's training in developmental education and cross-cultural communication; while in the field from its financial and moral backing.
Of the many individuals in Amherst who contributed to the completion of my program I would like to mention a few. I was greatly helped in the task of data analysis by another Fellow of the Center, Michael Hagerty. Throughout the research process I received constant support and guidance from faculty members, in particular from my thesis advisor, David Evans. I am especially grateful for his quick and pertinent reactions when I needed help on substantive or methodological questions, for his editorial suggestions, and for his understanding that the field researcher often requires moral encouragement. George Urch was immensely supportive as a professor who had conducted research in Africa and who understood the problems and promise of working in an African school setting. Tom Hutchinson helped enormously by suggesting procedures for data analysis. Thomas Cassirer as a keen observer of human development on the African continent, inspired me to consider the implications of the educational enterprise in which I was involved. I was particularly happy that two of these members managed to visit me at the research site.

My family provided unflinching support during the four years I was immersed in the doctoral program. I don't know how to thank my wife and children, always with me, and my parents, never far away, for their devotion to my cause.
To conduct research for this document I relied heavily on the cooperation of the personnel at the teacher training school in Bouaké. The school administration consented to my demands on faculty and student time, thus allowing me to have the close contact necessary for the study to occur. I appreciate that individual faculty members, including one I want to thank personally, Guy Dekens, offered their advice. It is the one hundred and twenty-five students whom I have taught a little but who have taught me much who deserve my highest praise. I believe that as a foreigner in an Ivorian setting I can best justify my presence by accompanying my teaching role with an earnest commitment to understand the students I live with.

February, 1972                                           Stephen H. Grant
University of Massachusetts
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CHAPTER I
THE STUDY

The Problem

The study is based on a problem which is expressible as three research inquiries. They all refer principally to one population: the students training to be primary school teachers at the Ecole Normale d'Instituteurs in Bouaké, Ivory Coast during the academic year 1970-1971. The first inquiry is of the descriptive nature: how can student participation be operationally defined and then measured? The second inquiry is partly descriptive and partly analytic. Little information is available on the student population. Who are they? More precisely, what are some of their demographic, experiential, and attitudinal characteristics? The third inquiry is exploratory: do some of these characteristics--selected to this end--appear to demonstrate relational properties with participatory behavior? That is, are there any patterns in the relationships observed between the students' level of participation and various other characteristics they exhibit?

Importance of the Study

The Ivory Coast government has recently launched a massive program of educational reform centered around televised broadcasts to primary school classrooms. Television was never proposed as a substitute for the teacher. Reliance
upon the new media was designed to take the burden of initiating and organizing the curriculum off the teacher. In 1969 a model school was created to train pre-service primary school teachers for a new role.

At the outset of any major enterprise it is fitting to gather information; not only fitting but necessary if one pretends to compare any apparent progress in the future with the initial position. At least four specific reasons can be advanced for collecting data—such as those in the present study—in the early stages of the Educational Television (ETV) project. Having launched the project, the Ivory Coast government's best interests are to help it succeed and be worth their substantial investment. Data can be used in a feedback process to help in decision making on the level of the ETV project authority. Second, other African and developing countries will want to learn all they can from the Ivory Coast experience if they are contemplating reforms in their educational systems. Third, the Ivorian Ministry of Education has officially stated its commitment to "a continuous and complete evaluation of the ETV program results," but has been unable to obtain financing to create an evaluation unit for the program.¹ The present study helps to meet that commitment at a time when no other similar research

is being performed. Fourth, the Education Ministry has formulated several objectives for its reforms: one important one is the active participation of students. In this light, the present study appears appropriate and timely.

Research Design

One constraint put on the research design involves the choice of instrumentation. Like many countries of colonial heritage, Ivory Coast publicly repudiates the imposition of measuring devices and norms of a Western model. The idea of locally conceiving new instruments of measurement coincided with this researcher's own convictions: not to import inappropriate tools but to work within the context of Ivorian reality. Consequently, the first task of defining operationally student participation was to be performed by the researcher guiding the collective efforts of the whole population of the Ecole Normale d'Instituteurs of Bouaké (ENI): students, faculty, and administration. Each of these three sectors could produce an input to form a composite conception of what student participation at the ENI seemed to include or imply. At the end of this first task a checklist would be produced of factors constituting participatory behavior.

The next task would be to identify to what degree the ENI students reflected these participatory behaviors or attitudes. It was planned that both the student body and the faculty would rate on a scale each student's participation level in each separate criterion of the checklist. In this
manner ratings would be obtained for each student along the
dependent or criterion variable, student participation.

Readings in related studies and working hypotheses
gained from familiarity with student life would contribute
to isolate those factors in a student's background, his
activities, and his attitudes which might potentially be
related to his level of participation in his training pro-
gram. Extremely little information is kept in official re-
cords on Ivorian students. A necessary step would be to re-
quest information from the students on various aspects of
their life. In such a manner a series of independent vari-
ables would be formulated and information on them gathered
from the students.

Finally, the relationship between independent vari-
ables and dependent variable would be studied. The design
would not test hypotheses, but would describe and analyse
the variables and some of their more important relationships,
in view of laying a groundwork for future research. A high-
powered analytic study would not yet be called for, for the
program was still small scale, in its initial phase, con-
tinually redefining itself, and for the moment extremely
atypical in the context of African education.

Overview

Chapter I has stated the problem of this study, the im-
portance and relevance of such a study in Bouaké at this
time; and the general methodology intended to pursue the research.

Any study requires background information on the population and on the setting in which the population is found. Such a background is particularly needed where the setting is in a different hemisphere and in a different cultural-linguistic zone from one's own. Chapter II will provide an introduction to the study proper by briefly presenting the country, the educational system, the ETV project, and the teacher training school, ENI.

Chapter III presents results of research studies in Africa or elsewhere which are related to the present study, namely to the independent variables investigated at the ENI, to the definition or measurement of participation, and to the observed relationships between these sets of variables.

Development of the instrumentation and collection of the data are described in Chapter IV. This researcher firmly believes that the problems and trials encountered in the research process provide fitting accompaniment to the hard data collected and merit their place in the study. Consequently, the reader will not be shocked when he meets the first personal pronoun, for the researcher is attempting to recapture the personal predicaments which attended the collection of information in a foreign environment.

Chapters V through VIII present different aspects of a "Description of the Population." A chapter each is
devoted to demographic data, attitudes previous and present, attitudes directed toward the future, participatory features and test scores. Information gathered from the students is presented in tabular or graphic form, accompanied by an explicatory commentary and often by direct quotations.

The reliability of the depended variable, student participation, is examined in Chapter IX before certain independent variables are crosstabulated with the measures of participatory behavior. Each observed relationship is compared with the expected relationship, in the purpose of isolating important interrelations.

Chapter X reviews the implications of each major aspect of the study for future research.
CHAPTER II

THE SETTING

Any random detail of daily life at the teacher training school ENI reflects a whole history. The content of the curriculum; the selection procedures; the vacation schedule; faculty-student relations--each element exists in its present form because of a series of historical circumstances, most of which stem from the legacy of French colonialism. In the present study it is necessary to understand the formation of Ivory Coast and the extent of French influence. It is also important to grasp the nature of the educational system, particularly the sectors of primary education and teacher training. The rationale behind the government's radical reform in education--new objectives, new structures, and new techniques--must also be reported before one presents important elements of that reform. Finally the specific setting for the study, the ENI, bears description.

This chapter will take the reader through a series of concentric circles as he approaches the researcher's first contacts with his population.
The Country

The visitor to Ivory Coast is immediately struck by three main truths: the local people are black Africans; it is a developing country in a tropical setting; French is spoken and many other evidences of French civilization are present. Ivory Coast's history has been sketched to date, without notable disagreement, by both Ivorian and French authors. In La Côte d'Ivoire dans la Cité Africaine¹ of F.J. Amon d'Aby (director of Archives in the pre-Independent Ivory Coast and presently Chief Inspector in the Public Administration Department) and in a Larousse-edited monograph on Ivory Coast,² the following principal events have made Ivorian history.

In the 1840's a French Naval Officer was sent by Bordelese merchants to sign treaties with local chiefs claiming the coastal territory as part of a French protectorate. By the turn of the century, treaties with all village chiefs closed the Ivory Coast to other colonial nations. The English were to the East (Gold Coast which became Ghana at Independence), the American founded Republic of Liberia to the west at the natural border of the Cavally River, and the French controlled Guinea and Sudan to the north-west. At that time Upper Volta was included in the northern portion of Ivory Coast. In 1893,

¹F.J. Amon d'Aby, La Côte d'Ivoire dans la Cité Africaine (Paris: Editions Larose, 1951).
after a mixture of diplomatic agreement and military pacification, Ivory Coast became a French colony.

Writing before Ivorian Independence, Amon d'Aby claimed:

Ivory Coast is an essentially French creation. Before the French arrived, the country was broken up into an infinity of principalities, where in almost every case anarchy, internal disputes, and human sacrifices were the rule. Only rarely did commercial ties bind neighboring tribes.³

Indeed, the 127,500 square miles now forming Ivory Coast (a country about the size of New Mexico) contained over sixty different ethnic groups, which over the eastern (Akan family), northern (Sénoufo family), and western (Krou family) borders overflow into other territories; only an external power could have forged such an arbitrary assemblage into a unit under these conditions. From 1893 to 1907 the French created permanent posts over much of the territory, promising protection against invasion and safety within the limits of French controlled land. The colonial administrator coerced the population into giving up part of their subsistence economy crops (yams, plantain bananas, cassava) to grow exportable products, such as coffee and cocoa. Although Ivorians expressed resentment to some aspects of colonial rule, such as forced labor crews to build a road network, it is recognized that the French impact has pushed Ivory Coast up to the world's third largest producer of coffee and Africa's fourth largest producer of cocoa.

During the First World War, Ivory Coast sent troops to defend France and shipped local products to the front: palm oil, rubber, wooden planks, and cereals. Amon d'Aby, who claims that the recruitment offices could not satisfy the plethora of volunteers, wrote:

The 1914-18 War permitted France to realize the stability of its pacification program: its enemies of yesterday had become its best defenders.4

In the Second War Ivory Coast in consort with the other colonies in French West Africa remained loyal to the collaboration government at Vichy until the allied invasion turned the tide for Marshal Pétain's cause. Soon after the war, General de Gaulle under the Fourth Republic founded the French Union, where French-African colonies were transformed into overseas territories, each electing deputies and senators to parliament in France. France thus promised to conduct the French Union members toward democratic self-government. Ivory Coast became an autonomous Republic within the French Community in 1958, and achieved the full status of sovereign nation in 1960.

With the preceding historical background, what is present-day Ivory Coast? The population is close to five million, with approximately 50,000 non-Africans (mostly French, with Lebanese merchants in second place). One million of the Africans are non-Ivorians, coming predominantly from Mali,

4Amon d'Aby, op. cit., p. 38.
Guinea, and Upper Volta. Among the sixty tribes in Ivory Coast the largest is the Baoulé, with about 700,000 individuals. This ethnic group is located principally near the center of the country around Ivory Coast's second city, Bouaké. Ninety-five per cent of the Ivorian population earn a living from agriculture. The non-African population dominates middle-size and large-scale business enterprises, teaching, and many are still employed by the government in advisory capacities.

Stretching between the fifth and the tenth parallels north of the equator, the country is divided between dense tropical forest in the south and dry savannah to the north. The forest zones produce the cash crops that make Ivory Coast "the richest and potentially most economically self-sufficient state in former French West Africa:" coffee, cocoa, tropical woods like mahogany, bananas, pineapple, rubber, palm oil, cola nuts. The sandy and lateritic northlands produce cereals (rice, corn, sorgum, millet) cotton, and tobacco. Income to Ivory Coast from exports has tripled since Independence in 1960. To illustrate, here are Ivory Coast's main exports and their world position as of 1970: third producer of coffee after Brazil and Columbia, fourth producer of cocoa after Ghana, Nigeria, and Brazil, fifth

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producer of pineapple and bananas, and the first African producer of rough timber. The industrial sector, which contributed only six per cent of the gross national product in 1960 now represents fifteen per cent of the GNP. Of all the countries responding to President Houphouet-Boigny's invitation to invest Ivory Coast, France holds over eighty per cent of the total investments.

French influence is significant enough in both public and private spheres to warrant further discussion. Although Ivorian Independence might have meant a reduction of the French residential population, the 20,000 Frenchmen working in Ivory Coast in 1960 have been increased to 40,000 in 1972. Presidents Pompidou and Houphouet-Boigny have discussed this issue during the French President's State Visit in February, 1971. Houphouet publicly reminded Pompidou that "Ivorization is necessary and normal." Pompidou reminded his compatriots that it was their duty to train Ivorians while making a living themselves.

Besides increased numbers of Frenchmen, the second notable evolution in French assistance is an increase in participation in multi-national projects. The hydro-electric dam at Cossou is a joint Italian-French-American project, and the educational television project in Bouaké involves cooperation from Germans, Canadians, Italians, Belgians, Americans, and English, although it is very much a "French" project. If Ivory Coast has outgrown its heavy dependence
on French aid because the international community is sharing with France that role, its dependence on France to buy its exports has evolved correspondingly. While 50 per cent of all Ivorian exports in 1960 went to France, just over 30 per cent in 1970 were sold to the Metropolis. President Pompidou concluded his remarks in Abidjan: "the Ivorian economy is firmly on its feet, and France is proud of the role it played."

The Educational System

When French President Pompidou during public talks with African leaders on their soil evokes "our common heritage," one is reminded of the opening line in reading primers circulated by the French government throughout their colonies: "Our ancestors, the Gauls..." Subjects in French colonies were expected to respect French civilization and cooperate with French "cultural missionaries." The most successful African in the French system could achieve high status in the national government. Both Senegalese President Léopold Sédar Senghor and Félix Houphouet-Boigny were Ministers in the French government. Houphouet was Minister of State and then of Health for ten years, and points with not a little pride at the astonishment of many Americans when he toured Harlem accompanied by his white "Directeur de Cabinet."8 While this is not the place for an extensive comparison of French and English administrative policy in

Africa, it is interesting to note what Edward Mortimor, a British historian, has written: "Britain would never have accepted the presence of N'Krumah or Kenyatta in the Macmillan Cabinet—the idea seems delightfully absurd. Yet the equivalent is what France accepted."  

While France clearly allowed the most promising Africans to further their studies in schools designed mainly for the children of French residents, it is not true to say that the French completely neglected the less fortunate youth in the local population: the Educational Ordinances of 1903 established a network of village schools, where the curriculum was heavily based on agriculture. Ironically, many Africans, refusing to be considered as second-class or different, preferred that their educational standards, techniques, and priorities maintain a parity with the Metropole. Remi Clignet and Philip Foster even argue that "indeed it was the most progressive officials who advocated the creation of metropolitan forms of education in Africa, with the expectation that the barriers between African and European would thus be eradicated."  

As colonial educational policy developed, the purposes it set were defined as those necessary to support local administrative needs. A 1917 issue of the French West African


Education Bulletin mentioned the fields where the local population could receive instruction.

It is not only a matter of providing our schools with native teachers designed to supplement the European teachers. It is a matter of providing all branches of administration, of industry, of agriculture, of health care and of social work with a native personnel able to back up the insufficient European personnel and, to a certain degree, to replace them in case of necessity. 11

Although the colonial government aimed first to train support staff for its administrative hierarchy, it also prepared the infrastructure for a civil service which a few decades later would be on its own.

The language of instruction is a potentially controversial issue. Article 64 of the 1924 Education Reorganization Act for French West Africa stipulated that "French is the sole language used in the schools. It is forbidden for the teachers to use local idioms with their students." This seemingly draconian policy (which for comparison was not followed in British Africa where English was progressively introduced mid-way in the elementary school cycle) had its unifying effects upon the sixty-plus tribes who could often not understand each other's language or dialect. Although it has been estimated that about 10 per cent of the population in Francophone Africa actually speak French, 12


12 Meisler, op. cit., p. 12.
a result of the elitist educational policy, French has been declared the official language in Ivory Coast. All official governmental and educational discourse is held in the French language. The most severe critic of French colonial educational policy is perhaps Abdou Moumouni, who repudiates the use of French in African teaching. He chastises French imperialism for having through its racist policies of sabotage and depersonalization provided a cut-rate education to Africans and for having thus caused their present alienation crisis.\textsuperscript{13} The list of works is long that chronicles the benefits and crimes of colonialism in matters of educational policy. This section has only sketched some of the recent major arguments and mentioned some effects of the colonial system.\textsuperscript{14} Before turning to the recent educational picture in Ivory Coast it is appropriate to mention some final aspects of colonial educational history. Toward the beginning of the century primary schools were established by the French, and shortly after a training school for Ivorian primary school teachers was erected. During the next fifty years a few regional teacher training schools were created. They were


\textsuperscript{14}The impression must not be given that the French magnanimously laid out an educational system where no education took place previously. The transfer of knowledge and training of village citizenry were carried out through the (oral) passing down of traditions or through the (written) Arabic teaching of marabouts in Koranic schools. The most erudite Africans who have written in French on traditional education are Ahmadou Hampaté Bâ of Mali and Niger's Boubou Hama.
three-year institutions, offering a first year of general pedagogy, a second year of specialized pedagogy by subject matter, and a third year of applied pedagogy in practice teaching. The first secondary schools were built in the 1940's. After this historical introduction, basic structural features of Ivorian education will be presented.

**General administration and budget.** The Minister of Education supervises five directors and their staffs: his own Cabinet Director, the General Director of Education, the Director of Higher Education and Research, the Director of Administrative and Financial Affairs, and the Director of Cultural Affairs. (Consult Figure 2 on page 18 for the official flow diagram and breakdown of these Directorships.) It should be added that under the Departmental Directorship of Education falls the Inspectorate, which itself supervises the staff of pedagogical advisors. And finally a modification to the Ministry's structure was announced in December, 1971, when the Minister gained two "Secretaries of State," one in charge of culture and the other in charge of primary education and educational television. In the next official flow diagram these two functions will be placed immediately under the Minister's position.

The Education budget, which finances all areas represented in the flow diagram (plus subventions to private schools) formed almost one quarter of the total national
Minister of National Education

- Minister's Cabinet
- General Directorship of Education
- Directorship of Higher Education and Research
- Directorship of Administrative and Financial Affairs
- Directorship of Cultural Affairs
  - Administration and Personnel Bureau
  - Investment, School Construction, and Maintenance Services
  - Bureau of the Budget and Expenditure Control

- Bureau of Statistics and Planning
  - Bureau of Pedagogy and Teacher Training

- Scholarship Bureau

- Housing Service

- National Commission to UNESCO
  - Bureau of Primary Education
    - Personnel Bureau
    - Educational Television Program

- Bureau of Secondary Education
  - Personnel Bureau
  - and Private School Services

- Bureau of Examinations
  - Bureau of Nutritional Services, General Services, and Post-schooling Services
  - Departmental Directorship of Education

FIGURE 2
FLOW DIAGRAM, MINISTRY OF NATIONAL EDUCATION, DEGREE 70 333, MAY 25, 1970
budget in 1970.\textsuperscript{15} Ivorian financing of education is supplemented by external aid, the greatest of which is French, such as their financing 1500 secondary school teachers and University faculty.\textsuperscript{16} For every one Ivorian secondary school teacher or administrator (public and private sectors including teacher training) there are three Frenchmen in these categories.\textsuperscript{17} Primary school personnel in the public and private sectors contain less than 50 per cent Ivorian representation, but the non-Ivorian personnel is not broken down by nationality. For higher education no such personnel figures can be deduced from the 1970 official statistics, but the percentage of Ivorian professors is presumed to be very low.

**Structure and enrollment.** In 1960 there were 200,000 students in primary schools; in 1970 over double that figure. The increase in primary school enrollment from 1969 was on the order of 9 per cent. Secondary school enrollment

\textsuperscript{15}The education budget figures never indicate expenditures incurred in primary school building construction and maintenance, which, as in France, is the responsibility of the municipality, or, as centers other than Bouaké and Abidjan are referred to, of the "local collectivity." The Ministry has regretted that the figures are not available, but these capital expenses are usually not recorded in municipal budgets and sometimes are not assessed in monetary terms.


\textsuperscript{17}République de Côte d'Ivoire, Ministère de l'Éducation Nationale, Service Autonome des études générales de planification et des statistiques, Statistiques: Situation de l'enseignement au 1er janvier 1970 (Abidjan, 1970).
in 1960 numbered 8,000 and ten years later almost seven times that figure. The increase from 1969 in secondary school enrollment was 19.1 per cent. Higher education has recorded the most striking growth over the ten-year period. In 1960, 71 students who had passed their baccalauréat exam after secondary school were furthering their studies in these fields: law, economics, science, literature, and humanities. A decade later, 3,400 students were matriculated in the University of Abidjan which has colleges of arts and sciences, economics and social sciences, law, medicine, and pharmacy, and in the university-level schools, the most important of which are the National School of Administration, the Advanced Normal School training secondary school teachers (graduating 24 in 1970), the National Public Works Engineering School, the National School of Agriculture, and the new Institute of Technology.

Primary education consists of six grades: first year preparatory course called "CP1," second year preparatory course or CP2, two elementary courses CE1 and CE2, and the fifth and sixth years are middle courses CM1 and CM2. Secondary education can be divided into three categories: general secondary schools, comprising a first cycle of four years and a second cycle of three years; normal schooling; technical and vocational schools. Figure 3 on page 21 presents the branching possibilities for a student after the completion of the first cycle of secondary school.
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<tr>
<th>PRIMARY LEVEL</th>
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**FIGURE 3**
FLOW DIAGRAM OF PRIMARY AND SECONDARY SCHOOLING, GENERAL STUDIES AND TEACHER TRAINING SCHOOL, EXAMINATIONS (FROM MINISTRY OF NATIONAL EDUCATION, OFFICIAL STATISTICS, 1970)
Students enter normal schools at the end of the first cycle of secondary education (3rd form). They may spend one year at a CAFOP (Center for Group Leadership and Pedagogical Training) to become an assistant primary school teacher. In 1970 the seven CAFOPs included 879 students. The one ENI (in Bouaké) contained 67 first year students. The percentage of girls in all these primary teacher training institutions was just less than 10 per cent. The faculty at these schools numbered 74, with 15 Ivorians (all men), 49 Frenchmen from the technical assistance program, no non-Ivorian Africans, and 10 non-French foreigners. Such is a brief historical, statistical, and structural outline of the Ivorian educational system.

The Educational Television Project

The solution of educational television attracted the attention of high officials in the Education and Planning Ministries because they saw in it a remedy for many of the country's educational ills. The Planning Ministry particularly viewed a more efficient educational sector as crucial to meeting political and developmental goals. The section "Primary Schooling" of the First Outline of the 1971-75 Plan begins with two extremely significant statements. The first is this: "the financial burden which 100 per cent enrollment would represent appears to be incompatible, before 1975,
with projected growth patterns."\textsuperscript{18} The second statement points with dismay at the poor yield of primary education. The Plan offers the following evidence: only 54 per cent of the pupils in CPI in 1961-62 remained in CM2 six years later.\textsuperscript{19} These two notions of target-setting and low yield of education will be briefly developed.

The Ministry of Planning apologized for not being able to set an 100 per cent enrollment rate until after 1975. Target-setting under political pressure is a common trap for developing countries who lock themselves into promising goals which are either impossible to attain or basically against the country's interests.\textsuperscript{20} As soon as the government adopted the ETV reforms in 1969 and after preliminary costing and manpower projections the year 1986 was heralded as the year of 100 per cent enrollment for the primary school sector!

There is much evidence of Ivory Coast's low yield from primary school. In 1969 only 18 per cent of the CM2 students were admitted to secondary school. A working document of the Planning Ministry estimates that between 1968 and 1975 the cumulative total of pupils who will find the doors of secondary


\textsuperscript{19}Ibid., p. 257.

\textsuperscript{20}J.-C. Pauvert (1970, p. 26) warns that total primary school enrollment can "absorb or even surpass a country's national budget."
school closed approaches a frightening half million.\textsuperscript{21} Dropouts are one problem, and Ivory Coast is not in the worst shape among African nations, for 68 per cent is the figure Unesco has calculated as the percentage of primary school pupils in all African countries who drop out between the CPI and CM2 grade levels.\textsuperscript{22} A high repeater rate compounds the low output. Working documents produced by the Education Ministry's Bureau of Planning and Statistics follow a representative cohort of 1000 CPI pupils, and nine years later affirm that 215 of them have reached the CEPE exam, having utilized a total of 5,446 pupil/years. The number of pupil/years necessary to bring one pupil successfully through primary school is about 25, instead of the theoretical six years.\textsuperscript{23} Ivory Coast has considered a solution to the quantitative problem of low yield: automatic promotion. It realizes, however, that this strategy cannot be applied to the educational system in its present state.

Geographic imbalance and urban-directed mobility are other dangerous educational realities which the government


would like to control. Colonial Ivory Coast always counted a far higher European presence in the rich forest belt of the south. Independent Ivory Coast inherited the strong centralization of the French administration. The country maintained the capital city on the coast and perpetuated the lack of development in the north. 1970 statistics illustrate the disparity by showing the range of the primary school enrollment rates by area: a northern department has 11 per cent enrollment and a southern department 97 per cent, with an average national rate of 50 per cent. These percentages are not further broken down to reveal the large differences existing between urban and rural areas and even among districts of the same town. For political, economic, and social reasons the Ivorian government is launching a campaign to develop the north.

Village existence does not satisfy the thousands of youth who leave home annually seeking a new life in Abidjan. Teachers also prefer city living. The insufficient number of teachers who do work in villages have received no special training as rural educators. Their uninterest and inability to deal effectively with villagers do nothing to attract the young schoolboys or schoolgirls to remain in their rural community. Consequently Ivory Coast realized the necessity of

devising a more appropriate training for rural educators and of reasserting the value of rural living.

Ivory Coast was thus faced with a depressing educational situation: a low yield from primary education, an increasing percentage of primary school graduates or leavers with no chance for further schooling, a migration to the city on the part of untrained and unemployable youth, a serious disparity between the enrollment rates of differing geographic regions, the shortage and inappropriate training of teachers, and a growing percentage of the total national budget devoted to education. The government favored certain options: automatic promotion, a target date in the near future for 100 per cent enrollment on the primary level, a revision of the primary school curriculum, and a new emphasis in teacher training on rural education. During the middle 1960s Ivory Coast followed attentively the experiment which the French government had directed in nearby Niger. It was a program of instructional television.

At the request of Ivory Coast, Unesco financed in 1969 an evaluation mission of ETV in Niger, El Salvador, and American Samoa. The final report of this mission included a number of suggestions to Ivory Coast if it decided to follow the example of these countries and base educational reform upon modern media.25 Ivory Coast was

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25The Ivory Coast Republic, Ministry of National Education, Education by Television, 1960-80, Vol. III: Report of the missions for the evaluation of educational television in Niger, El Salvador, and American Samoa. (Abidjan, 1970). This is the only one of the series of volumes on the ETV program which has appeared in English.
struck with the advantages of any modern tele-communication system: possibility of diffusing a uniformly high quality education over the whole territory, simple manipulation of a few knobs to obtain the audio-visual message, the immediate dissemination of all kinds of documents and messages, the prospect of reaching various audiences through the same medium, and the decreasing current expenditures as the number of viewers increased beyond a certain threshold.

It is within this context—the perceived failings of the present educational system, the expressed goals for educational development, the results of previous media projects, and the apparent advantages of the modern tele-communication system—that the Ivory Coast legislature in 1969 created the model teacher training school (ENI) to begin forming a new brand of educator. The next section in this chapter will describe the teacher training unit. The other functional unit in the ETV Complex is responsible for the construction of audio-visual materials. The time table for progressively introducing television into the primary school curriculum stipulated starting in the fall of 1971 with CPI and each year adding a grade, completing the cycle by 1976. In 1969 a Production Center heavily staffed by French technicians and pedagogues undertook preliminary research prior to the fabrication of programs. Post-primary and adult education would receive attention after the primary level broadcasts and teacher training and upgrading were under way. A
research and evaluation unit planned and budgeted since 1969 was not yet operational by early 1972.

Educational broadcasts would emanate from Bouaké and be beamed to Abidjan and out over the existing national network. In the planning scheme the hours left free by the state-run network were completely filled. Primary school teachers would get to school by 7 o'clock to receive an hour's preparation for the day. From 8 to 12 and 2 to 5:30 grades CP1 to CM2 would receive a series of 20-minute programs designed for their level. In late afternoon a new stream of "post-primary" students who found doors to secondary school closed could be initiated through the medium of TV into a trade conducive to a rural setting and time would be reserved for a program of adult education.

Financing the program would be an obstacle to most developing countries, but enjoying a singular economic prosperity and particularly active program of foreign investment, Ivory Coast soon had a promise from the French government to provide all the technical expertise and hardware. The World Bank issued a long-term loan for the construction of the permanent ETV facilities in Bouaké. A host of international organizations and sources of bilateral aid were contacted and persuaded to contribute to Ivory Coast ETV under the coordinating management of Unesco. Such are the background and nature of the ETV project which was adopted to remedy several ills inherent in the Ivorian educational system.
The ENI, Teacher Training School

The ENI was created to fulfill three main objectives: one, to help in the reform of primary school curriculum; two, to train a new type of teacher; and three, to provide in-service training or "recycling." The second objective—the training of a new brand of teacher—has become the main concern of the ENI faculty. It is to this sector that attention will be drawn in this study. The first step will be to describe the unprecedented thorough selection process which differentiates ENI from other Ivorian academic institutions.

In July of 1969 a circular from the Ministry of Education announced a common exam to be given in October for entrance into any primary teacher training school. The exam included three parts: a fill-in-the-blank written exam on the French language, a similar-style test in mathematics, and a multiple-choice questionnaire on general knowledge. The tests were open to any Ivorian student who had successfully passed his or her BEPC exam at the end of third form. They were administered at the CAPOP centers, one in the north, one in the west, three in Bouaké, and two in the south of the country. The purposes of the exam were to eliminate poor students, select 120 students for each of the seven CAPOPs (to train in one year an assistant teacher),

and identify the best students who would sit for another entrance exam to the ENI (which would form a full teacher in three years). The total number of candidates who came to sit for the exam was less than the number of places open! This fact is due, it is thought, to the following factors: students decided not to apply when they learned there would be an exam and not simply a presentation of their dossier; a teaching career, especially on the primary level, maintains low prestige; and students and their parents lacked information on the project.

The top 140 students from this preliminary exam sat for the ENI exam, designed to "measure, as far as it is possible, the necessary aptitudes for teachers who will also be rural community leaders and specialists in educational television." Test items covered logic, reading aloud, drawing aptitude, aptitude for observation, hearing aptitude and group leadership potential. For the 1969 and 1970 exams no television equipment or programs were available for the students. In 1970 a new test included developing a questionnaire in a work group of fourteen candidates and subsequently interviewing an employee (e.g. typist, gardener, cook) of the school. In 1969 four faculty members including one Ivorian judged the quality of participation of

27M. Mouchon, "Examen d'entrée dans les CAFOPs et concours de recrutement ENI, Bouaké, 1970 (Bouaké, 1970), p. 2. (Mimeographed.)

28Ibid.
each candidate during a discussion session. Each year the seventy highest scoring students are accepted into ENI and the other seventy from the second battery of tests redistributed among all the CAFOps.

Selection of faculty and administration, two sectors which will be considerably less important in this study, is performed by the Ivorian Bureau of Primary Education in Abidjan in the case of Ivorian personnel and by Unesco in Paris in the case of expatriates. In the latter case names are submitted by Unesco for approval by the Ivorian government. The staff is an international one, but clearly French dominated. In 1970 there were on the average fifteen faculty members, all male but one. This number varied because of staggered arrivals and departures (planned and unplanned) and due to absences when a Unesco member was called on temporary mission to another part of the world. Most of the non-Ivorian personnel have served in Africa before, either in previous Unesco projects, such as teacher training in Zaire, or in the French technical assistance, for an example history and geography teacher in Morocco. Unesco appointments are on a yearly basis on the average. The attitude of most "Unesco experts" was that the Ivorian project promised some excitement and challenge, but that they would surely be moving on to something else after a few years. They definitely represented a transient population, both in their own minds and according to the Ministry's projections which
called for a cessation of expatriate assistance to the ETV project in the middle 1980s.

The situation of the four Ivorians (one woman) was very different, especially in terms of recruitment and responsibilities. One admitted to me that he had not just heard about the project and applied for a position, as one might normally expect: he was ordered by the Ministry of Education to leave his previous job and go to the ETV Complex. Another Ivorian explained that very few of his compatriots who were qualified were willing to live away from the capital city. Part of the scheme in placing the whole ETV operation in Bouaké was to develop the country's second city, yet the project continued to suffer because nationals preferred the Abidjan living style. Attempts to hire Ivorians were foiled because of other reasons also. nationals sent to France under scholarships for training, promised a particular slot in the ETV operation, decided to remain in the Metropole and pursue further studies. And finally there appear to be considerable hostilities among young Ivorian intellectuals against the ETV project, which they consider perpetuation of neo-colonialism (strong French presence) or tribalism (large proportion of Baoulé, the ethnic group of Ivory Coast's President).

An Ivorian was appointed director of the ENI and another Ivorian head of the whole ETV Complex (teacher training and program production). Yet outside these directorships, which all parties had agreed must be offered to
Ivorians, the other nationals held clearly minor positions. The music teacher, the drawing teacher, and the teacher responsible for feminine activities were in secondary roles because of the minimal time allotted them in the course schedule and because their specialties were rarely included when one discussed the priorities in the curriculum. An additional problem was that the art and music teacher recruited were artists rather than pedagogues. Their previous training allowed them to master elementary techniques in their artistic profession but gave them no insights on how one teaches drawing or music to primary school pupils. This inappropriateness, combined with the low interest which ENI students had for the two subjects, produced a Fine Arts program which was poorly attended by the students.

A final element in the description of Ivorian staff participation concerns the nature of faculty meetings. The major portion of faculty meetings was devoted not to an exchange of information on what went on in the various classes, nor to an exchange of impressions of how students were performing. The meetings were essentially planning sessions, where not only the teaching strategies for the complete three-year programs were formulated but where even the objectives for the ENI training program were developed. All the expatriate personnel felt extremely uncomfortable in their role as developers of objectives, believing their proper function more of the mercenary nature, where they
would perform in accordance with the objectives set by the host country government. However, in this case the Ivorian Ministry of Education had specifically admitted that it had developed no clear objectives for the ENI, and assigned this task to the ENI staff. Ivorian faculty members were free to partake in these planning sessions which would shape the philosophy and methodologies of the ENI. However, they were rarely present at meetings, and when they were there rarely spoke up. The reasons for their absence were both numerous and complex: intimidation at public speaking in front of glib Frenchmen, lack of appeal of the endless hours devoted to having a multi-national staff arrive at a unique policy, lack of experience in planning and policy making, and lack of hospitality and concern on the part of expatriates. To whatever combination of causes the situation can be attributed, the result was that the ENI program of study was almost entirely conceived, presented, and supervised by non-Ivorians, although it was never planned that way. Hence the fear that the Bouaké project would turn into another foreign project, with all the dangers such an importation of ideas brings. There existed an analogous case of low Ivorian participation in the fabrication of the television programs in the Center for Production.

The ENI student body was definitely aware of the marginal role of Ivorians in faculty deliberations. The faculty did not provide the students a model for participation in
an Ivorian setting; yet, as the study will show, student participation was espoused as a goal for the school. The students understood clearly that Ivorization was far from being a reality. They realized that the expatriate influence was strong in areas which touched them very closely: the planning of their curriculum; the instruction they received; and the composition of the television programs which they would have to work with in the classroom.

After this brief description of recruitment procedures and some discussion of the staff, an account of the atmosphere which reigns at the ENI is appropriate before turning to the students' outlook when they arrive at the school. First, the physical layout. The school facilities are on the outskirts of Bouaké and include classrooms and administration offices, a dining hall and dormitories, a library and football field. The Production Center and its auxiliary audio-visual services are on adjoining terrain.

The rhetoric of the ENI includes not only the intention of preparing a student for subsequent work with audio-visual materials and for a double responsibility as classroom teacher and as extension worker, but also the espousal of new teacher-student roles. Rather than passively listening to a lecture, and regurgitating memorized notes at an examination, students at the ENI are expected to speak out. They attend "workshops" rather than classes, sit with a leader around a common table (instead of in front of and below a teacher), reason, question,
critize, analyze, and propose their own solutions to problems for group reaction. The faculty member in theory has the role of facilitator. In reality three different patterns of interaction are visible. One, a classic classroom design, where the teacher is overbearing, monopolizes speaking time, and hopes to transfer his knowledge to the students with minimal exchange. Two, the facilitator design, where the faculty member allows the students to make the agenda but where he is often present to guide discussion or offer information. The third design is more radical: the staff member becomes a member of the group just like another student. In this variety it has happened that a teacher found his wish to intervene deemed unacceptable by the group. In general the role of the teacher-leader depends on his personality and on the felt needs of group members. The three designs are not mutually exclusive with any one work group. Group work passes through phases, which are marked by the presence of a student discussion leader and a "rapporteur."

Additional factors make the ENI, recognized as a model school, very different from other academic institutions. The subjects which all students study represent a change from the curriculum of previous normal schools. The ENI provides workshops in audio-visual aids, French (linguistics, French language study and laboratory practice), programmed instruction, group dynamics, drawing and music, modern mathematics, natural science, social science (history and
economics), psychology, pedagogy, and rural community leadership training. As Unesco consultants or temporary faculty arrive, shorter term workshops in such topics as technology and film making have occurred.

Instead of having one class schedule throughout the year, the workshops are announced for a one or two week period depending on perceived needs, available personnel, and instructional objectives, the latter creating demands of varying duration and intensity. An example of an unusual module is field work, when after having prepared questionnaires for artisans, villagers, the town hall, the Planning Ministry, or whatever, a part or all of the students go live in the field, often for several days, to conduct interviews. Later the groups write up their results and present them simultaneously in a number of "inter-group" meetings.

ENI students have difficulty adapting to the new pedagogy, which entails much more than a few new disciplines. The students have been asked to assume new roles, first as students at the ENI and later as classroom teachers and agents of rural development. The set with which they enter ENI is a powerful one. There is no better evidence of the weight of traditional education upon the students than their own words. One student sketched his primary school years spent in a small town in these terms:

I was ten years old when I first went to primary school in 1957. My parents wanted me to stay home and work in the fields,
but I fled to school with my big brother. They finally gave in. I would eat some corn cakes and drink some well water before walking the 300 meters to school. I preferred to receive the teacher's switch than my father's, for at home I could not eat lunch and would be sent to school in the afternoon on an empty stomach. In school we learned everything by heart. I remember absolutely nothing that I learned by heart during those years except a little mathematics. . . We would put up our hand to answer a question and the teacher would yell, "are you going to give a stupid answer again?" So we didn't speak in class for fear of making a wrong answer, the teacher would hit us, all of us, except the children of his friends. . . He would make us cut down a branch from the guava tree--those branches don't break and he could hit a long time with one before it broke. For a long time I wanted to be a teacher just to return all the beatings I received, but now I know that is silly. . . We could not ask questions to the teacher until CM2, and all exams until then were written, so we never acquired a facility with the spoken word. . . We only worked for ourselves individually and never in a group. Even in secondary school. I had a hard time following at ENI. It was only after the second year that I was a little convinced. Group work did not interest me. I understood nothing. I preferred to wander around, because I didn't see the point.  

Such a testimony indicates the early academic experience which, from other reports, is quite typical of ENI students. It reflects several elements of traditional education: corporal punishment, working only by oneself, an atmosphere of

29 Recorded interview, September 30, 1971.

30 See the second paragraph of Appendix A for an Ivorian faculty member's account corroborating this student's experience.
fear and tyranny in the classroom, little oral participation from students, and the discouragement of inquisitiveness. If the New Pedagogy has its way, these aspects of the old system should disappear. Students entered ENI with an uninquiring mind, used to individual work and passive receptivity. Brusquely they were asked to change their behavior radically. They were asked specifically to speak out, to say what they thought, to question and criticize. They were invited to play an important role as members of a student group. The rationalization behind the program goal "student participation" is not known. Presumably the extroversion and communicativeness would be essential to a teleteacher in a system where he would have to compensate the passivity that pupils would likely manifest in front of a television screen.
CHAPTER III
RELATED RESEARCH

The Dependent Variable: Student Participation

Although the concept of participation is frequently on tongues it has not yet approached the equivalent currency on paper. No known studies have been devoted to participation as a single phenomenon. When participation is analyzed in any enterprise it is most often in the field of labor; usually industry. When a rare instance of educational research treating the theme participation appears the enterprise investigated is most often adult education courses (Appelbaum and Roberts, 1968; Knox and Carlson, 1966; Goard and Dickinson, 1968, etc.). Participation in these programs is simply determined by attendance.

How one measures participation is a key problem; and often it cannot be as simple a technique as keeping attendance. Anderson and Kell (1954) measure student attitudes about participation in a group setting using the Q-technique. Their research was performed on four classrooms representing extreme and moderate stances on the polarity "student-centered" and "leader-centered" atmosphere in the classroom. Four hundred and seventy statements were made by students about themselves as group participants. A hundred of the statements were sorted by the students along a scale of how much the
statement applied to them. Results showed that in the teacher-centered classes the attitudes held by group participants were both positive and negative. In the student-centered classes the attitudes were positive only.

Hemphill (1949) suggests another measure for participation, among several other group dimensions. Respondents in the experiment were asked to answer 50 open-ended questions about the nature of their group and their relation to it. Scales were developed such as, for the item "participation," "each member of the group is on one or more active committees," "every member of the group does not have a job to do," "the group has a reputation for not getting much work done." Such examples form part of an operational definition of what participation means to the population of respondents.

Hemphill also collected from respondents incidents which highlighted group leadership characteristics. From this information the author constructed sentence completion items. A group leader can be described as someone who...

believed in the group's purpose...
was willing to cooperate with others...
could put it into words...
informed members about things concerning them...
could make tactful criticism...

This inventory is also an operational definition related to participatory behavior.

Anderson and Kell with the Q-sort technique and Hemphill with his inventory show that a common research procedure in
the measurement of participation is to have the subjects themselves provide the operational definitions. In the Q-sort technique students judged themselves, which is another alternative to peer judgments or to judgments by a third party.

The Independent Variables as Correlates

If there is a dearth of research material concerning the single concept, participation, that concept is often linked with other variables in discussions of student behavior and classroom interaction. This section will be divided arbitrarily into two parts: studies which have isolated a single correlate with participatory behavior and studies which recognize numerous variables which demonstrate relational properties with participation.

Three authors were found who identified a single variable with student participation. Ahlbrand (1968) operationalized classroom participation "as being the result of a request by the teacher to answer a subject matter question." He tape recorded for five continuous days, and applied a stepwise regression to determine the correlations among these variables: sex, I.Q., pupil perception of teacher behavior, pupil preference for subject matter, pupil perception of academic success in the subject matter in question. The only variable which he found to be significantly correlated (positively) with participatory behavior was pupil
perception of teacher consideration. Averill (1967) addressed himself to a farm population and examined relationships between participation and openness, age, formal schooling, and socio-economic status. Of these variables, openness was the only one which was positively related to participation.

Finally, in this first part on single correlates, London (1970) studied the association between participation patterns and socio-economic class in adult education courses. He found that the level of formal education was the best single indicator of participation; better than occupation, income, place of residence, or race. London also determined in his study that the trait of liking one's school during student days was positively associated with participation. Scholastic performance, however, was not linked to participation levels. As one particularly aware of how the blue-collar worker has been slighted in society, London charged that most adult education courses are designed for a middle-class audience. He lamented the fact that the disadvantaged social classes were not given the opportunities to develop their potential. Clearly, one of the conditions necessary for participation is to have that opportunity available.

The first of four authors who report multiple correlates of participatory behavior is Flanders. Expressing the same conviction as Ahlbrand that the teacher is a major influence in student participation, Flanders (1967) noticed
a direct relationship between teacher influence which encourages student participation and constructive pupil attitudes toward the teacher, the school work and the class activities.

Willerman (1953) studied participation in University sorority life. Through test scores, self-ratings, and socio-metrics, he provided data that active members, as opposed to passive members, were positively associated with satisfaction, degree of skill, and extroversion. The active sorority participants also belonged to more extra-sorority groups.

Hemphill (1956) focussed his attention on group behavior. He studied the relationship between participation and productivity, plus other dimensions including the unity of group goals, the importance of the group to the members, and group control of member behavior. These intercorrelations Hemphill found to be significantly positive.

Finally, Teele (1967) used a participation study to present the profile of a population. He divided his dependent variable, voluntary social participation, into four components, and calculated the Pearson correlation coefficient between each one and over thirty independent variables. His dependent variables included class identification, age, neighborhood friendliness, rural-urban residence, belief in fatalism, belief in optimism, and sociability. Teele found 24 statistically significant relationships, and on this basis presented the profile of his population of 649
subjects. Teele's research is interesting because it covers several personality and socio-cultural variables and because it discovers a major difference in male and female correlations with the individuals tested.

The preceding studies were helpful to the current project by showing what substantive and methodological progress had been made in participation studies. The conclusions reached were applicable to an American and not an African population, of course. Nevertheless the outsider doing research in Africa necessarily brings with him elements from any source likely to help him form working hypotheses. From the studies presented in this section, a number of positive correlations were retained, such as age, urban-rural residence, level of education, pupil perception of teacher consideration, satisfaction, and certain elements of group cohesiveness. As for methodologies, the self-ratings and sociometrics Willerman used attracted particular attention.

Research in Africa Relevant to the Study

Although no works on participation of African students are known to have been published, and although the documentation on African schooling is often inaccessible or poorly diffused, there are research precedents where Europeans and some Africans have studied various aspects of African schooling. It is to the credit of the Ivory Coast and Unesco that in the planning stages of the ETV project the United
Nations Special Fund financed the compilation of three analytic bibliographies to form part of the series of official documents on the ETV program. Two volumes present the most up-to-date inventory of works on child psychology in French-speaking\(^1\) and English-speaking\(^2\) Africa. A third volume traces works in the social sciences and humanities in Ivory Coast.\(^3\) Some documents from these sources examine the participation patterns of African youth: the conclusions are directly relevant to the present participation study. Other documents present results of studies on student characteristics which are potentially related to participatory behavior. Reference will be made to the original works but in general drawn from the bibliographies, so no pagination will be given. Some of the information given pertains to Ivory Coast, other to African countries where researchers have asked some of the same questions as those which form part of this study.

A key factor in participation, it may be presumed, involves the opportunity to participate, which in turn is partially determined by the value one assigns a young person's


participation in his society. Restricting our field to oral participation, especially in a family setting, we find a unanimity among authors describing situations in both West and East Africa. Désiré-Vuillemin (1966) believes that the elementary school students he observed in Dakar were not prepared at home for a school life of active participation. The evidence he cites is that the Senegalese child is taught not to speak in front of older persons. Girls are not supposed to speak in presence of their brothers. An adult is always right. Psychoanalysts Ortigues and Ortigues (1966) agree that Senegalese children are brought up in a family atmosphere where they do not question, they do not give their opinion, and where they are even supposed to "feel ashamed" in the presence of elders. Finally, Castle (1968) in East Africa also concludes that children do not have the right to ask questions and are consequently extremely passive. Inasmuch as the African child carries before the adult teacher the inferiority and uncommunicativeness which have constituted his family role, any prompting toward self-expression will be difficult and appear out of place.

The first variable potentially related to participatory behavior is familiarity with the French language. It is reasonable to assume that inasmuch as participation is an oral phenomenon, competence in the spoken language is an important ingredient of participatory behavior.
It has already been stated that in Ivory Coast a multiplicity of local languages are spoken. In this respect, then, it is unlike Niger or Senegal where Haussa and Wolof are respectively the predominant languages and unlike the East African setting where Swahili is the lingua franca. French has been declared the official language, but it is nevertheless learned by almost all Ivorian children as a second language. Rogerro (1966) and Berbaum (1968) suggest that speaking French in the home is related to the parents' level of education, profession, and place of residence. Rogerro interviewed 733 pupils in CM classes in Abidjan, of whom 22 spoke French in their families. He believes that the incidence of French-speaking families is linked to the parents' level of education and profession. Surveying the CPL class in four Abidjan schools, Berbaum discovered that while from 27 to 35 per cent of the students in Abidjan proper spoke French with their parents, only 9 per cent of the suburban pupils spoke French at home. The results manifest considerable disparity with a range from less than 3 to 35 per cent of pupils coming from francophone families. It is important to note that French is spoken much more within the commercial city limits of the capital than in the outlying districts, which are often ethnically constituted.

Two other variables investigated in the present study concern the family's role in the student's professional decision and the quantitative and qualitative participation
of women. In an attempt to learn about parental interest and influence in children's education, surveys have been held to discover who in the family talks to the child most about educational matters or who follows the child's academic career. Two studies, one on Ivorian parents (Crapuchet, 1967) and another on CPI students in Abidjan (Berbaum, 1968) indicate that the father is the predominant family member concerned with his offspring's education. Taking the analysis further, Clignet (1961) suggests that the Ivorian father does not bring up his sons and daughters according to the same norms: the son receives a much more Westernized acculturation. One could associate Clignet's conclusion—that the Ivorian woman has remained a foreigner to European culture—to the disproportionately low figure of girls in the school system. Women are regarded as instruments of production, both agricultural and human. The French author Thé (1968) ascertained that in the regions of Bouaké there were several behavioral and attitudinal blocks which left the woman socially, economically, and culturally underdeveloped.

Chronological age is a traditional variable one tries to relate to social behavior. Determining a student's chronological age in Ivory Coast has not yet become free of difficulty because it is a vital statistic which is often absent, especially in villages where no written records are kept. For those students whose families found a birth
certificate easy to obtain at the time of the child's birth, there is no problem. For the others, there are other possible recourses; the nearest municipality (town hall) or the nearest administrative sub-division (prefecture or sub-prefecture) will establish a substitute judgment (jugement supplétif) on a child's probable birth date or on an adult's for that matter. This is done either by the parent's showing the child to a local official and perhaps giving some of the circumstances around his birth date, such as the climatic conditions, or the quality of the harvest that year or a simultaneous event such as the first airplane landing in Ivory Coast, which would help to estimate the date of birth, or by the official's saying without attempting to place the child's birth in any context: I think he looks six years old, I'll mark on his ID card "born about 1966." In remote villages a schoolteacher will simply accept the names of pupils and, taking their parents' fee for drawing up a substitute judgment to the appropriate public administrator will establish all the children of CPI as being a certain age without the slightest examination. A final method consists of consulting a doctor who will deduce the probable age from bone and teeth structure and general physiological characteristics. Berbaum (1965) counted in one Abidjan primary school 42 per cent of the population with birth certificates, 36 per cent with substitute judgments, and 21 per cent with a doctor's estimate. Ferrari (1969) points to a reason why
one must be suspicious of substitute judgments. In order to be eligible for a scholarship in the sixth form a student must not have reached his fifteenth birthday. Many older students voluntarily under-estimate their age to remain within the age restriction. Consequently, if one decides to use age as a variable he must do so realizing the unreliability of his data.

The father's occupation is another traditional variable one associates with school behavior and success. Berbaum (1968) noticed the decline of students' parents belonging to the higher occupational echelons as one surveyed schools further away from the capital. From 12 to 20 per cent of parents would fit a "white-collar" general professional category in three classes of CPI in Abidjan proper, and only two per cent in one class of CPI in an outlying district to the capital. In a rural setting, Ferrari (1969) questioned 550 primary school children in and around Lakota and found that 90 per cent had peasant fathers. In heavily agricultural Ivory Coast a city population will include a higher percentage of "white-collar" workers than a rural setting, as one would expect.

Tribal or geographic origin may be related to behavioral factors. A study by Soulez (1959) just before Ivorian Independence found patterns linking schooling, professional status, and ethnic group or geographical residence. Specifically, the Baoulé in the center of the country boasted more success
in schools which would see the young Baoulé become either farmers or civil servants where the northern tribes would form merchants and artisans after mediocre schooling. Finally relevant works in African research mention job aspirations. Ferrari (1969) looking again at primary school pupils tried in vain to see if ethnic group was related to professional aspiration. The interesting information he turned up, however, is that in a culture where 90 per cent of the working population is involved in farming, only 3.3 per cent of the primary school population envisage a similar career. Ninety six per cent foresee working in the higher professions such as medicine, teaching, and civil service. Berbaum (1966) found that in one Abidjan class of 5th form one-half of the students preferred to be doctors or teachers. Most of the ENI students may reach in a teaching career the professional level of their aspiration; however, it is not known how many of those aspirations included teaching.

Research findings in Africa related to the present study were summarized in this section. The data first presented on participation lead one to expect that students will enter ENI generally manifesting a low level of communicativeness and inquisitiveness because that has been their social and family role. The data available on variables potentially related to participatory behavior point to several orientations. The researcher will want to determine several factors influencing the pupil's formative years:
did the child speak French in the home? Was his childhood residence in a city, town, or village setting? In what ethnic or geographic area was it? What is his father's occupation? Along with answering these questions, the researcher will be interested in determining the students' chronological age, but he is aware of the unreliability involved. He will seek information on professional decision making in the family, for instance whether the father or the student himself was mainly responsible for the decision to enter teacher training. Another question suggested by the research is the minority position of female students. Finally, the researcher will want to investigate retrospectively the professional aspirations of the students and the incidence of a teaching career as a stated preference.
CHAPTER IV

DEVELOPMENT OF INSTRUMENTATION AND COLLECTION OF DATA

This chapter will describe the researcher's saga of instrument development and data collection. The reader will recall that in the first chapter he was warned that the knowledge produced by this study would not involve only "hard data," but would cover crucial problems of the research process met in the present study. The most faithful means of portraying the drama of field research in a foreign environment is perhaps by presenting a chronology, in the first person, of the researcher's interaction with his population.

This particular style will be followed in this chapter. The first section, "An Operational Definition of Student Participation" reviews the original intentions in the research, and follows the first contacts with the population up through the development of an inventory of participation components. The next part "The Faculty's Role in the Study" recounts the researcher's problem of obtaining the participation of the faculty. The third section "Peer Opinions of Student Participation Levels" describes the attempt to identify perceived levels of student participatory behavior. A crisis in the researcher's role is also chronicled. Finally, the fourth part relates the circumstances surrounding the development and administration of the questionnaire on independent variables.
An Operational Definition of Student Participation

Review of original intentions. The original research design of this study reflected the conviction that the criteria of student participation should be developed in Ivory Coast. It was thought that all bodies of the teacher training school--students, faculty, and administration--should be involved in determining how the students participated in their training program. It would be important to ascertain whether the collective views of these three groups examining the phenomenon of participation were similar, complementary, or at cross-purposes.

Strategy of first contacts with the population. Whatever purpose or methodology accompanied my research, a first step was necessary: to assure the cooperation of the ENI population. Realizing the French-inherited fussiness about proper credentials and sponsorship, I was careful not even to show my face around the ENI until I had secured an official letter from the Minister of Education authorizing my research. In early November, with the precious authorization finally in my possession, I made an appointment with the director of the ETV Complex. His reaction on reading the few words on ministerial stationery was "you have carte blanche." I asked the Director if he would help introduce me to the faculty, whom I knew would be much more suspicious and reticent about my presence than the students.
I requested that he write a cover letter to the Minister's authorization of my research and distribute his cover letter plus a copy of the Minister's letter to all the ENI teachers. He agreed and suggested I enclose a letter of my own presenting myself and my exact project. This was done, and I noticed from the new comprehension on the ENI faculty's faces that getting the brass to back my project and circulating their signatures was not only expedient, but not doing so would have left an aura of suspicion over my presence. I could summarize most of the faculty reactions as non-committal or mildly positive. The two extreme reactions were to be symbolic. A Frenchman snorted, "What does this CIA agent want?" An Ivorian complied, "The Minister told us to help him so we'll do anything he asks." I was to think later of the gulf between these two responses when I would compare the French and Ivorian contribution to my study.

After the initial contact with the faculty through the hierarchy, I wrote a similar letter of introduction to the students. In it I told them my subject was the phenomenon of student participation in the ETV program, and that I had the permission of the Education Minister and the agreement of my professors in the States to undertake research in Bouaké. I intended to draw a parallel between my present research and their periodic field work, where we each faced a similar task: we had a subject, we had to ask
people for information by different ways, and with the data obtained we had to make a rational and intelligible presentation of findings. After thanking the students in advance for their collaboration, good will, and indulgence, I mentioned that I had also written a similar letter to the staff for I would be needing their cooperation, too. I did not want the students to think I was consulting the faculty behind their backs. It should be noted that I did not let the students know the ultimate aim of my research, namely to discover elements which would be related to their participatory behavior. I feared, perhaps unjustly, that students would be scared away by my search for associations which might seem ridiculous to them.

How was I to approach the students personally, after having decided on the strategy of a written introduction? I had selected a French member of the faculty because he had invited me to his house and had expressed particular interest in my thesis. I told him that I wanted very much to see the group of students he was currently working with. He introduced me to one of his two groups of first-year students (henceforth ENI-1) which was to collect information from local artisans about their work. The students agreed to meet me the next morning at 8:00 for an hour. This seemed a rather effective way to approach the students and I resolved to get to know the other faculty members and meet their students in a similar fashion.
Just before meeting the first group of students, then, I reviewed my position. My problem was to gain the acceptance of the local informants or respondents, in this case principally the students. The first meeting with a student group would be especially crucial, because I knew echoes of the encounter would spread to the other students and contribute significantly to their set of potential reactions to my presence. I thought the essential relationship between students and myself should be trust, so that they would be free and honest in their delivery of information knowing that I would in no way betray them. There is a natural suspicion and resistance to a foreign field worker which I had already felt from meeting a few faculty members. I was determined to reduce this potentially catastrophic sentiment on the part of the students. How I was introduced to the students would have an effect on their image of me, and I was introduced as a student. I had attempted to further this association by writing in my letter of introduction of my task as being similar to theirs during a field work exercise. Having demonstrated my scholarly interest in the ENI student body and having emphasized our affinity in a student enterprise, I also felt a natural interest in the students' situation. I hoped this propensity of human consideration added to the academic interest would occasion my acceptance.
Meeting with first group of students. I couldn't meet the students the next morning because of a general student strike! They were awaiting a ministerial decision about possible day student status and a decision within the Complex concerning dormitory accommodations. Two or three days later, however, when the problems had been solved and work resumed, I could meet the first group of seven students in the morning sitting outside around a table. I handed out my letter of introduction for each student to keep. After giving time for the students to read the letter, I asked if there were any questions. The only response was rather a comment on the fact that I had taught three years in Sassandra, Ivory Coast. I read in the tone of the comment that the students felt they did not have a total stranger in their midst. It even happened that in this first group sat a boy who had been an English student of mine four years earlier. This fact of which the students were aware set up an atmosphere of renewed friendship, but also must have conjured up before them the more appropriate and natural image of a teacher (after all they knew no white students and all the other whites around were teachers or technicians) rather than a student.

I talked for five or ten minutes about my intention to investigate with them examples of participation at the training school. Then I asked for a few concrete examples: what do you do when you participate in your program? Answers
came with an increasing rhythm as students caught on to the
task. "I listen attentively to the leader." "I ask for in-
formation to clarify a point I have not understood." "I
take part in discussions." When I thought the group had
understood, I asked them to write out on paper that I dis-
tributed their list of participatory behaviors. I requested
that for conformity they all write at the top of the paper,
after their name and group number, "A student participates
when he..." and in list form underneath a number of end-of-
sentences, such as the examples given orally. Then on the
other side of the page I asked them to complete the sentence,
"A student does not participate when he..." I was following
the first steps of the "Operationalization of Fuzzy Con-
cepts" (Hutchinson, n.d.). A half hour later most of the
students had written five or six items under each category.
I was disconcerted because at this point the hour I had re-
erved with them had elapsed. The next step involved check-
ing whether the suggestions in fact described a situation
where the generalization "participation" was present and
that they were in observable and measurable terms. I an-
nounced that it was all the time I had a right to, but that
if they wanted to continue we could finish that part. They
all seemed anxious to continue, saying, "this is interesting."
For the next hour and a half we discussed every item on each
student's list. I would read the item, lead a discussion on
whether the criterion was accurate or relevant, and ask for
comments of approval or disapproval before going on to the next item. On occasion I would ask probing questions, but in general would let the discussion go its course. One member manifestly lost interest. Another, obviously weak in reasoning and verbal expression, was victim of his vague or irrational items. Other group members all tried conscientiously to ask him for clarification, but he could not comply. At the end I said I would re-create a list of their agreed-upon sentence completion items to give back to them the next time. They thought that with this they would be prompted to write down additional items. I thanked them and they thanked me.

Seeking a strategy for meeting all the students. After meeting more student groups I realized that it was a major time investment to come up with a few items, many of which were vague and seemed to defy further operationalization on the part of the students. I tried meeting with two groups (thirteen persons), but the tone of the group changed; it was less task-oriented, more free flowing and permissive. There was no time to catalog all their suggestions or to discuss most of them. I typed up previous suggestions and distributed copies to students in hopes that a lot of repetition would be avoided. I realized concurrently that the list presented would have a tendency to limit or direct future suggestions. When little new information was coming in on elements of non-participation, I eliminated that part
from the discussion, except when an example presented itself.

Besides my realization that the definition of student participation by students was time consuming (eighteen groups for approximately two hours each), I encountered difficulty in meeting the groups. Another strike was declared because the scholarship money promised the students by the Ministry was delayed. On occasion faculty and students were issued contradictory schedules and one period considered free by the students to meet me was interrupted by a teacher: "I don't care what's on your schedule. Mine has two hours with your group now and I am waiting for you."

Looking for holes in the students' schedules I would find none.

One sympathetic faculty member advised me to try to become a permanent element in the students' schedule, which was drawn up each week in advance. I met the professor in charge of this duty, and since he was himself favorably inclined to my research effort promised to put me into the schedule whenever I wanted, if he could comply. This was the best news in weeks, for I foresaw with gloom my research design being unrealistic because of excessive demands on student time. Despite the considerable time investment, risk of repetition, and scheduling difficulties, I persisted, convinced that I wanted a personal contact with each student initially, and that with a small population (130 at the beginning of the year) I needed ideas from everyone.
For close to forty hours, then, I had met with the entire student population (minus a few who missed because of sickness, absence, or lack of interest) in small groups. Toward the middle of the string of sessions I would have a group read the list of a previous group to recheck unanimity. They would add or delete items, suggest more accurate and comprehensible wording, and I would continually urge them to make the items more concrete. "But what does a student do when he is motivated? What does he do when he takes the initiative?" We discussed participation in different endeavours, in group, in dormitory or dining room life, with the staff, and in non-academic settings. I jotted down the name of the individual in the group who seemed to stand out by the clarity of his expression and the amount that he advanced the group discussion. Throughout the conversations I maintained the distinct feeling that simultaneous to my gathering information was an awakening on the part of the students to the whole idea of participation.

After experimenting with introductory techniques to my subject, I found the most successful or satisfying was to propose a role-playing situation, with their professional future. "Let us say that in a few years you are a school principal, or pedagogical advisor (at the time of our meetings these professional possibilities had been officially announced, only later to be rescinded). You are called into a classroom under your jurisdiction to evaluate the students'
participation in the class. What do you look at? What evidence will you accept that a student is participating?"

With such a stimulus the students responded using their own memories of pupil days and their perceptions of relevant pupil behavior.

**Some impressions of the group sessions.** During the group sessions several facts became evident. First, the subject at hand provided grounds for unending discussion. A definition of participatory behavior involved drawing lines and examining one's actions and attitudes which resulted in a very African phenomenon—a palaver. "Can you participate and say nothing? You can be disciplined and not participate. If you sabotage a group effort you are participating negatively. If you carry on a scholarly conversation during mealtime you are participating excessively. One can participate without being motivated. Some joking in a group is positive because it relieves tension. I prefer to participate by being absent because otherwise I would open my mouth and say something stupid." Such bicker and banter, aside from the conclusions it might produce for the list of criteria, exhibited the natural social interaction among the students.

Second, while there were certain commonalities there were also distinct differences between ENI-1 and ENI-2 reactions to the sessions. ENI-2, showing the effects on them of living for twelve more months in their new pedagogical
and social setting, were more thoughtful in the pertinence and diversity of their suggestions, but less spontaneously willing to participate in the exercise. First-year students in groups I had not yet visited would interrupt a meeting with "Sir, we haven't had you yet, when will you come to us?" A second-year student once commented, "We are getting nowhere," where the general tone in first-year student sessions was constant acceptance of the task and of the results. If the second-year student was more honest and if he felt free to be critical, he also disclosed a certain attitudinal state. He revealed, "last year we worked until midnight, but this year we aren't motivated." As well as suggesting that there was a certain curve over time along the psychological continuum of optimism/pessimism, motivation/non-motivation, this expression of malaise also indicated that the two years of students formed perhaps two different populations. I resolved to be particularly attentive to the difference between the class years as regards attitudes when I began to investigate independent variables.

Inevitably, amidst the definitional tasks the students exposed a number of their own attitudes through such reflections as the following, gathered from separate sessions. "The old teachers are against the ETV project and want to throw a monkey wrench into the works. The only way you can get things done is by protesting. The faculty promised to analyze accounts of summer experience we took pains to
submit to them, but we've received no reaction. We ask for more hours of French and no more field experiences." Such grievances emanated from second-year students, who seemed collectively disgruntled, and who would remark to first-year students: "now everything here seems fine, but you'll see."

Development of the researcher's role. One group requested that I serve as intermediary between the students and staff in bringing to light a number of student grievances. I agreed to comply with the request, and found that by and large the faculty and administration were aware of the dimensions of student discontent. The students' solicitation constituted a new expression of how they perceived me, as a potential agent for ameliorating their situation. It completed a pattern which Glazer cites in his repertory of means of the social science field researcher to gain acceptance (Glazer, 1972): after stressing a scholarly and a personal interest, the researcher brings a plight or unpopular situation to the attention of important public figures. In the early stages of the research my overtures to some faculty members concerning student grievances were met with open ears but with no ensuing action, rather an expression of "yes, we know and we should find the time to go through their summer work" or "the reason the students don't like field experiences is that they feel superior to peasants and realize they can't communicate with them."
At this point in my stay in Bouaké I was familiarizing myself with the school atmosphere and did not think that I could be of much assistance to the students. I did, however, try to show good will by offering a sense of comraderie. After the sessions on participation students would ask me questions about the United States and speak snatches of English. To students who came to the house we would offer drinks, reading matter, the use of our motorbike, medical aid, or small sums of money, as the occasion called for.

While I received certain satisfaction thinking I was playing some part in the training of these students, by arranging our sessions so they would be forced to be observers, to reflect, to interpret their past and current behavior in school, to express themselves in a group and to come to a consensus, I also felt that because of this atmosphere of reflection and analysis that I had created I was being considered another member of the faculty. Students would say, "this morning we have natural science, math, and participation." Or they would reflect another traditional attitude toward the teacher that they had not yet thrown off in a case where two opinions were divided equally among the group on the phrasing of an item, and the leader turned to me, "you decide."

Drafts of the inventory. The first draft list contained 66 criteria expressed not in normative terms, that is suggesting acceptable levels of participation or the
behaviors one must show to participate, but drawn from the universe of possible participatory behaviors at the ENI. The list can be defined as only "semi-operationalized," for several elements were not in measurable or behavioral terms. I wanted to know the students' final opinion as to what items were clear and made sense to them, and I recalled a student's suggestion to me to call an "inter-group" or representatives from several groups to have a final look at the list. I invited to the house five individuals from five groups, three from ENI-1 where there were 10 groups, two from ENI-2 where there were 8 groups. Four were students whom I had judged particularly thoughtful and fluent, a fifth was brought at their request. When the non-randomly selected students were installed in my room and had begun sipping their drinks, I presented the problem.

First, I needed their collective opinion on the clarity and meaningfulness of the 66 items. I wanted to make a final sorting. As a means of judging the usefulness of the items, I suggested (thinking ahead to my next step of research) each student think of a member of his group who best exhibited that element in the total realm of participation. With a definite individual's behavior called to mind, the students would discuss the item's relevance. In two hours, after eliciting but not naming group members who participated more than others at the item in question and after discussing the meaning of the items, the students and I had
combined a few items and deleted the abstruse and meaningless ones. After they had left I analyzed the remaining 50 items and divided them into categories, perhaps arbitrary categories but ones which would improve readability and offer a useful structure. Adapting the Carter et al. (1951) model for observation categories as presented in Krech, Crutchfield, and Ballachey (1962), I elaborated an inventory which is included in Appendix B. Before turning to the next research phase I took stock.

Conclusions. With the total student body I had produced an inventory, which could be used at the ENI and perhaps elsewhere, which represented a collective attempt to define participatory behavior in a school setting. The methodology described in this section and the contents of the inventory in Appendix B can be shared with anyone interested in them.

In the process of developing the potential instrument, I learned a great deal of other things about the research process in a foreign environment. One was the necessity of gaining the confidence and cooperation of the population. My familiarity with Ivorian students and school life was a great asset to my being able to work productively with the ENI students. Another learning experience was in adapting to the unplanned good and bad breaks. What a difference it meant meeting the master scheduler who was sympathetic to my demands for student time! Student strikes were unforeseen
events which disrupted the research schedule, but what better concrete example of participation? The students' full schedules prolonged the data collection process but each time I met students I knew time was limited and I tried to approach the subject directly and expeditiously. One also learns to carefully analyze his techniques of data collecting and modify and revise them according to the circumstances. Another element which makes the research process a kinetic experience is the changing role of the researcher, which will be seen even more dramatically in the third section of this chapter. During the first phase of the research besides the instrument produced and the accompanying learning experiences gained, I was becoming more used to the ENI setting. Understanding the students would be especially crucial when I would turn to the measurement of participation levels and to the search for related independent variables.

The Faculty's Role in the Study

The original intentions in contacting faculty and administration at ENI was to inventory their views on student participation and to elicit their judgments on each student's level of participation in aspects of the training program. The person responsible for the faculty and the person whom the director told me to contact was the chief pedagogical advisor. When I explained the subject of my research he became quite excited, and promised to call his
colleagues for a meeting where I would recount my subject
and where I wanted faculty help.

**Reciprocity.** Although I was relieved that meeting the
colleagues would now be a simpler affair, I was somewhat
wary of one of my interlocutor's comments: "We want to use
you." On one hand I said, "Watch out, Grant. It is natural
for them to try to milk you, another body they would not be
financing but who would be working on one of the project's
essential goals." In addition, the research and evaluation
unit had not yet been established and my work constituted
a piece of research which it would not otherwise be possible
to produce. Yet against this fear of exploitation, I felt
the need to reciprocate, to return in some form the aid which
the faculty would hopefully provide me. At the time, the
dilemma was summarized in my research diary: "I must not
let myself get pushed around, yet some form of reciprocity
is called for."

In early December I spent close to an hour explaining
my research project to the whole faculty and the ENI director.
I noted three stages where they could help me: defining
student participation, judging the level of each student's
participation, suggesting possible correlations to participa-
tory behavior. In return I tried to suggest areas where
I could perhaps contribute something to the faculty's effort.
I mentioned that I came from a rather unusual and impious
School of Education where a certain number of modern teacher
training techniques were being practised. I volunteered to explain what I knew of these techniques, especially micro-teaching which from the beginning was to be part of the learning process at ENI. I also promised to act as intermediary between the Complex and relevant American sources of information, for example the Children's Television Workshop, producers of Sesame Street. Finally, I expressed willingness to cooperate in endeavors where the faculty thought my input would be helpful. After a few questions from the faculty, the director announced his being in total accord with my plans. With this benediction on a formal level, I prepared to meet the teachers individually, starting with a sociologist who, the chief pedagogical advisor said, would probably be the most help to me.

First interview. He was a Frenchman, under a short-term Unesco contract, and a doctoral student himself. After we finally arranged a time when he was free to meet, we were interrupted ten minutes after the beginning of the discussion by a messenger demanding his presence at an unscheduled meeting at the Complex. The next time we could meet was shortly before his departure for France, and I was sorry to lose one who might be a prime source of information. I presented him the list of criteria which the students to date had formulated concerning participatory behavior at ENI. I wanted to keep the faculty's ideas on participation in the same format and asked him to react to the student
ideas and add his own definitions to the list. He said he preferred to talk spontaneously about his conception of participation rather than holding to the mould—what did I think of that? I replied that for me his answers would be more immediately useful if he followed the mould, but that I wanted to receive his best thinking and most likely he knew the most comfortable way of self-expression for him.

When he began exposing his ideas on participation I encountered another example of how the researcher will not always receive information from respondents in the planned fashion and that he must be flexible in handling each spontaneous situation.

My respondent initiated an interesting procedural element into our interview when, seeing me take notes, he asked me for a typed copy of my notes to add eventual modifications. I complied, suggesting that this procedure would also allow checking to see if I had correctly understood him. This one teacher, who had read through a portion of the student's operational definitions of participation, exposed his own: a student participates when he takes charge of his own education, when he asks the teacher no longer to lead him but to help him or advise him.

The new role of the teacher is that of informant, he becomes the uncle rather than the father in African society. He is there, he observes, he is available. The student who participates experiences a discharge of aggression as he—psychoanalytically speaking—kills the father,
saying to the teacher: we no longer need you...

A new and provocative conception of participation which would suggest seeking a measure for the discharges of aggression toward the teacher conveying participatory conduct. This conception did not match the wide scope of the students' criteria; it concerned a certain interrelationship of student and teacher. Few students seemed to possess similar convictions that they had to destroy a certain traditional relationship between student and teacher. Many items the students formulated were conduct or discipline oriented, and not so extreme or revolutionary. The basic difference in conceptions of participation that I was discovering appeared explicable given the young Ivorians' traditional educational upbringing and their very recent familiarity with student initiatives. Opposed to that conception, the French professor brought his psychological and sociological training to bear on participation as he defined it intellectually. Participation could not mean the same thing for subjects of such different cultures.

Since this professor was leaving, and he was himself familiar with certain problems of social science research, I asked his advice about whether I could request from all faculty members, after a few months, individual rankings or judgments on the individual participation levels of their students. He replied that he could not perform that
task then, but thought that at the end of the year the teachers would be familiar enough with the students to do it.

Attempts at preliminary data collection. Another source of information for procedural questions such as this one, and for which I did not want to approach the population of teachers at ENI, proved to be a teacher from the adjoining CAFOP. He agreed that toward the end of the year the teachers would know the students well enough to rank them according to levels of participation in their subject. I also gained from this teacher consent to arrange meetings with some of his CAFOP students when I was to pre-test my questionnaire on independent variables for ENI students. I was fortunate in having, as a pre-test group, a sibling population drawn from the same pool and going through similar pedagogical training; in this manner I would not be obliged to contaminate my already small ENI population. When I questioned this teacher about another procedural item—collecting judgmental ratings of individual student participation—he advised that in addition to my asking the students to rate each other and the faculty to rate students that I should rate all the students myself. This was in early January, and although I had not planned to judge myself, for I considered myself an outsider who would render service by engineering a judgment mechanism within the ENI, I began to think of how I could judge students myself.
Before I solicited in a questionnaire the faculty's views on student participation at ENI, I took the opportunity, at different occasions, of asking informally for some of their reflections on participation. I was seeking further comprehension of how the faculty, who for the most part had been involved with ENI students daily for almost two years, perceived the students' attitudes and actions. My interlocutors also gave me ideas or advice on my own research. One cautioned me to be aware of the disparity which existed between the long list of participatory items the students suggested and their actual behavior. Another related that from his experience the students who were affectively comfortable in their group were the best participants. One faculty member found causes as to why, in his opinion, the greatest participants were generally negative participants--grippers and grrousers. It was a fact that when the first ENI students were recruited they were promised by the Primary School Directorship that upon graduation they would become school principals or pedagogical advisors. A year after being at the training school, however this promise was officially rescinded and their position upon graduation was fixed as ordinary school teacher. This reversal was bitterly resented by the students, and was evoked by many as a symbol of how they were maltreated or even mocked.

Being encouraged by the two faculty members mentioned
above, toward the end of the year I asked two math teachers
to see if they could complete the same exercise as the stu-
dents, namely place the name of the best participant next to
each of the 50 items. I chose these teachers because they
reportedly maintained the closest rapport with students.
While they both were more or less willing to try to match
names and behaviors or attitudes, upon attempting it they
confided to me their difficulty. They saw the students
very little actually and did not know most names. It would
be the same story for other teachers only more so, and I de-
cided to concoct some more simple and appropriate census
of faculty judgments. But before passing to a new instru-
ment, the inability of faculty to identify the majority of
the students by name calls for some explanation.

"I don't know their names." The first impression of a
white teacher in front of a black class or a black teacher
in front of a white class, especially if that teacher is
new in that cultural setting, is often one of difficulty
in distinguishing physiological features. As the teacher
progressively becomes accustomed to the students' physiog-
nomies, each new class generally presents fewer difficul-
ties in recognition and demands less time until the in-
dividuals can be correctly identified by the teacher. In
a setting such as ENI, where most teachers during the year
of research were no longer neophytes in a black community,
this possible explanation cannot be legitimately claimed.
As it will be seen, the tribal predominance in both years belong to the Baoulé. This tribe perpetuates a certain nomenclature system which gives each child, besides the father's name, one name according to the day of the week at birth. Although the rule is a similar one for girls with a different set of names, boys can be identified in the following fashion: Kouassi is born on Monday, Kouadio on Tuesday, Konan on Wednesday, Kouakou on Thursday, Yao on Friday, Koffi on Saturday, Kouamé on Sunday. The Baoulé student, then can carry two names, his own and his father's, from this very limited pool. The result is the following, which one reads off the register of ENI-1 and ENI-2 students:

Koffi Koffi
Koffi Koffi
Koffi Kouadio
Koffi Kouakou
Koffi Kouamé
Konan Koffi
Kouadio Koffi
Kouadio Kouamé
Kouadio Yao
Kouakou Koffi
Kouakou Kouadio
Kouakou Kouamé
Kouamé Konan
Kouamé Konan
Kouamé Kouassi

The practice of attributing nicknames or other appellations which would tend to minimize the confusion which exists—even among the Baoulé and among the students when they call each other—is not developed. This situation does
not facilitate the association of name and face, but it does not apply to the majority of the population which is non-Baoulé. It can also be affirmed that the students regardless of their ethnic origin often change the order of their names (a first and a last name are not natural distinctions) and those who have Christian names are known to change them from time to time.

Since the faculty sets the pattern for how it identifies the students it is natural to look for the habits which the French (forming 80 per cent of the faculty at ENI) normally brought with them from France. There is a sociocultural fact that name calling follows very special norms in France. In normal greetings, outside of an educational setting, it is considered impolite to say "hello" followed by the person's name. In the States, to the contrary, it is often thought a lack of friendliness if one says "hi" without adding the individual's name. On the "hierarchical ladder" a student would never mention a teacher's name to his or her face in France--it would always be "Monsieur," "Madame," or "Mademoiselle." And a teacher would never address his or her principal by that individual's name: the position rather than the personality is evoked in "Bonjour, Monsieur le Principal." As for the conditions surrounding the manner with which teachers would address students, in the Metropole classes are large, there is little or no contact with the students out of class, a
teacher in one discipline might meet every student for a relatively brief period for there are frequently a dozen subjects to study, and the students' contributions which determine their mark are generally written and not oral. With such a background, the faculty finds itself in almost analogous conditions in Bouaké. There are about 10 subjects being taught often to plenary groups from 60 to 70. Most faculty members teach both class years and meet the students in small groups infrequently. The faculty live far from campus, where the students board, and outside of class hours are with their colleagues in meetings, with their expatriate neighbors, or with their families. In addition, traditional factors allowing faculty to learn names are absent. Unesco teaching appointments do not assure permanency; that is, some appointments to ENI were for two, three, or six months and members pulled out for two weeks here, a month there, to attend conferences abroad or participate in other missions. Marks have been abolished, so the teachers are under no pressure to provide a number or a letter grade following each name. Attendance is not taken. There are no seating plans, for groups meet informally or in rows with different seating arrangements. All these elements reinforce the absence of name calling between the strata of faculty and students.

Attempts at final data collection. I devised a form to hand to the faculty where each member would judge the best
participants in the groups of 14-16 students according to a very limited number of criteria. I resolved to ask each one individually if he would be willing to help me. I was attempting to avoid the results produced when a colleague tried to introduce a new system of evaluating student performance by imposing it at a meeting without having discussed any of its contents previously or involved others in its construction: there was not only a general boycott of this system but the faculty exhibited henceforth a certain amount of hostility toward the maladroit solicitor of their cooperation.

To each member I said I was going to ask three tasks: that he read the students' criteria of elements defining participatory behavior and answer my questions: "What struck you in this inventory? Explain your reactions" and "if the students' conception of participation in their training program at ENI does not coincide with your own, what criteria do you judge important to add to or delete from the proposed list? If possible conform your answers to the inventory model, 'a student participates in his training program at ENI when he...'

The third request concerned the faculty's judgment on student participation levels, and I proposed seven questions, four from the students' category "oral contribution," which I believed would be the easiest for the faculty to decide on, and
three general categories (see Appendix C, "Form for Faculty Observation of Student Participation"). I asked each faculty member if he would write the names of the best participants according to the specific criteria or oral contribution during two sessions with each group of 14-16 students. I realized that only two group sessions would not give a very representative picture, but I planned that in the general categories—not relevant to any particular session—the faculty could cover those persons absent or less shining during the observed sessions.

Returning to the dilemma raised earlier of recognizing students, I asked each teacher whether he could do it. I confessed that I had not been successful in obtaining photos from all students which I would have labeled and divided into groups—a plan which failed because of the high price the students or I would have to pay for the photos. In retrospect the cost of photos, for example group photos, would have been money well spent. I did suggest to the administration that another year a composite photo be made of the groups and class years at the beginning of the year. To solve such problems in May a teacher thought it would be easy to ask students for their names from left to right at a session and during or after the class jot down the participator's names. When I raised this possibility with the other teachers, they all decided they could adopt this principle or manage otherwise. Only after having received
the oral consent of each faculty member whom I had systematically approached at their home, between classes or at odd moments did I hand out the forms, with the instructions plainly repeated.

I also asked two members of the administration to comment on the students' list. Maintaining no class contact with students they could not have judged individual performance. I abandoned my hope of keeping the general director of the Complex, to whom I had been referred by the Minister, not only aware of my research but involved as a source of official information relating to the goal of participation after countless fruitless attempts to even see the man. Such were the procedures to obtain faculty and administration involvement in the defining and judging of student participation.

Conclusions. The researcher's demands on others' time constitute an imposition, and any responsible researcher will give thought to how he can, in turn, repay his informants. It seems to me that a scheme of mutual exploitation, that is an exchange of services, provides an ideal working relationship.

When one has been granted a hearing with perspective informants, such as I was when the pedagogical advisor called a meeting of his colleagues to learn of my project, the problem is then to know: what can I reasonably expect of them? One must be alert to avoid unrealistic demands, for
example asking the faculty for information they cannot give. This danger can be reduced by continually sounding out others and gradually developing the appropriate research tools. If the informants have the capacity to inform, they must also be favorably disposed to inform. And there is a wide gulf between an oral expression of willingness to cooperate and the actual task being performed conscientiously or performed at all!

Retrospectively this phase of the research revealed certain insights and certain regrets. I learned that a researcher must be prepared for meeting experienced informants, such as my sociologist, who prefer alternate forms of input to the one the researcher has planned for him. I also became aware of how different conceptions of participation could be from the students to the sociologist. I regretted not going into that difference further. I regretted not having arranged for student group photos or some other means for facilitating faculty rankings of student participatory behavior. And finally, faced with my lack of success in obtaining feedback from the administration, I was forced to rethink the question of realistic time demands on administrators. One must add that these were particular administrators who were not familiar with what research was or with how helpful research findings could be in decision-making.
Peer Opinions of Student Participation Levels

The second research inquiry involved measuring student participation. Since I had received very gratifying assistance from the student body during the first phase of the study I placed a good deal of faith in their cooperation on providing peer opinions of student participation levels.

As I brought the peer judgment forms (the same ones as in Appendix B) to the ENI one morning, when I had one year scheduled to meet from 8 to 10 o'clock and the other from 10 to 12 o'clock, several things rushed through my mind. On the positive side I thought I would achieve more reliable judgments of participatory behavior by breaking the phenomenon of participation into small behavior units (this method of micro-units was recommended particularly in Carter et al., 1951). And what was as or more important was that the criteria were applicable to the population to be tested; that the population itself from their own experience had defined with some unanimity the inventory to be used. There was little chance of inappropriateness. On the realistic side, I had abandoned my original hope to elaborate an objective measure of what participation was. I had moved from an intended measure of actual behavior to remembered or perceived behavior on the part of the students, who now constituted the new instrument in the study. I would have to deal with inter-rater reliability and the halo effect, that one peer might choose another as best participant because of friendship or ethnic ties. I had been
warned by a teacher that the students "respected friendship more than truth," and that I might not get honest answers. I had been advised by a research organ of the Ministry of Education that the students would write down the names which came into their mind right away, but that at another testing all would have changed.

I conjured up safeguards to maximize the usefulness of my information. I planned sessions where one group would not have time to discuss the forms with another. I asked the respondents not to put down their own names for fear of disproportional self-estimation on the part of a few individuals. I asked them that if no name in their group appeared to correspond with the item not to put down any name just to fill the space. Thinking that if I had asked for judgments over a whole class year a student would not have equally full knowledge about the total population and in some cases put down just those persons he knew best, I requested names from the regular work groups. I also promised confidentiality of the results.

When ENI-1 entered the only classroom which would hold a whole year's class, I asked them to take seats in chalked-off rows according to groups, planned so that a neighbor to the side would not be from the same group. I wanted to insure against the temptation of looking on sheets or whispering answers. When the room was quiet I thanked the
students for the spirit in which they had helped me in the past. I announced that I was to hand out the inventory they had formulated, but that I needed more information concerning the inventory from their opinions about their group. For the sheets to be filled out properly certain conditions were necessary: silence, total concentration, and honesty. I pleaded that the value of my results depended in large part on their sincerity. As I handed out the forms, I was expecting the students to start work without any questions.

A few minutes of silence. Then a few laughs. Someone said, "impossible." Another chimed, "we won't do it." A hand went up: "You are going to give this to the faculty and we'll see the non-participants, who don't get their names listed often, publicly denounced." "We will put down how many students participate, if you want, but not the names." "Why do your American professors want names? They don't even know us!" "Ask us the last day of school when we know our groups better, we'll do it then." "What are you going to do with it?"

With the passage of time and the change of task a new rapport between population and researcher had emerged. In December students were quasi-unanimous in assuring me their interest in discussing participation and their willingness to put themselves totally at my disposal. In May they were wary and thus unconsenting, with definite signs of hostility. To what their spontaneous reaction could be attributed
was the major question in my mind.

In retrospect, a whole collection of elements produced the preceding scene. The most important may have been the change in how I was perceived in December and in May. For, in effect, my status had drastically changed. In February, after I had finished meeting the small groups, I was asked to join the faculty of the ENI as a Unesco consultant. My mandate was to initiate the whole class ENI-2 to classroom observation techniques; to organize visits to primary school classrooms; to arrange lectures and discussions on child psychology, the educational objectives in Ivorian primary schools, and the contribution of TV to those schools.

My relationship with the faculty and administration had also obviously changed. Whereas before I would arrive on campus, and according to custom shake hands with the staff present, but immediately leave them to meet with students, now I spent several hours a week in faculty meetings. For the students, then, who perhaps never considered me a real student, their perception of me "on the other side" was confirmed. And although the school was bent on creating friendly and open faculty-student relations, there was definite fear of my being in a position to expose negative aspects of the student body. My role had changed from one who could on occasion report a student plight to the staff to one who was directly involved in the functioning of the ENI and associated with the staff but one who attempted to
continue his information-gathering function, associated with the students. It was the dilemma of the participant-observer!

But there was more involved. The puzzle was--what did the students expect? And the phrase of the director of the research and testing bureau of the Ministry of Education haunted me: "Watch out for the students' expectancy system." Some students feared betrayal, and since I considered myself one of the least likely betrayer-types around, I was keen on probing that particularly strong and insinuating reaction. In an effort to recreate the set the students must have had when they entered the room, I later unabashedly asked some students, "why did you react that way?" One said "last year we were asked to write down everything at school we did not like. We did so, hoping for changes, or at least a dialogue. The information was used against us."

While requesting information at a later date on demographic features, I was to meet a similar mistrust of "data banks." A student confided, "at primary school they would ask us our father's occupation, and if he was a farmer we knew that we could get kicked out of school periodically. A civil servant father would be able to defend his children, but not an illiterate peasant."

If one can qualify the students' reaction to my forms as a "traditional" one in that they suspected reprisals, one can also note the evolution of a certain critical spirit.
Asking why is a phenomenon conspicuously absent from both the teaching and the learning process in Ivorian schools or out of Ivorian schools. (See Appendix E for some clarification on the Baoulé faced with questions on causation.) If the faculty and staff at ENI were agreed upon any one element in the two years' existence of the school it was that the students were very rapidly developing keen critical faculties. In a traditional academic setting it would not have occurred to them to openly challenge a professor. At the ENI, where this practice was energetically encouraged by certain members of the faculty, it occurred spontaneously.

Besides the honest query, "what are you going to do with it?" or "how can it be useful?", there was a definite unfamiliarity on the part of the students with sociometrics and questionnaires. Students do not have the habit of filling out scores of psychological (or intelligence and aptitude tests, for that matter) tests during their school career. They found themselves at a loss, and were thus negatively disposed.

Two contingencies, I think, contributed their share to the students' reaction. It was near the end of the year and they were tired. Their fatigue was translated into a decreased urge to cooperate. And there is a definite anonymity about a plenary session, where individuals feel protected and are more aggressive then they would be in fewer numbers and in another context.
While these retrospective attributions concerning the cause of the students' noncompliance contained hints of how it might be overcome, on the spot I could not comprehend them all and I instantly fell back to a number of pleas for faith and confidence, and I evoked the rigors of doctoral level research. I announced that at the end of my research I would present them all that I had done and give the whole picture of my project. I am sure that the students were anything but convinced when I tried to calm their biggest complaint--name writing--by explaining that the names would later be transformed into numbers and would never appear as names but that I had to start with names. I didn't seem to be getting anywhere after a half hour of the population expressing its uneasiness and the researcher attempting self-justification. Then the palaver was miraculously terminated when one of the most vociferous protesters declared to the assembly: "All right, let's do it for him and trust he respects our contribution." This turnabout judgment swayed the group, who set to work immediately. Perhaps it was a very African process, before doing anything one had to pass through the palaver stage. But I was dubious whether after this session with the students they would ever consent to helping me again, and I had not finished my information gathering!

The other group of students, ENI-2, were to come from 10 to 12 o'clock, and I tried to imagine the best set to give them in my introduction, given their probable similar
reaction. As a matter of fact, I was lucky to have ENI-2 come at all, because one disgruntled ENI-1 student crossed off my class time with ENI-2 on the bulletin board! I assured the doubtful ENI-2 students that I indeed wanted to see them, but a few, warned, stayed away. Before this group which I knew much better for having worked with them for two months, I warned that I was going to ask them to do something which they would not like. I asked them all to close their eyes, and open them only when they were persuaded that they had an American doctoral student and not an ENI faculty member before them; if not the experiment might fail. One girl helped to break the tension by asking, "Then can we call you Steve?" Of course.

This group's reaction was also negative, but more concerned with reliability and their difficulty in filling out the forms. They declared that although they belonged to groups much of their work—as I knew—had not been group work and on a major field experience lasting several weeks they had even mixed up their groups based on the theme chosen. Consequently they pleaded unfamiliarity with all the students in their group. Some suggested using the preceding year's group, others said they could answer for half of their work group, not for all. I finally accepted this latter solution if the students honestly felt they could not respond for the whole group. I realized my problems of
calculating reliability would be increased, but I didn't see a better alternative. I thought that such a problem for me was less important than their positive disposition toward filling out the forms. Other students claimed there was no "one best," but several or no one at all. I relented and accepted their putting down more than one name, but did my best to discourage it. During the session, once they had accepted the task after initial palaver, scattered members of the second group came to my desk because they did not understand an item. I would clarify it for them so they could answer, but I discouraged public questions, for I feared the delicate favorability toward cooperation in the room might tumble at the slightest jar.

I learned a painful and scary lesson in the importance of the disposition of respondents. I had pre-tested the naming game with five students but using imagination, not writing indelible names. There is a gulf of difference!

Independent Variables

Readings in related research, suggestions from ENI faculty, the original research design, and my own grown familiarity with ENI students had together generated a number of possible variables where information on the students might be related to their participatory behavior. Grouping the most essential questions, I devised a two-part questionnaire and invited three students from the CAFOP--
adjoining the ENI where it will be recalled similar pedagogical conditions existed—to my home one evening. The first part was a government questionnaire, one which had been administered for the first time a few months earlier by the Bureau of Planning and Statistics, Ministry of Education to all secondary school students excluding teacher training schools. I included it for several reasons. I thought that an official form would lend some authenticity to my own private effort. Many of the questions asked for information which I would have sought anyway. The questionnaire had been pre-tested and in principle contained questions in French which would be clearly understood by the students. The coding instructions presented official breakdowns of such arbitrary and debatable categorizations as rural-urban areas, tribe, level of education and branch and level of father's profession. Finally, the Bureau of Planning and Statistics had given me the forms for the ENI student population and consented to my utilizing them for my research.

Before I handed out the government forms and my own, the students listened to why I was requesting their participation—because I intended to give a finished draft questionnaire to all ENI students but that they could help me immeasurably by going through the questionnaire, filling it out completely, and giving me clues as to the time it might take or to any obscure or poorly expressed questions.
Perhaps the three would even find the topics raised of interest to them. I assured them that the papers would remain with me and that no one else would see them. In a relaxed atmosphere, over a glass of soda, they willingly started to fill out the government questionnaire, which would shed light on their age, ethnic group, birthplace, their parents' cultural level, French-speaking habits, primary and secondary school careers, and their father's branch and level of occupation. My own questionnaire of 21 items requested information on the students' attitudes toward the school program and personnel, on their parents' attitude toward their decision to go into teaching, on the relation between youth and elders in the village, on professional training acquired if any, on preference in subjects studied, on reasons for participation and a description of participation in various activities followed by an evaluation of their respective levels, on club membership and activities, on preferences or images of future professional life, and on a few other items.

During a long discussion that followed the questionnaires, I took notes from the students' avowals of difficulties and their suggestions as to more comprehensible wording. The pre-test gave me a limited idea of range in the answers when I would compare the set of three. It awakened me to the necessity of providing a few answers to some questions but enough to cover the majority of responses in
an exhaustive and mutually exclusive way. I learned that I must change the amount of space left after certain questions or arrange the format differently. I was told that "students don't have the habit of writing out their feelings" and that I might not get a lot of answers. This lack of habit of furnishing such information which I knew to exist would spell some difficulties for me and these students' warning reinforced my intention of a well thought out "set induction" to the questionnaire. Also from this pre-test I learned not to be a prisoner of my own rationality on how a certain answer should be interpreted. For example, one question asked: "At your first assignment to a school you will meet colleagues. How do you imagine their attitude?" One student checked the answer "suspicion or jealousy." What went through my mind was this: the older, traditionally trained teachers would be suspicious and jealous because the young, newly trained teachers were bringing the new official pedagogy from the "brain" (as many people referred to Bouaké) into the bush where up until then the established primary school teachers were unmolested, unthreatened, and kings. To see if the student conceived of the jealousy also along professional lines, I asked him to explain. The answer he gave: "I will be going into the village as a young bachelor; the other teachers will not trust my behavior toward their wives, their sisters, or their daughters."
The complete disparity between my presupposition and his
answer prompted me to insert several "why" questions after an elicited opinion!

Before I called in a second group of three students another evening in the same circumstances, I had reworded several questions, deleted one or two because they did not appear to produce interesting or utilizable information, and added "why" questions or other open-ended questions which I thought would put into a necessary perspective their closed-ended attitudes. The second draft questionnaire numbered 27 items, and after a similar process of review following the second pre-test, a final draft of over 50 items was written. (See Appendix D for both questionnaires.) I realize I got carried away and the jump to 50 items reflects my lunging at a unique opportunity to obtain information from the total population. But besides the core of what correlations might exist, I included some questions which might be related only tangentially to the present research and which might provide data for treatment in another context at another time.

The questionnaire items included demographic data, attitudinal factors, and experiential elements. A final area--test scores--was represented when I obtained permission from the ENI authorities to have access to the school files, part of which were in filing cabinets and part in cockroach-filled cardboard cartons. The admission test to the CAFOPs provided a general score on a composite
test in French expression, mathematical aptitude, and general knowledge. Similar tests were given to both years of ENI students and the results are available. The ENI also had records of an additional battery of tests given ENI-1 in the realm of participation in the group and aptitude for leadership.

In closing this account of procedures for gathering information on independent variables it is necessary to describe the conditions in which the major questionnaire was administered to the two class years. I requested three hours for each year in the morning, but the master scheduler put me down one morning and a Friday afternoon. When these times were publicly announced, I personally told a few of my most loyal students how important this last session would be. They promised to spread the word and I could therefore hope for maximum attendance. I was not pleased with the afternoon session because the extreme heat in the early afternoon always produces lower attendance rates. My even greater chagrin was caused, however, when one of the students announced to me that "on Friday they serve us attieké for lunch." Attieké is a southern Ivory Coast dish; very filling, sticky pounded cassava which is boiled like couscous. Its alimentary properties or the myth attached to them apparently send the majority of the student body, after the weekly appearance of attieké, for a several-hour siesta! And according to prophecy, there
was not one student in the room at 3:00, the time announced for the questionnaire, and several drifted in still in a daze after 6:00 P.M. Between these times I had to catch one student here, another there, send the ones I trusted the most to fetch others, until I had about half of the group. The morning went much better. The students appeared reconciled to doing immediately what I asked them, I met very little opposition. In fact, one student even confided to me, "Sir, we talked in our dormitory about the members who made a fuss about filling in the peer judgment forms and we decided that they acted too hastily and inconsiderately."

Whereas at the administration of the peer judgment forms I had no student write his name on his paper—later I could not track down the absentees—this time I issued the government form first which included a place for one's name. I stated that the form was not destined to go to the Ministry of Education but they had allowed me to use the form for my personal use. The students wanted confirmation on this point and some even said that if it were for the government they would not do it. Their mistrust which had appeared earlier was again clearly felt. On my own questionnaire I did not want names to be written, but I did want to be able to combine information from both forms on the same individual. In a section marked "Do not write in this block" on my questionnaire I precoded the elements from the government
questionnaire I would want to use and in this column of precoded numbers I typed three identification numbers from the government form. When I distributed the forms the government form was slipped into the questionnaire with the matching number. I believe some students wrote more freely because their name was not attached to my questionnaire, which I asked them to place in a different pile from that of the government sheet. No students to my knowledge caught on to the technique but one noticed that a few days later when I approached him asking for a clarification I had the two forms stapled together. Asked how I recognized his questionnaire, I simply stated that in research one has to know how to do such things.

One major problem I faced during the administration of both questionnaires was to answer the hundreds of student questions on how to fill out certain parts of the questionnaire—especially the government questionnaire which was concisely worked onto two sides of one page. Two other problems were to insure that parts or pages of the questionnaires—which naturally included instructions not to omit any questions—were not left empty and that the absent students be given the questionnaire at another time. The answering of questions was painstaking because there was a constant arrival of students spread out over three hours, and since it was difficult to gain the attention of those who were at another point in the questionnaire and farther advanced students themselves would not necessarily give correct
advice to their peers. I was obliged to repeat instructions many, many times. I tried to relieve my fear that students would leave out sections or pages, by declaring that before exiting each student must bring his questionnaire to me for a quick review. This system was definitely rewarding, for almost without exception I caught blanks which the students had unwittingly left. Since I had names written on the government forms I knew which students had not handed in their sheets. It took me two weeks of daily urging, and going to school early, hunting down students during lunch hours, and obtaining one copy the last day of class by accompanying a student to her uncle's house in town.

The results of this time-consuming effort were satisfying: 66 students (100 per cent) of ENI-1 rendered their questionnaires and 59 out of 61 ENI-2 students (97 per cent) left at the end of the year gave in their forms. One of the two non-respondents did not take the questionnaire seriously, would reply: I am ten years old, etc., and left 95 per cent blank. The other was impossible to track down, although he apparently was still a member of the class and in Bouaké somewhere.

At this point I had acquired, with few exceptions, all the data I was going to collect from my population. The remaining task in the study would be more lonely: my own description and analysis of the data apart from the population. I would even go miles away from the population to another
continent and feed their words into a machine. Then I would have to piece the puzzle back together and present a coherent and a faithful picture of the population I had studied and worked with for over six months.

It was not intended that this chapter present minutia, but that it record faithfully a foreigner's interaction with the population he is trying to understand. His observations and his understanding are crucial for his later analyses. His groundwork in chronicling how the ENI population reacts to a researcher would hopefully also be helpful for future researchers.
CHAPTER V

DESCRIPTION OF THE POPULATION I: DEMOGRAPHIC DATA

From the information gained through questionnaire responses of the near-total population, a selection was made for presentation in Chapters V to VIII. This selection was based on three criteria; foremost are the items which the researcher has reason to conjecture are related to participation patterns. Also included are basic data such as sex, and some other characteristics, such as repeater figures, which seem particularly revealing about the population. Data are ordinarily presented in tabular form. Explanations accompanying these statistical summaries include examples, implications, and other commentaries, such as comparison with national averages, where appropriate.

This chapter contains elements which should help to set general characteristics of students as they entered ENI: number of students, their age and sex; residence patterns, parents' level of education, father's occupation; linguistic and ethnic patterns; primary and secondary school careers, and mobility.

Enrollment, Age, Sex

The number of students physically present at the end of the year offers a figure one can compare with the intended
figure. The capacity of each year of ENI was officially set at 70 boys and girls, and this has been the number accepted in each ENI-1.\(^1\) Based on the first two years of operation, the population at the end of the academic year 1970-71 numbering ENI-1 66 and ENI-2 61, one might hypothesize a 5 percent rate of attrition as an estimate for future projections. This low percentage—compared with the overall high dropout rate throughout the secondary school system—can be further reduced if one takes account of the higher number of attending students during the school year. For illustration, the 1971-72 school year began with an ENI-2 of 67 (one up from June, 1971) and an ENI-3 of 63 (two up from June, 1971). The returning students had been incapacitated from illness or pregnancy. The permanent dropouts left because of lack in interest or because of desire to be members of the teacher force sooner, i.e. by transferring to a CAFOP which would train them at a lower level in just one year.

In considering the age of students one must recall the caution due to the procedure of establishing substitute judgments. The range of given age in ENI-2 is 18 to 24 with a mean of 21.08 and in ENI-1 17 to 25 with a mean of 19.94. Of the 57 ENI-2 students responding to the question: "was

\(^1\)Projections as to future available manpower in the primary school teaching profession are based on this full number. Nowhere in the official documentation is an attrition rate estimated or even alluded to, making one wonder whether the original project planners tacitly assumed no dropouts.
your age determined by birth certificate or subsequent substitute judgment?" 46 or just under 80 per cent declared by substitute judgment. This high figure, giving a representative idea how few official birth certificates were delivered in the late 1940's and early 1950's, leads one to conclude that the ages given have very little veracity. A rational hypothesis could be advanced that as one approaches the present day the wider infrastructure of civil administration and accompanying increase in official record keeping would produce a decrease in the percentage of substitute judgments delivered. And in fact in as much as only two positions determine a progression, this direction is observed by the next class year, ENI-1, for out of 61 respondents, 45 or just under 74 per cent declare their age as having been determined by substitute judgments.

It can be expected that the percentage of girl students will be small, given the socio-economic-cultural position of women in traditional Ivorian society. One can also predict that given the government's expressed intention of improving the Ivorian woman's social position, the number of girls admitted would tend to grow over the years. On the other hand one might foresee a possible clash with the government's intention if the girls' results on entrance examinations remain low. According to available information no double standard was initiated to swell the female population. Examination records show a marked improvement in the position girls have
obtained relative to boys in a ranking of entrance exam scores. While girls in the first year held the last places on the entrance exam scores before the cut-off point, the third year their average position was toward the middle. Accompanying this rise in the calibre of girls seeking admission to ENI was an increase in the number of girls accepted. The ENI accepted 4, 6, and 7 girls respectively during the first three years of its existence. The girls have a relatively high record of withdrawal, i.e. out of 125 respondents in May, 1971, 7 or 5.6 per cent were girls, due perceptibly to inadaptation of the training program to feminine activities, disparagement on the part of masculine students, and pregnancy. One could summarize the feminine representation in the student body by calling it a precarious and vulnerable minority, with a tendency, however, toward growing in numbers. After two years of only token heed to the problem--how the ENI can be made more attractive to girl students--1972 might see a more successful feminine policy.

Residence Patterns, Parents' Level of Education, Father's Occupation

The answers students would give as to their principal residence during their childhood would most likely give hints as to their parents' level of education, their father's profession, as well as their linguistic habits in as far as concerns familiarity with French. Before presenting the
students' residence patterns it is important to show the
general demographic constitution in Ivory Coast along the
rural-urban scale. Table I is deduced from population fig-
ures in 1965, the last census taking when Ivory Coast was
already learning how nascent industrialization and rural
exodus could transform its demographic map.

TABLE I

IVORY COAST POPULATION IN 1965\(^2\) BROKEN DOWN
BY RURAL-URBAN RESIDENCE

<table>
<thead>
<tr>
<th>RESIDENCE</th>
<th>PERCENTAGE OF THE POPULATION N = 3,700,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abidjan</td>
<td>8.0%</td>
</tr>
<tr>
<td>Important town (10,000 inhabitants or more)</td>
<td>9.5</td>
</tr>
<tr>
<td>Town (5,000 inhabitants or more or an administrative center)</td>
<td>7.5</td>
</tr>
<tr>
<td>Village</td>
<td>75.0</td>
</tr>
<tr>
<td></td>
<td>100.0%(^3)</td>
</tr>
</tbody>
</table>

Extrapolating to population patterns before and after 1965,
the last year of statistical accounting, one can first

\(^2\)République de Côte d'Ivoire, Ministère du Plan,
Côte d'Ivoire 1965: Population, Études régionales 1962-65,

\(^3\)The accuracy of figures must be quite rough, although
the percentages may be more dependable. Even among government
publications contradictions exist, i.e. the Second Outline for
the Plan uses 4,300,000 as the total population in 1965 whereas
the Population 1965 volume stipulates 3,700,000.
surmise that when the ENI students were of preschool age in the late 1940's and early 1950's the rural population was considerably higher. In the latest official estimate of population breakdown in 1980, the Planning Ministry foresees the rural population to be 61 per cent of the total. Since one of the purposes of the present study is to lay some groundwork for longitudinal studies which may be taken on teacher training institutions in particular, it would be interesting to follow the students' places of residence as they evolve within the framework of total population movements. Table II presents residency patterns at two periods, one during the students' first seven years, the other during their primary school years.

### TABLE II

**STUDENTS' RESIDENCE PATTERNS**

<table>
<thead>
<tr>
<th>RESIDENCE</th>
<th>0-7 YEARS N = 124</th>
<th>7-13 YEARS N = 125</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abidjan, Bouaké</td>
<td>17.1%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Important town</td>
<td>8.1</td>
<td>12.8</td>
</tr>
<tr>
<td>Small town</td>
<td>13.8</td>
<td>29.6</td>
</tr>
<tr>
<td>Village</td>
<td>61.0</td>
<td>37.6</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The two comparisons in order are between the two periods presented in Table II and with the national population.
percentages of Table I. City residence of the ENI population is over twice the national average, and village residence of the ENI population during their primary school years is one-half of the national average. The educated pool in cities and small towns contribute a disproportionately large share to the composition of the ENI student body. When one skips several years and compares 0-7 years with 7-13 years one notices a marked reduction of village dwellers from five-eighths of the population to three-eighths. The substantial exodus from village residence is largely due to a migration to areas where primary schooling is available.

Parents' level of education would be thought to conform to the residential situation with the majority of the population being village dwellers who have had little or no schooling. A large disparity would be hypothesized between the parents' low level of education and the students' relatively high level. Thirdly one could foresee a distinctly lower level of education for women given their position in traditional Ivorian society. In Table III the percentages presented are relatively adjusted on 100 per cent after having eliminated the category of deceased parents.\(^5\)

\(^4\) A third possible comparison is between class years. The differences calculated, however, did not prove to be substantial.

\(^5\) Maximal information was not gained on this item because of the structure of the question. If a parent were dead, his status was so marked and no level of education was recorded from him. Of the 125 respondents 9 (7.2%) noted deceased mothers and as many as 27 (21.6%) declared deceased fathers.
### TABLE III

**PARENTS' LEVEL OF EDUCATION**

<table>
<thead>
<tr>
<th>LEVEL</th>
<th>FATHER (%)</th>
<th>MOTHER (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Baccalauréat or more</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>2. 2nd cycle professional or technical school</td>
<td>2.0</td>
<td>0.0</td>
</tr>
<tr>
<td>3. 2nd cycle general</td>
<td>1.0</td>
<td>0.0</td>
</tr>
<tr>
<td>4. 1st cycle professional or technical school</td>
<td>3.1</td>
<td>0.0</td>
</tr>
<tr>
<td>5. 1st cycle general</td>
<td>3.1</td>
<td>0.0</td>
</tr>
<tr>
<td>6. CM2</td>
<td>6.1</td>
<td>2.6</td>
</tr>
<tr>
<td>7. Reads, writes French</td>
<td>17.3</td>
<td>0.0</td>
</tr>
<tr>
<td>8. Speaks, understands French</td>
<td>24.5</td>
<td>16.4</td>
</tr>
<tr>
<td>9. Understands no French</td>
<td>42.9</td>
<td>81.0</td>
</tr>
<tr>
<td><strong>100.0%</strong></td>
<td><strong>100.0%</strong></td>
<td></td>
</tr>
</tbody>
</table>

No father went beyond secondary school and no mother beyond primary school. Over two-fifths of the fathers understand no French and over four-fifths of the mothers. Category 7 includes fathers who could have attended some years of primary school or who learned French in a non-academic situation.

Categories 7 through 9 refer to knowledge of French rather than to a particular stage in the educational system. Some modification in the structure of the question was necessary for it is evident that the great majority of answers lie among these three categories. It is also a very French and...
one might add ethnocentric habit to associate level of education with knowledge of the (foreign) French language. This point is even clearer when one reads the French label on the government questionnaire for this item: *niveau culturel* or "cultural level." Culture is defined linguistically and language defined Gallically.⁶

Since most jobs in the modern sectors of the economy require French, the official language, and since the students' fathers' level of French has been established as low, it can immediately be hypothesized that their profession will fall largely in the traditional sector. The government questionnaire sought information not only on the father's branch of activity, but also on his level of activity. This distinction seemed an important one, because the appellation of "farmer" or "planter" as used in Ivory Coast covers an extensive range of endeavors. A planter may be a hired hand who works for a pittance on a neighbor's small field of cassava and yams. On the other hand, when one sees the list in the Abidjan newspaper of deputies to the Legislature one sees the label "planter" after several names; and they are in

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⁶Of course what is significant is the fact that when most students leave school to visit their parents during vacations they reenter a different linguistic and cultural world, not an unfamiliar world to the students who grew up in that atmosphere, but a near complete break with their French-inspired schooling. The students will talk their local language or dialect with their parents and talk French only with other students or the local civil servants.
big business.\(^7\) Investigating the level of work indeed seemed a principle which would produce more accurate distinctions.

The similar type of question as in the level of education produced answers where in cases of deceased fathers no profession was given.\(^8\) Among the 94 other respondents, we have the breakdown of the father's branch of work as presented in Table IV.

**TABLE IV**

**FATHER'S BRANCH OF WORK**

<table>
<thead>
<tr>
<th>BRANCH</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 94</td>
<td></td>
</tr>
<tr>
<td>1. Agriculture</td>
<td>73.4%</td>
</tr>
<tr>
<td>2. Industry</td>
<td>1.1</td>
</tr>
<tr>
<td>3. Construction</td>
<td>2.1</td>
</tr>
<tr>
<td>4. Transportation</td>
<td>3.2</td>
</tr>
<tr>
<td>5. Public administration</td>
<td>9.6</td>
</tr>
<tr>
<td>6. Teaching</td>
<td>2.1</td>
</tr>
<tr>
<td>7. Liberal professions,</td>
<td>4.3</td>
</tr>
<tr>
<td>public utilities</td>
<td></td>
</tr>
<tr>
<td>8. Modern commerce</td>
<td>1.1</td>
</tr>
<tr>
<td>9. Traditional trade and</td>
<td>3.2</td>
</tr>
<tr>
<td>crafts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>

\(^7\)A deputy in Bouaké who is classified a planter owns a pineapple factory that exports thousands of tons a year.

\(^8\)When the label "retired" was added to "dead," 31 students or 24.8% marked this category.
The picture of the large majority of the ENI students' families is clearly one of village dwellers who are employed in agriculture and who do not use the French language in their daily work. Given the known predominance of agricultural workers in Ivory Coast, the government questionnaire contained a special hierarchy of job levels in that branch. No fathers work in the modern agricultural sector, that is on large mechanized farmlands. Two-thirds of the farmers have the ultimate responsibility of providing their families with sustenance, and one-third, besides assuring their families food, employ subordinate help and produce their crops principally for sale.

For the non-agricultural domain, the remaining 25 fathers are divided among levels of responsibility. The majority lie in the middle range and are employees such as railroad station master, an accountant, a health care agent, an assistant primary school teacher, a policeman, a clerk, and a forest ranger. The cadres include only a handful, in jobs such as director of a primary school and head court clerk. And the manual laborers included a few, such as railroad mechanic and a tailor.

Linguistic and Ethnic Patterns

The opportunity to learn French in preschool family life is naturally dependent upon the linguistic patterns of the family members surrounding the student. When asked whether they spoke French before entering primary school, 9.6 per cent
of the 125 students replied "yes," 25.6 per cent answered "a little," and the majority, 64.8 per cent, stated "no." Those who spoke French to any degree presumably learned it because French was spoken in the home, but not necessarily by the parents--older students often take it upon themselves to speak French with their younger brothers and sisters when they return to the village during vacation. In the majority of cases, students are introduced to French in the first grade of primary school. They are not allowed to speak their local languages in school and, to assure that the teachers do not speak their own tongue with the pupils, whenever possible a teacher is assigned to an area where he cannot speak the local language.

The maternal tongues spoken by the tribes forming the population of Ivory Coast are conventionally grouped into families.\(^9\) The six families can be more or less distinguished by their geographic location in Ivory Coast (see Figure 4, page 115), although migrations are frequent and any town will include residents from several tribes. The two class years of ENI students, all Ivorians by law, represent the tribes and tribal families that are listed in Table V, page 116 with the corresponding percentages.

\(^{9}\)There is frequent dispute as to which tribe belongs to which family. Data conform to the Ministry of Education's categorization.
Akan  Krou  Lagoon  Malinké  Mandé  Voltaic

FIGURE 4

IVORY COAST ETHNIC MAP

<table>
<thead>
<tr>
<th>TRIBAL FAMILY (PERCENTAGE)</th>
<th>TRIBE</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 125</td>
<td></td>
</tr>
<tr>
<td>Akan</td>
<td>Agni</td>
<td>10.4%</td>
</tr>
<tr>
<td>(40.8%)</td>
<td>Baoulé</td>
<td>29.6%</td>
</tr>
<tr>
<td></td>
<td>Apollo</td>
<td>0.8%</td>
</tr>
<tr>
<td>Krou</td>
<td>Bété</td>
<td>8.8%</td>
</tr>
<tr>
<td>(17.6)</td>
<td>Godié</td>
<td>3.2%</td>
</tr>
<tr>
<td></td>
<td>Guéré</td>
<td>3.2%</td>
</tr>
<tr>
<td></td>
<td>Dida</td>
<td>1.6%</td>
</tr>
<tr>
<td></td>
<td>Other Krou</td>
<td>0.8%</td>
</tr>
<tr>
<td>Lagoon</td>
<td>Attié</td>
<td>2.4%</td>
</tr>
<tr>
<td>(10.4)</td>
<td>Ebrié</td>
<td>2.4%</td>
</tr>
<tr>
<td></td>
<td>Adioukrou</td>
<td>2.4%</td>
</tr>
<tr>
<td></td>
<td>Abbey</td>
<td>1.6%</td>
</tr>
<tr>
<td></td>
<td>Abidji</td>
<td>0.8%</td>
</tr>
<tr>
<td></td>
<td>M'Batto</td>
<td>0.8%</td>
</tr>
<tr>
<td>Malinke</td>
<td>Malinke</td>
<td>12.0%</td>
</tr>
<tr>
<td>(12.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mandé</td>
<td>Gouro</td>
<td>4.0%</td>
</tr>
<tr>
<td>(8.8)</td>
<td>Yacouba</td>
<td>3.2%</td>
</tr>
<tr>
<td></td>
<td>Gagou</td>
<td>1.6%</td>
</tr>
<tr>
<td>Voltaic</td>
<td>Sénoufo</td>
<td>6.4%</td>
</tr>
<tr>
<td>(9.6)</td>
<td>Tagouana</td>
<td>2.4%</td>
</tr>
<tr>
<td></td>
<td>Mossi</td>
<td>0.8%</td>
</tr>
<tr>
<td>Double Tribe</td>
<td>Malinke/</td>
<td>0.8%</td>
</tr>
<tr>
<td>(0.8)</td>
<td>Ewe (Togo)</td>
<td></td>
</tr>
</tbody>
</table>

100.0% 100.0%
Twenty-three other small tribes are not represented in the present population. The possibility of discrimination--conscious or not--arises.\(^{11}\) For the moment, belonging to one of these tribes constitutes zero chance of gaining admission to ENI.

An idea of general representativity can be obtained by comparing the total tribal family percentages at ENI with their national equivalents. Based on 1965 rough data,\(^{12}\) one finds the comparison in Table VI.

### TABLE VI

**TRIBAL FAMILIES AT ENI AND ON NATIONAL LEVEL**

<table>
<thead>
<tr>
<th>TRIBAL FAMILY</th>
<th>ENI % N = 125</th>
<th>IVORY COAST % (ROUNDED) N = 3,700,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Akan</td>
<td>40.8%</td>
<td>25%</td>
</tr>
<tr>
<td>Krou</td>
<td>17.6</td>
<td>18</td>
</tr>
<tr>
<td>Lagoon</td>
<td>10.4</td>
<td>10</td>
</tr>
<tr>
<td>Malinké</td>
<td>12.0</td>
<td>17</td>
</tr>
<tr>
<td>Mandé</td>
<td>8.8</td>
<td>9</td>
</tr>
<tr>
<td>Voltaic</td>
<td>9.6</td>
<td>19</td>
</tr>
<tr>
<td>Other</td>
<td>0.8</td>
<td>2</td>
</tr>
<tr>
<td><strong>100.0%</strong></td>
<td><strong>100%</strong></td>
<td></td>
</tr>
</tbody>
</table>

\(^{11}\)Factors making one hesitate to claim discrimination are the following: the tribes are small, they are equally divided among the tribal families and the geographic sections of the country, and the tribal affiliation of candidates not accepted at the ENI is unknown.

It can be seen from Table VI that three tribal groupings—the Krou, Lagoon tribes, and Mandé peoples represent very nearly their comparative positions in the national ethnic distribution. One group is considerably underrepresented—the Voltaics or Upper Volta Ivorians; one is moderately underrepresented, the Malinké; and one group is moderately overrepresented, the Akan. The easiest deviation from the norm to explain is the Akan, three-fourths of whom are Baoulé. Bouaké lies in Baoulé territory, and public information about the ETV project is higher in the Bouaké area than elsewhere. The northern tribes were shown in the related literature section to have lower school enrollment and to be inclined toward commerce rather than toward civil service. For these reasons one would expect the Upper Volta Ivorians and the Malinké to be relatively few at ENI, and this is the case. In the final analysis, then, the ancient disparity between the early colonized south and the less developed north is perpetuated in the ethnic distribution of ENI students training to become cadres in the national educational system.

Primary and Secondary School Careers, Mobility

Theoretically a student spends six years in primary school. In practice, however, the repeater rate is high, as it was explained in Chapter II. Table VII presents the length of time that ENI students spent in primary school.

\[13\text{See page 52.}\]
TABLE VII

NUMBER OF YEARS SPENT IN PRIMARY SCHOOL

<table>
<thead>
<tr>
<th>NUMBER OF YEARS</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four</td>
<td>1.6%</td>
</tr>
<tr>
<td>Five</td>
<td>3.2</td>
</tr>
<tr>
<td>Six</td>
<td>41.6</td>
</tr>
<tr>
<td>Seven</td>
<td>37.6</td>
</tr>
<tr>
<td>Eight or more</td>
<td>16.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0 %</strong></td>
</tr>
</tbody>
</table>

The 125 respondents with a mean 6.6 years of primary schooling included a larger number of students who took either seven or eight years than who took the normal six or fewer. Nevertheless the 6.6 average is far below the national average. Those who spent either fewer or more than the theoretical six years, however, do not necessarily have their case attributed to intelligence or achievement-oriented criteria. The two who skipped two grades had a close relative in their primary school. A certain proportion of those students who stayed back did so because of a family move in the middle of a school year or due to a regulation determining the minimum legal age of entrance into sixth form so a young student had to repeat his CM2. The incidence of these various causes for repetition was not investigated systematically, but non-academic causes form most likely only a small minority.
Information was gathered on public school vs. private school attendance by asking what type of school was attended in the student's last CM2 class. It was known that in 1970 77 per cent of all primary school students were in public schools, and out of the minority in private (denominational or nondenominational) schools 86 per cent—or 20 per cent of the total students—were in Catholic schools. These proportions are expected, given the fact that religious education did comprise the first schools in Ivory Coast, that missions are still present throughout the country, but that parochial schools never achieved the thorough permeation characteristic of English-speaking African countries. The ENI respondents spent their last CM2 in the types of schools represented in Table VIII.

| TABLE VIII |
| AFFILIATION OF LAST CM2 |

<table>
<thead>
<tr>
<th>TYPE</th>
<th>PERCENTAGE N = 125</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public</td>
<td>65.6%</td>
</tr>
<tr>
<td>Catholic</td>
<td>27.2</td>
</tr>
<tr>
<td>Protestant</td>
<td>4.8</td>
</tr>
<tr>
<td>Private nondenominational</td>
<td>1.6</td>
</tr>
<tr>
<td>Private unspecified</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>
The ENI students come from predominantly public schools but this percentage is somewhat lower than the 1970 distribution among types of schools. The difference is filled by Catholic school training, which accounts for over a quarter of ENI students.

The only question relating directly to the secondary school career elicited the type of school attended, the grades attended, and the number of years spent. It was known that all students achieved a minimum threshold of the 3rd form, after which they all successfully passed their BEPC exam. But some students had started the next year's class or had gone even further in the 2nd cycle of secondary studies. In an attempt to capture the essential information from this question, a coding scheme was designed to record the highest grade the student attended— as full year or part of year—and whether he had repeated a grade (or more) in his secondary school career. This information is summarized in Table IX.

Over three-quarters of the 125 students came to ENI after their 3rd form, with among this majority one more student having repeated a class than the number who reached ENI without repeating a grade in secondary school. Of those thirty students or 24 per cent who carried their studies beyond 3rd form, the repeater rate is considerably less: 9.6 per cent out of the 24 per cent repeated and 14.4 per cent
advanced normally. The dropout rate as well as the repeater rate is relatively low in the upper classes. Six students only or 4.8 per cent started a year--2nd or 1st form--without finishing it. The fact that presently up to a quarter of the ENI population did not come to ENI at the period of the minimum achievement--after 3rd form--but made the lateral transfer at a later time offers an opportunity for students spread over a few years to present their candidature, rather than finding their turn lost irretrievably if they continue on after 3rd form in the cycle of general studies. This suppleness is also seen as an advantage for it brings together students of potentially different levels who can learn from and teach each other by a process of cross-fertilization.

TABLE IX
HIGHEST SECONDARY SCHOOL GRADE ATTENDED WITH REPEATER RATIO

<table>
<thead>
<tr>
<th>HIGHEST LEVEL</th>
<th>ANY GRADE REPEATED</th>
<th>PERCENTAGE N = 125</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. End 3rd form</td>
<td>no</td>
<td>37.6%</td>
</tr>
<tr>
<td>2. End 3rd form</td>
<td>yes</td>
<td>38.4</td>
</tr>
<tr>
<td>3. Part 2nd form</td>
<td>no</td>
<td>2.4</td>
</tr>
<tr>
<td>4. Part 2nd form</td>
<td>yes</td>
<td>0.0</td>
</tr>
<tr>
<td>5. End 2nd form</td>
<td>no</td>
<td>8.8</td>
</tr>
<tr>
<td>6. End 2nd form</td>
<td>yes</td>
<td>4.8</td>
</tr>
<tr>
<td>7. Part 1st form</td>
<td>no</td>
<td>0.8</td>
</tr>
<tr>
<td>8. Part 1st form</td>
<td>yes</td>
<td>1.6</td>
</tr>
<tr>
<td>9. End 1st form</td>
<td>no</td>
<td>2.4</td>
</tr>
<tr>
<td>10. End 1st form</td>
<td>yes</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>
It was hypothesized that most ENI students came to ENI directly from school, that is without having been members of the labor force. Answers to the question: "Before coming to ENI did you undergo any professional training?" revealed that 106 students or almost 85 per cent in fact had known no other formal work than school work. The remaining 19 students had worked from a period of several weeks to more than two years in several lines of activity, in particular commercial or technical activity. It is not known if any students worked without any professional training.

A final item involves the student's mobility, or more precisely his exposure to the hub of Ivorian activity—Abidjan. While up to a quarter of the ENI students resided in Abidjan during their primary school years, many more could have spent considerable time in the capital, lured by its multiple attractions. Answering the question: "How much time have you spent in the capital, Abidjan?" the students show a clear progression from a handful who either have not been to Abidjan or if so only for a few days to fully half of the students who have spent several years there. Figure 5 on page 125 presents this progression graphically.

The causes for visiting or residing in Abidjan were not investigated. One must certainly attribute schooling as a major factor. In a study on 550 primary school students in
a small Ivorian town the following reasons for visiting the capital were given in a descending order of percentage: visiting parents or making purchases, to know the city, studies, to attend a football match, for medical reasons. It could be hypothesized that ENI students go to the capital largely to know the city and visit friends or family who are "making it." During summer vacations most students return to their village for a spell but also prefer to spend at least a few days in the capital city.

FIGURE 5

TIME SPENT IN ABIDJAN
(N = 125)
CHAPTER VI
DESCRIPTION OF THE POPULATION II: ATTITUDES PREVIOUS OR PRESENT

The study now turns to student attitudes, which are more difficult to measure than the previous demographic data. The two basic topics in this chapter are student motivation and student satisfaction. Both of these attitudes seemed important potential correlates of participation, under the supposition that if one has chosen a career out of some conviction or if one manifests particular satisfaction in training for that career his level of involvement will be higher.

"Career Aspirations and Professional Options" shows the distribution of career preferences and the main reasons given for preferring the ENI. In tracing the student's family role, "Parental Roles in Decision-Making" also covers motivations for entering a teacher training school. Lastly, "Attitudes Toward Training Over Time" is a longitudinal study which tries to capture the reasons behind student satisfaction or dissatisfaction with the faculty and curriculum.

Career Aspirations and Professional Options

Among the types of information one seeks first when trying to assess the attitudes of students in a new educational setting is how they became attracted to the ENI, or more broadly how they came to choose the career of primary
school educator. For lack of any previous information on students' career preferences when they were attending primary or secondary school, an attempt was made to recreate what those preferences were by asking the students: "At the time you earned your BEPC, what career did you envisage?" Table X shows their responses.

<table>
<thead>
<tr>
<th>TABLE X</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAREER ASPIRATIONS AT BEPC EXAM</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CAREER</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teaching</td>
<td>53.7%</td>
</tr>
<tr>
<td>2. Medicine and nursing</td>
<td>9.8</td>
</tr>
<tr>
<td>3. Continue studies</td>
<td>6.5</td>
</tr>
<tr>
<td>4. Industry, technology</td>
<td>6.5</td>
</tr>
<tr>
<td>5. Journalism</td>
<td>5.7</td>
</tr>
<tr>
<td>6. Police, military</td>
<td>2.4</td>
</tr>
<tr>
<td>7. General administration</td>
<td>2.4</td>
</tr>
<tr>
<td>8. Theatre, art</td>
<td>1.6</td>
</tr>
<tr>
<td>9. Other or &quot;none&quot;</td>
<td>11.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

Approximately one-half the students envisaged teaching as a career when they finished their third form. Yet three-quarters of the students came to ENI without going higher in school than the third form. From these percentages one can deduce that several students who did not intend a teaching career would up in one a few short months later.
The unexpected response "continue studies" which eight students spontaneously wrote shows a certain imprecision in vocabulary or thought and an unfamiliarity with questionnaire items, for "continue studies," of course, is not a career. But more important, the answer suggests a very strong wish which many students share that if it had been possible they would have gone on to further studies.\(^1\)

Since a teaching career was envisaged by one-half the population it was thought important to further divide this category into levels. However, the levels of instruction were not requested; they were volunteered, and demonstrate an individual's desire to make his preference more precise. Table XI presents the further breakdown of teaching aspirations on a total and on an adjusted basis.

### TABLE XI

**BREAKDOWN OF TEACHING ASPIRATIONS**

<table>
<thead>
<tr>
<th>CATEGORY OR LEVEL</th>
<th>TOTAL % N = 125</th>
<th>ADJUSTED % N = 66</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General</td>
<td>35.2%</td>
<td>66.7%</td>
</tr>
<tr>
<td>2. Primary</td>
<td>4.8</td>
<td>9.1</td>
</tr>
<tr>
<td>3. Secondary or higher</td>
<td>11.2</td>
<td>21.2</td>
</tr>
<tr>
<td>4. Other</td>
<td>1.6</td>
<td>3.0</td>
</tr>
<tr>
<td>5. No answer</td>
<td>1.6</td>
<td>--</td>
</tr>
<tr>
<td>6. Non-teaching</td>
<td>45.6</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

\(^1\)As it was, the students weren't requested to furnish this information, unfortunately.
In most instances respondents marking category 3 coupled secondary with higher education on their own initiative. It could be hypothesized that those who took the trouble to specify a level of teaching did so out of some conviction. The general teaching category might denote a more diffused or vague intention to enter the educational profession. It is clear that insofar as the students felt strongly decided enough to specify their preferred level of instruction, less than 5 per cent of the total population marked their ultimate destination--primary school education--as their goal. In each case more than twice the percentage would have preferred teaching at a higher level. In conclusion, although a small majority of students at the BEPC professed some form of teaching as their career goal, only a small minority aimed at the primary level. The future of 95 per cent of the population was redirected rather abruptly.

The key question, "Why did you come to the ENI?" was indirectly inserted among questions concerning acceptances and refusals at other institutions.2 The answers were disparate and often defy codification. A third of the students chose teaching for job security or claimed teaching as

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2 For the exact context see the Questionnaire in Appendix D, page 261. It was not clear to the students who should respond to questionnaire items 36 and 39. Seventy-six students claimed they had been accepted at other schools. Although item 36 intended to find out why these students preferred ENI, 116 students replied! Similarly, twenty-four students admitted to having been refused at another school, but seventy students marked to what extent they would have preferred that institution!
their "vocation." A quarter of the students put "financial reasons." Such a response signifies a financial need—usually emanating from the students' parents' fiscal difficulties—which could be attenuated by receiving a student-teacher scholarship and entering the work force in one to three years at a fairly adequate salary level. These students probably would have preferred to continue their secondary education, but either had no money to do so or were pressured with family demands for support. Approximately one-tenth of utilizable answers denoted "other avenues closed"; the teacher training school system was a last resort. In general, there seems to be an even distribution between those students choosing ENI of their own volition and those who enter the school resignedly.

Parental Roles in Professional Decision-Making

In addition to student testimonies as to their professional preferences and information on application to other schools, it was thought important to learn about the parents' roles and attitudes as factors in the decision to attend teacher training school. Given the impossibility of interviewing the parents and the impracticability of even sampling

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3 The financial benefit assuredly figures in almost all students' motivations, but it is often not made explicit. It is a taboo subject or an unpopular admission to make. It was learned that such responses as "for personal reasons" or "for reasons that I will not go into" also referred to purely financial considerations.
their opinions by any means, the students were asked their perceptions of parental attitudes. To put parental attitudes into relief it is preferable first to establish the part parents in general played in the decision to attend teacher training school. The literature such as Crapuchet (1967) and Berbaum (1968) pointed to the father as most influential in academic matters. The source of the scale in Table XII, Ferrari, shows parents as being responsible for about 84 per cent of the cases where primary school students were sent to school. Major schooling decisions at ages fifteen to twenty would normally involve some participation of the student concerned but the degree was not known. Table XII presents a closed-ended inventory of the "most influential person in the decision to take entrance examination for teacher training schools."

Categories 1-3 were specified in order to determine how the decision was divided among elements of parental responsibility. Categories 4 and 5 were included due to the significant part the uncle often plays in African child upbringing. Parents represent only 16 per cent of the major influence while the students 60 per cent of the time made their own decision: a major change compared with the data on primary school students. If one opposes the generations, that is the relatively educated or intellectual students vis-à-vis their parents or uncles who are mostly illiterate peasants,

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"A. Ferrari, op. cit., p. 80."
one notes that nearly a quarter of the decisions were principally made by the older generation, who continue to exert a major influence on their teen-age children. Since the whole question of parental attitudes toward their offspring going into teaching seemed a complex, unexplored, and important item, additional information was sought.

TABLE XII
MOST INFLUENTIAL PERSON IN DECISION TO TAKE TEACHER TRAINING SCHOOL EXAM

<table>
<thead>
<tr>
<th>RELATION</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Father</td>
<td>8.8%</td>
</tr>
<tr>
<td>2. Mother</td>
<td>2.4</td>
</tr>
<tr>
<td>3. Father and mother</td>
<td>4.8</td>
</tr>
<tr>
<td>4. Father's brother</td>
<td>4.8</td>
</tr>
<tr>
<td>5. Mother's brother</td>
<td>1.6</td>
</tr>
<tr>
<td>6. Other relative</td>
<td>8.0</td>
</tr>
<tr>
<td>7. Tutor</td>
<td>0.8</td>
</tr>
<tr>
<td>8. Myself</td>
<td>60.0</td>
</tr>
<tr>
<td>9. Other</td>
<td>8.8</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>

It was hoped that the open-ended question, "Why does your family want you to go into teaching?" would elicit a range of answers to the question or outright denials. Corresponding to the majority of students who were themselves the major agents responsible for the decision to enter a
teacher training school, almost one-half of the utilizable 122 answers stated "my own decision" and not the family's. Typical answers in this category were:

With us Africans it is not the family who decides, but we ourselves who decide.

My family had no influence on my choice. I decided my future without my parents' opinion. It could not be otherwise because of their ignorance.

My family has nothing to say concerning my professional orientation. I came into teaching on my own. My parents only approve my wishes. For them the important thing is to see me succeed in my life.

If close to half of all students purportedly chose their own futures, parental reaction in some cases was not only formulated but hostile to varying degrees. Somewhere between 10 and 20 per cent of the parents expressed negative feelings about their son's or daughter's professional choice, according to the latters' perceptions. It is often the case of the child's not fulfilling the professional expectancy of the parents--a universally known situation.

My family never wanted me to go into Public Education. They wanted me to be in a private school. More precisely in a Protestant school. According to them this way I would be in close contact with Religion.

I picked teaching without my parents knowing it, they wanted me to become a midwife.

On some occasions there was a change in parental attitude toward a more favorable leaning:

My family did not want me to go into teaching but they accepted my decision.

My father wanted me to go into medicine, but since I didn't like that profession I convinced him to opt for teaching.
In at least two cases a negative parental attitude caused serious internal problems.

My family did not want me to go into teaching. My entry into ENI provoked unpleasant things in my family.

The second student described his situation more fully to me.

My parents wanted me to be a lawyer because the village wants only one representative in each branch. There already is a teacher but I wanted to be one, too. I insisted, and my parents, claiming that one teacher was sufficient from the village, threatened to cut off all my support. They insinuated that if I went into teaching I would be competing with my big brother. When I would try to reason, saying with two teachers the village would be better represented they did not understand and only retorted: "You don't think the [first] teacher is competent. And the teacher didn't dare contradict the village elders so he did not speak up for me.

Such a testimony reveals how difficult it is for some students to deal with their elders and how their support can depend on their satisfying the benefactor's desires. It also introduces a very common phenomenon where a village attempts to have all sectors of endeavor represented so the "big brother" can help the villagers in any domain. The same pattern is present in this answer:

My family wants each son oriented in a different branch and as I am the third son (the first two being a technician and a nurse) I am called to be a teacher.

About 8 per cent of the respondents claimed that their parents' attitude was positive because their offspring would be able to help them financially. It is felt that this situation is more frequent than the percentage would suggest but some students would not mention it of their own initiative.
Given the family situation, ten children . . . a father having become blind after the tenth, having left three coffee plantations, one of them abandoned, another destroyed by the construction of the village. Thus I was obliged to enter teaching.

Father is old and mother is worn out and you must come quick and help.

To quickly earn my living and theirs.

Enormous hope is placed in the educated sons who can come to a poor family's relief. While some students claim teaching as a vocation, it seems much more plausible that the motivation is more socialistic, because of the expected family support. Teaching is chosen because one earns a decent salary right away, even as a student-teacher trainee.

Given the fabric of African extended families and the solidarity and self-denial that they require, it was no surprise to see as many as 17 per cent of the respondents place their parents' positive attitude within the framework of helping the many brothers and sisters advance their schooling.

I come from a large family of 26 children, you see then that the problem of schooling is enormous. So my parents want me in teaching to encourage and help my brothers in their studies.

It must not be concluded that the teacher's assistance will be only in the realm of moral support or pedagogical tutoring.

My family wanted me in teaching to help the little brothers and cousins in their schooling. Being a teacher one has no difficulty in enrolling one's brothers.

Because the number of little brothers and sisters is increasing it is then to be able to enroll them one day, at least in primary school.
Since there are far too many school-age children for the insufficient number of teachers and villages with schools, some sort of priority system had to be established. This system is largely tribal and even village based, and works in the following fashion. Every school teacher, particularly at the primary level is deluged with petitioning youngsters sent from the home village to be taken care of by the successful big brother. The latter, according to traditional tight family bonds, is expected to enroll the child—a task for which he is well placed—and often to house and nourish him. A similar pattern is true when students who are asked to repeat a grade or leave school are sent for another try in a big brother's school.

Attitudes Toward Training Over Time

Attitudes toward the curriculum and toward the faculty were solicited after six months of training for ENI-1 and after twelve months of training for ENI-2. Figure 6 shows the answers in percentages to the questions: "At the beginning of your training, what was your attitude toward the curriculum, that is the contents of the workshops?" and "Now, what is your attitude toward the curriculum?"

5 So it is that a neighbor of mine in Bouaké who is primary school director houses 20 children: his own ten plus ten sent from his village.
The first attitudes approach a normal curve, where the summit, "indifference," may be translated as an inbetween sentiment such as a felt "lukewarm" or "so-so" or perhaps a decision not to express an extreme. It does not necessarily signify a refusal or a "turning off." The fact that "indifference" netted the majority of the voices is easily explicable by the newness of the curriculum to the students, presenting some subjects they had never been exposed to before in a radically new pedagogical setting. The students in this high percentage show their confused, disconcerted state at the outset of the great unknown--the experiment with educational television and the training of the first television teachers. After several months of training, there is a definite shift, as is visible in the two curves of Figure 6, page 138. The mode is now clearly "happy" with a slightly increased "very happy." Any discontent has remained stable. "Indifference" has been reduced to 21 per cent. From oral information collected informally, another possible reason for lukewarm attitudes is uncertainty and apprehension as for the future in the new career of teacher by television. Clearly, however, the major change can be detected by the change in modes, from a hesitant or slightly sceptical feeling to a sentiment of general approval.

Would attitudes toward the persons responsible for this curriculum vary in the same way? Figure 7 presents the attitudes toward faculty over time.
FIGURE 6
ATTITUDES TOWARD CURRICULUM
(N = 123)
Figure 7 shows that the change in modes follows the same pattern, from "indifferent" at the confused beginning of a new training to a generally "happy" disposition over time. The concept "faculty" is not clearly separate from the concept "curriculum," for the first element not only presents the second but believes in it, lives by it, is it in some respects. This signifies that to some extent a measurement of attitudes toward faculty may be correlated with attitudes toward curriculum. But in this case the mode is much lower at 34.4 per cent showing the students feeling at being less at a loss with the human leaders than with the inanimate contents of the pedagogy. Discontent in any form is less than half what it was for curriculum perhaps stemming from the same reason: one is more severe on a defenseless curriculum than when judging a human superior. Over time the factor of discontent is constant. There is a slight decrease in those "very happy" students picturing ENI as rosy. The increase in happy disposition and the decrease in indifference balance themselves, as they did in the attitudes toward curriculum but compatible with the changes in attitudes toward faculty, being less consistently extreme, the amount of the change is significantly less considerable (approximately 20 per cent) than with curriculum (about 33 per cent). In conclusion, the notable attitude change in both curriculum and faculty scales was from indifference to happiness, the other categories remaining relatively constant over time. Attitudes toward
FIGURE 7
ATTITUDES TOWARD FACULTY
(N = 125)
faculty over time remained consistently more positive than attitudes toward curriculum. It is no doubt less palatable to blame human intentions than to blame the contents of courses for dissatisfaction students manifest in their training.

Certain questionnaire items warrant analysis by separating ENI-1 from ENI-2 and this is one of them. Although the population is halved, thus based on approximately sixty students thus decreasing generalizability, the year separating the two half populations is enough to produce a vitally different psychological state in terms of satisfaction levels. Again we will present original attitudes and later attitudes toward curriculum and faculty, but this time focusing on the direction of change by each class year. The change is perhaps best presented by a 5 X 5 matrix, where the row entries represent the original level and the column entries the later level of satisfaction. The horizontal and vertical labels are coded VH, H, I, D, and VD abbreviating the levels very happy, happy, etc. Figures 8A to 8D on page 142 present change in attitudes by class year, by sector judged curriculum or faculty and over time. Beneath each matrix is the recapitulation of change, where the equals sign (\(=\)) equals no change (the diagonal), the plus sign (\(+\)) designates any change in a positive upward direction (the cells below the diagonal) and a minus sign (\((-\)) signifies a change toward a
**FIGURE 8A**

**ENI-1 ATTITUDES TOWARD CURRICULUM**
(N = 66)

<table>
<thead>
<tr>
<th>VH</th>
<th>H</th>
<th>I</th>
<th>D</th>
<th>VD</th>
<th>Σ</th>
</tr>
</thead>
<tbody>
<tr>
<td>VH</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>H</td>
<td>4</td>
<td>4</td>
<td>1</td>
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</tr>
<tr>
<td>I</td>
<td>3</td>
<td>20</td>
<td>11</td>
<td>4</td>
<td>38</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>6</td>
<td>4</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>VD</td>
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<tr>
<td>Σ</td>
<td>32</td>
<td>31</td>
<td>14</td>
<td>8</td>
<td>22</td>
</tr>
</tbody>
</table>

= 22  33%
+ 37  56
- 7   11  100%

**FIGURE 8B**

**ENI-2 ATTITUDES TOWARD CURRICULUM**
(N = 56)

<table>
<thead>
<tr>
<th>VH</th>
<th>H</th>
<th>I</th>
<th>D</th>
<th>VD</th>
<th>Σ</th>
</tr>
</thead>
<tbody>
<tr>
<td>VH</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>6</td>
</tr>
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<tr>
<td>I</td>
<td>2</td>
<td>10</td>
<td>6</td>
<td>10</td>
<td>31</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>VD</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Σ</td>
<td>11</td>
<td>23</td>
<td>12</td>
<td>15</td>
<td>31</td>
</tr>
</tbody>
</table>

= 11  20%
+ 22  39
- 23  41  100%

**FIGURE 8C**

**ENI-1 ATTITUDES TOWARD FACULTY**
(N = 66)

<table>
<thead>
<tr>
<th>VH</th>
<th>H</th>
<th>I</th>
<th>D</th>
<th>VD</th>
<th>Σ</th>
</tr>
</thead>
<tbody>
<tr>
<td>VH</td>
<td>11</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>13</td>
</tr>
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<td>I</td>
<td>3</td>
<td>17</td>
<td>7</td>
<td>27</td>
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</tr>
<tr>
<td>D</td>
<td>2</td>
<td>6</td>
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<td>8</td>
<td>8</td>
</tr>
<tr>
<td>VD</td>
<td>20</td>
<td>37</td>
<td>7</td>
<td>2</td>
<td>31</td>
</tr>
<tr>
<td>Σ</td>
<td>31</td>
<td>47%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
+ 32 | 48|
- 3  | 5  100%

**FIGURE 8D**

**ENI-2 ATTITUDES TOWARD FACULTY**
(N = 59)

<table>
<thead>
<tr>
<th>VH</th>
<th>H</th>
<th>I</th>
<th>D</th>
<th>VD</th>
<th>Σ</th>
</tr>
</thead>
<tbody>
<tr>
<td>VH</td>
<td>9</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td>19</td>
</tr>
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<td>H</td>
<td>1</td>
<td>13</td>
<td>5</td>
<td>1</td>
<td>20</td>
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<td>I</td>
<td>8</td>
<td>3</td>
<td>4</td>
<td>1</td>
<td>16</td>
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<tr>
<td>D</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>VD</td>
<td>10</td>
<td>27</td>
<td>12</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Σ</td>
<td>26</td>
<td>44%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
+ 12 | 20|
- 21 | 36  100%
more negative or lower level of satisfaction (illustrated by cells above the diagonal). These frequencies are translated into percentages according to the number of respondents, the N given.

Similarities between the two class years include a common greater stability of attitudes toward faculty (47 per cent and 44 per cent) than toward curriculum (33 per cent and 20 per cent). This consistency may be caused by the element of relative permanency in the faculty while the nature and appropriateness of the curriculum may change--thus producing a change in student attitude toward it. The faculty are, with few exceptions, the same individuals. Another similarity is the higher percentage of positive changes for curriculum (56 per cent and 39 per cent) than for faculty (48 per cent and 20 per cent) and the remaining percentage shows a higher proportion of negative changes in curriculum attitudes (11 per cent and 41 per cent) than in faculty attitudes (5 per cent and 36 per cent). As explained above, it is more comfortable to express oneself dramatically concerning an inanimate array of courses and workshops than to pronounce oneself in favor or in disfavor of faculty members.

The major significant difference is the relative high negative feelings of ENI-2. They are almost four times as negative (41 per cent vs. 11 per cent) as ENI-1 in judging curriculum and over seven times as negative (36 per cent vs.
5 per cent) in judging faculty. ENI-1 consistently has more students who either maintain their attitude or positively change their attitudes than ENI-2. The high negative changes in ENI-2 make one especially curious as to what factors compose a satisfaction or dissatisfaction decision as observed between the two class years.

What are the factors producing satisfaction or dissatisfaction on the part of ENI-1 or ENI-2 students? Many of them were elicited in the question immediately following the curriculum and faculty attitude index, namely: "If you gave two different answers to the preceding question, please indicate the reason for your change in attitude." For instance, if a student marked "Indifferent" toward faculty at the beginning of training and then "happy" or "unhappy" several months later, he was invited to explain his attitude change. The students' answers will expose the major causes for satisfaction or dissatisfaction and reveal similarities or differences between class years.

Common difficulty in adaptation. Certainly a common occurrence, and one evoked by more than a third of the students who explained their first attitude of indifference or discontent was the shock of a new style of teaching and learning. For the first time students arriving at ENI were not placed on the other side of the lecture podium to just

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⁶Common refers to both ENI-1 and ENI-2.
listen but were confronted with problems to which they themselves were expected to propose solutions.

In the beginning I realized that work at ENI was different from that which I had experienced during all my previous schooling. Organization by work groups did not suit me at all.

The fact of saying that I should discover difficulties myself and resolve them frustrated me. I came from a school where that does not exist.

At the beginning I found myself in a new situation, or at least in a totally different school from the lycée. In the lycée we were in direct contact with the teachers: they were the supreme masters. And then suddenly I find myself in a new school where every student has the right to speak. The student can freely express his opinion. We work in groups and sometimes without a teacher. So I felt we were being neglected, we were being abandoned by the teachers.

I was discontent about the teachers because I considered their refusal to pass down knowledge in the classical way to be due to their laziness. After a while I understood that it was a new kind of teaching.

Unsuitability, frustration, apparent negligence and incompetence typified many student reactions at the beginning of their new training. These sentiments are in fact proof that a new pedagogy was being installed, as had been intended.

Common victims of misinformation. As one inventories the reactions to teaching ENI style, one realizes that students did not know what they would find at ENI. Precious little information was available to them about the teacher training school and even about the ETV project. Ignorance then as well as confrontation with novelty marked many reactions.
In the beginning I was indifferent because I lacked information thus I was unaware of the purpose of what I was doing. I hadn't yet fathomed the training especially because it was so different from that which I had undergone in secondary school.

Ignorance and unpreparedness before a novelty were perfectly normal reactions for students in a program which was brand new. Such reactions are not necessarily harmful unless they are accompanied by unfulfilled expectations. Some students, even after a full year of the school's operation unfortunately found a very different training than they had intended to undergo.

Right now I am discontent because I expected to receive courses like in a lycée.

I want to have general courses. Since my arrival this is what I expected and what I still expect.

These students expected to receive not only classes held in traditional pedagogy, but courses enabling them to prepare the baccalauréat and complete general secondary studies. The fact that numerous students harbored the impression that coming to ENI they could pursue general secondary studies is itself a poor reflection on the distribution of information prior to selection. In those cases where the student persists in his illusion--for the ENI has an immutable mandate, until new orders, to train television and audio-visual oriented

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7Such an expectancy may seem incongruous with the school's title--a normal school. However, it must be recalled that the other normal in Ivory Coast had steadily evolved from schools training primary school teachers to training institutions for higher studies, given this more popular inclination on the part of students.
primary school teachers—it is particularly distressing. Some students have been able to surmount their early disappointment.

When during the first days of ENI we were introduced to the Math teacher, the Natural Science teacher, and the French teacher I thought we were going to have general courses like in the lycée. My disappointment was great when the French teacher taught me how to correct the phonetic errors a child makes when he mis-pronounces certain words. And now I see that it is not as bad as all that.

As the ENI becomes known the disappointments students now witness due to misinformation or lack of information should disappear. Preferably students would find satisfaction by design, not by chance.

Allusion has already been made to the official promise later rescinded that ENI graduates would start at positions hierarchically above that of classroom teacher. A student changes his attitude from happy to indifferent because in the beginning I understood that after three years training I would become a pedagogical advisor. But now I know I will be a teacher.

The first two classes at ENI suffered from the indefiniteness and finally degradation—in their eyes—of their professional status.

Common mixed feelings. There is attestation that both class years feel generally comfortable in their relations with faculty which appears to take seriously the students' contributions. An ENI-2 student changed from indifferent to
happy "because the faculty takes account of our suggestions."

And an ENI-1 student writes that

The teachers consider us as adults and our ideas are not rejected. We enjoy a good camaraderie. They help us a lot in certain areas.

Although there is a common appreciation for a faculty that is well intentioned, the teachers present certain disadvantages. Both years resent the fact that the curriculum defines itself as it goes along and as a result of the faculty's groping.

The teachers do not know exactly what instruction to give at ENI. They seem to be groping. And the workshops are not permanent. (ENI-2)

The unstable curriculum seeking its optimal format is a painful and anxiety-producing process in a new school. A less necessary element is the flux in Unesco personnel, short-term appointments and frequent leaves of absence on mission. More than one student associated an unstable curriculum with a nomadic faculty. "I am discontent because they grope to find the curriculum for us. And the teachers often change." (ENI-1)

The docility of ENI-1. If the two years share many causes for satisfaction or dissatisfaction, some attitudes are clearly typical of one year rather than the other. One would rarely find in the hardened ENI-2 the naïve acceptance and docility included in the following ENI-1 statements:

It's the curriculum they give us so it's good.
I don't want to judge them because they teach me what I should do.

I did not know my teachers. I did not know what they were going to do concerning my training. Now I can say they accomplish marvelously their task.

I was not accustomed to this kind of studying but since I realize that learning new notions allows my easy adjustment to society...

ENI-1, because of their undeveloped critical mind and their closer adherence to traditional responses of acceptance, exhibit an unrealistic rosiness. Perhaps their vague and unquestioning receptivity can be epitomized by the student who justified his positive changes in attitude by a laconic, "I understood later." Exactly what he understood and how remain undefined.

The recrimination and insecurity of ENI-2. On the other hand, ENI-2 is filled with a profound sense of insecurity, based on perceptible concrete fears. A large number of students expressed anxiety, such as, "Now I am discontent because I do not see very well where we are going." The faculty's ignorance and lack of perceived purpose continue to worry students.

At the beginning the faculty spoke of teaching reform. So for me, only they could know what kind of instruction to give here. And now I realize that even they themselves don't know. I am worried.

Products of traditional education, why would students think teachers do not have all the answers? Especially Unesco teachers who are more than teachers: their status is enhanced as "experts."
I didn't know in the beginning what an expert was. Then I thought an expert was a professor of worldwide renown, capable of finding the best solution to no matter what problem. Now I realize that the work they do can be done by any professor, so I no longer deceive myself.

The euphemistic misnomer "expert" invites a disappointment. But behind the label of expert, teachers, because they did not distribute an established undisputable syllabus or propound pedagogical recipes, were considered less than competent. More incriminating and potentially serious than the ingrained lack of confidence in someone who gives the impression at times of not knowing where he is going is an attitude verbalized by a dozen ENI-2 students suggesting an irrelevant curriculum. Some of these testimonies express desire to take general courses to prepare the baccalauréat. One avowal in particular is a serious indictment.

I changed attitudes [from "indifferent" to "discontent"] for the good reason that I have the impression of having learned nothing that will enable me to confront the problems which a teacher faces in class.

At least two major factors would seem to provoke this attitude. One concerns the curriculum and the teaching personnel, the other the students' views on professional training. It had been announced in the early stages of the ENI creation that the major part of the professional training would be child-centered, that is the teacher trainee would study the process of learning in accordance with a child's physiological development and mental age. Because no psychologists or
pedagogues were found to be hired until well into the second year of ENI, contrary to project planning, the students' classwork remained up until that point extremely centered upon the student-teacher, and not the primary school pupil. Indeed, after over a year of ENI the students had not been into any primary schools and had had no contact with young pupils or with real problems faced in the primary school classroom. This promised but unfulfilled contact with the realities of primary school life would very understandably produce anxiety and discontent on the part of students.

The second factor is not so apparent. What do students have in mind when they evoke the "problems" of a primary school teacher? When the "psycho-pedagogical unit" began functioning, its personnel was stupefied to learn that the large majority of students were wholly preoccupied with the composition of the message they would be responsible for as teachers, not with how the message should be communicated according to the nature of the audience or with how there could be a control of acquisitions or changes in attitude. That is, the surprise for the faculty was that the students did not see the need for studying child psychology because for them the only important aspect of teaching was to "give one's course." After all, this is what they had witnessed during all their primary schooling. This confrontation of ideas on what constitutes a teacher's role and consequently the elements of his professional training was not explicit
in any questionnaire answers; the issue, recognized as a crucial one, emanated from discussions held after the administration of the questionnaire.

A very different answer was given by one ENI-2 student who reserved his opinion: "Because I have not yet put into practice all I have learned in order to see its effectiveness."

Of course the student-teachers don't know for sure how prepared they are for the class until they are in front of a class. It is argued that despite their feelings of insecurity accompanying the birth pains of a project they are far more prepared than they think. This seems perfectly possible, but it is nevertheless important to have an insight into the students' own expressions of their situation. For ENI-2, who consider themselves the prime guinea pigs, their situation is ambiguous. They are ambivalent toward the faculty, who,

... promise a lot and achieve little. I like them anyway because they are more human than the other educators whom I have met. They understand our anxieties but do not have the means to help us.

Definitely a new popular student-faculty relationship has been installed. The students' affective relations with faculty are positive. Yet there is a gulf, a credibility gap. Students have been led to believe certain statements by administration or propositions by faculty which were premature. They have been exposed to a new rhetoric concerning a renovated educational system with an audio-visual emphasis, but throughout two years of training they never saw any
television. Students confess to having suffered from ignorance or misinformation before coming to the school and from the difficulty of adaptation throughout the early months. Surrounded by material inadequacies, an indefinite status, an insecurity as to the future, and the heavy and discouraging machinery of the project's organization, the students of spring, 1971 are undergoing many tribulations which will hopefully be spared their successors.
CHAPTER VII

DESCRIPTION OF THE POPULATION III: ATTITUDES DIRECTED TOWARD THE FUTURE

At some time participation patterns and productivity of the new teachers will have to be assessed, and it is very possible that an influential factor will be student attitudes toward their first professional assignment. The first sections of this chapter, "Perceived Level of Personal Contribution to Project," shows how the students perceive the importance of their professional roles. The next section "Professional Residence Preferences" reveals why the students favor rural or urban teaching positions. The last part, "Projected Attitudes of Future Colleagues," faces the question: how do the students conceive of their working relationship with their new colleagues?

Perceived Level of Personal Contribution to Project

Participation studies in the past have attempted to measure the amount of involvement each subject felt in his enterprise. The enterprise here is the educational television project, and the students were asked: "The success of the ETV project will involve a large number of people. How do you rate your personal contribution?" Students were indirectly requested to project the importance of any role they were to
play in the ultimate success of the project. Table XIII tabulates the distribution of the answers.

**TABLE XIII**

PERCEIVED LEVEL OF PERSONAL CONTRIBUTION TO PROJECT

<table>
<thead>
<tr>
<th>LEVEL OF CONTRIBUTION</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Essential</td>
<td>41.6%</td>
</tr>
<tr>
<td>Fairly important</td>
<td>45.6</td>
</tr>
<tr>
<td>Unknown</td>
<td>12.8</td>
</tr>
<tr>
<td>Fairly unimportant</td>
<td>0.0</td>
</tr>
<tr>
<td>Negligible</td>
<td>0.0</td>
</tr>
<tr>
<td></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

If students had marked the lower two categories they would have admitted to a felt worthlessness of their participating in the enterprise. On the contrary, almost 90 per cent believe they have significant roles to play. The new pedagogy does not mean only placing new technological instruments at the disposal of Ivorian towns and villages: it is incumbent on the students to be agents of the reform. While approximately 13 per cent reserve judgment or have no spontaneous positive or negative reaction to the question of their role, two out of every five students are persuaded their role is an essential one.
Professional Residence Preferences

In the first of a series of questions designed to have the ENI students show how they conceive of certain concrete possibilities in their future life, they read in the questionnaire: "When you begin your teaching career, where would you like to live? Why?" Table XIV presents the distribution of the responses.

**TABLE XIV**

**PROFESSIONAL RESIDENCE PREFERENCES**

<table>
<thead>
<tr>
<th>LOCALITY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>In a village, anywhere</td>
<td>12.8%</td>
</tr>
<tr>
<td>In a village, near my home</td>
<td>5.6</td>
</tr>
<tr>
<td>In a small town</td>
<td>39.2</td>
</tr>
<tr>
<td>In an important town</td>
<td>21.6</td>
</tr>
<tr>
<td>In Bouaké or Abidjan</td>
<td>20.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

If it is remembered that over a third of the students grew up in a village atmosphere, that over two-thirds of their parents live in villages, a clear progression can be noticed as less than 20 per cent of the students would prefer village assignments. Only 20 per cent or about the percentage of students who grew up in a city wished to teach there. The towns received most of the preferences (between small and important towns about 60 per cent).
As such this information presents an interesting distribution, and perhaps not what one would have imagined. On one hand the question asked was an academic one, because normally one does not take into consideration the students' preferences: positions are assigned. But on the other hand hearing the students' own views on where they would like to teach first would give a tableau of how they perceived professional service and living conditions in the range of rural/urban settings available in Ivory Coast.

Of the sixteen students answering "any village," a few evoked material advantages: fewer expenses, housing facilities, and generally an uncostly existence. More recognized that the need for teachers was greater in the village and their presence among villagers would be more important and more useful than in larger communities. A few students expressed their willingness to serve anywhere, and especially in the village because their training was supposed to prepare them precisely as effective agents in villages. Finally, along the same line, two answers made it clear that only by trying to work in a village would the students be able to evaluate their training. The seven individuals marking "a village near my home" expressed a particularly strong desire to aid family and friends or to be in a familiar atmosphere where they would live economically and enjoy village esteem.

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1Big city life is usually overwhelmingly popular with students. Besides, going to school in Bouaké has accustomed the ENI students to city living.
Skipping to the 26 persons who prefer city living, we see a different set of reasons. Most students say they would like to teach in Bouaké or Abidjan because they want to remain informed and continue their education, mainly through evening courses. Many students prefer city teaching because they grew up in a city and claim they will be motivated or effective only if they remain in such a setting. They also mention health and friendship.

I have lived in Abidjan for many years. I know the milieu pretty well; my parents, friends, and pals are there. The climate agrees with me. I would be very motivated there. You are informed on almost everything there. There are evening courses which would permit me to "evolve" in my career and to accede to the secondary teacher training school.

The desire to develop in all possible forms is a strong one, which we will return to. Here the progress would be toward a higher teaching position, perhaps out of the context of educational television. The proclivity toward upper mobility and leaving primary teaching, which is much less prestigious than higher teaching, is felt by many students, who are planning to move on if possible. The project administration on one hand is being advised to allow latitude in the students' professional future, but they also do not want to find their primary school positions abandoned. Some students want to remain in Bouaké in order to be more aware of the ETV programs and be in contact with future training at ENI. It is an exceptional student who answers this question by condemning village life.
I don't like the bush. I want to live in night clubs and see shows. In the bush you don't know how to spend the money you earn.

This is an extreme statement, for most students evoking financial matters claim Abidjan is exhorbitant and village existence permits solvency.

Students mark a "small town" preference mainly because of its low living cost. An "important town" is usually picked for its opportunities to continue one's self development. Many students pick town living as ideal: they avoid the expensive city and the dull village: "City life costs too much and the village is dead—I would be bored." Criticisms of village life are categorized. There are few diversions (sports, movies). To make purchases such as books, to receive one's mail regularly, to keep oneself informed one must go to a town. Daily conditions are difficult—sometimes no water or electricity—and dangerous to one's health. Very often the arduous living conditions—which most students knew as a child but have surpassed in their present existence with scholarship and city advantages and which most students seem to want to associate with their past and not their future—are seen as producing not only dislike on the part of the student but consequent ineffective service.

I have always lived in small towns and I know this milieu much better. Placing me in a village would be exposing me to too many risks. Besides the village life does not suit me. I would be worried about so many things. I would go into class in a bad mood.
because I would have had a bad sleep and in the final analysis I would fulfill poorly my professional responsibilities.

There is a sentiment that working where one wants to work will produce an effective teacher. And one wants to work in a setting one is familiar with, or one also will not be effective. Some students foresee their pattern of professional mobility: they would like to work in a village at first, save money, and then be appointed to a city or town.

Having elicited some reasons for professional residence preferences, the questionnaire went further by forcing an expression of the student's willingness to live in a village. Again, it was known that the student might have no choice: but how would he react if he were assigned to a village position? The question "To what degree would you be willing (or unwilling) to live in a village?" was followed by a closed-ended scale, and again by the invitation: "Why?" Table XV gives the results of students on the scale.

| TABLE XV |
| VILLAGE RESIDENCE WILLINGNESS SCALE |

<table>
<thead>
<tr>
<th>DEGREE</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entirely willing</td>
<td>25.6%</td>
</tr>
<tr>
<td>More or less willing</td>
<td>35.2</td>
</tr>
<tr>
<td>More or less unwilling</td>
<td>17.6</td>
</tr>
<tr>
<td>Entirely unwilling</td>
<td>21.6</td>
</tr>
</tbody>
</table>

| N = 125                             | 100.0%     |
Sixty per cent of the students are willing to some degree, 40 per cent unwilling to some degree. Many reasons given are the same as for the preceding question: savings, health hazards, lack of opportunities for self-advancement, and boredom are associated with village life. Many students profess they will respect their assignments but nevertheless have preferences. Some bring up for the first time the administrative isolation of village living.

I would never want to stay in a village where the authorities ignore your problems. In a village the Inspector comes perhaps once a year . . .

Another student is entirely willing to live in a village "insofar as I have frequent communication with the town and educational authorities." Conscious of their future responsibilities of teaching by television, some students also remind one that in a village TV repairs will be much more difficult to obtain.

On the extremes, several students are eager to try village teaching to prove the value of their training. They are motivated to help villagers with their problems. Those students at the opposite pole are afraid of being cut off.

At the present time it is very difficult for me to spend more than two weeks in a village. Village life doesn't interest me at all. You are uninformed about current events. It is like a stagnant existence. You do not evolve, or you evolve so little.

Stagnation and personal development; this dichotomy in which so many students associate village vs. city or town living
can be epitomized in this final quotation on the subject of residence willingness.

Village life is lousy. I have absolutely no intention of eating yams. At school here we are served potatoes: they are part of modernism.

In this down-to-earth symbolism, the traditional African tuber gives way to the imported spud, which, because of its foreignness, its exoticism, its association with a new style of life, tastes better. The conviction that some elements of village life are out of place in the 20th century for someone "with ambition" or make for dull living for someone who has tasted town or city life styles is common among ENI students. However, most opinions are not so strong as to embrace the new and Western as being automatically better.

Projected Attitudes of Future Colleagues

In the fall of 1972 after three years of training at ENI, close to sixty young Ivorians will become (if they are accepted into the teaching force) new colleagues in established primary schools with an established faculty. The schools may have television or they may not (the Ministry of Education has recently announced this policy, which has entailed considerable modification in course structure at ENI to prepare the students for non-TV classes as well). The colleagues of the young ENI graduates may have attended in-service summer courses to introduce them to the ETV reforms or not. Their colleagues will be spread among the present four echelons:
a full teacher or ordinary teacher having successfully passed his C.A.P. (certificate of aptitude in Pedagogy) after several years of teaching; an associate teacher with his C.E.A.P. (elementary certificate of aptitude in Pedagogy) having graduated from a CAFOP; or from one of the two lower levels of teachers which are being eliminated through retraining, the monitors or associate monitors who have little more than a primary school education.

The ENI students at graduation will take the C.A.P. exam, and if successful will earn that diploma without having held a class and without the numerous years usually spent by the presently practicing teachers to prepare for the exam. The ENI graduates will have been through a course of study and training which, unlike that of their future colleagues, places a premium on certain pedagogical principles: group work, student participation, the use of audio-visual accessories, and a warm, non-threatening classroom atmosphere. Their training also prepares them to be agents of development outside of the classroom, with adult groups, with the village or town elders, with the non-school population. Previous teacher training has never approached these areas. When these ENI graduates come from the center of the educational renovation, Bouaké, how will the established colleagues react? Interrogating the teachers themselves would give one answer; but the students have their own perceptions of how they will be perceived by their older colleagues. Table XVI presents
the distribution of the answers to the closed-ended question: "In the first school you are assigned to, you will meet your colleagues. What do you imagine to be their attitude?"

TABLE XVI

PERCEIVED ATTITUDE OF FIRST COLLEAGUES

<table>
<thead>
<tr>
<th>ATTITUDE</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 123</td>
</tr>
<tr>
<td>1. They will all listen to me and all will go well.</td>
<td>15.4%</td>
</tr>
<tr>
<td>2. In general they will accept me.</td>
<td>58.5%</td>
</tr>
<tr>
<td>3. I will work on my side and they on theirs.</td>
<td>0.8%</td>
</tr>
<tr>
<td>4. They will be jealous or suspicious.</td>
<td>25.2%</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The researcher will interpret these four outlooks respectively in terms of the following epithets: the optimists, the confidents, the separatists, and the pessimists. Working separately (No. 3) is not conceived of as a viable possibility. Of the three remaining categories over half are confidents. Over a quarter are pessimists; they think there will be some sort of resistance when they join a primary school faculty. Fifteen per cent are optimists and cannot imagine why there would be any resistance. This question produced a fruitfully wide distribution, and potentially a major difference in attitudes.
What did the students have in mind when they checked 1, 2, or 4? Of course one will not learn until the fall of 1972 how the students' premonitions will be borne out—will the optimists turn into utopians and the pessimists into realists?—the best we can do is to display accurately their present projections. The students found plenty to say as they filled in the supplementary question: "Why do you think this way?"

Among those students foreseeing no real problem in integrating among their first colleagues is one who evokes the African wisdom: "It is a custom in Africa. You welcome anyone." Another believes that one teacher will have the same attitude as any other teacher by virtue of his function: "I am a primary school teacher like them, and I don't see why they would have another attitude than that one which I have chosen." A third believes that his advice will be followed if he is not accepted on sight.

Because being new they will accept me first before I explain to them my pedagogical principles. If after the explanations they are still unconvinced, I will tell them to be patient and try an experiment adopting my principles.

The majority of students confident or optimistic are persuaded that the most essential elements in their acceptability are their character and their behavior.

It is very difficult to answer such a question. I would like to be in the field to bear it out. Nevertheless I hope that if I make an effort I will be
accepted because I am not too difficult. The essential thing to me is to know how to gain acceptance.

And how does one gain acceptance? Different strategies are suggested:

... this situation depends on my behavior and also on my competence. I will make friends with everyone. I will not impose myself, but will make myself understood tactfully.

As for me I will consider them my predecessors in the field and I will obey them.

I will take the attitude of someone who knows nothing and who wants to learn from those who have experience in the profession.

In developing their techniques for gaining acceptance in their first school, some students showed clearly that training at ENI, especially in group dynamics, had provided integrating techniques.

First of all in a group you must put yourself at the level of each member. And I think that I will try to make them understand that we are working for the same purpose and that we can help each other to get up the mountain together.

Many students believe that a common purpose—that greater purpose of educating Ivorian youth—will unite the teachers. A few others have faith in a symbiotic relationship. Some students believe their composite training at ENI will solve all integration problems.

After my training received at ENI, in community leadership, speaking French well, having the right behavior, I will be able to attract men to me for our collaboration.

One student possesses a notable feeling of relativity and of the historical process.
I will do everything so that we will work together. "No one has the choice of his destiny." If today they are labelled traditional teachers it is only because there has been a renovation. At the present rate how do I know if I won't be called traditional one day? And after all in the past years they have fulfilled their role validly.

This perception is profound and true but probably far removed from the daily cares of most teachers. And finally another student perceives the big picture as the authorities see it---but do the teachers see it that way?

Since it was their own pedagogical experience in the field that prompted the decision to renovate education on a national level. They understand that there exists only one education and they will be retrained in educational technology.

According to one ENI student out of four, the current primary school teachers feel threatened. They react to the whole idea of a revamped educational system as an insult to them as dedicated professional persons and they fear for their future.

Because presently education by television is not liked by all and everyone does not believe in its success. Also the old teachers feel maligned or rather they believe that it is because they are incapable of teaching or because they are poorly trained that the educational system is being revamped.

A student claims that poor publicity has made many old teachers feel rejected. A real difficulty in acceptance is centered around the C.A.P. exam.

Because I already know teachers who are against the fact that we have been their pupils and that they have taught much longer than we, why should we be granted the C.A.P. that they themselves have not
all had. And in such conditions they will do everything to show us that they know the art of teaching better than we do.

Some students accept this unavoidable rivalry, but are determined to rise above it.

It is not frequent that one meets a teacher who has his C.A.P. so young. The teacher who has it has, on the average, spent a long time teaching to get it. The fact of seeing me so young and without having actually taught can elicit jealousy on the part of teachers in the field. But I will do everything I can to gain acceptance in their milieu.

Some students, convinced of their future colleagues' jealous attitude, foresee corresponding acts.

At the present time all the practising teachers are against ENI students. Consequently they are waiting for us to make our life complicated—my wish is that they change their attitude.

They will be jealous of the training I have received. And especially of my status of full teacher. They will distrust me and attempt to lay traps for me. Yet their teaching method is finished and it's I who possess all knowledge.

With the superior attitude of this last student, it seems indeed possible that traps will be laid! In conclusion, there is an important minority who foresee difficult times in adapting to an overwhelmingly "traditional" school. The majority of students predict positive integration due to two general factors—no reason for hostility on the part of old teachers and the "right" tactful behavior on the part of the student newcomers. Some of the student opinions expressed are mentioned as being based on the contact the students have
already had with teachers in the field; the majority constitute projections without this foundation.

It is one thing to hypothesize what someone else's attitude is going to be; it is another to predict how one will act or react in face of this attitude. Since it was felt that it is much more important to mull over how one will combat a negative attitude than how one will slip into a non-hostile environment, a further question was designed to solicit projected actions: "If you meet colleagues who are jealous or suspicious, what will you do?" The answers were equally divided between two central tendencies: one, "try to convince my colleagues and maintain my pedagogical principles"; two, "try to convince my colleagues and find a compromise." 2

Was there any difference between their attitudes in responding to one statement rather than the other? The request "Explain your answer" revealed one main difference. The group responding the first way maintained that they possessed the right principles which must not be abandoned; it is the old teachers who must change.

I believe that to try to convince my colleagues and maintain my pedagogical principles is the best solution because my pedagogical principles will be theirs one day or another because they will be retrained to adapt to these principles.

2Only three students picked the two other options presented, which represented extreme positions. See Appendix D, questionnaire, items 81-82.
It is true that all the teachers presently in service will be retrained and will be asked to adopt by and large the same pedagogy as that existing in the renovated teacher training schools.

Against this just and comprehensible attitude is another incorporating the same qualities, and espoused by most of those respondents partial to the second attitude. These students feel that a united front is a first priority, that it is more important for the good of the school in general and the pupils in particular to administer the same instruction.

It is not advisable that in the same institution the teachers do not get along and each one does as he pleases. This spirit could have harmful repercussions on the training of the children. So it would be better to find a compromise and administer the same instruction.

On the surface, then, even though there was a consistent grouping in the distribution along the center, there seems to be a marked difference between the two positions represented. The students may hold conflicting ideas on which is more important: to stay true to the pedagogical baggage one has brought from Bouaké or to give up some of it in the interest of a united and thus better teaching front. But is this a real conflict? Do the two positions fit with reality? As long as the terms remain vague; terms like pedagogical principles, compromise, convince, or "do as he pleases" and "same instruction," little more can be said.

One must wait until the school year 1972-73 gives us a clue
of the reactions and problems. There may be grounds for wondering, nevertheless, whether an even greater number of students than say so will not retract from their innovative pedagogy and embrace their new colleagues' pedagogy, being convinced that it is in the best interests of the school.

Since the hypothesis that established teachers would receive their new colleagues with negative attitudes presents a veritable danger if proven to be true, it was thought important to marshal the concentration of the entire student body onto this possibility. This was achieved by forcing the students to analyze different causes for negative attitudes. They were asked the open-ended question: "Why would they [the teachers presently in the system] be jealous or suspicious?

Fifteen students retained their opinion that any opposition or resistance was incomprehensible. As many claimed that any negative attitude would be triggered only by the ENI graduates' misbehavior.

If I treat them as no-goods or as old-fashioned, if I keep to myself, and carry on in a superior fashion, as someone more privileged than they.

A handful think the established teachers will be jealous because they feel inferior to the new teachers who, according to one student, in their eyes announce the Messiah. Ten more students consider this inferiority complex due to the superior training of ENI.
Because I come from ENI with a heap of information in my head. While they have been retrained only for three months. I pity them.

Approximately ten students believe teachers are against any change: "You know, people are mistrustful at the beginning of an innovation." Teachers are against the ETV system in particular, according to 17 students. A few think teachers will be jealous because of the success and popularity the newly trained teachers will command in the eyes of both the pupils and local population. Fifteen reiterate the status problem as provoking jealousy, that the ENI graduate will have earned the C.A.P. at a much younger age than the practicing teachers— if the latter have indeed earned the diploma at all. Sixteen students are of the opinion that negative feelings on the part of teachers would come from their lack of information or misinformation on the project: "Lack of information for they fear we are going to take their place." One believes a semantic problem is at the root of any negativism.

Because in the beginning we treated their pedagogy as "traditional," and the word was misinterpreted. They all thought it meant "bad".

In brief, while a minority are convinced there is no plausible reason for teacher opposition, the large minority attribute such a reaction to a multiplicity of factors: overbearing superiority of new teachers, their easier access to status, the anxiety before change in their daily professional existence, and the lack or inexactitude of information concerning all of these factors.
CHAPTER VIII
DESCRIPTION OF THE POPULATION IV:
PARTICIPATORY FEATURES AND TEST SCORES

Chapter VIII is the last in the series of descriptions of the population. The main sector covered is participatory features, both in the training program in general and in various non-academic activities as well. The final section concerns test scores of each class year at the time of the admission to the teacher training system.

"Reasons for Participation in the Training Program" is another attempt to understand the motivation behind the students' involvement in their program. "Membership in Voluntary Associations" describes the nature and the intensity of belonging to non-academic clubs. "Self-ratings in Five Non-academic Activities" represents an effort to look at participation patterns outside of a classroom in these areas: family life, leisure time, sports, dormitory life, and religious life. Finally, "Test scores" presents the only data concerning achievement or aptitude which exist on both class years.

Reasons for Participation in the Training Program

It is difficult to imagine that most students anywhere are extremely conscious of why they participate in a training program or in any enterprise. The reasons one might give are likely to be numerous, and at such levels of
abstraction as to defy any rigorous expression. It was thought important however to try to obtain a preliminary idea of the "reference point" behind each student's commitment to participation in his training. Was he principally motivated to participate for his own good, for the good of his future pupils, for the good of the profession, or of the nation, etc." It was decided to present several likely reasons and then ask for the students' additions if they perceived more important reasons which had been omitted. The statements were each to reflect a different reference point, according to this correspondence:

(peers): "because if I do not participate my fellows will not hold me in high esteem"

(self): "because it is only in participating that I can attain self-fulfillment"

(profession): "because the real role of a teacher is to be a community development leader"

(superiors): "because it pleases the faculty"

(nation): "because it helps to build the nation."

The students were asked: "Why do you participate as you do in your training program? Choose the two answers which represent your attitude the best and check them." Two reasons would be less unfair to the students who otherwise would be obliged to pit, for instance, their self against the nation, their profession against the nation. The total population produced 250 answers as can be seen in Table XVII.

The fourth and fifth categories represent opinions of other people. Clearly what they will think does not motivate
the students to participate. As probably could have been predicted, the essential pattern is the student himself who is preparing for a profession where he will serve his country. In this triumvirate the profession, that is the new image of the ENI graduate being a teacher and a community leader, is the perceived prime mover of participatory behavior. Seventy-four students or 16 fewer believe that participation enables one to develop his own personality and potential. This answer could be conceived as meaning that the student feels his having participated will facilitate his future existence whether or not it is tied to the profession of educator. The third main reason given with 64 adherents is service to the

<table>
<thead>
<tr>
<th>REFERENCE POINT</th>
<th>NUMBER OF TALLIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Profession</td>
<td>90</td>
</tr>
<tr>
<td>2. Self</td>
<td>74</td>
</tr>
<tr>
<td>3. Nation</td>
<td>64</td>
</tr>
<tr>
<td>4. Superiors</td>
<td>5</td>
</tr>
<tr>
<td>5. Peers</td>
<td>1</td>
</tr>
<tr>
<td>6. Unutilizable answer</td>
<td>3</td>
</tr>
<tr>
<td>7. No answer</td>
<td>13</td>
</tr>
</tbody>
</table>

250
nation. It is difficult to know in such statements what is the proportion of repeated rhetoric and of genuine feeling. And of the many students who evoke national service, some may just sound rhetorical but be sincere, others may appear truth-telling but may be deceiving. A student at a later date orally warned me: "Many say that they work for the nation but it is for their own good; they lie." This may be true for some. The administration of the questionnaire followed by only several days the visit of a high official in the Education Ministry who exhorted the students on their national duty.

In an effort to learn the range of possible reasons and to produce a more representative list, the students were asked: "Perhaps you think that the reasons cited in the preceding question are not sufficient. Do you see other more important reasons than those given?" Thirty students suggested other principal reference points. One could be in a circle situated between the ENI experience and the profession of educator; it involves the success of the ETV project. Another important handful of students participate because they want to have a voice in what their training program consists of. They are particularly insistent that their training provide them with "what it takes" to be a good teacher. This is an intense yearning on the part of the students, wary of how they will fare in a classroom to be furnished with the appropriate knowledge and pedagogy. A
couple of students claim they participate not in general to be good teachers later, but for a particular necessity aimed at the successful handling of the children: "How can I know how to make children participate if I don't participate myself?" The other answers represent unique positions or misinterpret the request for reasons, and give another type of information. In general, the students' suggestions would add the following reasons: to help the ETV project succeed, to learn what I have to teach, to know how to make children participate.

Membership in Voluntary Associations

It was known that many of the ENI students were leading members of youth organizations or ethnic associations in a non-school context. It was supposed that these club members gained considerable experience in group work, such as using one's initiative, taking responsibilities, and public speaking through this outlet. To try and delimit the students' club membership, the following questions were put: "Have you belonged or do you belong to a club, youth group, co-operative, etc.? If so, choose one and give the following information: name of organization, the purposes of the organization, your role (tasks, responsibilities)."
Table XVIII shows how the information was categorized.¹

It was learned incidentally that the "serious" students who are normally responsible for creating the clubs achieve participation from most of the youth by dances or promising "booms." When adhesion is secured, they add such activities

¹Information from the series of answers was quite disparate in terms of completeness and clarity. Some clubs alleged "leisure" as their purpose, and this usually signified dances or as they are popularly called "surprise-parties" or "booms." The so-called "sporting" clubs mean exclusively football (soccer) clubs. It was found later that when students say community development they may mean entertaining the village by organizing a dance. All this is to say that the questions formulated and the answers volunteered do not permit a very precise delimitation of the actual activities engaged in.
categorized above as mutual aid or community development. While the other categories are more or less self-explanatory, these two may be illustrated by student examples. Mutual aid may involve going to the village during vacation and helping various families work in the fields, or build a house. Club members will use dues to help pay transportation of a member who must return to the village for a funeral. They sit in council and advise members on the solution of a problem, such as a conjugal difficulty or a professional problem. The rubrique "community development" includes such student activities as literacy training in the village, creation of entertainment for the local population (some overlap with category N° 2), campaigning to enroll children in school, and dissemination of information on modern agricultural techniques.

While the category which involves the greatest number of students is sports and leisure, the most natural and appealing activity, a greater number of clubs maintain a diversified front of activities. As a general rule the ENI students are officers in their clubs, but it must be added that the cadres of a club usually outnumber considerably the ordinary members. The highly stratified hierarchy might include, for example, a president, vice-president, secretary-general, secretary, treasurer, assistant treasurer, dues keeper, advisors, scribe, editor, press attaché, and simple members. The ENI students manifestly spend considerable time in their
activities--planning agendas, hand writing the "convocations" or invitations in case of a dance to each member, organizing the material necessities for the meetings or outings. Each individual plays his role in the group, has his say, and the decisions are made at the group level after an exchange of views. It is possible that, say, a president of a club is an autocratic one, but usually, it is recognized, the clubs are group-directed rather than leader-directed, a spirit of democratic participation reigning.

A measure of the importance in which the student holds his club is revealed by the strength of his association with it. Seventy-one per cent of the students consider they participate in their club "a great deal." Twenty-four per cent believe "to some extent" and five per cent "a little." Reasons given for considerable participation include the expected activity of an officer in the club or a firm belief in the club's goals. Causes for lesser participation are recent membership, distance between residence and club headquarters, and lack of time. Many of the 25 students not belonging to clubs defend their attitude by saying such things as: I have no time, clubs don't interest me, I wouldn't get anything out of them, I am all alone.

Self-ratings in Five Non-academic Activities

In Chapter IV information was gathered on participation in academic activities; it was also thought appropriate to
learn what patterns of participation might exist in non-academic affairs. Five areas were chosen: family life, leisure time, sports, dormitory life, and religious life. There was some overlap among these categories, for one's time spent in sporting activities could be part of leisure time and activities undertaken in a dormitory setting is also often leisure time activity. The students gave two sorts of information: first, they described their participation in each area; second, they rated the intensity of their participation along a scale. After a synthesis of student participation in each sector, a composite table (Table XIX, p. 187) evaluating the degree of participation be drawn.

"Family life" was intended and was understood as referring to the students' parents in particular, rather than to the students themselves as parents. There is reason for possible confusion for perhaps half of the students are fathers or mothers. On a questionnaire administered to one class of ENI before I came to Bouaké six students admitted to being married, only one having a child; five students claimed bachelorhood with one or two children each. Informal discussions with students, plus news of births periodically and a student's returning to school after having a baby lead one to believe that although students for various reasons do not

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2 See questionnaire items 51-57 in Appendix D.
officially admit their married or paternal/maternal states (they are not often asked to do so) such states are very often existent. If somewhere around a half of the student body have parental responsibility they by no means live a family existence during the school year. Without exception the child and the other parent remain in the village, only seeing the ENI student-parent on vacations. The unquestioned receptivity of Ivorian families to a child from their midst plus the precedent of such a practice of a child living away from a blood parent make this situation perfectly natural in this setting.

The three activities most mentioned, and probably characteristic of nearly all student visits to the village community are sharing in the family's chores in physical labor, partaking in discussions to solve some family problem, and taking care of or tutoring younger brothers and sisters. Many students claim they help their mothers carry heavy loads (in most tribes a woman's task) and their fathers planting coffee, cocoa, and yams. They do washing and have assigned responsibilities such as keeping the courtyard clean. Attitudes expressed toward parents are respect, obedience, and the naturally felt determination to bring assistance. One student sends half of his scholarship money home. They not only look after children, but tutor them, and see that their younger brothers and sisters are diligent school-workers. The tone of these descriptions depicts generally
close family bonds, but it must be remembered that stays in the village are only brief and temporary, and that few students if any will go back to their villages to live when in professional service.

The majority of leisure time activities are those which are readily accessible and are without cost. Reading is a partially developed habit, with newspapers, photo-novels, and library books readily available. Games such as checkers are played, sometimes with hand-constructed material. One student mentions possession of a record-player and consequently his ability to entertain fellow students. There are several transistor radios which constitute one of the first relatively major purchases a student will treat himself to. It is used to listen to the week-end ball games and frequent musical selections. Only one student mentioned TV viewing, for until October of 1971 there was no television available at ENI. Being accustomed to walking long distances regularly, students are quite mobile in off hours. They walk to all districts of Bouaké, enjoying each other's company, laughing and talking and often visiting student friends in town. Attendance at dances and balls is a regular weekend habit. Movies are popular, but until the fall of 1971 inaccessible to most students because of the price. African and other films are now shown regularly at the new cultural center in Bouaké which is heavily attended by ENI students.
Students describe their participation in sports as organizers, active players, spectators, supporters, or arbitrators. Football is the most widely practised sport, with karaté, which is a recent fad, in second place. Other sports engaged in are volleyball, basketball, handball, and track. Some students tell of having organized teams, collected dues to pay for uniforms, and planned matches with other teams. Many mention their moral support to the team when they are not playing. A great number also believe that they advance the group sport by serving as arbitrators to avoid or minimize quarrels among players. It must be said that football is a sport which engenders passionate eruptions in Africa. In this context arbitration becomes a necessary participatory function. Those students who profess no sport claim physical disability, fragile health, lack of interest, or femininity (no sports at present being organized for the girls, who do not organize them for themselves either).

Dormitory life is marked by several maintenance chores--room cleaning, clothes washing and ironing, sewing buttons and repairing tears all of which are performed by each student. Certain tasks are administered by some students--dormitory proctor, waker upper, and dispenser of aspirin and bandages. Many students refer to the fun of dormitory life, to the laughing, joke and story telling, and discussions held. Many also evoke the frequency of problem solving sessions, this rural African and strong family tradition whereby
group consensus and support are given an individual who lays down his problem or his care before the group. As in any dormitory setting, there is a handful of individuals whose characters find collective living a tyranny or "hell."

Nowhere in the questionnaire was the student asked to name his religion. For this reason, the student's perceived degree of religious affiliation or involvement cannot accurately be attached to a particular religion. Estimates can be made however. A perusal of the students' names reveals Moslem names: Mamadou, Ouattara, Coulibaly, Yacouba, for example. Based on this evidence approximately 30 per cent of the students could be of the Islamic tradition. Judging from the elevated percentage of students coming from a Catholic school, probably a higher percentage are Catholic, and a much lower percentage Protestant. There are certainly quite a few non-believers and perhaps some animists. The religious activities most often evoked are forms of cult worship: Christians attend mass or church, Moslems go to the mosque and pray with their family at home. Some students participate particularly in ancillary forms: singing in a choir or attending lecture discussions on religious themes. The more fervent are members of religious clubs and claim they try to interest their friends in a deeper faith.

3As a matter of interest, the most complete census of 1965 includes no data on religious affiliation: the question is often neglected in official documents concerning "vital" statistics.
Table XIX presents percentages of participation in various spheres of activity which are crude, at best. There seems to be a pattern if one observes the extreme values, much participation and no participation. Following the order in which the activities are placed in the table, from family life to religious life, one finds that the "much" category is increasingly descending and the "none" category increasingly ascending (with the exception of the inversion of 12.9, sports and 5.8, dormitory life.)

This pattern reveals a difference between religious life, where there is a fairly even distribution, and family life, where a distinct progression is visible. Family life presents the most interesting distribution. During the school year students can indulge in all the activities covered except family life. Yet, despite the consequent brevity of actual contact between student and family, family bonds are still strong enough to place that sector above the others. Family life is also the activity where the fewest number of students express no participation.

Like in family life, very few students claim no participation in leisure time activities, but less than half call

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4 No attempt was made to make precise the behavioral distinction among the categories. It was left to the individual's discretion to estimate his own level of involvement.

5 The "none" figures 12.9 for sports and 29.3 for religious life may be slightly inflated because of a sex bias, i.e., low feminine participation.
<table>
<thead>
<tr>
<th>DEGREE</th>
<th>FAMILY LIFE IN % (N = 123)</th>
<th>LEISURE TIME IN % (N = 122)</th>
<th>SPORTS IN % (N = 124)</th>
<th>DORMITORY LIFE IN % (N = 122)</th>
<th>RELIGIOUS LIFE IN % (N = 123)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much</td>
<td>61.8%</td>
<td>46.7%</td>
<td>38.7%</td>
<td>36.4%</td>
<td>16.3%</td>
</tr>
<tr>
<td>Some</td>
<td>22.0</td>
<td>32.0</td>
<td>30.6</td>
<td>41.3</td>
<td>22.0</td>
</tr>
<tr>
<td>Little</td>
<td>14.6</td>
<td>18.0</td>
<td>17.7</td>
<td>41.3</td>
<td>26.8</td>
</tr>
<tr>
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<td>1.6</td>
<td>3.3</td>
<td>12.9</td>
<td>5.8</td>
<td>29.3</td>
</tr>
<tr>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>
leisure pastimes very important. The academic program is a heavy one—over thirty hours of classes a week not including assigned or suggested group or individual preparation. The time factor may minimize the availability of leisure time. To some extent isolation away from the center of Bouaké, a lack of distractions on campus such as movies or TV, and very limited spending money contribute to the fact that the category leisure-time activities did not receive higher ratings.

It seems very natural that in any society some positive degree of family attachment and some satisfying form of spending leisure time exist. Sports, however, is a sector where there usually is a minority of individuals who are non-athletically inclined or who aren't moved by the sporting world. The very sports-minded however outnumbered their opposite by three to one. And while they are involved in a sporting event their intensity level is extremely high.

Dormitory life presents the first category where the mode is no longer with the most positive degree. The dormitories are just that, designed only for sleeping, with a bed and a cupboard the sole furnishings for each student. There is no studying generally in the bunk rooms, and little entertainment. Because of the heat and the limited electrical lighting, most activity in non-school hours is outside, except during the rainy season, where waiting inside a dark, damp dormitory for hours would not prompt enthusiasm anywhere.
There are very few non-participants because everyone must necessarily be exposed to the vicissitudes of dormitory living. The lower ratings probably signify a distaste or some lack of satisfaction derived from communal living.

In the religious sector we see the lowest level of participation. Not only is the "much" category not the mode, it is the least popular level, with less than one eighth of the students; the first time this figure is under one third. In fact, the mode is its opposite: no involvement. The mild involvement in religion seems often to be associated with the late adolescent period, for students claim that before they attended prayers or church but lately their interest or "courage" in matters of faith have fallen. Religious activities are also a very individualized affair, with little practice of fellowship. Perhaps at their present age the students require a more social experience than that which religion in the Ivorian setting can offer them.

Participation in Optional Activities at ENI

Just under forty-five per cent of the study body participation in non-athletic extracurricular activities at ENI. Slightly over half of this percentage are second-year students. Both classes are equally represented in their number of contributors to the school newspaper (one issue, 1970-71). The dramatic club includes three times as many ENI-2 students as ENI-1 students; the opposite is true for
the literary club where ENI-1 students outnumber the second-year class by three to one. Finally, a reading club contains second-year members only. This brief account of extracurricular activities membership shows that there is not a wide choice of activities (four), and that there is not a great deal of mixing between the two class years; a club was started on the initiative of one class year and remained largely an operation of that class. The hope that administration and faculty had expressed that the optional activities would be a vehicle for cross-class interest groups has only partially been satisfied.

Information on why students participate in their optional activities was sought by asking them to check a list of possible reasons or give their own. Outside of a firm majority who consider them "important for my training," the remaining students evoke several other reasons. Of greater utility are the data on why the 70 students do not participate. A third insist they are uninterested in the existing clubs. One quarter claim they have no time. Over ten per cent do not join because they do not get along well with certain members of the clubs. Just under 10 per cent think the clubs have no relevance to their future teaching.

Before commenting on the reasons given, it is useful to describe the activities in brief, in order to perceive what benefit they may be to students. The literary club
decides on a book, usually on Africa, that it wants to study; the group members read the book individually and gather to discuss it. The reading club meets to read a work aloud. The dramatic club prepares full-length African dramas, invents skits, and presents regional dances. Finally, the school newspaper gathers original literary efforts, statements on school life and a humor page; the paper is produced and distributed by students. The clubs present opportunities for students to perform the tasks of group members in an organization having clear objectives. They provide an outlet for persons desiring to express themselves orally or in written form before an audience. They offer the possibility of personnel enrichment rather than a straight professional training.

It is very possible that those students perceiving no relevance between clubs and future teaching do not consider experiences for personal enrichment or prowess essential to a teacher training school. Or they do not see that participation in group tasks such as common reflection on a decision making theme, and literate communication with others—which indeed are common factors in these clubs—may be transferred to class situations. It probably is not clear to them that the confidence or self-assurance one gains in public appearances can directly serve the teacher and have an effect on his influence in the classroom.

The fact that over one out of ten non-club participants see themselves thwarted by inter-personal animosities could
reflect the difficulties Ivorian students have in adapting to the new student roles at ENI. If regular classwork sessions produce a dissatisfied student because of inter-personal rivalries it is understandable he would not want to meet the same circumstances in an optional activity where he expects relaxation and enjoyment. An assessment of how the inter-personal problems arose and are perpetuated would be helpful, for the students in this category apparently have the will to participate but do not, because of contingent reasons.

The students claiming "no time to participate" might be overworked or poorly organized. Or the students might not participate because they are not aware of how much they can benefit from club membership and because they have never systematically addressed themselves to the question: "With the limited time I have how should it best be put to use?"

Non-participation in clubs may be characterized less by sheer opposition than by contingent attitudes, such as personal animosities, which could be resolved, or inability to see the benefits, which could perhaps be illustrated to the doubting students. The fourth and most mentioned cause is non-interest. Alternative remedies to this situation would be again, to demonstrate that in fact a relevance and a transferability are very possible or to widen the spectrum of clubs.
Test Scores

Requirements for entering the general CAFOP system and the ENI each included a battery of tests, the general purpose (selection) and general nature of which were referred to earlier. These are the only test scores available for the present ENI students, that is no records are assembled from their previous schooling. The scores, also open for the students' perusal in the ENI director's office, were copied from these official school records by permission. These scores will be reported here, but not interpreted. At least two aspects of the tests are limiting factors. Although it was the intention to include in the school exam scores file an explanation of the rationale behind, the constitution and interpretation of the test, this information was missing. All that can be stated is the general nature of the test item and the scale used in evaluating a student's performance. The second item is directly relative to the school's young age and the manner in which work is performed; the staff is experimenting with testing, yet experiments are dropped without being analyzed. For the ENI-1 under study a battery of tests was designed to evaluate a candidate's participation and attitude toward group work. No comparable test was administered to ENI-2 and the entering class in the fall, 1971 did not see the battery repeated. There is thus no norm with which these results may be compared; the tests are one-shot efforts.
Chronologically the first test all candidates took was the CAFOP entrance exam, which contained analogous items for each of the two class years in the fields of French expression, Mathematics, and General Knowledge. The results of these tests were algebraically added by the ENI staff directing the admissions policy and the candidates ranked along their composite score. The range of scores for the 63 cases recorded for ENI-1 was from 101 to 132, with a mean score of 117.44 and a standard deviation of 5.83. For ENI-2 the range a year earlier on the test was 107 to 132 with a mean score of 121.24 and a standard deviation of 4.95 for the 59 students. Although for many items in the present study the two ENI groups were considered from the same population, the two sets of test scores should be treated as separate and distinct scores. One knows the nature of the tests was similar and the conditions under which the tests were administered also similar, but there is no certainty the scores are comparable. There is also no certainty one can simply add the results of three separate tests to form a composite sum, but this operation, establishing the critical ranking of all candidates, was performed and remains a reality of the past selection processes.

This concludes the last chapter of "a description of the population." The study has described in detail several sectors of the students' experiences and attitudes which
present a groundwork for further research on ENI populations. The study has also produced an instrument for measuring perceived levels of student participation. The remaining two chapters will analyze the relationships between these two parts of the study and will present implications of the research experience.
CHAPTER IX

FINDINGS: ANALYSIS OF RELATIONSHIPS

Chapter IX brings together the work of the previous parts of the study: development of an inventory to allow rating participatory behavior at ENI and the description of variables potentially related to the observed participation patterns. Before any analysis is appropriate, the researcher must calculate with what confidence he has in fact developed a reliable strategy for measuring participation levels. After the first section, "Reliability and Validity of the Dependent Variables," the analysis follows. The chapter concludes with a summary of the conclusions which have been produced by the analysis of relationships between dependent and independent variables.

Reliability and Validity of the Dependent Variable

The fourth chapter outlined the procedure for obtaining peer and faculty judgments on student participation. A recapitulation, presenting the nature of these results, will serve to reintroduce the dependent variable and suggest the appropriate tests for reliability.

The peer judgments sheets are each in the form of one name associated with each of the fifty items from the universe of participatory behavior. Limiting conditions to these data are that there were absences during the administration
of the rating, some groups being more fully represented than others. While most put one name to a line, some students placed no name or more than one name on a line. Some students answered only for a small group (7 or 8 individuals) not for their full work group of double that size. And finally it will be recalled that students were asked not to put their own names after items of participation thus decreasing reliability in one sense, but avoiding—in principle—a student's writing his own name indiscriminately.

The index or coefficient of reliability should measure the degree of consistency between two measures of the same thing. The square of this coefficient will give the proportion of the variance that is left after error variance, due to lack of consistency, has been removed. Since the nature of the data does not allow computation of reliability by the test/retest method or by an alternate-forms technique, the internal consistency of the single observation will be computed from self-correlations. Given the nature of the instrument—the student raters—and the conditions cited, it was decided to compute the reliability by the split-halves method. However, as Guilford points out, a test or rating may be split into halves many ways and yield different estimates of the reliability.\(^1\) The split-halves

correlation was computed in the following way in an attempt to take into consideration the limitations of the instrument and the data.

Reliability was first calculated with data on ENI-1, because with that class all students answered for the full work groups, not for the small sub-groups. Each item on the participation rating form was treated as a discrete variable. Students were not competing across items; that is, the researcher did not tally the distribution of names in a group opposite the item, say, "takes notes for his own records." Rather, the individual whose name was mentioned the most number of times was considered the best general participant in the group. The two dimensions of "superlative" participation to cover are intensity ("the best") and breadth ("the most"). Intensity of participation was already covered by asking for the superlative participator and the other dimension, breadth of participatory behaviors, was now covered by counting the frequency of times a student was marked on any one paper.

The data forms were divided according to the respective student groups. Each pile, representing a group, contained from 10 to 12 forms. The piles were divided randomly into halves. For each sub-pile a figure was calculated for the number of times each student's name appeared. If two names appeared, the first was selected. In this fashion two scores were computed for each individual. For instance, the name
Kouamé was mentioned six times in one sub-pile and eight in the other. Each composite score from the sub-piles was divided by the number of raters (5 or 6) in order to put the results on the same basis. The data are expressed as interval data, where, for example, 10 points are established as being twice as much as five points. A score of ten would not mean that the person with that score participates twice as much as a student with a score of five; but that he is perceived by his group peers in twice as many instances as being the head participator in that group.

The appropriate correlation procedure to estimate reliability in this case of interval data is the Pearson Product Moment Correlation. A pair of numbers was thus obtained for each individual, as he was perceived by the two randomly chosen halves of his group. The correlation coefficient then was calculated for each individual. The average correlation becomes the correlation coefficient for ENI-1: it is .5949. The index .59 is a conservative estimate, however, because we used an internal consistency technique and split the raters in half. Were one to have twice as many raters, the reliability would be increased. We can estimate this increased reliability by the Spearman-Brown Prophecy Formula:

$$r_{nn} = \frac{nr}{1 + (n-1) r}$$
where $r_{nn}$ is the new estimated reliability when the number of raters is increased \(n\) times, and \(r\) is the old reliability. \(^2\)

\[
 r_{nn} = \frac{2 \times .5949}{1 + .5949} \text{ or } .75
\]

The study then has produced an instrument with an estimated reliability of .75 for the present population of ENI-1.

The reliability coefficient for ENI-2 was bound to be lower, because several students answering only for a subgroup produced data incompatible with the rest. And there were more absences. This (uncorrected) index was computed to be .5422. Although this index is lower because fewer answers decrease reliability, the conditions are similar and the group instruments not particularly different from these used with ENI-1.

Validity cannot be estimated. A possible procedure would have been to validate the ENI students' criteria of participation against a widely accepted composite definition which one, does not exist, and two, might have manifested cultural relativity. The limitation to validity has already been mentioned several times: the dependent variable is not the result of a measure of participatory behavior, but a composite rating by group peers of perceived participatory behavior and attitudes. Content validity cannot be established by comparing the students' list with another one, for it is a unique document.

It is a carefully screened list, but it remains the students' conception of student participation. Predictive or concurrent validity could be established if during a longitudinal study certain aspects of these students' behavior were investigated when they became classroom teachers: for example, the amount of student talk in their classes, or the variety of opportunity for participation offered to the students.

It was intended to compare faculty perceptions of students' levels of participation with the students' own. Difficulties met in soliciting faculty cooperation were enumerated in Chapter IV. Despite efforts to contact each faculty member individually and receive his prior consent to cooperate and to make the rating questionnaire simple and practical, the results proved the procedures to be insufficient. Of over a dozen forms handed out for each class year requesting two sets of ratings for each of two different work sessions, only three teachers submitted complete ratings and those were for only one work session. Unlike the students judging a general impression of participation, these three faculty members could only judge according to the subject which they taught (music, French, and documentation). In these subjects naturally students have uneven and perhaps non-representative participation patterns as compared with their total behavior patterns in all academic subjects.
Another limit to any accurate results was the previously cited fact that students' names were generally not known by the faculty. One realistic colleague had cautioned: "Watch out, they will put down any name just to make you happy." And in fact, one of these three teachers listed a boy who had left the institution months earlier! With such circumstances it was not surprising to find a split-half correlation coefficient of reliability close to zero. Since the faculty coding has zero reliability, one can only conclude that the faculty are not able to reliably report student participation with the suggested procedures.

The Determination of Relationships

Chapter IV described the methodology used in operationally defining the measuring student participation. The first section of the present chapter computed a reliability coefficient to show with what confidence one can use the dependent variable—student participation observed by peers. Data on independent variables potentially related to participatory levels were presented in Chapters V to VIII. This section will present a strategy for relating participation level to certain variables and will describe these relationships.

The problem is to identify relationships which are important for the present population. Such relationships might also be present for another similar population in Ivory Coast and thus would be worthy of future research. To assess the importance of relationships at least three methodological
options are open. One could analyze the data by multiple regression to estimate the strength of the relationships. For instance, one would answer the following question from the present data and apply the results to the future. What linear combination of demographic, experiential, and attitudinal factors are associated with the more active participants? However one is discouraged from this approach because of the possibility of finding non-linear relationships, the small total population, the dynamics of the rapidly evolving school, and the inappropriateness of adopting higher power statistics before testing for more basic relationships.

A second option would be to rely heavily upon the chi-square statistic to test the association among variables, where the observed values would be compared with the expected values. A significance level of the chi-square statistic, however, would presume conditions which are unrealistic in the ENI setting. The students observed form a unique population, not a sample from which one may assume a larger population over time or over an area. They are not randomly selected, but form the first two complete contingents of a training school which contains two out of the eventual three class years.

The third option, which will be used, involves a presentation of cell distributions when the dependent variable is crosstabulated with various independent variables. This technique will allow comparison of the actual behavior with the
expected behavior given the distribution along the "participation" continuum. The contingency table used is the same as for chi-square. Since the population has not been studied before, crosstabulations is a fitting non-inferential methodology which will allow the researcher to observe any relationships, linear or non-linear and which will permit conclusions on the population, laying a groundwork for more powerful analyses at a later time.

The two tasks necessary before describing any relationships are one, to select the appropriate independent variables and two, to construct matrices to display the relationships. The selection of variables potentially related to participation levels has already taken place during the development of the questionnaire, based on related research and working hypotheses, and again during the reporting based on the nature of the findings. A third and final selection will be achieved by discarding those variables which either involve considerably less than the total population of 125 (for example, entrance scores of each class) or which contain characteristics which are closely related to other variables, such as satisfaction indices or residence patterns.

The original eleven-point scale of participation levels contain numerous zero cells and low frequencies. For example, one student was rated 11, no one rated 9 or 10, one rated 8, three rated 7. The categories 4 to 11, representing the highest perceived participators, fall off in frequency number
when compared with the first three categories. For manageable matrix interpretation, the categories 4 to 11 will be grouped into a new fourth category. Collapsing these categories could change the reliability (either increasing or diminishing it), but only slightly. The resulting frequency distribution for the 125 students is shown in Table XX.

TABLE XX
FREQUENCY BREAKDOWN OF FOUR-POINT PARTICIPATION SCALE FOR TOTAL POPULATION

<table>
<thead>
<tr>
<th>PARTICIPATION LEVEL</th>
<th>SAMPLE SIZE (N)</th>
<th>PERCENTAGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (lowest)</td>
<td>19</td>
<td>15.2%</td>
</tr>
<tr>
<td>2</td>
<td>41</td>
<td>32.8%</td>
</tr>
<tr>
<td>3</td>
<td>32</td>
<td>25.6%</td>
</tr>
<tr>
<td>4 (highest)</td>
<td>33</td>
<td>26.4%</td>
</tr>
<tr>
<td></td>
<td>125</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

When the text speaks of "highest" participation, category "4" will be meant. "High" will refer to both "3" and "4". "Low" means "1" and "2". The "lowest" participators belong to group "1". Middle-level or middle-range participators scored "2" and "3".

Categories for the independent variables were also collapsed in order to facilitate interpretation. In most cases the variable was dichotomized. Two crosstabulations will be presented as examples of the process used to establish
relationships from the data. Figure 9 on page 207 shows two sample crosstabulations between the dependent variable, level of participation perceived by peers (coded PEERPTS3), and the amount of time spent in the capital city (TIMECAP) and the membership patterns in non-school clubs (KINDCLUB).

In the first crosstabulation the amount of time spent by each student in Abidjan was dichotomized from five categories4 to form an even distribution (62 individuals to 63); students who had spent less than a year in the capital city and those who had spent more than a year. Studying the frequencies in each cell or their corresponding percentages one finds that the highest (4) and the lowest (1) participants are likely to have spent over a year in Abidjan (frequencies 15 and 18). The middle-level participants are likely to have spent less than a year in the capital city (frequencies 24 and 20). One can make a tentative interpretation from such a pattern, which is not a linear but a curvilinear relationship. The "treatment" of prolonged exposure to the capital seems to have a predictable effect on this population: students are "turned off" (the one's on the participation scale) or "turned on" (the four's). The effect of living in an urbanized setting before entering ENI is the type of potentially significant area which could be

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3The two crosstabulations are the only ones from the data which have chi-squares at a significance level of better than .05.

4See Appendix D, questionnaire item 22.
### Figure 9

#### TWO SAMPLE CROSSTABULATIONS

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<th></th>
<th></th>
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<td>TOTAL</td>
</tr>
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<td>COL PCT</td>
<td>TOT PCT</td>
<td>PCT</td>
<td>PCT</td>
</tr>
<tr>
<td></td>
<td>1 I</td>
<td>2 I</td>
<td>3 I</td>
<td>4 I</td>
<td></td>
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<tr>
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<td>24 I</td>
<td>20 I</td>
<td>15 I</td>
<td>63 I</td>
</tr>
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<td>I 31.7 I</td>
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<td>50.4 I</td>
</tr>
<tr>
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<td>I</td>
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<tr>
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<td>32 I</td>
<td>33 I</td>
<td>125 I</td>
</tr>
<tr>
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<td>25.6 I</td>
<td>26.4 I</td>
<td>100.0 I</td>
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</table>

<table>
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<td>25 I</td>
<td>32 I</td>
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<td>I 20.0 I</td>
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<td>I</td>
<td>I</td>
<td>I</td>
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<td>7 I</td>
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<tr>
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<tr>
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</table>
examined in a further study over a larger population. Time in the capital city is also probably related to other independent variables.

Membership in non-school clubs or associations was originally broken down into club types. For purposes of a general crosstabulation, the population was divided between those students who belonged to one or more of these non-school clubs (80 per cent of the students) and those who belonged to none (20 per cent). One can compare the observed frequencies with their expected proportion: the lower three levels of participation have larger frequencies in the "not belong" cells than the proportion 100 to 25 would normally produce. On the other hand if a student participates to the highest degree observed (the four's) he is almost surely likely to be a club member (frequencies 32 and 1). One would conclude that the highest participation level is positively related to membership in non-school clubs.

After this introduction demonstrating the process of interpreting the crosstabular data, the twenty-five relationship will include the sample size (N), the distribution in percentages, major findings, followed by a conclusion. The frequency distributions are presented in tabular form in Appendix F for reference. After the summary of all findings, particular attention will be paid to those relationships which appear worthy of future research.

\[5\]See Appendix D, questionnaire item 63 and the breakdown on page 264.
A. **Age (N = 125).** Age (irrespective of class year) was broken into three categories. The crosstabulation of age with participatory level shows that if one is a low participant (points 1 and 2) he is more apt to be younger, from 17 to 21. For every one student in the 17 to 19 year range among the highest participators (point 4) there are almost three students in the 20 or 21 range and at over three in the 22 to 25 range. Conclusion: in a general way higher age categories are positively related with a higher participation rate for this population.

B. **Town size (N = 125).** Sixty-two per cent of the students lived in a town or city during their primary school years; 38 per cent in villages. Scorers with 1 or 2 points show no relation to residence distinctions. Three-point participants are more apt to be village dwellers; four-point participants are more apt to be town or city inhabitants. Conclusion: the two high participant categories are differentially associated with residential patterns for this population.

C. **Father's education (N = 116).** Fifty-seven per cent of the students have fathers who understand and speak French; 43 per cent understand no French. Participators ranking two and three tend to come from families where the fathers do not speak French. The highest and the lowest participators come from families where the fathers are more likely to understand French. Conclusion: these two variables are differentially related for this population.
D. Father's profession (N = 94). Seventy-three per cent of the students have fathers who work in the agricultural sector; the fathers of 27 per cent of the students work in non-agricultural professions. High participants (3, 4) are twice as apt to have farmer fathers than those with non-farmer fathers. Low participants (1 and 2) are more apt to come from non-farmer families. Conclusion: there seems to be a relationship between high participation and coming from an agricultural family setting.

E. Childhood French speaking habits (N = 125). Sixty-five per cent of the students spoke no French before going to school; 35 per cent spoke French to some degree. The highest and the lowest participants are more apt to have spoken French; the 1's slightly more, the 4's much more. Both middle-range participants are less apt to have spoken French; the 2's slightly less, the 3's much less. Conclusion: there is a non-linear pattern of relationship between these two variables for this population.

F. Ethnic group (N = 125). The only meaningful way to collapse the small population's ethnic groups is by the dichotomy, Akan tribes (41 per cent) and all other tribes (59 per cent). Low participants are more apt to come from the Akan tribes and high participants from the tribal families. Conclusion: there is a relationship between the variables for this population, with high participators tending to come from non-Akan ethnic groups.
G. **Kind of primary school (N = 125).** Sixty-six per cent of the students went to public school during their last CM2 year; 34 per cent to private or parochial school. The lowest participants are more apt to come from public schools. In general, one must conclude that there is little relation between the kind of primary school attended and level of participation.

H. **Number of years at primary school (N = 125).** Forty-six per cent of the students attended primary school for 4 to 6 years and 53 per cent for 7 to 8 years. Low participants are apt to have spent 7 to 8 years in primary school. High participants are more likely to have spent from 4 to 6 years. **Conclusion:** there exists a relationship between years at primary school and level of participation.

I. **Secondary school career (N = 125).** Seventy-six per cent of the students halted their secondary school career at the third form; 24 per cent went beyond the BEPC. The tendency for those students having left secondary school after third form is to be low participants. Students going beyond that class are more apt to be high participants. **Conclusion:** there is a relationship between the variables for this population, where high participators are likely to have gone further in secondary school.

J. **Time spent in Abidjan (N = 125).** Fifty per cent of the total population has spent less than one year in the capital city; one-half the population has spent more than
a year. Those extreme participants (1 and 4) are more likely than participants at the other levels to have spent over a year in Abidjan. Among the lowest participants, for every one student who knows the capital from only brief encounters, almost four students are accustomed to urban living. The middle-level participators manifest the opposite tendency: they are more likely to have only a limited familiarity with Abidjan. Conclusion: there is a differential relationship between these two variables for this population.

K. **Job aspiration** (N = 125). At the end of the third form, 53 per cent of the students planned on a teaching career; 47 per cent planned on a different professional outlet. The distributions are fairly consistent with the dichotomized breakdown of professional aspirations. Exactly the same number of students planning on going into teaching participate in the low categories as that number also planning on a teaching career from the high categories. Extreme participants are slightly more apt to plan on teaching; middle-level participants are slightly more likely to plan on a non-teaching career. Conclusions: job aspiration does not seem to exhibit any strong relationship with participatory behavior for this population.

L. **Professional training** (N = 125). Fifteen per cent of the students trained for some profession other than teaching; 85 per cent had no professional training. There
is a consistent relationship as a student receives higher participation points to be more likely to have had professional training. Three times as many point-one participants had no professional training than those with job training. Almost two times as many point-four participants had job training than the expected proportion. High participants generally have professional experience; low participants have less. Conclusion: high participation is positively associated with the professionally trained for this population.

M. Decision to enter teacher training (N = 125).

Sixty per cent of the students were themselves responsible in a major way for deciding to enter a teacher training school. In 40 per cent of the cases other persons (most of whom in the student's family) were responsible. Students scoring points one to three on the participation scale are slightly apt to have taken major responsibility. The highest participants show the opposite relationship: for every one four-point participant who decided independently, as it were, two students also with four points based their decision on the recommendation of others. Conclusion: there is a relation between very high participation and a high sensitivity to the opinions of others in the case of career choice, and a relation between lower participation and independency of decision for this population.
N. **Current satisfaction with curriculum (N = 124).** Fifty-seven per cent of the students are happy to some degree about the curriculum at ENI; forty-three per cent are either indifferent or discontent to some degree. Students in the lowest participation level are slightly more apt to be indifferent or unsatisfied. Middle-range students are slightly more apt to be happy. The highest participants manifest no relation to the satisfaction index, but it is interesting to note that the highest participant in the original scale (11) is very discontent. Conclusion: there seems to be a slight relation between the amount of satisfaction concerning one curriculum and participation levels for this population.

O. **Current satisfaction with faculty (N = 125).** Seventy-five per cent of the students are happy to some degree with the faculty; twenty-five per cent are indifferent or unsatisfied. There is no relationship between these two variables for this population.

P. **Reaction when colleagues jealous or suspicious (N = 120).** Fifty-one per cent of the students intend to react to jealous or suspicious colleagues in their first school by maintaining their pedagogical principles; 49 per cent state that they will seek a compromise in teaching with their new colleagues. Those intending to relinquish some of their pedagogical principles in adapting to a school situation tend to be middle-level participators at ENI.
Those students intent upon maintaining their principles in the classroom are apt to be the extreme participators (1 or 4). Conclusion: this variable is differentially related to participation levels for the present population.

Q. Perceived level of personal contribution to project (N = 109). Forty-eight per cent deem their contribution to the ETV project an "essential" ingredient to its success; 52 per cent believe their role to be "quite important."

Data on the average participants (2 and 3) produce no relation between the variables. A correlation is present, however, with the extreme participants. A participant at level 1 is much more apt to believe his role is "quite important"; a participant at level 4 is much more apt to consider his contribution "essential". Conclusion: for this population, very high participation is related to a very strong belief in the importance of one's personal contribution and very low participation is related to a less strong belief in the importance in one's contribution to the success of the ETV program.

R. Willingness to live in a village (N = 125). Sixty-one per cent of the students are "for" village living when they begin their teaching career; 39 per cent are "against". The participants in groups 2 and 3 show no relation between the two variables. The highest participants are much more apt to be "for" a village assignment and the lowest participants "against" a village position. Conclusion: for this
population a very high participation is related to a greater willingness to serve in a village teaching position and very low participation is associated with a strong preference for a non-village position.

S. School club membership (N = 125). Forty-nine per cent of the students take part in extra-curricular activities at ENI; 51 per cent do not. Extreme participants are more apt to belong to school clubs; middle-level participants more likely to not be members. Conclusion: there is a differential relationship between these two variables for this population, including a particularly strong positive relationship between the highest participation level and club membership.

T. Non-school club membership (N = 125). Eighty per cent of the students belong to clubs in a non-academic setting; 20 per cent do not. Low academic participants rated 1 to 3 are not likely to belong to clubs; the highest academic participants are very likely to be members of non-school clubs. Conclusion: there is a strong relationship between these two variables for this population.

U. Participation in sports (N = 124). Thirty-nine per cent of the students participate in sports to a high degree; sixty-one per cent from "somewhat" to "not at all". The highest participants show no relation between the two variables. The 1's and the 3's are more apt to be low sports
enthusiasts; the 2's very apt to be sports minded. Conclusion: there is a non-linear relationship between sports participation and academic participation for this population.

V. Participation in leisure time activities (N = 122). Forty-seven per cent of the student population claim to participate to a large degree in leisure time activities; fifty-three per cent to a small or to no degree. Middle-level participants show no relationship between the two variables. The extreme categories of participatory behavior are just slightly associated with a higher level of participation in leisure time activities. Conclusion: there is no important relationship between participation in academic and leisure time affairs for this population.

W. Participation in dormitory life (N = 121). Thirty-six per cent of the students consider themselves active participants in the campus dormitory life. Sixty-four per cent rate themselves on a lower level of involvement. Extreme participants show no relation with the variable. Point-two participants are more apt to be marginally involved in dormitory life; point-three participants are more apt to accord a larger importance to dormitory activities. Conclusion: there is a small relationship between participation in academic and dormitory affairs for one-half of this population.
X. **Participation in religious life (N = 123).** Forty-four per cent of the students accord "much" or "some" importance to participating in religious activities. Fifty-six per cent consider themselves less concerned with religious matters. Low participators are apt to be involved only marginally with religious matters. High participants are associated with a relatively high level of religious involvement. Conclusion: for this population a student's level of participation in religious activities is positively correlated with his level of participation in his training program.

Y. **Participation in family life (N = 123).** Sixty-two per cent of the students claim to participate to a high degree in family life. For thirty-eight per cent family life is less important. There is no relation between the extreme participatory values and the variable family life participation. The middle-range participants exhibit mild relationships with the variable; the 2's in a negative way, the 3's in a positive way. Conclusion: there appears to be no strong relationship between the two variables.

The Analysis of Relationships

The independent variables manifest a wide range of relationships to the dependent variable for this population. It is appropriate to divide these relationships according to their foreseen usefulness in terms of future research
priorities and to examine those relationships which appear particularly worthy of future resources.

For the present population there is no relationship between perceived participation levels and these three variables:

G. Kind of primary school attended
O. Attitudes expressing levels of satisfaction concerning the faculty
Y. Participation in family activities.

There is a partial relationship between perceived participation levels and several variables for this population. That is, the relationship is slight over the whole population, involves only a portion of the population, or is a differential relationship changing from positive to negative to positive or from negative to positive to negative. More information could be gathered on these variables when the population becomes larger; at that time it will be easier to determine whether the relationships are worthy of future study. The variables showing a partial relationship with perceived participation levels are the following:

B. Town size
C. Father's education
E. Childhood French speaking habits
J. Time spent in Abidjan
K. Career aspirations
N. Attitudes expressing levels of satisfaction concerning the curriculum

P. Intended reactions to jealous or suspicious colleagues

S. School club membership

U. Participation in sports

V. Participation in leisure time activities

W. Participation in dormitory life.

Most worthy of future research are the relationships consistently positive for the population. The independent variables in this category will be divided into two sections; those where the "break" is between high and low participation (that is, where participation points 1 and 2 are associated with one category of the independent variable and 3, 4 with another); and those where the break occurs between the lower three participation levels and the highest level.

High participatory behavior (points 3 and 4) of students at ENI, as perceived by peer group members, appears to be positively correlated with (and levels 1 and 2 are not associated with) these variables.

A. A higher age category

D. A family where the father works in agriculture

F. Coming from a non-Akan tribal family

H. A low number of years spent in primary school

I. A secondary school career beyond third form

L. Experience in professional training (besides teaching) or professional service

X. Strong religious convictions.
Highest participatory behavior (point 4) of the ENI students is associated with (and participation levels 1 through 3 are not associated with) these variables:

M. A high sensitivity to the opinion of other regarding professional career choice

Q. A very strong perceived level of personal contribution to the ETV project

R. A willingness to live in a village during the first teaching assignment

T. Membership in a non-school club.

The isolated positive relationships which the preceding variables exhibit with perceived participation levels for the ENI population become even more interesting when one attempts to find patterns among them. Such interpretations are necessarily in the form of intuitive hypotheses based upon the author's experience of living and working the ENI.

The first pattern one can perceive in the positive associations involves age and experience. For this population a higher age category (item A) is related to higher participation levels. One might assume that the maturity and the experience which accompany age are factors which help some students not only adapt well to the ENI atmosphere but be the most actively involved in it. Those students who are older have benefited from other experiences or more experiences than have their younger classmates. The positive correlations for this population give us an idea of what some of these extra experiences are and are not.
Those students not entering ENI at a younger age directly after third form do two things primarily: continue their studies in secondary school or undergo some form of professional training. Those students who have gone on to second, first, or terminal form (item I) are more likely to be high participators. Those students with some professional training (item L) are also especially likely to participate at a high level. A third possible way of spending extra years would be in primary school; however, those students who did repeat primary classes once or twice (item H) are likely to be low participators. In conclusion, the study has established that if a student is older, if he has spent those extra years either in professional training or in furthering his secondary education but not in supplementary primary school years he is especially likely to participate actively in the ENI academic program. A further study might begin with this premise and examine the particular factors in higher secondary school training, professional training,\(^6\) or general experience accompanying age which seem to give the student added probability of being a high participator.

\(^6\)Many teacher training institutions are of the opinion that candidates with some professional service bring an additional amount of realism and dedication to a training program. The ETV project authorities are seriously considering in the future opening the ENI entrance exam to young teachers. The first positive correlations of this study would lead one to support such a decision.
A second general pattern which seems to emerge from the data involves a respect for traditional values. Traditional values include especially strong family cohesiveness and an attachment to the rural life. The highest participators come from families upon whose advice the student relied heavily when he was considering applying to teacher training schools (item M). Being sensitive to family desires or submitting to parental insistence are evidences of strong traditional family bonds. The students who make their own decision, in what one might call a typically Western attitude of independent adolescent decision making were not manifesting their role as participants in a family setting; these individuals also did not take the role of strong participator at the ENI.

Strong participators are particularly apt to come from a rural agricultural setting (item D) and be especially willing to return to a rural location on a teaching assignment (item R). Those students coming from a non-agricultural background, that is, from a non-traditional background, are perhaps not used to a strong communal environment where each member has an important social role to play. A desire to return to village existence in a first teaching assignment may represent another bond between the highest participators and their rural roots or may reflect the success of two of the ENI's related goals; namely, preparing the students for service in a village and stressing the value of rural living.
The highest participators in academic matters and group work at ENI are also likely to be members of non-school clubs (item T). These participators not only manifest group solidarity—a traditional value—but as Chapter VIII made clear many of the students' associations included village or ethnic group activities, mutual aid projects or community development programs. In this respect, this variable is a part of the pattern of strong traditional loyalty.

Traditional values may also include strong religious convictions (item X). Religious affiliations may not only represent a personal commitment but may act as an agency for socialization, where Ivorian youth participate in communal activities centered around a cult. It would be important to know the role played by animist or syncretist cults as well as the role played by the imported but entrenched Christian and Moslem systems of worship.

The association of high participation and coming from a non-Akan tribal family (item F) is another relationship which requires more study before attempting and interpretation. Do the Akan students come from non-traditional, civil servant or partially urbanized families not displaying the same cohesive and participatory roles as the non-Akans? It is estimated that a disproportionately high percentage of civil servants in the country are from the Baoulé tribe (the most numerous in the Akan family). Enjoying a certain
prestige emanating from the Ivory Coast President's Baoulé status, would Baoulé participate less actively believing that their position is assured as members of the country's educated elite? Correspondingly, would non-Baoulé realize that they need extra qualities to insure their future success and security and therefore be more motivated to participate? Additional difficulties in interpreting this relationship are presented by the fact that the tribal question is one of acute political sensitivity and the relative lack of knowledge on Ivorian ethnic characteristics.

The final correlate with highest participatory behavior is the perceived level of personal contribution to the success of the ETV project (item Q). This association occurs with students who exhibit several characteristics. They have a strong self-concept, believing that they can be major forces in the success of the ETV system, not just viewing themselves as pawns playing minor roles in the sub-systems of teacher training and classroom teaching. The school seems to have been successful in socializing these students, in involving them personally in the spirit of dedication to the pedagogical reform. Lastly, their strong personal commitment may also reflect the traditional value of loyalty and service to the community. The students please their families and home villages by becoming leaders in the
educational sector and they benefit Ivorian youth by answering the national plea to improve the output of the educational system.

This chapter has summarized the associations found among the variables examined for two years of ENI students. The relationships found to be consistently positive were given possible interpretation. Besides laying a base for future research, the interpretations could be used for decision making. The first area of decision making which could be affected is recruiting and selection. Since students with characteristics \((A,D,F,H,I,L,M,Q,R,T,X)\) are more likely to participate than students without those characteristics, a recruiting and selection process might be established to actively seek out students with such a background. The second area of decision making involved is training. One has learned from the study that those students lacking characteristics \((A,D,F,H,I,L,M,Q,R,T,X)\) need some special treatment in order to become high participants. The training program should propose extra experiences to this group of students who might thereafter increase their level of participation. The last section of the next chapter will present additional implications of the positive associations.
CHAPTER X

IMPLICATIONS OF THE STUDY FOR FUTURE RESEARCH

The knowledge this study produced can be helpful to future research in two ways: by identifying areas of research to build on and by indicating certain research operations to avoid or to be aware of. With these purposes in mind, the author will isolate what seem to him the major implications of each of the three aspects of the study: the definition and measurement of student participation, the collection of independent variables, and the relational analysis.

The Definition and Measurement of Student Participation

The modification of original intentions. Despite the benefits of a site inspection\(^1\) before developing a research proposal, the researcher nevertheless launched into a research design which he was obliged to modify. The two main elements in the modification were related: demands on informants and the process of operationalizing student participation.

Demands on informants. The tasks of definition and measurement were to be collectively performed. The administration was aware the study was taking place but although solicited did not produce any input. This precedent must

\(^1\)Consult the research calendar in Appendix H.
be kept in mind in the future when one is projecting the participatory role of the local project authorities in other research endeavors. The administration's role was limited to support through the initial authorization and through the absence of any interference during the research operations. The findings of the present study will be shared post facto with the local authorities; nevertheless their contribution to the development of the research effort would no doubt have enhanced its relevance.

The ENI faculty was solicited to accomplish certain tasks which it had informally agreed to perform in previous consultations with the researcher. With few exceptions the faculty's input into defining and judging student participation was not forthcoming. Their lack of cooperation may have reflected their uninterest in the research question, their difficulty in using the observation form, the low priority which was placed on the research in the face of other demands on their time. Certain members of the faculty who were particularly sensitive to the researcher's needs were helpful in giving their views on student actions and attitudes. Future researchers have a precedent of a low institutional participation on the part of the faculty, but of the cooperation of a sympathetic minority.

Time demands on the students were substantial. It was their intensive participation which produced most of the
material for the study. It is the students' willingness to help define their own participatory behavior which permitted the researcher to attain his goal of developing a research instrument in the local setting and relevant to the population to be observed.

The researcher was demanding of the student population in other ways than time. He obliged them to express themselves in unfamiliar ways concerning themselves—-their motivations, attitudes, and rationalizations--and concerning their peers. Any researcher working with such a population should realize as does Vincent Guerry, who has "discovered", that certain questions he poses so glibly are likely to be received with perplexity and suspicion. The Baoulé or other Ivorian who answers a question asking "why?" or who consents to place a classmate's name on a line where he has never done so before is revealing thoughts which have hitherto remained private. Demands on students from the researcher also required their trust and confidence.

The process of operationalizing student participation. Getting the ENI students to formulate (in as concrete terms as possible) the different ways in which they participate in their training program was a laborious exercise, the fruits of which will be discussed in the next paragraph.

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2 See Appendix E.
Beginning with a generalization and whittling it down to a recognizable, measurable behavioral set of components is a difficult task in itself, and is especially slow going with over a hundred individuals coping with such an exercise for the first time. The "semi-operationalized" inventory served as an instrument not for measuring what student participation is but what it is perceived to be by judges.

Since a measuring instrument can be more effective if it is objective, the value of the present inventory could be increased if future researchers helped to reduce each item to a common behavioral denominator. For instance, it would improve knowledge of the ENI setting and of the general nature of participation if one could operationalize such items in the inventory as "helps the group overcome its difficulties" or "serves as an intermediary between the ETV Complex and his milieu."

**Content of the inventory.** The inventory in Appendix B is perhaps one of the most promising of the study's results. It represents a screened checklist of the major ways in which the ENI students see their participation in the educational enterprise. It is a veritable testimony of how the ENI students conceive a model student.

The first section of the checklist concerns group norms. By listing items on self-control the students are confirming their difficulties in adapting to group work after an academic
career of individualistic striving. Items on tact, respect, and responsibility reveal that the students are aware that these properties are necessary components of cohesive group work. The section on "individual aptitudes" makes it clear that students normally participate only when they are favorably disposed to participate. That is, those students who enjoy what they are doing and realize their important roles in their country's educational reform are conscientious participators. In this section the students affirm their strong association between willingness, conviction, and effort. Since participation in the student's mind is linked with motivation, a key question for the decision makers at ENI becomes: if student participation is a goal, how does one achieve maximum motivation of students?

The final section on relations with the administration and faculty represents another area--next to the area of adapting to group norms for the first time--where students assume a potentially new role. It is the verbalized reaction by students to the faculty's curriculum and the faculty's teaching styles that often produces their subsequent modification. A satisfying symbiotic relationship between students and staff is another ingredient of the motivated and thus perhaps participatory student.

Especially throughout the process of operationalizing student participation, and also all aspects of any further
study great attention must be given to the meanings of words used. There exists some margin of misconception in a study such as this where both researcher and population are manipulating an imperfectly assimilated second language. Clarity in definitions and terminology is critical in such a case as this. In-depth interviews would be helpful in clarifying the meaning of expressions.

One must get deeper, however, than the language used. For French expressions concerning participation may easily be borrowed. The whole question of how the concept of participation is linked to one's culture seems an enormously fertile subject. One could approach this question from the analytic perspective; for instance, what are the cultural values of the Ivorian ethnic groups which a content analysis of the students' inventory would find? Or one could examine the comparative aspect of the concept of participation. For example, Chapter IV included the description of a French conception of participation which was quite different from the Ivorian students' ideas. What would a similar inventory developed by French or American students include? How would each group look when measured on another's criteria? This is the sort of research question which could build on the present instrument which operationally define student participation.

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3See page 74.
Measurement. The instrumentation in the present study involved the students and a rating they were asked to provide using their own inventory. Further studies should aim at a consistently reliable indicator of participation. Reliability coefficients of over .75 can be obtained. Student work sessions could be recorded and through voice identification participators could be identified. A single judge or a group of trained judges (as an alternative to peer judges) utilizing an improved inventory would enhance the participation study. Group photographs could be used to facilitate teacher coding of student participation.

The delicateness of the participant-observer's role. The participant-observer's role is difficult for him when he attempts to disengage himself to describe or analyze his experience. The participant-observer role was also difficult for the population to live with, especially because in this case the observer's status changed from that of a simple observer to that of observer and staff member. In a social setting where suspicion rather than confidence was traditionally the more normal attitude toward school staff members (especially when confidential information was involved) the students were placed in the uncomfortable position of being requested to answer research questions which they considered potentially self-incriminating. Their reluctance to comply was also aggravated by their unfamiliarity with techniques of social science research.
One major means by which the researcher is able to reciprocate in gratitude for the students' cooperation is through his participant role. It is one of the satisfactions of the participant-observer role that one can institutionally provide an input into the enterprise one is studying. First through this researcher's role as a teacher and second through his lengthy sessions with the student groups on participation the author believes that he added to the benefits students derived from their training program. Included among those benefits would be increased familiarity with certain techniques of social science researchs.

The other major means of reciprocation is to find ways of using the data to improve the lot of the students and to insure that the data will never be used against the students who provided them.

Independent Variables

This section will not systematically review the results of the four chapters, "Description of the Population." However the section will identify certain areas where information gained through the collection of independent variables suggests important reasons for recommending further study.

The quality and quantity of candidates for teacher training schools is obviously a key question if one wants to obtain potentially the best possible teachers. It is
important to note that during the first two years of the ETV project's existence, 1969-1971, the number of candidates taking the CAFOp and ENI general entrance exam was less than the number of places to fill. Being forced to call a second general entrance exam at a later date or to accept candidates not passing through this exam path were temporary palliatives. The October 1971 general entrance exam was administered to approximately 1200 students and the 1972 exam, according to the prediction of the CAFOp coordinator, will attract 1500 candidates. The two issues at stake seem to be recruiting and working conditions, which will be explored in the next two sections.

Recollecting. The low state of public information about the ETV project is partially due to a lack of effort and resources deployed to "talk it up" and to seek out candidates rather than simply announcing over the radio the examination date and place and to the newness of the project. This newness means that not many people know about it yet. The first graduates have not yet joined the teaching force throughout the country to tell of the project and there is a general hesitancy about tying one's future to a project which carries so many unknowns and has not proved itself. The newness of the project will wear off a little each year, and knowledge will progressively replace the unknowns. Widespread public information, however, is not a factor that "just happens." If the project authorities are
convinced that the quality of the recruits is an essential ingredient to project success they will make more of an effort one, to study the qualities of the best teachers in the new system as soon as this study becomes possible (1972-1973), and two, to devise a policy to seek out the most promising candidates according to that description of appropriate qualities.

Working conditions. The second factor is working conditions, an element mentioned directly or indirectly in many student statements. It is evident that announcing a major educational reform and calling over the radio for recruits do not suffice to attract flocks of Ivorian youth. The highest echelons of the government label education "the priority of priorities." Close to a quarter of the nation's budget is invested in this sector. And yet a large number of students are not drawn to a primary teaching career, but end up there due to a combination of contingent reasons. These students can look forward to being assigned to an urban or a rural school. Many view rural living as stultifying and retrograde. Some, who do not perceive the primary school teacher in towns or cities as having much prestige, plan to use an urban assignment to better themselves and ultimately to rise above their position. These tendencies make one wonder if the authorities can make rural living more appealing to young teachers and primary teaching in an urban setting more prestigious. In this dilemma, Ivory Coast has the
company of almost every other country in the world.

What do the teacher trainees say that they want for working conditions? They do not clamor for higher pay—on the contrary, the financial adequacy and stability of a teaching position are the positive factors which draw many students into teaching. The conditions which they do mention are material ones: they claim a right to receive mail regularly, make purchases without going long distances, be visited regularly by supervisors in the Education Ministry, have health care facilities available, not to suffer from lack of basic comforts such as water for drinking and washing, and electricity to light their homes. If they had more money, as one student put it, they wouldn't know how to spend it in the village. What they want is for the village to be developed materially. The television set itself may do a lot to help keep the teacher in touch, not only with the ETV center but with national and international events, and with other instructional or entertainment programs.

Incentives for rural service. Given a system where student-teachers may be assigned their first positions in village or town, and given the fact that about half of the students questioned have some degree of hostility to village living, it would seem that to avoid potential disasters on either the personal or the project level the whole question of how one can be successful in and profit from a village
teaching assignment should be officially and seriously brought up with the students.

Village teachers preferring such an existence should be brought to the training center to explain why. Perhaps a lack of information on what the real satisfactions of village teaching are can be corrected. And perhaps if each new teacher knew he would have in his early career a village assignment and an urban assignment, this inescapable double exposure would considerably change student expectations. Currently there is a minority who want to avoid village teaching at all costs and who have already decided that it would be contrary to their effectiveness and to their happiness.

This possible remedy may be idealistic, however, because as one civil servant in Abidjan put it, such a law would never pass for the legislators would not want their own sons who have studied in France to have to serve in a village position. The problem manifestly is greater than the present attitudes of a few prospective primary school teachers. If a colloquium on the national level with participants from the Planning, the Economic and Financial, and the Education Ministries were organized with the objective of facing squarely the problem of rural needs and incentives for rural service, perhaps at least a partial solution could be found for this Ivorian problem which is also a universal problem.
Student access to public information. Public information is a dimension which potentially determines not only which candidates present themselves for a teacher training school exam but also the nature of the expectations which those successful candidates have when they come to school the first day. The first general reaction of most ENI-1 students each year is one of bewilderment and confusion. These reactions are due to the radically new student tasks and personal relationships in the school setting. With time they are mostly overcome. Even if one were to broadcast to potential candidates how much the student atmosphere would be different from their previous one only the experience of undergoing the new role situation would be effective proof.

The problem of public information is not a question of methods but one of content and the issue of professional status. The fact that several students were upset when they were not able to take a general course of study allowing them a chance to complete secondary school leads one to several possible deductions. Either these students were promised a general education at the ENI, or nothing was announced as to the purposes and contents of the curriculum to give the prospective students a clear picture, or announcements were made but were not heard by students or were heard and not believed. Although there are precedents for official promises being rescinded, it seems unlikely that the students were led to think that the ENI would present a general
curriculum leading to the completion of secondary school studies.

It is very likely that at the time of the first admissions tests very little news of what an ENI education would actually entail was transmitted from the planners in Bouaké to the Ministry of Education and then to the prospective students. Whatever authentic news did reach candidates may have been disregarded since all other so-called normal schools train for the baccalauréat exam and for higher education. Perhaps the most distressing element in this affair is that students entering ENI during the second year also seem to have the same illusion. In addition to the continuing gap in public information there may be an element of wishful thinking on the part of the students who would like to see their future professional opportunities increased by going on to the baccalauréat.

Public information for teachers in the field. Information dispensed to the public is crucial not only with candidates to the new pedagogy but with practitioners of the old pedagogy. Without a pervasive campaign to explain the why and the how of the ETV reform the present teachers are left victims of their own explanations and projections, which often reach mythical proportions. Although workshops have been organized for CPI tele-teachers, their school principals, and the regional inspectors, the veteran non-TV teacher has had only a minimum of exposure through the
national newspaper to some aspects of the new educational program of which he will become a part. The major part of his information is from informal or incidental sources.

Considerable ENI student opinion was expressed that these teachers either because of lack of information or misinformation harbor hostile thoughts about the ETV project in general and in particular toward the new teachers from the ENI. When the fall of 1972 shows what the veteran teachers' attitudes actually are toward their new colleagues, the point will not be simply to calculate the reliability with which students in 1971 predicted colleague attitudes in 1972. The important task will be to determine the range and the distribution of these colleague attitudes and the distribution of reactions of the ENI-trained teachers faced with these attitudes.

As more and more practising teachers become retrained to think along new lines their attitudes toward the ETV scheme and toward its new teachers must be monitored. It must be discerned how any negative attitudes have been created whether by misinformation, lack of information, a reflected opposition, or whatever circumstantial causes, and how in the future they can be reduced to a minimum.

Feminine policy. Will a new policy toward women teachers develop? Despite the visit of a woman Unesco consultant in the spring of 1971 who made recommendations for a more
amenable policy toward girl students at ENI, the girls' morale appears to remain low.

Attrition. The study indicates that the attrition rate of student-teachers needs to be monitored and estimates, such as the 5% figure suggested in this study, need to be incorporated into the planning process. Attrition, however, is not limited to pre-service; trained student-teachers may leave their teaching assignments in early career. Informal discussion with students has produced a wide range of projections on this point. Some students candidly admit that they intend to move up and on after a few years of teaching in primary school. Others feel that their ENI training has made them incapable of doing anything other than being a tele-teacher. The attrition rates will no doubt depend partially on the perceived working conditions, teacher prestige, and the reward system, mentioned above.

A final major question arising from the study concerns the appropriateness of the training received. The variety of content and the range of methods have been briefly described in the study as well as student attitudes toward the curriculum over time. There have been some changes in the instruction at ENI from 1969 to 1972. Changes however have not been, and up to now could not have been, the result of feedback from students applying their training in
the field. Although actual testing in the field should point out areas for suggested change in the curriculum, one can already base some recommendations on the findings of this research study. For instance: given the students' insecurity about beginning to teach in a school, and given the expected hostility or at best suspicion (which many students foresee) on the part of the present teachers, should not an important part of the curriculum be devoted to preparing the students to deal with these attitudes, perhaps through such methods as training classes? With the first contingent of ENI graduates entering school teaching in the fall or 1972 a survey should be organized to study the applicability to the classroom, the faculty room, and the community of all aspects of the students' training. Perhaps the first ENI graduates can return to ENI to give a workshop on the problems one meets when introducing change in the schools.

Final Implications of the Relational Analysis

The positive relationships described and analyzed in the preceding chapter apply only to the population of 125

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4Strength training consists of "classes" or sessions where groups are prepared for being effective agents in a difficult (i.e. hostile) environment. Group members are led by a trained psychologist through various techniques whereby they become affectively disarmed and then strengthened as they are sensitized to the position of the "other" people and how to deal with them.
students. Future research could continue on two fronts: one, begin new tacks and launch studies which would be more conclusive if they embrace a larger population, and two, delve into the major conclusions of the present study. These latter conclusions regarding relational analysis are many, but the two principal patterns found involve an association between high academic participation and a higher age category, accompanied by certain experiences, and by an adherence to certain traditional values.

Traditional Ivorian values may be the key to many doors. To understand the student's motivations and his parents' attitudes one must learn what these values are. To increase the chances of success for the ETV project one must understand the value structure of the Ivorian ethnic groups. Such knowledge will shed light on how the project will be received and how the public can be approached and encouraged to support it.

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5One of the inherent restraints in the present study was the small size of the population, especially crucial when one desires to observe the distribution range within that population. In the future it will be possible to enlarge the body of informants, by adding the third year ENI-3, by following graduates into their field positions, or by consulting the population in the one-year training schools, the CAFOP's. During the 1971-1972 year the researcher has sought information from all the CAFOP students (a sample size of nearly 1000) on many of the independent variables presented in this study. One can hope that other attempts will be made soon to collect data on a larger population. Being able to study a random sample of the larger population will greatly increase the relevance and usefulness of such a study.
What models do the ENI students now have for participation? Their school career prior to teacher training was marked by the absence of participation. Particularly in African societies one turns to one's elders for models. The "elders" at ENI are the administration and the faculty. Given the low level of participation revealed in the present study, the administration and faculty hardly constitute a model for participation in the students' eyes.

The fact that Ivorians are only marginally involved in the planning or in the instructional process at ENI—for whatever reasons—establishes a very clear set for the position of Ivorians in the decision making apparatus of the teacher training school. It is paradoxical that while the training program urges the ENI students to participate, present operations at ENI generally inhibits participation, at the faculty and administration level.

It is not clear who were the strongest supporters in the decision to make student participation a project goal. There is some evidence that the goal came from origins outside the Ivory Coast. If that is true one must be especially careful as to what is meant by participation.

The most reasonable means of discovering what participation can mean in an Ivorian setting, once the present investigation of ENI students has focused attention on the issue, is to study participation patterns in traditional society. An Ivorian informant gave a clue as to where one
might begin such a study.

The idea of student participation in school came from outside Ivory Coast. But we had that idea in the village; not in the schools but in the village.6

The village and its traditional values may contain some models of participatory behavior which could apply to the ENI training program. If the participation patterns of ENI graduates can be harmoniously adapted to the localities where the students are assigned, then the ETV project will have helped to close the gap between school and community, another goal of the project.

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6See Appendix A for the complete transcription of the interview.
APPENDIX A

AN IVORIAN FACULTY MEMBER ON TRADITIONAL SCHOOLING AND PARTICIPATION IN THE VILLAGE

Where I come from in the south, a child does not have the right to participate in family discussions and to be with the elders of the village. Not until he has his BEPC. It's very rare that a student before that point will be called to participate. So he plays with children of his own age. He is really accepted as a participating member of the village when he has a job. Then you can count on him, if a member of the family is sick, for instance, he'll help. If, on the other hand, a young villager has left school and is working but doesn't send anything home, not even a bar of soap, when he returns to the village he is not called. To be called to participate you have to recognize the family. . . .

You participate because you can only learn by exchanging ideas with others. In our schools before there was no exchange of ideas. Competition: each student tried to surpass his classmate. If a child discovered something in a book he would keep that for himself. Even if he tells the teacher, the teacher asks, "What do you have there? Let's see." The boy says, "My father gave

1Recorded interview, May 4, 1971.
me this book." "That's good." "Please don't tell the other boys, the exam is coming up, and my father loaned me the book." One always tried to surpass one's fellow students, there was no exchange, there was just the teacher who poured his knowledge into the students and the students who accepted, but between them there was no communication. . . .

The idea of student participation in school came from outside Ivory Coast. But we had that idea in the village; not in the schools but in the village. In the village you can't do anything without an assembly, around the palaver tree. In the village I taught in, if there was an important piece of news to announce the village chief told his town crier to call a meeting at six in the morning in the public square. At 6 o'clock everyone is there in a circle, and the debate begins. The chief says--here's what happened, what do you think? The villagers discuss and the chief listens. The chief is there, but he doesn't talk much, it's rare. His elders talk, and the villagers. If they have something to say, a personal opinion on the subject, they speak up. Only married men have the right to participate. Students if they are there may listen, but they do not take part. Women are not allowed. . . .

In school there was no work in a group, just in the village. A rupture was created between village life and school life. Now this rupture is being healed. Now the student is being given free voice in school. Now there
are round table discussions involving faculty and students. But in the village all decisions were made by discussion with participants in a circle. In my village, when they are sitting in a circle, the chief is always here, facing the east, facing the place where the sun rises, always. That always struck me. I even asked my father one day why and he told me that power comes from the east where the sun comes from, all power and all life come from the east. So the chief has to turn toward the east for inspiration. . . .
APPENDIX B

SEMI-OPERATIONALIZED LIST OF STUDENT PARTICIPATORY CRITERIA

Peer Judgment Form Issued to ENI Students on May 12, 1971

PARTICIPATION

Here is the inventory of what you--students of ENI-1 and ENI-2--have contributed to formulate in order to describe the range of behaviors and attitudes constituting student participation at ENI. Please read through the inventory which is, as you can see, divided into categories.

Now I am asking you to think specifically of the members in your group, and by group I mean AB, CD, EF, GH, and, in the case of ENI-1, IJ as well; that is about 14 students for ENI-1 and 16 for ENI-2. You are requested to reread each item on the inventory and ask yourself the question: "Which member of my group participates the most or the best in this particular domain?" Then YOU WILL WRITE THE COMPLETE NAME of this member to the right of each item in the indicated place.

Example A: Item 28.

... Tries to motivate to work a friend who sloughs off

Name: __________________

You would put to the right the whole name of the member of your group who--in your opinion--tries the most or who has tried the most to motivate to work someone in the group who sloughs off.
Example B: Item 43.

... Likes the contents of the curriculum Name: 

You would put the whole name of the group member who, according to you, seems to like the most the contents of the curriculum at ENI.

There remain three things to clarify.

NEVER PUT DOWN YOUR OWN NAME. Even if you think that it's you who participates the most of your group in the particular item, DO NOT PUT YOUR NAME.

IF you do not think of anyone in your group who corresponds to the item in question, PUT NOTHING.

And finally, I promise that all your answers will remain CONFIDENTIAL. I do not ask you to write your name on these pages, only to CIRCLE your group, and your year.

Thank you in advance.

GROUP (A,B) (C,D) (E,F) (G,H) (I,J)
YEAR ENI-1 ENI-2

A STUDENT PARTICIPATES IN THE TRAINING PROGRAM AT ENI WHEN HE

1.-11. (RESPECT FOR GROUP NORMS)

1. Is punctual at work Name: 

2. Comes frequently to work Name: 

3. Respects the order of the day (agenda, points to discuss) Name: 

4. Does not impose his ideas but emits them as suggestions Name:
5. Tries to understand a friend's idea before judging it

Name: __________

6. Knows how to reject a friend's idea by justifying the rejection and by proposing, if possible, another idea

Name: __________

7. Knows how to control himself when a friend rudely interrupts him

Name: __________

8. Aims toward the same goals as the group

Name: __________

9. Accepts responsibilities in the group

Name: __________

10. Informs an absent member of what has happened in the group

Name: __________

11. Does not take advantage of the self-discipline code

Name: __________

21.-31. (CONSTRUCTIVE INITIATIVES TO ADVANCE GROUP WORK)

21. Takes responsibilities in the group

Name: __________

22. Puts order in the group (especially the leader)

Name: __________

23. Creates an atmosphere of respect in the group

Name: __________

24. Proposes a solution to a problem that advances the group work

Name: __________

25. Calls on all members to speak (the leader)

Name: __________

26. Reanimates the discussion from time to time (especially the leader)

Name: __________

27. Encourages friends to terminate their work (especially the leader)

Name: __________

28. Tries to motivate to work a friend who sloughs off

Name: __________

29. Knows how to calm a member who gets angry quickly

Name: __________
30. Explains the subject to those who don't understand (especially the leader)

31. Helps the group overcome its difficulties (self-regulation)

41.–51. (INDIVIDUAL APTITUDES)

41. Feels the need to prolong a course (demand for extra hours)

42. Works conscientiously

43. Likes the contents of his curriculum

44. Is motivated by the curriculum

45. Makes an effort to attend a course he doesn't like

46. Makes an effort to improve his behavior in the group (often the result of self-criticism)

47. Feels a moral obligation toward the group

48. Listens attentively to what is said during work sessions

49. Learns how to train himself (for example informing himself with the help of books or newspapers within the framework of his training program)

50. Has the vocation of teacher

51. Realizes the importance of the task which awaits him when he graduates

61.–68. (INDIVIDUAL ACTIONS)

61. Undertakes personal research which can be useful to the group work

62. Gathers information during field experiments
63. Creates things (posters, maps, games, etc.) within the framework of the training program

64. Takes notes for his own records

65. Takes notes and summarizes suggestions, ideas, questions, answers, etc. given by the group (the rapporteur)

66. Is a worthy representative of his group during the inter-group sessions, reporting, suggesting, and being critical

67. Puts into practice what he has learned or observed within the framework of the training program

68. Serves as intermediary between the ETV Complex and his milieu (village)

71.-76. (ORAL CONTRIBUTIONS)

71. Answers questions often

72. Gives his point of view in a discussion

73. Asks for information or clarification

74. Analyzes situations in order to deduce the essential ideas

75. Expresses himself clearly to make himself understood

76. Becomes able to speak without timidity

81.-83. (RELATIONS WITH THE ADMINISTRATION AND FACULTY)

81. Asks for reforms in the curriculum (for example, courses in French Literature)

82. Helps the administration and the faculty solve certain problems

83. Is tolerant toward the faculty (pardons its errors)

I thank you very much for your collaboration.
APPENDIX C

FORM FOR FACULTY OBSERVATION OF STUDENT PARTICIPATION

Workshop: ________________
ENI-1 or ENI-2
Date: ________________

Faculty leader: ________________
Group: ________________
From ___ to ___ o'clock

Four specific items

Answers questions often

Gives his point of view in a discussion

Proposes a solution to a problem which advances the group work

Asks for information or clarification

Name: ____________

Name: ____________

Name: ____________

Name: ____________

Three general judgments
(NOT NECESSARILY RELATIVE TO THIS OBSERVATION SESSION)

In your opinion which student has the most constructive initiative in this workshop?

In your opinion which student respects the norms of the group the best?

In your opinion which student in general and without definite criteria participates the most in this workshop?

Name: ____________

Name: ____________

Name: ____________

Comments: 
APPENDIX D

QUESTIONNAIRES

Government Questionnaire

Name - First name

Sex: Masculine - Feminine* (circle the correct answer each time you meet the *)

Year of birth: __________ given by * - birth certificate
- substitute judgment

What is your nationality?: ________________________________

If you are Ivorian, what is your ethnic group?: __________

What was your main place of residence up to your 7th birthday?

Name of town or village: ________________________________

Sub-Prefecture: ________________________________

CULTURAL LEVEL OF FATHER, MOTHER, AND TUTOR

(Answer by placing a cross in each block corresponding to the correct answer for each of the three persons).

<table>
<thead>
<tr>
<th>Deceased, unknown, or inexistent (tutor)</th>
<th>Father (or guardian)</th>
<th>Mother</th>
<th>Tutor</th>
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<th>Baccalauréat or more</th>
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<tr>
<th>A few years 2nd cycle professional or technical</th>
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<th>A few years 2nd cycle general studies</th>
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<th>A few years 1st cycle professional or technical</th>
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<th>A few years 1st cycle general studies</th>
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<tr>
<th>CM2 level</th>
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<td>_______</td>
<td>_______</td>
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</table>
Reads French

Understands French

Does not understand French

Did you speak French before entering school?*
   Yes - only a little - none at all

Now do you speak French with your*
   Mother - Father - Brother or sister - Tutor - Friends only

**PRIMARY SCHOOL CAREER**

Number of years spent in each class:
   (One year = 1 - Repeat once = 2 - Repeat twice = 3)

<table>
<thead>
<tr>
<th>Nursery School</th>
<th>CP1</th>
<th>CP2</th>
<th>CE1</th>
<th>CE2</th>
<th>CML</th>
<th>CM3</th>
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</table>

Was your last CM2*: Public Private

If it was private, was it*: Catholic - Protestant - Adventist - Harrist - Another denomination - Nondenominational -

Have you taken the CEPE?* Yes - No Did you pass?* Yes - No

Have you taken the Baccalauréat?* Yes - No

**SECONDARY SCHOOL CAREER**

(For each year mark the name and the type of institution, whether it was public or private, and the number of years spent in each class. In case of a repeated grade count only the first year in giving the name and type of school)

<table>
<thead>
<tr>
<th>Years of study</th>
<th>Name: lycée, collège normal school, CEG</th>
<th>Public, Catholic, Protestant, Adventist, Nondenominational</th>
<th>Number of years spent</th>
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<tbody>
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<td>6th</td>
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<td></td>
<td></td>
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<tr>
<td>5th</td>
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<td>4th</td>
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<td>3rd</td>
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<td>2nd</td>
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<td>1st</td>
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<td>Terminal</td>
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</table>
(A section of the government questionnaire irrelevant to students at the teacher training school is skipped here)

Socio-professional situation: (THE PROFESSOR CONSULTS THE CODE AND MARKS THE BRANCH AND LEVEL OF THE FATHER'S OCCUPATION AS IT IS GIVEN BY EACH STUDENT)

Researcher's Questionnaire

June 16, 18, 1971
ENI, Bouaké

Dear Teachers-in-Training,

This questionnaire constitutes the last part of my research at the Ecole Normale d'Instituteurs this year. You have been very patient with the requirements of my research and I thank you in advance for being willing to furnish this last effort.

THIS IS NOT AN EXAM
THIS IS NOT AN ELEMENT FOR YOUR SCHOOL RECORDS.
THIS IS AN INFORMATION SHEET FOR ME,

without which I could not finish my research. Neither your name nor any name of your fellow students will appear on the sheets; in no case will any names be attached to the results of this research.

There are no correct answers or false answers. In answering what you yourself personally think you will be answering the questions in the right way. You will see that some questions have to do with your background, others ask your opinion on life at the ETV Complex, still others ask you to imagine a few aspects of your professional life.
Even though you are accustomed to group work, this questionnaire requires individual work, without discussion among you.

Do not hurry. Take time to think about each question before answering. You can answer many questions by putting an X before the best answer. Other questions ask you to respond more freely. Especially be sure to answer each question honestly. If you meet the least difficulty, raise your hand and I will come to help you.

7. Circle your class year:
   0 ENI-1   1 ENI-2

8. Circle your group:
   0 A  1 B  2 C  3 D  4 E
   5 F  6 G  7 H  8 I
   9 J

9. What is your age?
   0 ______ 17 or less
   1 ______ 18
   2 ______ 19
   3 ______ 20
   4 ______ 21
   5 ______ 22
   6 ______ 23
   7 ______ 24
   8 ______ 25
   9 ______ 26 or more

(Note: this space was reserved for transferring of coded information from the government questionnaire)

21. When you attended primary school, did you live in:
   (Put an X before the best answer)
   0 ______ a large city (Abidjan or Bouaké)
   1 ______ an important town like Man, Daloa, Gagnoa, Abengourou, etc.
   2 ______ a small town like Aboisso, Sassandra, Bongouanou, etc.
   3 ______ a village
22. How much time have you spent in the capital, Abidjan? Check the correct answer.

<table>
<thead>
<tr>
<th></th>
<th>never been to the capital</th>
<th>a few days</th>
<th>a few weeks</th>
<th>a few months</th>
<th>a few years</th>
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23-24. One hears that in the village, children, even up to 20 years old, should not mix with adults in their life and affairs. Up to what point was this true in your personal case? Explain.

25-26. What should the young person do to make himself heard? In what circumstances and on what subjects does one permit him to have a say, to pronounce himself?

27-28. At the time you earned your BEPC, what career did you envisage?

...............  

29. Before coming to the ENI, did you undergo any professional training?

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<th></th>
<th>no</th>
<th>yes, less than one year</th>
<th>yes, one year</th>
<th>yes, two years</th>
<th>yes, more than two years</th>
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<td>0</td>
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</table>

30. In what branch(es)?

31-32. Why does your family want you to go into teaching?

33. Who was the most influential in your decision to take the entrance examination for teacher training schools? Check only one answer.

<table>
<thead>
<tr>
<th></th>
<th>father</th>
<th>mother</th>
<th>father and mother</th>
<th>father's brother</th>
<th>mother's brother</th>
<th>other relative (who?)</th>
<th>tutor</th>
<th>myself</th>
<th>other (who?)</th>
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<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
34-35. You decided to come to ENI. Were you accepted at another school (excepting the other teacher training schools)?

0      no
1      yes

Which one(s)_______________________

36. Why did you prefer to come to ENI?

37-38. Were you refused at another school?

0      no
1      yes

Which one_______________________

39. Would you have preferred to go to that school rather than coming to ENI?

0      yes, certainly
1      yes, I think so
2      I don't think so

40. In the beginning of your training at ENI were you happy to be there rather than at a CAPOP?

0      very happy
1      happy
2      indifferent
3      unhappy
4      very unhappy

41-42. Why?

43. Now, do you regret your decision of having come to ENI rather than going to CAPOP?

0      much regret
1      some regret
2      indifferent
3      no regrets

44-45. Why?
46-47. There probably exists a workshop which interests you more than others. When you think about the cause of your participation in this workshop, what is, in your opinion, the principal reason? Check only one answer.

Workshop: __________

0 ______ the instructor's personality
1 ______ the work method used (which one?)
2 ______ my personal motivation for the subject
3 ______ the obvious application of the workshop to my teaching
4 ______ other reason (which?)

48-49. In second place after the workshop you have just mentioned, which one is your next choice?

Workshop: __________

Because of:
0 ______ the instructor's personality
1 ______ the work method used (which one?)
2 ______ my personal motivation for the subject
3 ______ the obvious application of the workshop to my teaching
4 ______ other reason (which?)

50. There exists a workshop--perhaps not the one which interests you the most or where you were the most motivated--which facilitated your participation the most; that is, which permitted you to express yourself, to give of yourself.

What is this workshop? __________________________

51-52. How do you explain that it is this workshop which allowed so much participation? How was your participation facilitated?

-----

One can participate in academic matters; one can also participate in non-academic or extra-curricular activities. Please DESCRIBE how you participate in the following sectors.

Sports:
Leisure time activities:
Dormitory life:
Religious life:
Family life:
53-57. Evaluate the degree of your participation in the preceding sectors by putting an X on the appropriate line after each of the five activities:

<table>
<thead>
<tr>
<th></th>
<th>MUCH (0)</th>
<th>SOME (1)</th>
<th>LITTLE (2)</th>
<th>NONE (3)</th>
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</thead>
<tbody>
<tr>
<td>3 Sports</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Leisure time activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Dormitory life</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Religious life</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Family life</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

58. Do you participate in one or more optional activities at ENI, such as dramatic club, literary club, school newspaper, etc?

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Which one(s):</th>
</tr>
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<tbody>
<tr>
<td>0</td>
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</tr>
<tr>
<td>1</td>
<td>yes</td>
<td></td>
</tr>
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</table>

59. If you answered YES to question 58, why do you participate in an optional activity? Mark the best answer.

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<thead>
<tr>
<th></th>
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<th>other reason why (which)</th>
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<tr>
<td>0</td>
<td>this activity is very important for my training</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>this activity allows me to leave the school grounds</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>I like to work with the instructor</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>I have friends who like this activity and I want to be with them</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>other reason why</td>
<td></td>
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60. If you answered NO to question 58, why don't you participate in an optional activity? Mark the best answer.

<table>
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<tr>
<th></th>
<th></th>
<th>other reason why not (which)</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>I have no time</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>these activities do not interest me</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>I don't get along with some of the members of these clubs</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>I don't see the relation between these activities and my future teaching</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>other reason why not</td>
<td></td>
</tr>
</tbody>
</table>
61-62. Here is a list of a few "voluntary workshops" or clubs that one could propose for next year. Put an X before each in which you would be interested in participating.

1. [ ] scientific workshop
2. [ ] literary workshop
3. [ ] reading club
4. [ ] information and communication
5. [ ] audio-visual expression
6. [ ] dramatic expression
7. [ ] musical expression
8. [ ] plastic expression
9. [ ] corporal expression
10. [ ] feminine activities
11. [ ] manual training
12. [ ] leisure activities
13. [ ] your idea:
14. [ ] your idea:

63. Have you belonged to or do you belong to a club, youth group, cooperative, etc.? If so, choose one and give the following information.

Name of the organization:
The purpose of the organization:

64. Your role (tasks, responsibilities)

65-66. Evaluate the degree of your participation in this club on the following scale. Mark the best answer.

Mark the best answer.

0. [ ] much
1. [ ] some
2. [ ] little
3. [ ] none

Please specify why you participate to that degree.

67. At the beginning of your training, what was your attitude toward the curriculum, that is, the contents of the workshops?

I was . . .

0. [ ] very happy
1. [ ] happy
2. [ ] indifferent
3. [ ] discontent
4. [ ] very discontent
68. Now, what is your attitude toward the curriculum?

0 _____ very happy
1 _____ happy
2 _____ indifferent
3 _____ discontent
4 _____ very discontent

69-70. If your answers to questions 67 and 68 are different, please indicate the reason behind your change in attitude.

71. At the beginning of your training, what was your attitude toward the instructors (in general)?

0 _____ very happy
1 _____ happy
2 _____ indifferent
3 _____ discontent
4 _____ very discontent

72. Now, what is your attitude toward the instructors (in general)?

0 _____ very happy
1 _____ happy
2 _____ indifferent
3 _____ discontent
4 _____ very discontent

73-74. If your answers to questions 71 and 72 are different, please indicate the reason behind your change in attitude.

75-76. Why do you participate as you do in your training program? Choose the TWO answers which represent your attitude the best and check them.

0 _____ because if I do not participate, my fellow students will not hold me in high esteem
1 _____ because it is only in participating that I can attain self-fulfillment
2 _____ because the real role of a teacher is to be a community development leader
3 _____ because it pleases the faculty
4 _____ because it helps to build the nation
77-78. Perhaps you think that the reasons cited in the preceding question are not sufficient. Do you see other more important reasons than those given?

0 ___ no
1 ___ yes

Which ones:

79-80. In the first school you are assigned to, you will meet your colleagues. What do you imagine to be their attitude? Circle only one answer.

0 ___ they will all listen to me and all will go well
1 ___ in general they will accept me
2 ___ I will work on my side and they on theirs
3 ___ they will be jealous or suspicious

Why do you think that?

81-82. If you meet colleagues who are jealous or suspicious what will you do? Check only one answer.

0 ___ ignore my colleagues and maintain my pedagogical principles
1 ___ try to convince my colleagues and maintain my pedagogical principles
2 ___ try to convince my colleagues and find a compromise
3 ___ change my pedagogical principles in order to satisfy my colleagues.

Explain your answer.

Why would they be jealous or suspicious?

83-84. When you begin your training career, where would you like to live? Check only one answer.

0 ___ in a village--anywhere
1 ___ in a village--near my home
2 ___ in a small town
3 ___ in an important town
4 ___ in Bouaké or Abidjan

Why?
85-86. To what degree would you be willing (or unwilling) to live in a village?

0 _____ entirely willing
1 _____ more or less willing
2 _____ more or less unwilling
3 _____ entirely unwilling

Explain your answer.

87-88. Try to describe the climate, the atmosphere that you hope to establish in the classroom when you become a teacher.

89. The success of the ETV project will involve a large number of people. How do you rate your personal contribution?

0 _____ essential
1 _____ fairly important
2 _____ I don't know
3 _____ fairly unimportant
4 _____ negligible

90. In your opinion, how is the teacher in the village thought of?

0 _____ in general very well thought of
1 _____ in general fairly well thought of
2 _____ in general thought little of

91. In your opinion, how is the teacher in town thought of?

0 _____ in general very well thought of
1 _____ in general fairly well thought of
2 _____ in general thought little of

92. Are there teacher training students who participate excessively (too much) in their training?

0 _____ no
1 _____ yes, there are many of them
2 _____ yes, but there are not many of them

Explain your answer.
93. In general, are you satisfied with your training up to now? Check the best answer.

0  _____ very satisfied
1  _____ quite satisfied
2  _____ indifferent
3  _____ dissatisfied
4  _____ very dissatisfied

---. Do you have things to add which you have not been able to fit into an answer?
APPENDIX E

VINCENT GUERRY ON BAOULE THINKING AND ATTITUDES

Vincent Guerry is a Benedictine monk who has been living in a Baoulé village for twelve years. He was prompted to leave his colleagues at their mission post when the Second Vatican Council accepted the premise: there may be values in pagan cultures. Father Vincent desired to discover some of these values. In 1971, he published "La vie quotidienne dans un village Baoulé" or the daily life in a Baoulé village and on two occasions was asked to speak before students, faculty, and producers at the ETV Complex. Some of his reflections seem to shed light on how several students reacted to my asking them to fill in a questionnaire, and especially to the many why questions.

Students were manifestly concerned if not anxious to know what I was going to do with the information I collected, that is what authorities might get their hands on the confidential outpourings. Father Vincent in quite another context spoke of the Baoulé's conception of communication to Africans and to whites.

When you tell something to a white, he will spread it right away.
When you tell something to an African, he will keep it for himself.
Some students reacted to why questions by replying that they didn't think in terms of why. Others mentioned outrightly that the Baoulé or Africans in general not only don't talk in those terms but are unconcerned with the why. Father Vincent says that for the Baoulé if you ask why, it means you cut up the event or the object. It loses its life.

If you cut open the dog you see the intestines, but the animal is dead.

He writes:

For us (Westerners) it is not enough to look at our universe at a distance; to understand it well we have to decompose all its elements, for what is vague, what is a mixture annoys us. The Westerner feels this annoyance from his childhood: "Why does the water run?" "Why does the fire burn?" a child will ask his parents. Before a fact we instinctively look for all the elements which could have constituted its composition: its causes, its origin, its history, its geography.

For a Baoulé placed opposite an object or an event, the point is not to see it clearly, but to taste it. To understand a thing one must coincide with it ... It is not a matter of a "vision" but of a "sensation."

The Baoulé feels repugnance to analysis. He is at ease in the fuzzy, in the mysterious: he does not feel the need to ask why. The why will never emanate from him. Undoubtedly, the Baoulé child passes through his questioning period, as it is called, and he asks many questions: "Where are you going? What are you doing? What's in your hand?" but almost never a why ...
The *why* scares him because it corresponds to the most feared evil: isolation. The Baoulé have the impression that the *why* separates the elements which are life giving: everything would fall apart. It's a variable dissection... 

Father Vincent believes that Baoulé are capable of understanding the principle of causality through intuition (global sensation) not through reasoning (precise decomposition and structuring of elements). Inasmuch as the Baoulé population or other ethnic groups represented at ENI reflect a certain unfamiliarity and unease with questions of causation, the researcher must note this reaction. Naturally the ENI students have been trained since their first school days to dissect—such is part of the Western education brought to them and to which they have become somewhat accustomed. However, their cultural heritage when they first attend the white man's school includes tenets—such as the disposition toward attributing and analyzing causes—which, if Father Vincent "analyzes" them accurately, might well help to either explain or caution one about some of the student reactions to *why* questions.

---

APPENDIX F

FREQUENCY DISTRIBUTION FOR CROSSTABULATIONS

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<th>A. Age</th>
<th>Participation Levels</th>
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<tr>
<td>17 to 19</td>
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</tr>
<tr>
<td>20 or 21</td>
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<tr>
<td>22 to 25</td>
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<table>
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<th>B. Town size</th>
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<td>village</td>
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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>knows French</td>
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<table>
<thead>
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<th>D. Father's profession</th>
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<td>non-agriculture</td>
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<table>
<thead>
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<th>E. Childhood French speaking habits</th>
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<td>F. Ethnic group</td>
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<tr>
<td></td>
</tr>
<tr>
<td>Akan</td>
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<td>non-Akan</td>
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<table>
<thead>
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<td>through 3rd form</td>
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<td>24</td>
</tr>
<tr>
<td>more than one year</td>
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<td>indifferent or discontent</td>
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<td><strong>O. Current satisfaction with faculty</strong></td>
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<td>10</td>
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<tr>
<td><strong>P. Reaction when colleagues jealous or suspicious</strong></td>
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<td>maintain new pedagogy</td>
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### Q. Perceived level of personal contribution to project

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### R. Willingness to live in a village

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### S. School club membership

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### T. Non-school club membership

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### U. Participation in sports

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APPENDIX G

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APPENDIX H
RESEARCH CALENDAR

June 1970
Site inspection to determine research possibilities (Abidjan, Bouaké)

July-August 1970
Writing and approval of research proposal (Amherst)

September-October 1970
Obtaining official authorization from the Ministry of Education to perform research and preliminary contacts (Abidjan, Bouaké)

November 1970-February 1971
Collection of data on dependent variable (Bouaké)

March-April 1971
Preparation and pre-testing of collection procedures for independent variables (Bouaké)

May-June 1971
Collection of data on independent variables (Bouaké)

July-August 1971
Data analysis at Center for International Education and Research Computing Center (Amherst)

September-December 1971
Collection of minor additional data and writing of dissertation (Bouaké)

January 1972
Editing (Amherst)